

#32  
Pre Amended

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on December 18, 2001. 12-26-01

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632

RECEIVED  
DEC 18 2001  
Technology Center 2600

Assistant Commissioner For Patents  
Washington, D.C. 20231

SECOND PRELIMINARY AMENDMENT

Sir:

This is a Second Preliminary Amendment in the above-identified application. Entry of this Second Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

Please amend the above-identified application as follows:

12/19/2001 BRILEXAND-00000002 09551365 252.00 OP  
01 FC:202

IN THE CLAIMS:

Please cancel claims 59, 63, 64, 104, 107 and 108,  
without prejudice.

Please add new claims 115-120 as follows:

Sub F77 -- 115. A control apparatus, comprising:

a first control device, wherein the first control device is capable of at least one of activating, de-activating, disabling, and re-enabling, one or more of a plurality of at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, and a vehicle, wherein the first control device is located at the vehicle,

HH  
cont

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the vehicle, wherein the second signal is transmitted from the second control device to the first control device, and further wherein the second signal is automatically received by the first control device,

HH  
const

wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device, wherein the third signal is transmitted from the third control device to the second control device, and further wherein the third signal is automatically received by the second control device.

116. A control apparatus, comprising:

a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, and a vehicle, wherein the first control device is located at a location remote from the vehicle,

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the first control device and remote from the vehicle,

wherein the second signal is transmitted from the second control device to the first control device, and further wherein the second signal is automatically received by the first control device, wherein the first signal controls a third control device, wherein the third control device is capable of at least one of activating, de-activating, disabling, and re-enabling, one or more of a plurality of at least one of a vehicle system,



a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance,

wherein the first signal is transmitted from the first control device to the third control device, and further wherein the first signal is automatically received by the third control device, wherein the third control device is located at the vehicle, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, deactivating, disabling, and re-enabling, the at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, and a vehicle.

HH  
cont

117. A control apparatus, comprising:

a first control device, wherein the first control device is capable of at least one of activating, de-activating, disabling, and re-enabling, one or more of a plurality of at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance, wherein the first

control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, and a premises, wherein the first control device is located at the premises,

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the premises, wherein the second signal is transmitted from the second control device to the first control device, and further wherein the second signal is automatically received by the first control device,

wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is

located at a location which is remote from the premises and remote from the second control device, wherein the third signal is transmitted from the third control device to the second control device, and further wherein the third signal is automatically received by the second control device.

118. A control apparatus, comprising:

*AA*  
*cost*  
a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, and a premises, wherein the first control device is located at a location remote from the premises,

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the first control device and remote from the premises,

wherein the second signal is transmitted from the second control device to the first control device, and further wherein the second signal is automatically received by the first control device, wherein the first signal controls a third control device, wherein the third control device is capable of at least one of activating, de-activating, disabling, and re-enabling, one or more of a plurality of at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance,

44  
CONT

wherein the first signal is transmitted from the first control device to the third control device, and further wherein the first signal is automatically received by the third control device, wherein the third control device is located at the premises, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, de-activating, disabling, and re-enabling, the at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, and a premises.

119. A control method, comprising:

transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the second control device and remote from a vehicle, and further wherein the first signal is automatically received by the second control device;

transmitting a second signal from the second control device to a third control device, wherein the third control device is capable of at least one of activating, de-activating, disabling, and re-enabling, one or more of a plurality of at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, wherein the third control device is located at the vehicle, and further wherein the second control device is located at a location remote from the vehicle, and further wherein the second signal is automatically received by the third control device;

at least one of generating a third signal with the third control device and transmitting a third signal from the third control device, wherein the third control device is located at the vehicle, and further wherein the third signal is at least

one of generated and transmitted in response to the second signal; and

at least one of activating, de-activating, disabling, and re-enabling, at least one of the vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance.

120. A control method, comprising:

*HA cont*  
transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the second control device and remote from a premises, and further wherein the first signal is automatically received by the second control device;

transmitting a second signal from the second control device to a third control device, wherein the third control device is capable of at least one of activating, de-activating, disabling, and re-enabling, one or more of a plurality of at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance, wherein the third

control device is located at the premises, and further wherein the second control device is located at a location remote from the premises, and further wherein the second signal is automatically received by the third control device;

at least one of generating a third signal with the third control device and transmitting a third signal from the third control device, wherein the third control device is located at the premises, and further wherein the third signal is at least one of generated and transmitted in response to the second signal; and

at least one of activating, de-activating, disabling, and re-enabling, at least one of the premises, a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance. --

Please amend Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112 as follows:

33. (Twice Amended) A control method, comprising:

at least one of monitoring and detecting an event

regarding at least one of a vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, at the vehicle; and

at least one of generating a first signal with a first control device and transmitting a first signal from a first control device to a second control device, wherein the first signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the vehicle,

*A2  
control*

wherein the second control device automatically receives the first signal from the first control device, and further wherein the second control device at least one of generates a second signal and transmits a second signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, wherein the communication device automatically receives the second signal from the second control device, and further wherein the communication device generates a third signal, wherein the third signal provides information regarding the occurrence of the event.



Sub J27

46. (Twice Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a premises, a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance, at the premises; and

H3  
cont

at least one of generating a first signal with a first control device and transmitting a first signal from a first control device to a second control device, wherein the first signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises,

wherein the second control device automatically receives the first signal from the first control device, and further wherein the second control device at least one of generates a second signal and transmits a second signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device automatically receives the second signal from the second control device, and further wherein the communication device generates a third signal,

wherein the third signal provides information regarding the occurrence of the event.

47. (Thrice Amended) A control apparatus, comprising:

H3  
CONT

a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, and a vehicle, wherein the first control device is located at the vehicle,

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the vehicle, wherein the second signal is transmitted from the second control device to the first control device, wherein the second signal is automatically received by the first control device, and further wherein the second control device at least

one of generates the second signal and transmits the second signal in response to a third signal,

wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device, wherein the third signal is transmitted from the third control device to the second control device, and further wherein the third signal is automatically received by the second control device.

#3  
cont'd

---

62. (Twice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, and a vehicle, wherein the first control device is located at a location remote from the vehicle,

sub F37

F44  
cont'd

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the first control device and remote from the vehicle,

wherein the second signal is transmitted from the second control device to the first control device, and further wherein the second signal is automatically received by the first control device, wherein the first signal controls a third control device, wherein the first signal is transmitted from the first control device to the third control device, and further wherein the first signal is automatically received by the third control device, wherein the third control device is located at the vehicle, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, de-activating, disabling, and re-enabling, the at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, and a vehicle.

*HH  
Cancel*

Sub III 7

67. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of monitors and detects an event regarding at least one of a vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, wherein the first control device is located at the vehicle,

wherein the first control device at least one of generates a first signal and transmits a first signal to a second control device, wherein the first signal contains information regarding the event, and further wherein the second control device is located at a location which is remote from the vehicle, wherein the second control device automatically receives the first signal from the first control device, and further wherein the second control device at least one of generates a second signal and transmits a second signal to a communication device associated with an individual,

wherein the communication device is located remote from the second control device, and further wherein the communication device automatically receives the second signal from the second control device, and further wherein the communication device

HS  
cont

generates a third signal, wherein the third signal provides information regarding the occurrence of the event.

68. (Thrice Amended) A control apparatus, comprising:

45  
cont

a first control device, wherein the first control device at least one of monitors and detects an event regarding at least one of a premises, a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance, wherein the first control device is located at the premises,

wherein the first control device at least one of generates a first signal and transmits a first signal to a second control device, wherein the first signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, wherein the second control device automatically receives the first signal from the first control device, and further wherein the second control device at least one of generates a second signal and transmits a second signal to a communication device associated with an individual,

wherein the communication device is located remote from the second control device, wherein the communication device automatically receives the second signal from the second control device, and further wherein the communication device generates a third signal, wherein the third signal provides information regarding the occurrence of the event.

H5  
concl

Sub I57 91. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, and a premises, wherein the first control device is located at the premises,

H6  
concl

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the

premises, wherein the second signal is transmitted from the second control device to the first control device, wherein the second signal is automatically received by the first control device, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device,

wherein the third control device is located at a location which is remote from the premises and remote from the second control device, wherein the third signal is transmitted from the third control device to the second control device, and further wherein the third signal is automatically received by the second control device.

H/b  
Cont

92. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of generates a first signal and transmits a first signal for at least one of activating, de-activating, disabling, and re-enabling, at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance,



and a premises, wherein the first control device is located at a location remote from the premises,

wherein the first control device at least one of generates the first signal and transmits the first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the first control device and remote from the premises,

*AK  
cont*

wherein the second signal is transmitted from the second control device to the first control device, and further wherein the second signal is automatically received by the first control device, wherein the first signal controls a third control device, wherein the first signal is transmitted from the first control device to the third control device, and further wherein the first signal is automatically received by the third control device, wherein the third control device is located at the premises, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, de-activating, disabling, and re-enabling, the at least one of a premises system, a premises equipment system, a premises component, a premises device, a

*H6  
cont*

premises equipment, a premises subsystem, a premises appliance,  
and a premises.

*Sub 767*

112. (Thrice Amended) A control method, comprising:

transmitting a first signal from a first control device  
to a second control device, wherein the first control device is  
located at a location remote from the second control device and  
remote from a vehicle or a premises, and further wherein the  
first signal is automatically received by the second control  
device;

*H7  
cont*

transmitting a second signal from the second control  
device to a third control device, wherein the third control  
device is located at the vehicle or the premises, and further  
wherein the second control device is located at a location  
remote from the vehicle or the premises, and further wherein the  
second signal is automatically received by the third control  
device;

at least one of generating a third signal and  
transmitting a third signal from the third control device,  
wherein the third control device is located at the vehicle or  
the premises, and further wherein the third signal is at least

one of generated and transmitted in response to the second signal; and

at least one of activating, de-activating, disabling, and re-enabling, at least one of the vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, the premises, a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance.

H7  
Cancel

MARKED-UP VERSIONS OF THE CLAIMS:

33. (Twice Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, [and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance,] at the vehicle; and

at least one of generating a first signal with [the] a first control device and transmitting a first signal from a first control device to a second control device, wherein the first signal [containing] contains information regarding the event, and wherein the second control device [being] is located at a location which is remote from the vehicle,

wherein the second control device automatically [receiving said] receives the first signal from the first control device, and further wherein the second control device at least one of [generating] generates a second signal and [transmitting] transmits a second signal to a communication device associated with an individual, wherein the communication device [being] is located remote from the second control device, wherein the communication device automatically [receiving] receives the second signal from the second control device, and further wherein the communication device [generating] generates a third signal, wherein the third signal [providing] provides information regarding the occurrence of the event.

46. (Twice Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a premises, a premises system, a

premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance, [and a premises at least one of system, equipment system, subsystem, device, component, and appliance,] at the premises; and

at least one of generating a first signal with [the] a first control device and transmitting a first signal from a first control device to a second control device, wherein the first signal [containing] contains information regarding the event, and wherein the second control device [being] is located at a location which is remote from the premises,

wherein the second control device automatically [receiving] receives the first signal from the first control device, and further wherein the second control device at least one of [generating] generates a second signal and [transmitting] transmits a second signal to a communication device associated with an individual, wherein the communication device [being] is located remote from the second control device, and further wherein the communication device automatically [receiving said] receives the second signal from the second control device, and further wherein the communication device [generating] generates

a third signal, wherein the third signal [providing] provides information regarding the occurrence of the event.

47. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of [generating] generates a first signal and [transmitting] transmits a first signal for at least one of activating, [deactivating] de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, [vehicle at least one of system, equipment system, subsystem, device, component, and appliance,] and a vehicle, wherein the first control device [being] is located at the vehicle,

wherein the first control device at least one of [generating] generates the first signal and [transmitting] transmits the first signal in response to a second signal, wherein the second signal [being] is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device [being] is located at a location which is remote from the vehicle, wherein the second signal [being] is transmitted from the second control device to

the first control device, [and] wherein the second signal [being] is automatically received by the first control device, and further wherein the second control device at least one of [generating] generates the second signal and [transmitting] transmits the second signal in response to a third signal,

wherein the third signal [being] is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device [being] is located at a location which is remote from the vehicle and remote from the second control device, wherein the third signal [being] is transmitted from the third control device to the second control device, and further wherein the third signal [being] is automatically received by the second control device.

62. (Twice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of [generating] generates a first signal and [transmitting] transmits a first signal for at least one of activating, [deactivating] de-activating, disabling, and re-enabling, at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, [vehicle at

least one of system, equipment system, subsystem, device, component, and appliance,] and a vehicle, wherein the first control device [being] is located at a location remote from the vehicle,

wherein the first control device at least one of [generating] generates the first signal and [transmitting] transmits the first signal in response to a second signal, wherein the second signal [being] is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device [being] is located at a location which is remote from the first control device and remote from the vehicle,

wherein the second signal [being] is transmitted from the second control device to the first control device, and further wherein the second signal [being] is automatically received by the first control device, wherein the first signal [controlling] controls a third control device, wherein the first signal [being] is transmitted from the first control device to the third control device, and further wherein the first signal [being] is automatically received by the third control device, wherein the third control device [being] is located at the vehicle, and further wherein the third control device at least



one of [generating] generates a third signal and [transmitting] transmits a third signal for at least one of activating, [deactivating] de-activating, disabling, and re-enabling, the at least one of a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, a vehicle appliance, [vehicle at least one of system, equipment system, subsystem, device, component, and appliance,] and a vehicle.

67. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of [monitoring and detecting] monitors and detects an event regarding at least one of a vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, [and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance,] wherein the first control device [being] is located at the vehicle,

wherein the first control device at least one of [generating] generates a first signal and [transmitting] transmits a first signal to a second control device, wherein the first signal [containing] contains information regarding the

event, and further wherein the second control device [being] is located at a location which is remote from the vehicle, wherein the second control device automatically [receiving] receives the first signal from the first control device, and further wherein the second control device at least one of [generating] generates a second signal and [transmitting] transmits a second signal to a communication device associated with an individual,

wherein the communication device [being] is located remote from the second control device, and further wherein the communication device automatically [receiving said] receives the second signal from the second control device, and further wherein the communication device [generating] generates a third signal, wherein the third signal [providing] provides information regarding the occurrence of the event.

68. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of [monitoring and detecting] monitors and detects an event regarding at least one of a premises, a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance, [and a premises at least one of system,

equipment system, subsystem, device, component, and appliance,] wherein the first control device [being] is located at the premises,

wherein the first control device at least one of [generating] generates a first signal and [transmitting] transmits a first signal to a second control device, wherein the first signal [containing] contains information regarding the event, and wherein the second control device [being] is located at a location which is remote from the premises, wherein the second control device automatically [receiving] receives the first signal from the first control device, and further wherein the second control device at least one of [generating] generates a second signal and [transmitting] transmits a second signal to a communication device associated with an individual,

wherein the communication device [being] is located remote from the second control device, wherein the communication device automatically [receiving] receives the second signal from the second control device, and further wherein the communication device [generating] generates a third signal, wherein the third signal [providing] provides information regarding the occurrence of the event.

91. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of [generating] generates a first signal and [transmitting] transmits a first signal for at least one of activating, [deactivating] de-activating, disabling, and re-enabling, at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, [premises at least one of system, equipment system, subsystem, device, component, and appliance,] and a premises, wherein the first control device [being] is located at the premises,

wherein the first control device at least one of [generating] generates the first signal and [transmitting] transmits the first signal in response to a second signal, wherein the second signal [being] is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the premises, wherein the second signal [being] is transmitted from [a] the second control device to the first control device, [all] wherein the second signal [being] is automatically received by the first control device, and further wherein the second control device at least one of

[generating] generates the second signal and [transmitting] transmits the second signal in response to a third signal, wherein the third signal [being] is at least one of generated by a third control device and transmitted from a third control device,

wherein the third control device [being] is located at a location which is remote from the premises and remote from the second control device, wherein the third signal [being] is transmitted from the third control device to the second control device, and further wherein the third signal [being] is automatically received by the second control device.

92. (Thrice Amended) A control apparatus, comprising:

a first control device, wherein the first control device at least one of [generating] generates a first signal and [transmitting] transmits a first signal for at least one of activating, [deactivating] de-activating, disabling, and re-enabling, at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, [premises at least one of system, equipment system, subsystem, device, component, and appliance,] and a premises, wherein the

first control device [being] is located at a location remote from the premises,

wherein the first control device at least one of [generating] generates the first signal and [transmitting] transmits the first signal in response to a second signal, wherein the second signal [being] is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device [being] is located at a location which is remote from the first control device and remote from the premises,

wherein the second signal [being] is transmitted from the second control device to the first control device, and further wherein the second signal [being] is automatically received by the first control device, wherein the first signal [controlling] controls a third control device, wherein the first signal [being] is transmitted from the first control device to the third control device, and further wherein the first signal [being] is automatically received by the third control device, wherein the third control device [being] is located at the premises, and further wherein the third control device at least one of [generating] generates a third signal and [transmitting] transmits a third signal for at least one of activating,

[deactivating] de-activating, disabling, and re-enabling, the at least one of a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, a premises appliance, [premises at least one of system, equipment system, subsystem, device, component, and appliance,] and a premises.

112. (Thrice Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, wherein the first control device [being] is located at a location remote from the second control device and remote from a vehicle or a premises, and further wherein the first signal [being] is automatically received by the second control device;

transmitting a second signal from the second control device to a third control device, wherein the third control device [being] is located at the vehicle or the premises, and further wherein the second control device [being] is located at a location remote from the vehicle or the premises, and further wherein the second signal [being] is automatically received by the third control device;

at least one of generating a third signal and transmitting a third signal from the third control device, wherein the third control device [being] is located at the vehicle or the premises, and further wherein the third signal [being] is at least one of generated and transmitted in response to the second signal; and

at least one of activating, [deactivating] de-activating, disabling, and re-enabling, at least one of the vehicle, a vehicle system, a vehicle equipment system, a vehicle component, a vehicle device, a vehicle equipment, a vehicle subsystem, and a vehicle appliance, [a vehicle at least one of system, equipment system, subsystem, device, component, and appliance,] the premises, [and a premises at least one of system, equipment system, subsystem, device, component, and appliance] a premises system, a premises equipment system, a premises component, a premises device, a premises equipment, a premises subsystem, and a premises appliance.



REMARKS

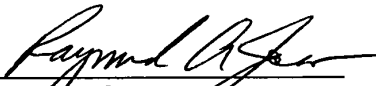
This is a Second Preliminary Amendment in the above-identified application. Entry of this Second Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested. By this Second Preliminary Amendment, Applicant has cancelled Claims 59, 63, 64, 104, 107 and 108, without prejudice, and Applicant has added new Claims 115-120. Applicant has also amended Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112.

Applicant respectfully submits that the above amendments to the claims do not contain new matter. Applicant submits that the above amendments to the claims were not made for purposes related to patentability.

Entry of this Second Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

A Fee Transmittal Sheet, along with a check in the amount of \$252.00, for payment for six (6) additional independent claims is submitted herewith.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encls. - Fee Transmittal Sheet (in duplicate)  
- Check for \$252.00 for payment for six (6)  
additional independent claims

December 18, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

RECEIVED

PTO/SB/17 (11-01)

Approved for use through 10/31/2002. OMB 0651-0032  
U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

# FEE TRANSMITTAL for FY 2002

Patent fees are subject to annual revision.

### Complete if Known

|                      |                 |
|----------------------|-----------------|
| Application Number   | 09/551,365      |
| Filing Date          | APRIL 17, 2000  |
| First Named Inventor | RAYMOND A. JOAO |
| Examiner Name        | V. TRIEU        |
| Group Art Unit       | 2632            |
| Attorney Docket No.  | RJ315           |

Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$) 252.00

| <b>METHOD OF PAYMENT</b> (check all that apply)<br><input checked="" type="checkbox"/> Check <input type="checkbox"/> Credit card <input type="checkbox"/> Money Order <input type="checkbox"/> Other <input type="checkbox"/> None<br><input type="checkbox"/> Deposit Account:<br>Deposit Account Number: _____<br>Deposit Account Name: _____<br>The Commissioner is authorized to: (check all that apply)<br><input type="checkbox"/> Charge fee(s) indicated below <input type="checkbox"/> Credit any overpayments<br><input type="checkbox"/> Charge any additional fee(s) during the pendency of this application<br><input type="checkbox"/> Charge fee(s) indicated below, except for the filing fee to the above-identified deposit account.  |          | <b>FEE CALCULATION</b> (continued)<br><b>3. ADDITIONAL FEES</b><br><table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>400</td><td>216</td><td>200</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>920</td><td>217</td><td>460</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,440</td><td>218</td><td>720</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,960</td><td>228</td><td>980</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>320</td><td>219</td><td>160</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>320</td><td>220</td><td>160</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>280</td><td>221</td><td>140</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,280</td><td>241</td><td>640</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,280</td><td>242</td><td>640</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>460</td><td>243</td><td>230</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>620</td><td>244</td><td>310</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>740</td><td>246</td><td>370</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>740</td><td>249</td><td>370</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>740</td><td>279</td><td>370</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> </tbody> </table> |          | Large Entity   |          | Small Entity    |          | Fee Description | Fee Paid | Fee Code | Fee (\$) | Fee Code | Fee (\$) | 105 | 130 | 205                | 65 | Surcharge - late filing fee or oath |     | 127 | 50  | 227               | 25 | Surcharge - late provisional filing fee or cover sheet |     | 139 | 130 | 139              | 130 | Non-English specification |     | 147 | 2,520 | 147                | 2,520 | For filing a request for <i>ex parte</i> reexamination |     | 112 | 920* | 112                    | 920* | Requesting publication of SIR prior to Examiner action  |  | 113          | 1,840* | 113     | 1,840* | Requesting publication of SIR after Examiner action |       | 115 | 110   | 215                | 55 | Extension for reply within first month |   | 116 | 400 | 216 | 200    | Extension for reply within second month |       | 117 | 920   | 217 | 460   | Extension for reply within third month |       | 118          | 1,440 | 218          | 720 | Extension for reply within fourth month |          | 128      | 1,960    | 228      | 980      | Extension for reply within fifth month |    | 119 | 320 | 219                    | 160 | Notice of Appeal |    | 120 | 320 | 220                               | 160 | Filing a brief in support of an appeal |     | 121 | 280 | 221                                   | 140 | Request for oral hearing |    | 138 | 1,510 | 138  | 1,510 | Petition to institute a public use proceeding |    | 140 | 110 | 240  | 55 | Petition to revive - unavoidable |  | 141 | 1,280 | 241 | 640 | Petition to revive - unintentional |  | 142 | 1,280 | 242 | 640 | Utility issue fee (or reissue) |  | 143 | 460 | 243 | 230 | Design issue fee |  | 144 | 620 | 244 | 310 | Plant issue fee |  | 122 | 130 | 122 | 130 | Petitions to the Commissioner |  | 123 | 50 | 123 | 50 | Processing fee under 37 CFR 1.17(q) |  | 126 | 180 | 126 | 180 | Submission of Information Disclosure Stmt |  | 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) |  | 146 | 740 | 246 | 370 | Filing a submission after final rejection (37 CFR § 1.129(a)) |  | 149 | 740 | 249 | 370 | For each additional invention to be examined (37 CFR § 1.129(b)) |  | 179 | 740 | 279 | 370 | Request for Continued Examination (RCE) |  | 169 | 900 | 169 | 900 | Request for expedited examination of a design application |  |
|--|----------|---|----------|--|----------|-----------------|----------|-----------------|----------|----------|----------|----------|----------|-----|-----|--------------------|----|-------------------------------------|-----|-----|-----|-------------------|----|--|-----|-----|-----|------------------|-----|---------------------------|-----|-----|-------|--------------------|-------|--|-----|-----|------|------------------------|------|---|--|--------------|--------|---------|--------|---|-------|-----|-------|--------------------|----|--|---|-----|-----|-----|--------|---|-------|-----|-------|-----|-------|--|-------|--------------|-------|--------------|-----|---|----------|----------|----------|----------|----------|--|----|-----|-----|------------------------|-----|------------------|----|-----|-----|-----------------------------------|-----|--|-----|-----|-----|---------------------------------------|-----|--------------------------|----|-----|-------|--|-------|---|----|-----|-----|--|----|----------------------------------|--|-----|-------|-----|-----|------------------------------------|--|-----|-------|-----|-----|--------------------------------|--|-----|-----|-----|-----|------------------|--|-----|-----|-----|-----|-----------------|--|-----|-----|-----|-----|-------------------------------|--|-----|----|-----|----|-------------------------------------|--|-----|-----|-----|-----|---|--|-----|----|-----|----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|---|--|
| Large Entity   |          | Small Entity  |          | Fee Description  | Fee Paid |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Fee Code   | Fee (\$) | Fee Code  | Fee (\$) |  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 105  | 130      | 205   | 65       | Surcharge - late filing fee or oath  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 127  | 50       | 227   | 25       | Surcharge - late provisional filing fee or cover sheet                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 139  | 130      | 139   | 130      | Non-English specification  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 147  | 2,520    | 147   | 2,520    | For filing a request for <i>ex parte</i> reexamination                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 112  | 920*     | 112   | 920*     | Requesting publication of SIR prior to Examiner action                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 113  | 1,840*   | 113   | 1,840*   | Requesting publication of SIR after Examiner action                        |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 115  | 110      | 215   | 55       | Extension for reply within first month                                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 116  | 400      | 216   | 200      | Extension for reply within second month                                    |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 117  | 920      | 217   | 460      | Extension for reply within third month                                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 118  | 1,440    | 218   | 720      | Extension for reply within fourth month                                    |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 128  | 1,960    | 228   | 980      | Extension for reply within fifth month                                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 119  | 320      | 219   | 160      | Notice of Appeal   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 120  | 320      | 220   | 160      | Filing a brief in support of an appeal                                     |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 121  | 280      | 221   | 140      | Request for oral hearing   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 138  | 1,510    | 138   | 1,510    | Petition to institute a public use proceeding                              |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 140  | 110      | 240   | 55       | Petition to revive - unavoidable   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 141  | 1,280    | 241   | 640      | Petition to revive - unintentional   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 142  | 1,280    | 242   | 640      | Utility issue fee (or reissue)   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 143  | 460      | 243   | 230      | Design issue fee   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 144  | 620      | 244   | 310      | Plant issue fee  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 122  | 130      | 122   | 130      | Petitions to the Commissioner  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 123  | 50       | 123   | 50       | Processing fee under 37 CFR 1.17(q)  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 126  | 180      | 126   | 180      | Submission of Information Disclosure Stmt                                  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 581  | 40       | 581   | 40       | Recording each patent assignment per property (times number of properties) |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 146  | 740      | 246   | 370      | Filing a submission after final rejection (37 CFR § 1.129(a))              |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 149  | 740      | 249   | 370      | For each additional invention to be examined (37 CFR § 1.129(b))           |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 179  | 740      | 279   | 370      | Request for Continued Examination (RCE)                                    |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 169  | 900      | 169   | 900      | Request for expedited examination of a design application                  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| <b>FEE CALCULATION</b><br><b>1. BASIC FILING FEE</b><br><table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>101</td><td>740</td><td>201</td><td>370</td><td>Utility filing fee</td><td></td></tr> <tr><td>106</td><td>330</td><td>206</td><td>165</td><td>Design filing fee</td><td></td></tr> <tr><td>107</td><td>510</td><td>207</td><td>255</td><td>Plant filing fee</td><td></td></tr> <tr><td>108</td><td>740</td><td>208</td><td>370</td><td>Reissue filing fee</td><td></td></tr> <tr><td>114</td><td>160</td><td>214</td><td>80</td><td>Provisional filing fee</td><td></td></tr> </tbody> </table> <p style="text-align: right;">SUBTOTAL (1) (\$) _____</p> |          | Large Entity  |          | Small Entity   |          | Fee Description | Fee Paid | Fee Code        | Fee (\$) | Fee Code | Fee (\$) | 101      | 740      | 201 | 370 | Utility filing fee |    | 106                                 | 330 | 206 | 165 | Design filing fee |    | 107  | 510 | 207 | 255 | Plant filing fee |     | 108                       | 740 | 208 | 370   | Reissue filing fee |       | 114  | 160 | 214 | 80   | Provisional filing fee |      | <b>2. EXTRA CLAIM FEES FOR UTILITY AND REISSUE</b><br><table border="1"> <tr> <td>Total Claims</td> <td>_____</td> <td>-20** =</td> <td>_____</td> <td>X</td> <td>_____</td> <td>=</td> <td>_____</td> </tr> <tr> <td>Independent Claims</td> <td>15</td> <td>-39 =</td> <td>6</td> <td>X</td> <td>42</td> <td>=</td> <td>252.00</td> </tr> <tr> <td>Multiple Dependent</td> <td>_____</td> <td></td> <td>_____</td> <td>X</td> <td>_____</td> <td>=</td> <td>_____</td> </tr> </table> <table border="1"> <thead> <tr> <th colspan="2">Large Entity</th> <th colspan="2">Small Entity</th> <th rowspan="2">Fee Description</th> <th rowspan="2">Fee Paid</th> </tr> <tr> <th>Fee Code</th> <th>Fee (\$)</th> <th>Fee Code</th> <th>Fee (\$)</th> </tr> </thead> <tbody> <tr><td>103</td><td>18</td><td>203</td><td>9</td><td>Claims in excess of 20</td><td></td></tr> <tr><td>102</td><td>84</td><td>202</td><td>42</td><td>Independent claims in excess of 3</td><td></td></tr> <tr><td>104</td><td>280</td><td>204</td><td>140</td><td>Multiple dependent claim, if not paid</td><td></td></tr> <tr><td>109</td><td>84</td><td>209</td><td>42</td><td>** Reissue independent claims over original patent</td><td></td></tr> <tr><td>110</td><td>18</td><td>210</td><td>9</td><td>** Reissue claims in excess of 20 and over original patent</td><td></td></tr> </tbody> </table> <p style="text-align: right;">SUBTOTAL (2) (\$) 252.00</p> |  | Total Claims | _____  | -20** = | _____  | X   | _____ | =   | _____ | Independent Claims | 15 | -39 =                                  | 6 | X   | 42  | =   | 252.00 | Multiple Dependent                      | _____ |     | _____ | X   | _____ | =                                      | _____ | Large Entity |       | Small Entity |     | Fee Description                         | Fee Paid | Fee Code | Fee (\$) | Fee Code | Fee (\$) | 103                                    | 18 | 203 | 9   | Claims in excess of 20 |     | 102              | 84 | 202 | 42  | Independent claims in excess of 3 |     | 104                                    | 280 | 204 | 140 | Multiple dependent claim, if not paid |     | 109                      | 84 | 209 | 42    | ** Reissue independent claims over original patent |       | 110   | 18 | 210 | 9   | ** Reissue claims in excess of 20 and over original patent |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Large Entity   |          | Small Entity  |          | Fee Description  | Fee Paid |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Fee Code   | Fee (\$) | Fee Code  | Fee (\$) |  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 101  | 740      | 201   | 370      | Utility filing fee   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 106  | 330      | 206   | 165      | Design filing fee  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 107  | 510      | 207   | 255      | Plant filing fee   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 108  | 740      | 208   | 370      | Reissue filing fee   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 114  | 160      | 214   | 80       | Provisional filing fee   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Total Claims   | _____    | -20** =   | _____    | X  | _____    | =               | _____    |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Independent Claims   | 15       | -39 =   | 6        | X  | 42       | =               | 252.00   |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Multiple Dependent   | _____    |   | _____    | X  | _____    | =               | _____    |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Large Entity   |          | Small Entity  |          | Fee Description  | Fee Paid |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| Fee Code   | Fee (\$) | Fee Code  | Fee (\$) |  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 103  | 18       | 203   | 9        | Claims in excess of 20   |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 102  | 84       | 202   | 42       | Independent claims in excess of 3  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 104  | 280      | 204   | 140      | Multiple dependent claim, if not paid                                      |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 109  | 84       | 209   | 42       | ** Reissue independent claims over original patent                         |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| 110  | 18       | 210   | 9        | ** Reissue claims in excess of 20 and over original patent                 |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |
| <p>**or number previously paid, if greater; For Reissues, see above</p>  |          | <p>*Reduced by Basic Filing Fee Paid</p> <p style="text-align: right;">SUBTOTAL (3) (\$) _____</p>  |          |  |          |                 |          |                 |          |          |          |          |          |     |     |                    |    |                                     |     |     |     |                   |    |  |     |     |     |                  |     |                           |     |     |       |                    |       |  |     |     |      |                        |      |   |  |              |        |         |        |   |       |     |       |                    |    |  |   |     |     |     |        |   |       |     |       |     |       |  |       |              |       |              |     |   |          |          |          |          |          |  |    |     |     |                        |     |                  |    |     |     |                                   |     |  |     |     |     |                                       |     |                          |    |     |       |  |       |   |    |     |     |  |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |

|                     |                        |                                   |              |
|---------------------|------------------------|-----------------------------------|--------------|
| <b>SUBMITTED BY</b> |                        | <b>Complete (if applicable)</b>   |              |
| Name (Print/Type)   | RAYMOND A. JOAO        | Registration No. (Attorney/Agent) | 35,907       |
| Signature           | <i>Raymond A. Joao</i> | Telephone                         | 914-969-2992 |
|                     |                        | Date                              | 12/18/01     |

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

**RAM** Fee History  
 Query  
 Revenue Accounting and Management

Name/Number: 09551365  
 Start Date: Any Date

Total Records Found: 13  
 End Date: Any Date

| Accounting Date | Sequence Num. | Tran Type | Fee Code   | Fee Amount | Mailroom Date | Payment Method |
|-----------------|---------------|-----------|------------|------------|---------------|----------------|
| 04/27/2000      | 00000116      | <u>1</u>  | <u>201</u> | \$345.00   | 04/17/2000    | OP             |
| 03/29/2001      | 00000057      | <u>1</u>  | <u>202</u> | \$40.00    | 03/28/2001    | OP             |
| 03/29/2001      | 00000058      | <u>1</u>  | <u>203</u> | \$54.00    | 03/28/2001    | OP             |
| 03/29/2001      | 00000059      | <u>1</u>  | <u>215</u> | \$55.00    | 03/28/2001    | OP             |
| 04/17/2001      | 00000001      | <u>1</u>  | <u>203</u> | \$198.00   | 04/16/2001    | OP             |
| 04/17/2001      | 00000002      | <u>1</u>  | <u>202</u> | \$200.00   | 04/16/2001    | OP             |
| 05/23/2001      | 00000002      | <u>1</u>  | <u>203</u> | \$180.00   | 05/22/2001    | OP             |
| 05/23/2001      | 00000003      | <u>1</u>  | <u>248</u> | \$55.00    | 05/22/2001    | OP             |
| 05/23/2001      | 00000004      | <u>1</u>  | <u>248</u> | \$55.00    | 05/22/2001    | OP             |
| 08/30/2001      | 00000005      | <u>1</u>  | <u>242</u> | \$620.00   | 08/29/2001    | OP             |
| 08/31/2001      | 00000002      | <u>1</u>  | <u>564</u> | \$15.00    | 08/29/2001    | OP             |
| 10/29/2001      | 00000004      | <u>1</u>  | <u>122</u> | \$130.00   | 10/26/2001    | OP             |
| 10/29/2001      | 00000005      | <u>1</u>  | <u>279</u> | \$370.00   | 10/26/2001    | OP             |

*Paid*



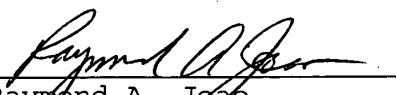
A copy of U.S. Patent No. 5,796,365 is submitted herewith.

The remaining listed references were previously either cited by the Applicant or cited by the Office in prior U.S. Patent Application Serial No. 09/277,935 which prior application is a parent application of the above-identified application.

No fee is due with this Information Disclosure Statement as it is being filed before the mailing of a first Office Action on the merits in the above-identified continued examination application.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT forms  
(Substitute for form 1449A/PTO) (2 sheets)  
- Copy of one (1) cited reference

December 3, 2001  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992



UNITED STATES PATENT AND TRADEMARK OFFICE

Under Secretary of Commerce for Intellectual Property and Director of the United States Patent and Trademark Office Washington, D.C. 20231 www.uspto.gov

Paper No. 30

RAYMOND A. JOAO, ESQ.  
122 BELLEVUE PLACE  
YONKERS, NY 10703

COPY MAILED

NOV 30 2001

OFFICE OF PETITIONS

ON PETITION

In re Application of  
Raymond A. Joao  
Application No. 09/551,365  
Filed: April 17, 2000  
Attorney Docket No. RJ315

This is a decision on the petition, filed October 26, 2001 and supplemented by facsimile transmission on October 31, 2001, under 37 CFR 1.313(c)(2) to withdraw the above-identified application from issue after payment of the issue fee.

The petition is **GRANTED**.

The above-identified application is withdrawn from issue for consideration of a submission under 37 CFR 1.114 (request for continued examination). See 37 CFR 1.313(c)(2).

**Petitioner is advised that the issue fee paid on August 29, 2001 in the above-identified application cannot be refunded. If, however, the above-identified application is again allowed, petitioner may request that it be applied towards the issue fee required by the new Notice of Allowance.<sup>1</sup>**

Telephone inquiries should be directed to the undersigned at (703) 305-8859.

The application is being forwarded to Technology Center AU 2632 for processing of the request for continued examination under 37 CFR 1.114.

*Karen Creasy*

Karen Creasy  
Petitions Examiner  
Office of Petitions  
Office of the Deputy Commissioner  
for Patent Examination Policy

<sup>1</sup> The request to apply the issue fee to the new Notice must be made in writing and should be accompanied by the new Issue Fee Transmittal Form PTOL-85(b), along with a copy of this decision. Additionally, if the issue fee has increased from the previously paid issue fee, the balance due must be submitted. Failure to ***timely*** request ***in writing*** that the previously paid issue fee be applied towards the new Notice and payment of any balance due will result in the abandonment of the application.

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on November 14, 2001.

*Raymond A. Joao*  
Raymond A. Joao

*Duplicate  
of Paper # 22*

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO

SERIAL NO. : 09/551,365

FILED : APRIL 17, 2000

FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

EXAMINER : V. TRIEU

GROUP : 2632

ALLOWED : JUNE 4, 2001

BATCH NO. : H08

FAX RECEIVED  
NOV 15 2001  
PETITIONS OFFICE

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.97 and §1.98, Applicant respectfully requests that the documents listed on the attached INFORMATION DISCLOSURE STATEMENT BY APPLICANT form (Substitute for form 1449A/PTO) be made of record and be



considered in connection with the examination of this application.

Copies of the cited references are transmitted herewith.

No fee is due with this Information Disclosure Statement as it is being filed before the mailing of a first Office Action on the merits in the above-identified continued examination application.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,



Raymond A. Joao  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
Form (Substitute for form 1449A/PTO) (1 page)  
- Copies of five (5) cited references

November 14, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

RS315 BY HAND DELIVERY  
 APPLICANT: RAYMOND A. JOAO  
 SERIAL NO.: 09/551,365  
 FILED: APRIL 17, 2000  
 FOR: CONTROL, MONITORING AND/OR SECURITY APPARATUS  
 AND METHOD  
 EXAMINER: V. TRIEU  
 GROUP: 2632  
 ALLOWED: JUNE 4, 2001  
 BATCH NO.: H08

NOVEMBER 14, 2001

RECEIVED

NOV 14 2001

FAX RECEIVED

NOV. 15 2001

PETITIONS OFFICE

- THIS IS TO ACKNOWLEDGE RECEIPT OF THE
- INFORMATION DISCLOSURE STATEMENT
  - INFORMATION DISCLOSURE STATEMENT BY APPLICANT FORM (SUBSTITUTE FOR FORM 1449A/PT) (1 PAGE)
  - COPIES OF FIVE (5) CITED REFERENCES
  - RETURN RECEIPT POSTCARD

Technology Center 2600

BY HAND DELIVERY TO EXAMINING GROUP 2600  
 ON NOVEMBER 14, 2001

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

**FAX COVER SHEET**

To: Karen Creasy  
Office of Petitions

From: Raymond A. Joao, Esq.

Date: November 15, 2001

Fax No.: 1-703-308-6916

No. Pages: 5 (including cover)

FAX RECEIVED

NOV 15 2001

PETITIONS OFFICE

Re: U.S. Patent Application Serial No. 09/551,365

Dear Ms. Creasy:

Please find transmitted herewith a copy of an Information Disclosure Statement, and accompanying form PTO/SB/08A, which was filed by hand delivery to Examining Group 2600 in the above-identified application on November 14, 2001. A copy of the stamped postcard evidencing receipt of same by Examining Group 2600 is also transmitted herewith. Please be so kind as to include this Information Disclosure Statement in the materials accompanying the Petition which is pending in the above-identified application.

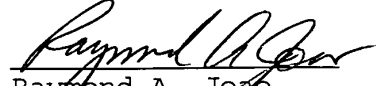
Respectfully Submitted,



Raymond A. Joao  
Reg. No 35,907

H254  
11 2607

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on November 14, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

**RECEIVED**  
NOV 14 2001  
Technology Center 2600

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.97 and §1.98, Applicant respectfully requests that the documents listed on the attached INFORMATION DISCLOSURE STATEMENT BY APPLICANT form (Substitute for form 1449A/PTO) be made of record and be

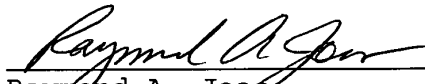
considered in connection with the examination of this application.

Copies of the cited references are transmitted herewith.

No fee is due with this Information Disclosure Statement as it is being filed before the mailing of a first Office Action on the merits in the above-identified continued examination application.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
Form (Substitute for form 1449A/PTO) (1 page)  
- Copies of five (5) cited references

November 14, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

FAX RECEIVED  
OCT 31 2001  
PETITIONS OFFICE

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

PETITION TO WITHDRAW APPLICATION FROM ISSUE TRANSMITTAL LETTER

Sir:


Please find transmitted herewith the following:

1. Petition To Withdraw Application From Issue After Issue Fee Has Been Paid, Pursuant To 37 C.F.R. §1.313(c);
2. Check for \$130.00 for the required fee under 37

C.F.R. §1.17(h) for the above Petition;

3. Request For Continued Examination (RCE) Transmittal form;
4. Check for \$370.00 for the required RCE filing fee under 37 CFR §1.17(e);
5. Preliminary Amendment;
6. Information Disclosure Statement; and
7. Return receipt postcard.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

October 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

FAX RECEIVED

OCT 31 2001

PETITIONS OFFICE

RJ015 BY HAND DELIVERY

OCTOBER 26, 2001

APPLICANT: RAYMOND A. JOAO

SERIAL NO.: 09/277,925

FILED: MARCH 29, 1999

FOR: CONTROL APPARATUS AND METHOD FOR VEHICLE

AND/OR FOR PRESET

EXAMINER: Y. TRIEN

CLASS: 2632

ALLOWED: JUNE 4, 2001

BATCH NO.: N09

OCT 26 2001

Technology Center 2600

- THIS IS TO ACKNOWLEDGE RECEIPT OF THE FOLLOWING:
- PETITION TO WITHDRAW APPLICATION FROM ISSUE TRANSMITTAL LETTER
  - PETITION TO WITHDRAW APPLICATION FROM ISSUE AFTER ISSUE FEE HAS BEEN PAID, PURSUANT TO 37 C.F.R. 31.313(c)
  - CHECK FOR \$30.00 FOR THE REQUIRED FEE FOR THE PETITION
  - REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL FORM
  - CHECK FOR \$370.00 FOR THE RCE FILING FEE
  - PRELIMINARY AMENDMENT
  - FEE TRANSMITTAL SHEET (IN DUPLICATE)
  - CHECK FOR \$42.00 FEE PAYMENT FOR (1) ADDITIONAL INDEPENDENT CLAIM
  - JURISDICTION DISCLOSURE STATEMENT, FORM INVTS/PTO, (1) REFERENCE
  - RETURN RECEIPT POSTCARD
- BY HAND DELIVERY TO CHANDLER CAMP 2600 ON OCTOBER 26, 2001



I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|              |  |                  |
|--------------|--|------------------|
| APPLICANT :  | RAYMOND A. JOAO  | FAX RECEIVED     |
| SERIAL NO. : | 09/551,365   | OCT 31 2001      |
| FILED :      | APRIL 17, 2000   | PETITIONS OFFICE |
| FOR :        | CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD |                  |
| EXAMINER :   | V. TRIEU   |                  |
| GROUP :      | 2632   |                  |
| ALLOWED :    | JUNE 4, 2001   |                  |
| BATCH NO. :  | H08  |                  |

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

PETITION TO WITHDRAW APPLICATION FROM ISSUE AFTER ISSUE FEE HAS BEEN PAID, PURSUANT TO 37 C.F.R. §1.313(c)

Sir:

This is a Petition To Withdraw Application From Issue After Issue Fee Has Been Paid, Pursuant to 37 C.F.R. §1.313(c).

Applicant hereby petitions and respectfully requests that the Commissioner withdraw the above-identified application from issue, after the issue fee has been paid, in order to allow for the consideration of a Request For Continued Examination, in compliance with 37 C.F.R. §1.114, in the above-identified application.

Applicant submits herewith a Request for Continued Examination (RCE) in compliance with 37 C.F.R. §1.114 in the above-identified application. Applicant submits herewith a Request for Continued Examination (RCE) Transmittal form in compliance with 37 C.F.R. §1.114, a Preliminary Amendment containing an amendment to the claims, an Information Disclosure Statement, and a check for \$370.00 for the required fee under 37 C.F.R. §1.17(e) for the Request for Continued Examination.


Applicant also submits herewith a check in the amount of \$130.00 for the required fee for this Petition pursuant to 37 C.F.R. §1.17(h).

Applicant respectfully petitions and requests that the Commissioner withdraw the above-identified application from issue in order to allow for the consideration of Applicant's Request for Continued Examination, which is in compliance with

37 C.F.R. §1.114, along with the above-referenced Preliminary Amendment and Information Disclosure Statement.

In view of the above, Applicant respectfully requests that this Petition be granted, that the above-identified application be withdrawn from issue, and that Applicant's Request for Continued Examination be considered in the above-identified application.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

- Encls. - Check for \$130.00 for the required fee for this Petition under 37 C.F.R. §1.17(h);
- Request for Continued Examination (RCE) Transmittal form in compliance with 37 C.F.R. §1.114;
  - Preliminary Amendment;
  - Information Disclosure Statement;
  - Check for \$370.00 for the required fee under 37 C.F.R. §1.17(e).

October 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

PTO/SB/30 (09-00)

Approved for use through 10/31/2002. OMB 0351-0031

U.S. Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                        |                 |
|--|------------------------|-----------------|
| <p align="center"><b>REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL</b></p> <p><small>Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000, provides for continued examination of an utility or plant application filed on or after June 8, 1995. See The American Inventors Protection Act of 1999 (AIPA).</small></p> | Application Number     | 09/551,365      |
|  | Filing Date            | APRIL 17, 2000  |
|  | First Named Inventor   | RAYMOND A. JOAO |
|  | Group Art Unit         | 2632            |
|  | Examiner Name          | V. TRIEU        |
|  | Attorney Docket Number | RJ315           |

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

**NOTE:** 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53 (e) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 66 Fed. Reg. 60092 (Aug. 16, 2000); Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. **Submission required under 37 C.F.R. § 1.114**

a.  Previously submitted

    i.  Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on \_\_\_\_\_  
(Any unentered amendment(s) referred to above will be entered).

    ii.  Consider the arguments in the Appeal Brief or Reply Brief previously filed on \_\_\_\_\_

    iii.  Other \_\_\_\_\_

b.  Enclosed

    i.  Amendment/Reply

    ii.  Affidavit(s)/Declaration(s)

    iii.  Information Disclosure Statement (IDS)

    iv.  Other PRELIMINARY AMENDMENT

2. **Miscellaneous**

a.  Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(f) required)

b.  Other \_\_\_\_\_

3. **Fees** The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

a.  The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. \_\_\_\_\_

    i.  RCE fee required under 37 C.F.R. § 1.17(e)

    ii.  Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)

    iii.  Other \_\_\_\_\_

b.  Check in the amount of \$ 370.00 enclosed

c.  Payment by credit card (Form PTO-2038 enclosed)

FAX RECEIVED  
OCT 31 2001  
PETITIONS OFFICE

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED**

|                   |                        |                                   |          |
|-------------------|------------------------|-----------------------------------|----------|
| Name (Print Name) | RAYMOND A. JOAO        | Registration No. (Attorney/Agent) | 35,907   |
| Signature         | <i>Raymond A. Joao</i> | Date                              | 10/26/01 |

**CERTIFICATE OF MAILING OR TRANSMISSION**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Assistant Commissioner for Patents, U.S. Patent and Trademark Office, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on: **HAND DELIVERED TO EXAMINING GROUP 2600 ON OCTOBER 26, 2001**

|                   |                        |      |          |
|-------------------|------------------------|------|----------|
| Name (Print Name) | RAYMOND A. JOAO        | Date | 10/26/01 |
| Signature         | <i>Raymond A. Joao</i> |      |          |

Burden Hour Statement: This form is expected to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND Fees and Completed Forms to the following address: Assistant Commissioner for Patents, Box RCE, Washington, DC 20231.

Best Available Copy

RT315 BY HAND DELIVERY  
APPLICANT: RAYMOND A. JOAO  
SERIAL NO: 09/551,365  
FILED: APRIL 17, 2000  
FOR: CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD

OCTOBER 26, 2001

EXAMINER: V. TRION  
GROUP: 2632  
ALLOWED: JUNE 4, 2001  
BATCH NO: H08

FAX RECEIVED  
OCT 31 2001  
PETITIONS OFFICE

- THIS IS TO ACKNOWLEDGE RECEIPT OF THE FOLLOWING:
- PETITION TO WITHDRAW APPLICATION FROM ISSUE TRANSMITTAL LETTER
  - PETITION TO WITHDRAW APPLICATION FROM ISSUE AFTER ISSUE FEE HAS BEEN PAID, PURSUANT TO 37. C.F.R. § 1.313(C)
  - CHECK FOR \$130.00 FOR THE REQUIRED FEE FOR THE ABOVE PETITION
  - REQUEST FOR CONTINUED EXAMINATION (RCE) TRANSMITTAL FORM
  - CHECK FOR \$370.00 FOR THE REQUIRED RCE FILING FEE
  - PRELIMINARY AMENDMENT
  - INFORMATION DISCLOSURE STATEMENT, FORM 1449B/PTO, (1) REFERENCE
  - RETURN RECEIPT POSTCARD
- BY HAND DELIVERY TO EXAMINING GROUP 2600 ON OCTOBER 26, 2001

RAYMOND A. JOAO  
122 BELLEVUE PL.  
YONKERS, NY 10703-1607

1-1268/260 3355

Date OCT. 26, 2001

Pay to the order of COMMISSIONER OF PATENTS AND TRADEMARKS \$ 130.00

ONE HUNDRED AND THIRTY DOLLARS + <sup>00</sup>/<sub>100</sub> Dollars

FIRST UNION NATIONAL BANK  
A/T 028012881

RESOURCE BANKING

FOR FEE FOR A PETITION TO WITHDRAW APPLICATION FROM ISSUE FOR 09/551,365

Raymond A. Joao

RAYMOND A. JOAO  
122 BELLEVUE PL.  
YONKERS, NY 10703-1607

1-1268/260 3351

Date OCT. 26, 2001

Pay to the order of COMMISSIONER OF PATENTS AND TRADEMARKS \$ 370.00

THREE HUNDRED AND SEVENTY DOLLARS + <sup>00</sup>/<sub>100</sub> Dollars

FIRST UNION NATIONAL BANK  
A/T 028012881

RESOURCE BANKING

FOR FILING FEE FOR RCE FOR 09/551,365

Raymond A. Joao

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|              |  |                  |
|--------------|--|------------------|
| APPLICANT :  | RAYMOND A. JOAO  | FAX RECEIVED     |
| SERIAL NO. : | 09/551,365   | OCT 31 2001      |
| FILED :      | APRIL 17, 2000   | PETITIONS OFFICE |
| FOR :        | CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD |                  |
| EXAMINER :   | V. TRIEU   |                  |
| GROUP :      | 2632   |                  |
| ALLOWED :    | JUNE 4, 2001   |                  |
| BATCH NO. :  | H08  |                  |

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

This is a Preliminary Amendment in the above-identified application. Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

Please amend the above-identified application as follows:

IN THE CLAIMS:

Please amend Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112 as follows:

33. (Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at the vehicle; and

at least one of generating a first signal with the first control device and transmitting a first signal from a first control device to a second control device, the first signal containing information regarding the event, and the second control device being located at a location which is remote from the vehicle,

the second control device automatically receiving said first signal from the first control device, and the second

the second control device automatically receiving the first signal from the first control device, and the second control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, and the communication device automatically receiving said second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

47. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, the first control device being located at the vehicle,

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated



by a second control device and transmitted from a second control device, the second control device being located at a location which is remote from the vehicle, the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, and the second control device at least one of generating the second signal and transmitting the second signal in response to a third signal, the third signal being at least one of generated by a third control device and transmitted from a third control device, the third control device being located at a location which is remote from the vehicle and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third signal being automatically received by the second control device.

62. (Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance,

and a vehicle, the first control device being located at a location remote from the vehicle,

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated by a second control device and transmitted from a second control device, the second control device being located at a location which is remote from the first control device and remote from the vehicle,

the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, the first signal controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device, the third control device being located at the vehicle, and the third control device at least one of generating a third signal and transmitting a third signal for at least one of activating, deactivating, disabling, and re-enabling, the at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and

appliance, and a vehicle.

67. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the first control device being located at the vehicle,

the first control device at least one of generating a first signal and transmitting a first signal to a second control device, the first signal containing information regarding the event, and the second control device being located at a location which is remote from the vehicle, the second control device automatically receiving the first signal from the first control device, and the second control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, the communication device automatically receiving said second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

68. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, the first control device being located at the premises,

the first control device at least one of generating a first signal and transmitting a first signal to a second control device, the first signal containing information regarding the event, and the second control device being located at a location which is remote from the premises, the second control device automatically receiving the first signal from the first control device, and the second control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

91. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, the first control device being located at the premises,

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated by a second control device and transmitted from a second control device, the second control device is located at a location which is remote from the premises, the second signal being transmitted from a second control device to the first control device, all the second signal being automatically received by the first control device, and the second control device at least one of generating the second signal and transmitting the second signal in response to a third signal, the third signal being at least one of generated by a third control device and transmitted from a third control device, the third control device being located at a location which is remote

from the premises and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third signal being automatically received by the second control device.

92. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, the first control device being located at a location remote from the premises,

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated by a second control device and transmitted from a second control device, the second control device being located at a location which is remote from the first control device and remote from the premises, the second signal being transmitted from the second control device to the first control device, and the

second signal being automatically received by the first control device,

the first signal controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device, the third control device being located at the premises, and the third control device at least one of generating a third signal and transmitting a third signal for at least one of activating, deactivating, disabling, and re-enabling, the at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises.

112. (Twice Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, the first control device being located at a location remote from the second control device and remote from a vehicle or a premises, the first signal being automatically received by the second control device;

transmitting a second signal from the second control device to a third control device, the third control device being

located at the vehicle or the premises, and the second control device being located at a location remote from the vehicle or the premises, the second signal being automatically received by the third control device;

at least one of generating a third signal and transmitting a third signal from the third control device, the third control device being located at the vehicle or the premises, the third signal being at least one of generated and transmitted in response to the second signal; and

at least one of activating, deactivating, disabling, and re-enabling, at least one of the vehicle, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

MARKED-UP VERSION OF THE CLAIMS:

33. (Amended) A control method, comprising:

at least one of monitoring and detecting an event



regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at the vehicle; and

at least one of generating a first [notification] signal with the first control device and transmitting a first [notification] signal from a first control device to a second control device, [wherein said] the first [notification] signal [contains] containing information regarding the event, and [further wherein] the second control device [is] being located at a location which is remote from the vehicle,

[wherein] the second control device automatically receiving said first signal from the first control device, and the second control device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication device [is] being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and [further wherein] the communication device [generates] generating a third [notification] signal [which provides], the third signal

providing information regarding [notification to an individual of] the occurrence of the event.

46. (Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, at the premises; and

at least one of generating a first [notification] signal with the first control device and transmitting a first [notification] signal from a first control device to a second control device, [wherein said] the first [notification] signal [contains] containing information regarding the event, [and wherein] the second control device [is] being located at a location which is remote from the premises,

[wherein] the second control device automatically receiving the first signal from the first control device, and the second control device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication

device [is] being located remote from the second control device, and [further wherein] the communication device automatically receiving said second signal from the second control device, and the communication device [generates] generating a third [notification] signal, the third signal providing information regarding [which provides notification to an individual of] the occurrence of the event.

47. (Twice Amended) A control apparatus, [which comprises] comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, [wherein said] the first control device [is] being located at the vehicle,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of

generated by a second control device and transmitted from a second control device, [wherein] the second control device [is] being located at a location which is remote from the vehicle, the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, and [further wherein] the second control device at least one of [generates] generating the second signal and [transmits] transmitting the second signal in response to a third signal, [wherein] the third signal [is] being at least one of generated by a third control device and transmitted from a third control device, [wherein] the third control device [is] being located at a location which is remote from the vehicle and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third signal being automatically received by the second control device.

62. (Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-

enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, [wherein said] the first control device [is] being located at a location remote from the vehicle,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of generated by a second control device and transmitted from a second control device, [wherein] the second control device [is] being located at a location which is remote from [said] the first control device and remote from the vehicle,

the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device. [wherein said] the first signal [controls] controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device. [wherein] the third control device [is] being located at the vehicle, and [further wherein] the third control device at least one of [generates] generating a third signal and [transmits]

transmitting a third signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, the [said] at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle[, in response to said first signal].

67. (Twice Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [monitors and detects] monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, [wherein said] the first control device [is] being located at the vehicle.

[wherein said] the first control device at least one of [generates] generating a first [notification] signal and [transmits] transmitting a first [notification] signal to a second control device, [wherein said] the first [notification] signal [contains] containing information regarding the event, and [wherein] the second control device [is] being located at a location which is remote from the vehicle, [and further wherein] the second control device automatically receiving the first signal from the first control device, and the second control

device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication device [is] being located remote from the second control device, the communication device automatically receiving said second signal from the second control device, and [further wherein] the communication device [generates] generating a third [notification] signal, the third signal providing information regarding [which provides notification to an individual of] the occurrence of the event.

68. (Twice Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [monitors and detects] monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, [wherein said] the first control device [is] being located at the premises,

[wherein said] the first control device at least one of [generates] generating a first [notification] signal and [transmits] transmitting a first [notification] signal to a second control device, [wherein said] the first [notification]

signal [contains] containing information regarding the event, and [wherein] the second control device [is] being located at a location which is remote from the premises, [and further wherein] the second control device automatically receiving the first signal from the first control device, and the second control device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication device [is] being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and [further wherein] the communication device [generates] generating a third [notification] signal, the third signal providing information regarding [which provides notification to an individual of] the occurrence of the event.

91. (Twice Amended) A control apparatus, [which comprises] comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of a premises at least one of system,



equipment system, subsystem, device, component, and appliance, and a premises; [wherein said] the first control device [is] being located at the premises,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of generated by a second control device and transmitted from a second control device, [wherein] the second control device is located at a location which is remote from the premises, the second signal being transmitted from a second control device to the first control device, all the second signal being automatically received by the first control device, and [further wherein] the second control device at least one of [generates] generating the second signal and [transmits] transmitting the second signal in response to a third signal, [wherein] the third signal [is] being at least one of generated by a third control device and transmitted from a third control device, [wherein] the third control device [is] being located at a location which is remote from the premises and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third

signal being automatically received by the second control device.

92. (Twice Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, [wherein said] the first control device [is] being located at a location remote from the premises,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of generated by a second control device and transmitted from a second control device, [wherein] the second control device [is] being located at a location which is remote from [said] the first control device and remote from the premises, the second signal being transmitted from the second control device to the

first control device, and the second signal being automatically received by the first control device.

[wherein said] the first signal [controls] controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device. [wherein] the third control device [is] being located at the premises, and [further wherein] the third control device at least one of [generates] generating a third signal and [transmits] transmitting a third signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling. [said] the at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises[, in response to said first signal].

112. (Twice Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, [wherein] the first control device [is] being located at a location remote from the second control device and remote from [at least one of] a vehicle [and] or a premises, the first signal being automatically received by the second control device:

transmitting a second signal from the second control device to a third control device, [wherein] the third control device [is] being located at the [at least one of a] vehicle [and a] or the premises, and [further wherein] the second control device [is] being located at a location remote from the [at least one of a] vehicle [and a] or the premises, the second signal being automatically received by the third control device;

at least one of generating a third signal and transmitting a third signal from the third control device, [wherein] the third control device [is] being located at the [at least one of a] vehicle [and a] or the premises, [and further wherein said] the third signal [is] being at least one of generated and transmitted in response to [said] the second signal; and

at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of the vehicle, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

REMARKS

This is a Preliminary Amendment in the above-identified application. Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested. By this Preliminary Amendment, Applicant has amended Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112.

With regard to each of Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112, Applicant respectfully submits that the term "automatically" means "without human intervention". In this regard, Applicant respectfully submits that the term "automatically receiving" means "receiving without human intervention". Applicant further respectfully submits that the term "automatically received" means "received without human intervention". Support for the respective terms "automatically receiving", and "automatically received" can, for example, be found in the Specification at page 47, lines 4-18; page 67, line 6 to page 69, line 19; page 70, line 17 to page 73, line 6; page 105, line 11 to page 111, line 11; page 161, line 21 to page 163, line 2; page 166, line 22 to page 181, line 6, page 283, line 7 to page 284, line 3; page 306, line 17 to page 308, line 8; page 310, line 5 to page 312, line 6, and page 320, line 3 to


page 321, line 21; and in the Drawings in Figures 5A, 5B, 11A and 11B.

Applicant respectfully submits that the above amendments to the claims do not contain new matter. Applicant submits that the above amendments to the claims were not made for purposes related to patentability.

Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

An Information Disclosure Statement is also submitted herewith.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encl. - Information Disclosure Statement

October 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

FAX RECEIVED  
OCT 31 2001  
PETITIONS OFFICE

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.97 and §1.98, Applicant respectfully requests that the document listed on the attached INFORMATION DISCLOSURE STATEMENT BY APPLICANT form (Substitute for form 1449B/PTO) be made of record and be


considered in connection with the examination of this application.

A copy of the cited reference is transmitted herewith.

No fee is due with this Information Disclosure Statement as it is being filed before the mailing of a first Office Action on the merits in the above-identified continued examination application.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joo  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
Form (Substitute for form 1449B/PTO) (1 page)  
- Copy of cited reference

October 26, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

|  |                          |                 |
|--|--------------------------|-----------------|
| Substitute for form 1449B/PTO<br><b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b><br>(use as many sheets as necessary) | <b>Complete if Known</b> |                 |
|  | Application Number       | 09/551,365      |
|  | Filing Date              | APRIL 17, 2000  |
|  | First Named Inventor     | RAYMOND A. JOAO |
|  | Group Art Unit           | 2632            |
|  | Examiner Name            | V. TRIEU        |
|  | Attorney Docket Number   | RJ315           |
| Sheet 1 of 1   |                          |                 |

| OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS |                       |   |
|---|-----------------------|---|
| Examiner Initials                                 | Cite No. <sup>1</sup> | Y <sup>2</sup>  |
|   |                       | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published. |
|   |                       | AUTHOR UNKNOWN, "ONSTAR LITERATURE" obtained from www.onstar.com, date unknown, OnStar Corp., http://www.onstar.com   |

*Duplicated of*  
 10/26/01

FAX RECEIVED  
 OCT 31 2001  
 PETITIONS OFFICE

|                    |                 |                 |        |
|--------------------|-----------------|-----------------|--------|
| Examiner Signature | <i>V. Trieu</i> | Date Considered | 2/8/02 |
|--------------------|-----------------|-----------------|--------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

3703 308 6916

\*\*\*\*\*  
\*\*\* RX REPORT \*\*\*  
\*\*\*\*\*

RECEPTION OK

|                |                |
|----------------|----------------|
| TX/RX NO       | 8456           |
| CONNECTION TEL | 9149692992     |
| CONNECTION ID  |                |
| START TIME     | 10/31(WE)17:02 |
| USAGE TIME     | 05'30"         |
| PGS.           | 12             |
| RESULT         | OK             |

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

**FAX COVER SHEET**

FAX RECEIVED

OCT 31 2001

PETITIONS OFFICE

To: Karen Creasy  
Office of Petitions

From: Raymond A. Joao, Esq.

Date: October 31, 2001

Fax No.: 1-703-308-6916

No. Pages: 38 (including cover)


*FAX I: 9 PAGES ✓  
FAX II: 20 PAGES ✓  
FAX III ✓*

Re: U.S. Patent Application Serial No. 09/551,365

Dear Ms. Creasy:

Please find transmitted a copy of a Petition To Withdraw From Issue After Issue Fee Has Been Paid Pursuant to 37 CFR §1.313(c) along with all supporting documents which were hand delivered to Examining Group 2600 on October 26, 2001. A copy of a stamped postcard acknowledging receipt of the above documents and checks by Examining Group 2600 on October 26, 2001 is also transmitted herewith along with copies of the checks for \$130.00 for Petition fee and \$370.00 for RCE filing fee.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No 35,907

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

**FAX COVER SHEET**

FAX RECEIVED

OCT 31 2001

PETITIONS OFFICE

To: Karen Creasy  
Office of Petitions

From: Raymond A. Joao, Esq.

Date: October 31, 2001

Fax No.: 1-703-308-6916

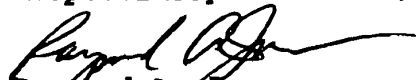
No. Pages: 38 (including cover) *FAX I: 9 PAGES ✓*

Re: U.S. Patent Application Serial No. 09/551.365

Dear Ms. Creasy:

Please find transmitted a copy of a Petition To Withdraw From Issue After Issue Fee Has Been Paid Pursuant to 37 CFR §1.313(c) along with all supporting documents which were hand delivered to Examining Group 2600 on October 26, 2001. A copy of a stamped postcard acknowledging receipt of the above documents and checks by Examining Group 2600 on October 26, 2001 is also transmitted herewith along with copies of the checks for \$130.00 for Petition fee and \$370.00 for RCE filing fee.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No 35,907

#29 JC

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

RECEIVED  
OCT 26 2001  
Technology Center 2600

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

*March 21, 2001*

PETITION TO WITHDRAW APPLICATION FROM ISSUE TRANSMITTAL LETTER

Sir:

10/29/2001 MMCGEE1 00000004 09551365 Please find transmitted herewith the following:  
01 FC:122 130.00 OP

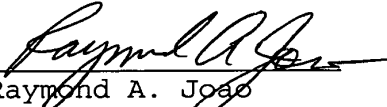
1. Petition To Withdraw Application From Issue After Issue Fee Has Been Paid, Pursuant To 37 C.F.R. §1.313(c);
2. Check for \$130.00 for the required fee under 37

06/01

C.F.R. §1.17(h) for the above Petition;

3. Request For Continued Examination (RCE) Transmittal form;
4. Check for \$370.00 for the required RCE filing fee under 37 CFR §1.17(e);
5. Preliminary Amendment;
6. Information Disclosure Statement; and
7. Return receipt postcard.

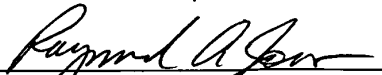
Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

October 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

OCT 26 2001

Technology Center 2600

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

PETITION TO WITHDRAW APPLICATION FROM ISSUE AFTER ISSUE  
FEE HAS BEEN PAID, PURSUANT TO 37 C.F.R. §1.313(c)

Sir:

This is a Petition To Withdraw Application From Issue  
After Issue Fee Has Been Paid, Pursuant to 37 C.F.R. §1.313(c).

Applicant hereby petitions and respectfully requests that the Commissioner withdraw the above-identified application from issue, after the issue fee has been paid, in order to allow for the consideration of a Request For Continued Examination, in compliance with 37 C.F.R. §1.114, in the above-identified application.

Applicant submits herewith a Request for Continued Examination (RCE) in compliance with 37 C.F.R. §1.114 in the above-identified application. Applicant submits herewith a Request for Continued Examination (RCE) Transmittal form in compliance with 37 C.F.R. §1.114, a Preliminary Amendment containing an amendment to the claims, an Information Disclosure Statement, and a check for \$370.00 for the required fee under 37 C.F.R. §1.17(e) for the Request for Continued Examination.

Applicant also submits herewith a check in the amount of \$130.00 for the required fee for this Petition pursuant to 37 C.F.R. §1.17(h).

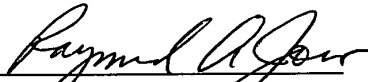
Applicant respectfully petitions and requests that the Commissioner withdraw the above-identified application from issue in order to allow for the consideration of Applicant's Request for Continued Examination, which is in compliance with



37 C.F.R. §1.114, along with the above-referenced Preliminary Amendment and Information Disclosure Statement.

In view of the above, Applicant respectfully requests that this Petition be granted, that the above-identified application be withdrawn from issue, and that Applicant's Request for Continued Examination be considered in the above-identified application.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encls. - Check for \$130.00 for the required fee for this Petition under 37 C.F.R. §1.17(h);  
- Request for Continued Examination (RCE) Transmittal form in compliance with 37 C.F.R. §1.114;  
- Preliminary Amendment;  
- Information Disclosure Statement;  
- Check for \$370.00 for the required fee under 37 C.F.R. §1.17(e)

October 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

#28

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                        |                 |
|--|------------------------|-----------------|
| <p align="center"><b>REQUEST<br/>FOR<br/>CONTINUED EXAMINATION (RCE)<br/>TRANSMITTAL</b></p> <p align="center">Subsection (b) of 35 U.S.C. § 132, effective on May 29, 2000,<br/>provides for continued examination of an utility or plant application<br/>filed on or after June 8, 1995.<br/>See The American Inventors Protection Act of 1999 (AIPA).</p> | Application Number     | 09/551,365      |
|  | Filing Date            | APRIL 17, 2000  |
|  | First Named Inventor   | RAYMOND A. JOAO |
|  | Group Art Unit         | 2632            |
|  | Examiner Name          | V. TRIEU        |
|  | Attorney Docket Number | RJ315           |

This is a Request for Continued Examination (RCE) under 37 C.F.R. § 1.114 of the above-identified application.

**NOTE:** 37 C.F.R. § 1.114 is effective on May 29, 2000. If the above-identified application was filed prior to May 29, 2000, applicant may wish to consider filing a continued prosecution application (CPA) under 37 C.F.R. § 1.53 (d) (PTO/SB/29) instead of a RCE to be eligible for the patent term adjustment provisions of the AIPA. See Changes to Application Examination and Provisional Application Practice, Final Rule, 65 Fed. Reg. 50092 (Aug. 16, 2000); Interim Rule, 65 Fed. Reg. 14865 (Mar. 20, 2000), 1233 Off. Gaz. Pat. Office 47 (Apr. 11, 2000), which established RCE practice.

1. **Submission required under 37 C.F.R. § 1.114**

a.  Previously submitted

i.  Consider the amendment(s)/reply under 37 C.F.R. § 1.116 previously filed on OCT 26 2001  
(Any unentered amendment(s) referred to above will be entered).

ii.  Consider the arguments in the Appeal Brief or Reply Brief previously filed on Technology Center 2600

iii.  Other \_\_\_\_\_

b.  Enclosed

i.  Amendment/Reply

ii.  Affidavit(s)/Declaration(s)

iii.  Information Disclosure Statement (IDS)

iv.  Other PRELIMINARY AMENDMENT

2. **Miscellaneous**

a.  Suspension of action on the above-identified application is requested under 37 C.F.R. § 1.103(c) for a period of \_\_\_\_\_ months. (Period of suspension shall not exceed 3 months; Fee under 37 C.F.R. § 1.17(i) required)

b.  Other \_\_\_\_\_

3. **Fees** The RCE fee under 37 C.F.R. § 1.17(e) is required by 37 C.F.R. § 1.114 when the RCE is filed.

a.  The Director is hereby authorized to charge the following fees, or credit any overpayments, to Deposit Account No. \_\_\_\_\_

i.  RCE fee required under 37 C.F.R. § 1.17(e)

ii.  Extension of time fee (37 C.F.R. §§ 1.136 and 1.17)

iii.  Other \_\_\_\_\_

b.  Check in the amount of \$ 370.00 enclosed

c.  Payment by credit card (Form PTO-2038 enclosed)

RECEIVED  
OCT 26 2001  
Technology Center 2600

|  |                        |  |
|--|------------------------|--|
| <b>SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT REQUIRED</b> |                        | 370.00 DP                                |
| Name (Print/Type)  | RAYMOND A. JOAO        | Registration No. (Attorney/Agent) 35,907 |
| Signature  | <i>Raymond A. Joao</i> | Date 10/26/01                            |

|   |                        |
|---|------------------------|
| <b>CERTIFICATE OF MAILING OR TRANSMISSION</b>   |                        |
| I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Box RCE, Washington, DC 20231, or facsimile transmitted to the U.S. Patent and Trademark Office on: <b>HAND DELIVERED TO EXAMINING GROUP 2600 ON OCTOBER 26, 2001</b> |                        |
| Name (Print/Type)   | RAYMOND A. JOAO        |
| Signature   | <i>Raymond A. Joao</i> |
| Date  | 10/26/01               |

Burden Hour Statement: This form is estimated to take 0.2 hour to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND Fees and Completed Forms to the following address: Assistant Commissioner for Patents, Box RCE, Washington, DC 20231.

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

*#27/01*  
*M. H. Lee*  
*Raymond A. Joao* 10-5-01  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

OCT 26 2001

Technology Center 2600

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

This is a Preliminary Amendment in the above-identified application. Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

Please amend the above-identified application as follows:

IN THE CLAIMS:

Please amend Claims 33, 46, 47, 62, 67, 68, 91, 92, and 112 as follows:

Sub H27

33. (Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at the vehicle; and

SH  
Cont.

at least one of generating a first signal with the first control device and transmitting a first signal from a first control device to a second control device, the first signal containing information regarding the event, and the second control device being located at a location which is remote from the vehicle,

the second control device automatically receiving said first signal from the first control device, and the second

control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

AS  
CML

sub #37

46. (Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, at the premises; and

AS  
CML

at least one of generating a first signal with the first control device and transmitting a first signal from a first control device to a second control device, the first signal containing information regarding the event, the second control device being located at a location which is remote from the premises,

the second control device automatically receiving the first signal from the first control device, and the second control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, and the communication device automatically receiving said second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

*Handwritten initials and "Contd."*

---

47. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, the first control device being located at the vehicle,

*Handwritten initials and "Contd."*

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated

by a second control device and transmitted from a second control device, the second control device being located at a location which is remote from the vehicle, the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, and the second control device at least one of generating the second signal and transmitting the second signal in response to a third signal, the third signal being at least one of generated by a third control device and transmitted from a third control device, the third control device being located at a location which is remote from the vehicle and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third signal being automatically received by the ~~second control device.~~

#3  
Contd

#3  
Contd

Sub H4

62. (Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance,

#4  
Contd

and a vehicle, the first control device being located at a location remote from the vehicle,

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated by a second control device and transmitted from a second control device, the second control device being located at a location which is remote from the first control device and remote from the vehicle,

the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, the first signal controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device, the third control device being located at the vehicle, and the third control device at least one of generating a third signal and transmitting a third signal for at least one of activating, deactivating, disabling, and re-enabling, the at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and



24  
Cont.

appliance, and a vehicle.

Sub H57

67. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the first control device being located at the vehicle,

A5  
Cont.

the first control device at least one of generating a first signal and transmitting a first signal to a second control device, the first signal containing information regarding the event, and the second control device being located at a location which is remote from the vehicle, the second control device automatically receiving the first signal from the first control device, and the second control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, the communication device automatically receiving said second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

68. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, the first control device being located at the premises,

the first control device at least one of generating a first signal and transmitting a first signal to a second control device, the first signal containing information regarding the event, and the second control device being located at a location which is remote from the premises, the second control device automatically receiving the first signal from the first control device, and the second control device at least one of generating a second signal and transmitting a second signal to a communication device associated with an individual, the communication device being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and the communication device generating a third signal, the third signal providing information regarding the occurrence of the event.

*Sub 1107*

91. (Twice Amended) A control apparatus, comprising:

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, the first control device being located at the premises,

*Sub  
Cont.*

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated by a second control device and transmitted from a second control device, the second control device is located at a location which is remote from the premises, the second signal being transmitted from a second control device to the first control device, all the second signal being automatically received by the first control device, and the second control device at least one of generating the second signal and transmitting the second signal in response to a third signal, the third signal being at least one of generated by a third control device and transmitted from a third control device, the third control device being located at a location which is remote

from the premises and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third signal being automatically received by the second control device.

92. (Twice Amended) A control apparatus, comprising:

*SL6*  
*cont*

a first control device, the first control device at least one of generating a first signal and transmitting a first signal for at least one of activating, deactivating, disabling, and re-enabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, the first control device being located at a location remote from the premises,

the first control device at least one of generating the first signal and transmitting the first signal in response to a second signal, the second signal being at least one of generated by a second control device and transmitted from a second control device, the second control device being located at a location which is remote from the first control device and remote from the premises, the second signal being transmitted from the second control device to the first control device, and the

second signal being automatically received by the first control device,

the first signal controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device, the third control device being located at the premises, and the third control device at least one of generating a third signal and transmitting a third signal for at least one of activating, deactivating, disabling, and re-enabling, the at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises.

Alb  
Cable

Sub #77

112. (Twice Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, the first control device being located at a location remote from the second control device and remote from a vehicle or a premises, the first signal being automatically received by the second control device;

SP  
C.H.T.

transmitting a second signal from the second control device to a third control device, the third control device being

located at the vehicle or the premises, and the second control device being located at a location remote from the vehicle or the premises, the second signal being automatically received by the third control device;

at least one of generating a third signal and transmitting a third signal from the third control device, the third control device being located at the vehicle or the premises, the third signal being at least one of generated and transmitted in response to the second signal; and

at least one of activating, deactivating, disabling, and re-enabling, at least one of the vehicle, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

---

**MARKED-UP VERSION OF THE CLAIMS:**

33. (Amended) A control method, comprising:

at least one of monitoring and detecting an event

regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at the vehicle; and

at least one of generating a first [notification] signal with the first control device and transmitting a first [notification] signal from a first control device to a second control device, [wherein said] the first [notification] signal [contains] containing information regarding the event, and [further wherein] the second control device [is] being located at a location which is remote from the vehicle,

[wherein] the second control device automatically receiving said first signal from the first control device, and the second control device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication device [is] being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and [further wherein] the communication device [generates] generating a third [notification] signal [which provides], the third signal

providing information regarding [notification to an individual of] the occurrence of the event.

46. (Amended) A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, at the premises; and

at least one of generating a first [notification] signal with the first control device and transmitting a first [notification] signal from a first control device to a second control device, [wherein said] the first [notification] signal [contains] containing information regarding the event, [and wherein] the second control device [is] being located at a location which is remote from the premises,

[wherein] the second control device automatically receiving the first signal from the first control device, and the second control device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication



device [is] being located remote from the second control device, and [further wherein] the communication device automatically receiving said second signal from the second control device, and the communication device [generates] generating a third [notification] signal, the third signal providing information regarding [which provides notification to an individual of] the occurrence of the event.

47. (Twice Amended) A control apparatus, [which comprises] comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, [wherein said] the first control device [is] being located at the vehicle,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of

generated by a second control device and transmitted from a second control device, [wherein] the second control device [is] being located at a location which is remote from the vehicle, the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, and [further wherein] the second control device at least one of [generates] generating the second signal and [transmits] transmitting the second signal in response to a third signal, [wherein] the third signal [is] being at least one of generated by a third control device and transmitted from a third control device, [wherein] the third control device [is] being located at a location which is remote from the vehicle and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third signal being automatically received by the second control device.

62. (Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-

enabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, [wherein said] the first control device [is] being located at a location remote from the vehicle,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of generated by a second control device and transmitted from a second control device, [wherein] the second control device [is] being located at a location which is remote from [said] the first control device and remote from the vehicle,

the second signal being transmitted from the second control device to the first control device, and the second signal being automatically received by the first control device, [wherein said] the first signal [controls] controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device, [wherein] the third control device [is] being located at the vehicle, and [further wherein] the third control device at least one of [generates] generating a third signal and [transmits]

transmitting a third signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, the [said] at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle[, in response to said first signal].

67. (Twice Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [monitors and detects] monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, [wherein said] the first control device [is] being located at the vehicle,

[wherein said] the first control device at least one of [generates] generating a first [notification] signal and [transmits] transmitting a first [notification] signal to a second control device, [wherein said] the first [notification] signal [contains] containing information regarding the event, and [wherein] the second control device [is] being located at a location which is remote from the vehicle, [and further wherein] the second control device automatically receiving the first signal from the first control device, and the second control

device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication device [is] being located remote from the second control device, the communication device automatically receiving said second signal from the second control device, and [further wherein] the communication device [generates] generating a third [notification] signal, the third signal providing information regarding [which provides notification to an individual of] the occurrence of the event.

68. (Twice Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [monitors and detects] monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, [wherein said] the first control device [is] being located at the premises,

[wherein said] the first control device at least one of [generates] generating a first [notification] signal and [transmits] transmitting a first [notification] signal to a second control device, [wherein said] the first [notification]

signal [contains] containing information regarding the event, and [wherein] the second control device [is] being located at a location which is remote from the premises, [and further wherein] the second control device automatically receiving the first signal from the first control device, and the second control device at least one of [generates] generating a second [notification] signal and [transmits] transmitting a second [notification] signal to a communication device associated with an individual, [wherein] the communication device [is] being located remote from the second control device, the communication device automatically receiving the second signal from the second control device, and [further wherein] the communication device [generates] generating a third [notification] signal, the third signal providing information regarding [which provides notification to an individual of] the occurrence of the event.

91. (Twice Amended) A control apparatus, [which comprises] comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of a premises at least one of system,

equipment system, subsystem, device, component, and appliance, and a premises, [wherein said] the first control device [is] being located at the premises,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of generated by a second control device and transmitted from a second control device, [wherein] the second control device is located at a location which is remote from the premises, the second signal being transmitted from a second control device to the first control device, all the second signal being automatically received by the first control device, and [further wherein] the second control device at least one of [generates] generating the second signal and [transmits] transmitting the second signal in response to a third signal, [wherein] the third signal [is] being at least one of generated by a third control device and transmitted from a third control device, [wherein] the third control device [is] being located at a location which is remote from the premises and remote from the second control device, the third signal being transmitted from the third control device to the second control device, and the third

signal being automatically received by the second control device.

92. (Twice Amended) A control apparatus, comprising:

a first control device, [wherein said] the first control device at least one of [generates] generating a first signal and [transmits] transmitting a first signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, [wherein said] the first control device [is] being located at a location remote from the premises,

[wherein said] the first control device at least one of [generates said] generating the first signal and [transmits said] transmitting the first signal in response to a second signal, [wherein] the second signal [is] being at least one of generated by a second control device and transmitted from a second control device, [wherein] the second control device [is] being located at a location which is remote from [said] the first control device and remote from the premises, the second signal being transmitted from the second control device to the



first control device, and the second signal being automatically received by the first control device,

[wherein said] the first signal [controls] controlling a third control device, the first signal being transmitted from the first control device to the third control device, and the first signal being automatically received by the third control device, [wherein] the third control device [is] being located at the premises, and [further wherein] the third control device at least one of [generates] generating a third signal and [transmits] transmitting a third signal for at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, [said] the at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises[, in response to said first signal].

112. (Twice Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, [wherein] the first control device [is] being located at a location remote from the second control device and remote from [at least one of] a vehicle [and] or a premises, the first signal being automatically received by the second control device;

transmitting a second signal from the second control device to a third control device, [wherein] the third control device [is] being located at the [at least one of a] vehicle [and a] or the premises, and [further wherein] the second control device [is] being located at a location remote from the [at least one of a] vehicle [and a] or the premises, the second signal being automatically received by the third control device;

at least one of generating a third signal and transmitting a third signal from the third control device, [wherein] the third control device [is] being located at the [at least one of a] vehicle [and a] or the premises, [and further wherein said] the third signal [is] being at least one of generated and transmitted in response to [said] the second signal; and

at least one of activating, deactivating, [enabling, and] disabling, and re-enabling, at least one of the vehicle, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

REMARKS

This is a Preliminary Amendment in the above-identified application. Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested. By this Preliminary Amendment, Applicant has amended Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112.

With regard to each of Claims 33, 46, 47, 62, 67, 68, 91, 92 and 112, Applicant respectfully submits that the term "automatically" means "without human intervention". In this regard, Applicant respectfully submits that the term "automatically receiving" means "receiving without human intervention". Applicant further respectfully submits that the term "automatically received" means "received without human intervention". Support for the respective terms "automatically receiving", and "automatically received" can, for example, be found in the Specification at page 47, lines 4-18; page 67, line 6 to page 69, line 19; page 70, line 17 to page 73, line 6; page 105, line 11 to page 111, line 11; page 161, line 21 to page 163, line 2; page 166, line 22 to page 181, line 6, page 283, line 7 to page 284, line 3; page 306, line 17 to page 308, line 8; page 310, line 5 to page 312, line 6, and page 320, line 3 to

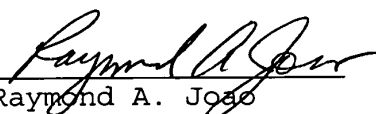
page 321, line 21; and in the Drawings in Figures 5A, 5B, 11A and 11B.

Applicant respectfully submits that the above amendments to the claims do not contain new matter. Applicant submits that the above amendments to the claims were not made for purposes related to patentability.

Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

An Information Disclosure Statement is also submitted herewith.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

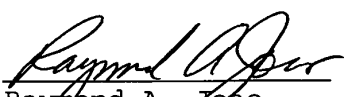
Encl. - Information Disclosure Statement

October 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

#26

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on October 26, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

APPLICANT : RAYMOND A. JOAO

OCT 26 2001

SERIAL NO. : 09/551,365

Technology Center 2600

FILED : APRIL 17, 2000

FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

EXAMINER : V. TRIEU

GROUP : 2632

ALLOWED : JUNE 4, 2001

BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §1.97 and §1.98, Applicant respectfully requests that the document listed on the attached INFORMATION DISCLOSURE STATEMENT BY APPLICANT form (Substitute for form 1449B/PTO) be made of record and be

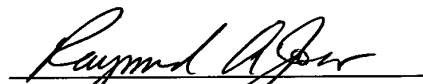
considered in connection with the examination of this application.

A copy of the cited reference is transmitted herewith.

No fee is due with this Information Disclosure Statement as it is being filed before the mailing of a first Office Action on the merits in the above-identified continued examination application.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

  
Raymond A. Jose  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT  
Form (Substitute for form 1449B/PTO) (1 page)  
- Copy of cited reference

October 26, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992



**UNITED STATES DEPARTMENT OF COMMERCE**  
**United States Patent and Trademark Office**  
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 09/551,365      | 04/17/00    | JOAO                 | R RJ315             |

WM01/0920

RAYMOND A JOAO ESQ  
 122 BELLEVUE PLACE  
 YONKERS NY 10703

EXAMINER

TRIELL, V

| ART UNIT | PAPER NUMBER |
|----------|--------------|
| 2632     | 23           |

DATE MAILED: 09/20/01

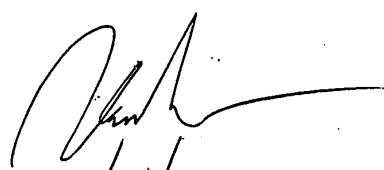
Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|   |                 |                       |  |
|---|-----------------|-----------------------|--|
| <b>Response to Rule 312 Communication</b> | Application No. | JOAO, RAYMOND ANTHONY |  |
|   | 09/551,365      | Art Unit              |  |
|   | Examiner        | 2632                  |  |
|   | Van T Trieu     |                       |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1.  The amendment filed on 29 August 2001 under 37 CFR 1.312 has been considered, and has been:
- a)  entered.
  - b)  entered as directed to matters of form not affecting the scope of the invention.
  - c)  disapproved because the amendment was filed after the payment of the issue fee.  
 Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.
  - d)  disapproved. See explanation below.
  - e)  entered in part. See explanation below.

  
 9/18/01





UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
 Washington, D.C. 20231

|                 |             |                      |                     |
|-----------------|-------------|----------------------|---------------------|
| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|

09/551,365 04/17/00 JOAO

RAYMOND A JOAO ESQ  
 122 BELLEVUE PLACE  
 YONKERS NY 10703

WM02/0907

R RJ315

|          |
|----------|
| EXAMINER |
|----------|

|          |              |
|----------|--------------|
| TRIEU, V |              |
| ART UNIT | PAPER NUMBER |

2632

21

DATE MAILED:

09/07/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|   |                        |                       |  |
|---|------------------------|-----------------------|--|
| <b>Response to Rule 312 Communication</b> | <b>Application No.</b> | <b>Applicant(s)</b>   |  |
|   | 09/551,365             | JOAO, RAYMOND ANTHONY |  |
|   | <b>Examiner</b>        | <b>Art Unit</b>       |  |
|   | Van T Trieu            | 2632                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

1.  The amendment filed on 27 July 2001 under 37 CFR 1.312 has been considered, and has been:
- a)  entered.
  - b)  entered as directed to matters of form not affecting the scope of the invention.
  - c)  disapproved because the amendment was filed after the payment of the issue fee.  
Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.
  - d)  disapproved. See explanation below.
  - e)  entered in part. See explanation below.

  
9/4/01

PART B—ISSUE FEE TRANSMITTAL

RECEIVED

Complete and mail this form, together with applicable fees, to: **Box ISSUE FEE**  
**Assistant Commissioner for Patents**  
**Washington, D.C. 20231**

AUG 29 2001

Technology Center 2600

**MAILING INSTRUCTIONS:** This form should be used for transmitting the ISSUE FEE. Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Issue Fee Receipt, the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

Note: The certificate of mailing below can only be used for domestic mailings of the Issue Fee Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing.

CURRENT CORRESPONDENCE ADDRESS (Note: Legibly mark-up with any corrections or use Block 1)

RAYMOND A JOAO ESQ  
 122 BELLEVUE PLACE  
 YONKERS NY 10703

WM01/0612

**Certificate of Mailing**

I hereby certify that this Issue Fee Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Box Issue Fee address above on the date indicated below.

BY HAND DELIVERY TO EXAMINING GROUP 2600

RAYMOND A. JOAO

(Depositor's name)

*Raymond A. Joao*

(Signature)

8/29/01

(Date)

| APPLICATION NO.             | FILING DATE | TOTAL CLAIMS                      | EXAMINER AND GROUP ART UNIT | DATE MAILED |
|-----------------------------|-------------|-----------------------------------|-----------------------------|-------------|
| 09/551,365                  | 04/17/00    | 068                               | TRIEU, V 2632               | 06/04/01    |
| First Named Applicant JOAO, |             | 35 USC 154(b) term ext. = 0 Days. |                             |             |

TITLE OF INVENTION CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

| ATTYS DOCKET NO. | CLASS-SUBCLASS | BATCH NO. | APPLN. TYPE | SMALL ENTITY | FEE DUE  | DATE DUE |
|------------------|----------------|-----------|-------------|--------------|----------|----------|
| 3 RJ315          | 340-539.000    | H08       | UTILITY     | YES          | \$620.00 | 09/04/01 |

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363). Use of PTO form(s) and Customer Number are recommended, but not required.
- Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47) attached.

2. For printing on the patent front page, list (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.
1. RAYMOND A. JOAO
2. \_\_\_\_\_
3. \_\_\_\_\_

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)  
**PLEASE NOTE:** Unless an assignee is identified below, no assignee data will appear on the patent. Inclusion of assignee data is only appropriate when an assignment has been previously submitted to the PTO or is being submitted under separate cover. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY & STATE OR COUNTRY)

Please check the appropriate assignee category indicated below (will not be printed on the patent)

- individual  corporation or other private group entity  government

4a. The following fees are enclosed (make check payable to Commissioner of Patents and Trademarks):

- Issue Fee
- Advance Order - # of Copies 5

4b. The following fees or deficiency in these fees should be charged to:

DEPOSIT ACCOUNT NUMBER \_\_\_\_\_  
 (ENCLOSE AN EXTRA COPY OF THIS FORM)

- Issue Fee
- Advance Order - # of Copies 0

The COMMISSIONER OF PATENTS AND TRADEMARKS IS requested to apply the Issue Fee to the application identified above.

(Authorized Signature)

*Raymond A. Joao*

(Date)

8/29/01

NOTE: The Issue Fee will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the Patent and Trademark Office.

**Burden Hour Statement:** This form is estimated to take 0.2 hours to complete. Time will vary depending on the needs of the individual case. Any comments on the amount of time required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, D.C. 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND FEES AND THIS FORM TO: Box Issue Fee, Assistant Commissioner for Patents, Washington D.C. 20231

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMIT THIS FORM WITH FEE

4

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

FAX COVER SHEET

To: Examiner Van Trieu  
Art Unit 2632  
703-308-5220

From: Raymond A. Joao, Esq.

Date: August 28, 2001

Fax No.: 1-703-872-9314

No. Pages: 9 (including cover)

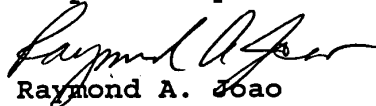
RECEIVED  
AUG 29 2001  
Technology Center 2600

Re: U.S. Patent Application Serial No. 09/551,365

Examiner Trieu:

Please find transmitted herewith a Second Amendment After Allowance Pursuant To 37 C.F.R. §1.312 which is being filed in the above-identified application.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No 35,907

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

Box ISSUE FEE  
Assistant Commissioner for Patents  
Washington, D.C. 20231

Date: August 29, 2001

Docket No.: RJ315

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

RECEIVED

AUG 29 2001

Technology Center 2600

PAPERS BEING FILED:

ISSUE FEE TRANSMITTAL FORM PTOL-85B, COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE, STATEMENT OF NEW DETERMINATION OF SMALL ENTITY STATUS FOR PAYMENT OF ISSUE FEE, PURSUANT TO 37 C.F.R. §1.27(g), Check for \$620.00, Check for \$15.00 for five (5) advance order copies of the Patent

08/31/2001 BALEXAND 00000002 09551365

01 FC:564

15.00 OP

TRANSMITTAL LETTER

BALEXAND 00000005 09551365

Sir:

620.00 OP

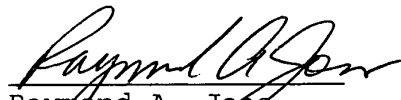
Enclosed herewith please find a Form PTOL-85B along with a check in the amount of \$620.00, for payment of the Issue Fee, for the above-identified application. A check

in the amount of \$15.00 is also enclosed for payment for Applicant's advance order of five (5) copies of the Patent.

Please also find enclosed a COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE for entry into the above-identified application.

Please also find enclosed a Statement of New Determination of Small Entity Status For Payment of Issue Fee, Pursuant to 37 C.F.R. §1.27(g). Applicant is a Small Entity and, therefore, Small Entity Status is entitled to be asserted for the above-identified application.

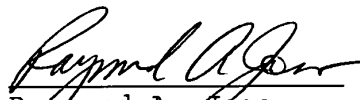
Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

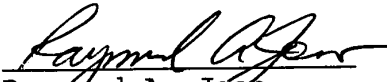
August 29, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

I hereby certify that this correspondence is being hand delivered to examining Group 2600 on August 29, 2001.

  
Raymond A. Joao

I hereby certify that this correspondence is being transmitted via facsimile transmission to Examiner Van Trieu at (703) 872-9314 on August 28, 2001.

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

SECOND AMENDMENT AFTER ALLOWANCE  
PURSUANT TO 37 C.F.R. §1.312

*o-k  
to enter  
Van  
9/18/01* Sir:

This is a Second Amendment After Allowance  
Pursuant to 37 C.F.R. §1.312 in the above-identified

application. Entry of this Second Amendment After Allowance Pursuant to 37 C.F.R. §1.312 is respectfully requested.

Please amend the application as follows:

IN THE CLAIMS:

Please amend claims 47 and 91 as follows (versions with markings to show changes made to the claims are provided hereinbelow):

*Sub B*  
*1*  
*47.* comprises:

(Amended) A control apparatus, which

a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, wherein said first control device is located at the vehicle,

*F1*  
*cont.*



wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device.

F1  
cont.

sub 47  
comprises:

47. (Amended) A control apparatus, which

a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a

F2  
cont.

premises, wherein said first control device is located at the premises,

wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the premises and remote from the second control device.

*F2  
control*

VERSIONS WITH MARKINGS TO SHOW CHANGES MADE TO THE CLAIMS

47. (Amended) A control apparatus, which comprises:

a first control device, wherein said first

control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, wherein said first control device is located at the vehicle,

wherein said first control device at least one of generates said first signal and transmits said first signal [is] in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device.

91. (Amended) A control apparatus, which

comprises:

a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, wherein said first control device is located at the premises,

wherein said first control device at least one of generates said first signal and transmits said first signal [is] in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the premises and

remote from the second control device.

REMARKS

This is a Second Amendment After Allowance Pursuant to 37 C.F.R. §1.312 in the above-identified application. Applicant has amended claims 47 and 91.

Applicant has amended Claim 47 so as to replace "is" with -- in --, as shown, in order to correct an inadvertent error.

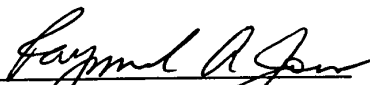
Applicant has amended Claim 91 so as to replace "is" with -- in --, as shown, in order to correct an inadvertent error.

Applicant submits that the above amendments to the claims were not made for purposes related to patentability.

Applicant further submits that the above amendments to the claims do not contain new matter.

Entry of this Second Amendment After Allowance  
Pursuant to 37 C.F.R. §1.312 is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

August 28, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on August 29, 2001.

Raymond A. Joao  
Raymond A. Joao

227  
M. A. Joao  
9-22-01

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

RECEIVED

AUG 29 2001

Technology Center 2600

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

SUBMISSION OF COURTESY COPY OF FILED  
SECOND AMENDMENT AFTER ALLOWANCE

OK  
to enter  
[Signature]  
9/18/01

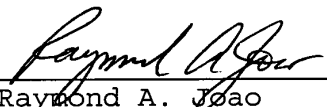
Sir:

Please find submitted herewith a copy of a Second Amendment After Allowance Pursuant to 37 C.F.R. §1.312 which was filed, in the above-identified application, via facsimile transmission at (703) 872-9314 on August 28,

2001. A copy of the accompanying Fax Cover Sheet and a copy of the Transmission Verification Report acknowledging receipt of same by the Office on August 28, 2001 are also submitted herewith.

The above documents are being provided for the Examiner's convenience.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

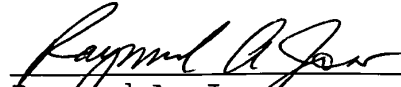
August 29, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992



I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on August 29, 2001.

#19  
8.31.01

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

AUG 29 2001

Technology Center 2600

APPLICANT : RAYMOND A. JOAO

SERIAL NO. : 09/551,365

FILED : APRIL 17, 2000

FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

EXAMINER : V. TRIEU

GROUP : 2632

ALLOWED : JUNE 4, 2001

BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner for Patents  
Washington, D.C. 20231

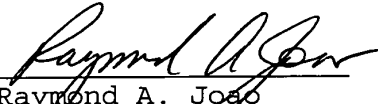
STATEMENT OF NEW DETERMINATION OF SMALL ENTITY STATUS, FOR  
PAYMENT OF ISSUE FEE, PURSUANT TO 37 C.F.R. §1.27(g)

Sir:

Applicant is a Small Entity and, therefore,  
Small Entity Status is entitled to be asserted for the

above-identified application.

Respectfully Submitted,


  
Raymond A. Joso  
Reg. No. 35,907

August 29, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on August 29, 2001.

#20  
8.31.01

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

RECEIVED  
AUG 29 2001  
Technology Center 2600

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

COMMENTS ON STATEMENT OF REASONS FOR ALLOWANCE

Sir:

This is Applicant's Comments on Statement of Reasons for Allowance in the above-identified application. Entry of this Comments on Statement of Reasons for Allowance is respectfully requested.

In the Detailed Action accompanying the Notice of Allowance and Issue Fee Due and Notice of Allowability, mailed June 4, 2001, the Examiner provided, at page 2, the following Examiner's statement of reasons for allowance: "The following is an examiner's statement of reasons for allowance: there are no references teaching of a control apparatus for controlling of at least one of activating, deactivating, enabling and disabling of at least one of a vehicle and a premises having at least one of system, subsystem, component, equipment and appliance, wherein the first control device is responsive to a second signal and the second signal is at least generated by a second control device which is located remote from the vehicle and the premises. And further wherein the second control device is responsive to a third signal which is generated by a third control device which is located at a location remote from the vehicle and the premises and remote from the second control device."

Applicant respectfully disagrees with, and objects to, certain aspects of the Examiner's statement of reasons for allowance. Applicant respectfully submits that the Examiner's statement of reasons for allowance is unduly and improperly limiting in its interpretation of certain aspects of the subject

matter of certain of the allowed claims. Applicant further respectfully submits that the Examiner's statement of reasons for allowance does not address the subject matter of each of, and all of, the allowed independent claims, does not describe certain aspects of certain of the allowed subject matter, the claim terminology and the alternative claiming terminology, in a complete and accurate fashion, and does not provide an accurate and complete interpretation of the subject matter of each of the allowed independent claims.

Applicant further submits that the Examiner's statement of reasons for allowance is also unduly and improperly limiting insofar as it only addresses certain aspects of only certain of the allowed subject matter. Applicant respectfully submits that the Examiner's statement of reasons for allowance addresses a "control apparatus" and appears to address subject matter which is contained in independent claim 112 which pertains to "at least one of a vehicle and a premises". Applicant respectfully submits, however, that independent claim 112 is directed to a control method which pertains to "at least one of a vehicle and a premises".

Applicant further submits that the Examiner's statement of reasons for allowance is also unduly limiting as it addresses

a control apparatus "for controlling at least one of activating, deactivating, enabling and disabling of at least one of a vehicle and a premises having at least one of system, subsystem, component, equipment and appliance". Applicant respectfully submits that certain of the allowed independent claims pertain to "at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle". Applicant further respectfully submits that certain of the allowed independent claims pertain to "at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises".

Applicant further respectfully submits that the Examiner's statement of reasons for allowance does not accurately and consistently reflect Applicant's use of alternative claiming terminology, in certain respective instances, in order to reflect that the third control device is located at a location remote from the at least one of a vehicle and a premises. Applicant further respectfully submits that the Examiner's statement of reasons for allowance does not accurately reflect Applicant's use of alternative claiming terminology, in certain respective instances, in order to reflect that a respective signal is "at least one of generated by and transmitted from" a respective control device.

In view of the above, Applicant respectfully disagrees with, and objects to, certain aspects of the Examiner's statement of reasons for allowance insofar as it does not address each of, and all of, the allowed independent claims. Applicant also disagrees with, and objects to, certain aspects of the Examiner's statement of reasons for allowance as it does not, in certain aspects, address certain subject matter in a proper context. In view of the above, Applicant respectfully submits the following comments:

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 33. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control method, comprising: at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component and appliance, at the vehicle; and at least one of generating a first notification signal and transmitting a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and further wherein the second control device is located at a location which is remote from the

vehicle, wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 46. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control method, comprising: at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component and appliance, at the premises; and at least one of generating a first notification signal and transmitting a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, wherein the second control device at least one of generates a second notification signal and transmits a second



notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 47. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control apparatus, which comprises: a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, wherein said first control device is located at the vehicle, wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the

vehicle, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 62. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control apparatus, comprising: a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, wherein said first control device is located at a location remote from the vehicle, wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the

second control device is located at a location which is remote from said first control device and remote from the vehicle, wherein said first signal controls a third control device, wherein the third control device is located at the vehicle, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, deactivating, enabling, and disabling, said at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, in response to said first signal.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 67. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control apparatus, comprising: a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, wherein said first control device is located at the vehicle, wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains

information regarding the event, and wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 68. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control apparatus, comprising: a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, wherein said first control device is located at the premises, wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal

contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 91. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control apparatus, which comprises: a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, wherein said first control device is located at the premises, wherein said first control device at least one of generates said first signal and transmits said first signal in

response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the premises and remote from the second control device.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 92. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control apparatus, comprising: a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, wherein said first control device is located at a location remote from the premises, wherein said first control

device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from said first control device and remote from the premises, wherein said first signal controls a third control device, wherein the third control device is located at the premises, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, deactivating, enabling, and disabling, said at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, in response to said first signal.

Applicant submits that the prior art does not disclose or suggest, and no references teach, the present invention as defined by independent Claim 112. In this regard, Applicant submits that the prior art does not disclose or suggest, and no references teach, a control method, comprising: transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the second control device and remote from at least one of a vehicle and a premises; transmitting a second

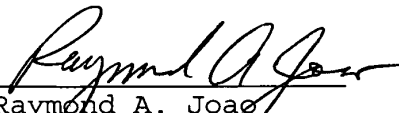
signal from the second control device to a third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein the second control device is located at a location remote from the at least one of a vehicle and a premises; at least one of generating a third signal and transmitting a third signal from the third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein said third signal is at least one of generated and transmitted in response to said second signal; and at least one of activating, deactivating, enabling, and disabling, at least one of the vehicle, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

Applicant respectfully submits that the comments provided herein address the reasons for allowance of, and provides a complete and accurate interpretation for, the subject matter of each of, and all of, the allowed independent claims in the above-identified application. Applicant respectfully requests that the herein-provided Applicant's comments be entered into the above-identified application.



Entry of the above Comments on Statement of Reasons  
for Allowance is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

August 29, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

RECEIVED

AUG 22 2001 #18

Technology Center 2600

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on August 22, 2001

*Raymond A. Joao*  
Raymond A. Joao

*M. [Signature]*  
8-23-01

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

*[Handwritten initials]*

APPLICANT : RAYMOND A. JOAO

SERIAL NO. : 09/551,365

FILED : APRIL 17, 2000

FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

EXAMINER : V. TRIEU

GROUP : 2632

ALLOWED : JUNE 4, 2001

BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231  
ATTN: OFFICIAL DRAFTSPERSON

SUBMISSION OF REPLACEMENT FORMAL DRAWING FOR FIGURE 9


Sir:

Applicant submits herewith a replacement Formal Drawing for Figure 9 (1 sheet) for entry in the above-identified application.

Applicant submits that the replacement of the Formal Drawing for Figure 9 correctly labels the block identified by reference numeral "12" as "VEHICLE SYSTEM(S) I/F(S)".

Applicant submits that no new matter is introduced by the submission of the replacement Formal Drawing for Figure 9. It is respectfully requested that the replacement Formal Drawing for Figure 9 be entered into the above-identified application.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Date: August 22, 2001

encls.: Replacement Formal Drawing for Figure 9 (1 sheet)

Raymond A. Joao  
122 Bellevue Place  
Yonkers, New York 10703  
914) 969-2992

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/551,365

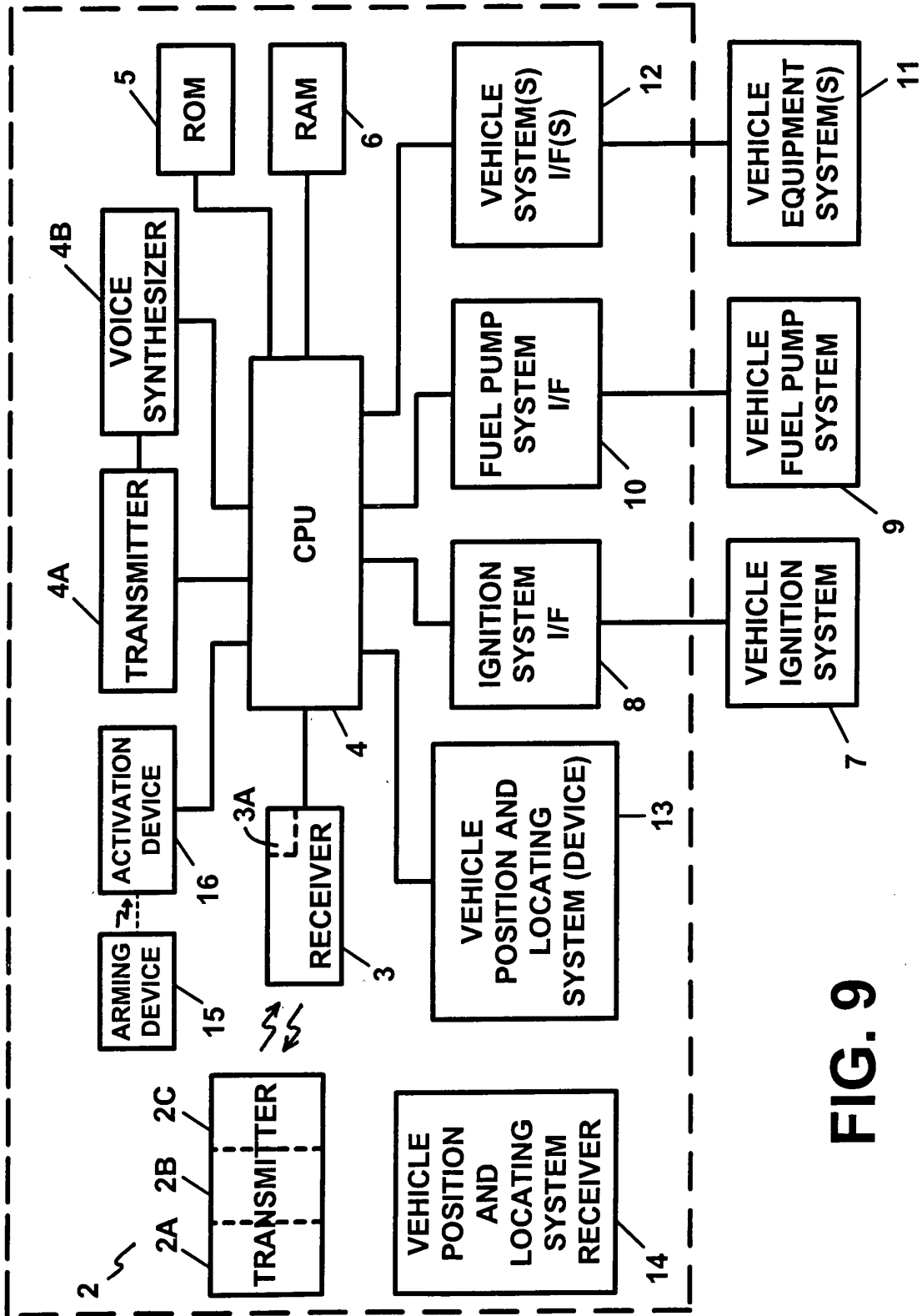


FIG. 9



B...C.V  
17/E  
M.H. Lee  
8-17-01

Match & Return

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on July 25, 2001.

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231

AMENDMENT AFTER ALLOWANCE PURSUANT TO 37 C.F.R. §1.312

O.K.  
fy enter  
*[Signature]*  
9/4/01

Sir:

This is an Amendment After Allowance Pursuant to 37 C.F.R. §1.312 in the above-identified application.

06/01

Entry of this Amendment After Allowance Pursuant to 37  
C.F.R. §1.312 is respectfully requested.

Please amend the application as follows:

IN THE CLAIMS:

Please amend claims 48, 51, 54, 55, 56, 58, 61,  
67, 68, 72, 75, 76, 77, 79, 80, 83, 85, 87, 88, 90, 93, 96,  
99, 100, 101, 103, 106, 112 and 114 as follows (versions  
with markings to show changes made to the claims are  
provided hereinbelow):

248. (Amended) The apparatus of claim 47,  
further comprising:

a monitoring device, wherein said monitoring  
device monitors at least one of the vehicle, the vehicle  
operational status, the vehicle operation, the vehicle at  
least one of system, equipment system, subsystem, device,  
component, and appliance, at least one of fuel supply,  
water supply, and coolant supply, at least one of  
electrical generator operation and alternator operation,  
battery charge level, fuel cell output, fuel cell fuel

E1  
cont.

supply, fuel cell operation, engine temperature level, at least one of an electrical circuit and an electrical device, an equipment device, a computer, a command computer, an electronic command computer, a diagnostic computer, an ignition system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical, at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the vehicle, activity outside the vehicle, and activity at the vehicle.

E1  
cont.

5 51. (Amended) The apparatus of claim 47, wherein said first control device detects at least one of a use of the vehicle, an unauthorized use of the vehicle, an access at least one of into and onto the vehicle, and a theft of the vehicle.

E2

8 54. (Amended) The apparatus of claim 47, further

E3  
cont.

comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

ES  
CDAT.

9<sup>1</sup> ~~55~~. (Amended) The apparatus of claim ~~47~~<sup>1</sup>, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

10<sup>1</sup> ~~56~~. (Amended) The apparatus of claim ~~47~~<sup>1</sup>, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic



E3  
cont.

signal and transmits a second diagnostic signal to the third control device, wherein the third control device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

E4

12/58. (Amended) The apparatus of claim 41, wherein the third control device transmits a first control signal to the second control device, and further wherein the second control device processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device processes said second control signal and generates a third control signal, wherein said third control signal at least one of activates, enables, de-activates, and disables, at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

E5  
cont.

15/61. (Amended) The apparatus of claim 41, further comprising:  
a voice synthesizing device, wherein said voice

E5  
Contd.

synthesizing device generates a voice message indicative of  
at least one of operation of the apparatus, status of the  
apparatus, operation of said first control device, and  
operation of the vehicle.

Sub 915

21 st. (Amended) A control apparatus, comprising:

a first control device, wherein said first control  
device at least one of monitors and detects an event  
regarding at least one of a vehicle and a vehicle at least  
one of system, equipment system, subsystem, device,  
component, and appliance, wherein said first control device  
is located at the vehicle,

E6  
Cont.

wherein said first control device at least one of  
generates a first notification signal and transmits a first  
notification signal to a second control device, wherein  
said first notification signal contains information  
regarding the event, and wherein the second control device  
is located at a location which is remote from the vehicle,  
and further wherein the second control device at least one  
of generates a second notification signal and transmits a  
second notification signal to a communication device  
associated with an individual, wherein the communication

device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

34.58. (Amended) A control apparatus, comprising:

a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, wherein said first control device is located at the premises,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication

Elp  
cont.

E6  
world

device is located remote from the second control device,  
and further wherein the communication device generates a  
third notification signal which provides notification to an  
individual of the occurrence of the event.

E7

25<sup>21</sup> 72. (Amended) The apparatus of claim 6<sup>21</sup>, wherein  
said first control device detects at least one of a use of  
the vehicle, an unauthorized use of the vehicle, an access  
at least one of into and onto the vehicle, and a theft of  
the vehicle.

E8  
cont.

28<sup>21</sup> 75. (Amended) The apparatus of claim 6<sup>21</sup>, further  
comprising:

at least one of a camera, a video recording  
device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video  
recording device, a microphone, and an audio recording  
device, is at least one of stationary, mounted on an  
object, moveable, moveable along a guiding device, and  
pivotable.

29 ~~76~~. (Amended) The apparatus of claim ~~67~~<sup>21</sup>, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

ES  
cont.

30 ~~77~~. (Amended) The apparatus of claim ~~67~~<sup>21</sup>, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding said at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

E9  
cont.

32 ~~79~~. (Amended) The apparatus of claim ~~67~~<sup>21</sup>, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control device processes the first control signal

and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates, and disables, said at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

~~35~~<sup>34</sup>. (Amended) The apparatus of claim ~~68~~<sup>34</sup>, further comprising:

a monitoring device, wherein said monitoring device monitors at least one of the premises, the premises operational status, the premises operation, the premises at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system,

Eq  
CDA.

an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises, activity outside the premises, and activity at the premises.

Eq  
contd.

<sup>34</sup>  
38 ~~83~~. (Amended) The apparatus of claim ~~68~~, wherein said first control device detects at least one of a use of the premises, an unauthorized use of the premises, an access at least one of into and onto the premises, and a theft of the premises.

E10

<sup>34</sup>  
41 ~~86~~. (Amended) The apparatus of claim ~~68~~, further comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

E11  
cont.

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

<sup>42</sup> 87. (Amended) The apparatus of claim <sup>34</sup> 68, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

E11  
cont.

<sup>43</sup> 88. (Amended) The apparatus of claim <sup>34</sup> 68, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding said at least one of a



E11  
cont.

premises and a premises ~~at~~ least one of system, equipment system, subsystem, device, component, and appliance.

---

E12

~~45~~<sup>34</sup>90. (Amended) The apparatus of claim ~~68~~<sup>34</sup>, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control device processes the first control signal and transmits a second control signal to said first control device, and further wherein said ~~first~~ control device at least one of activates, enables, de-activates, and disables, said at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

---

E13  
cont.

~~48~~<sup>47</sup>93. (Amended) The apparatus of claim ~~91~~<sup>47</sup>, further comprising:

a monitoring device, wherein said monitoring device monitors at least one of the premises, the premises operational status, the premises operation, the premises at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of

electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system, an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a gun, a weapon system, a self-defense system, an electronic warfare system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises, activity outside the premises, and activity at the premises.

E13  
cont.

51%. (Amended) The apparatus of claim 91,

wherein said first control device detects at least one of a use of the premises, an unauthorized use of the premises,

E14  
cont.

E14  
cont.

an access at least one of into and onto the premises, and a theft of the premises.

54 99. (Amended) The apparatus of claim 91, further comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

E15  
cont.

55 100. (Amended) The apparatus of claim 91, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

56 101. (Amended) The apparatus of claim 91, wherein

E15  
contd.

said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding said at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

Elle

~~58~~ 103. (Amended) The apparatus of claim ~~91~~<sup>49</sup>, wherein the third control device transmits a first control signal to the second control device, and further wherein the second control device processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates, and disables, at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

~~61~~ 106. (Amended) The apparatus of claim ~~91~~<sup>47</sup>, further comprising:

E17  
a voice synthesizing device, wherein said voice synthesizing device generates a voice message indicative of at least one of operation of the apparatus, status of the apparatus, operation of said first control device, and operation of the premises.

sub. E17 ~~66~~ 112. (Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the second control device and remote from at least one of a vehicle and a premises;

E18  
cont.  
transmitting a second signal from the second control device to a third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein the second control device is located at a location remote from the at least one of a vehicle and a premises;

at least one of generating a third signal and transmitting a third signal from the third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein said third signal is at least one of generated and transmitted in response to said second signal; and

E18  
could.

at least one of activating, deactivating, enabling, and disabling, at least one of the vehicle, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and a premises at least one of system, equipment system, subsystem, device, component, and appliance.

<sup>46</sup> 114. (Amended) The apparatus of claim <sup>34</sup> 68, wherein the premises at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a gun, a weapon system, a self-defense system, and an electronic warfare system.

E19

VERSIONS WITH MARKINGS TO SHOW CHANGES MADE TO THE CLAIMS

48. (Amended) The apparatus of claim 47,

further comprising:

a monitoring device, wherein said monitoring device monitors at least one of the vehicle, the vehicle operational status, the vehicle operation, [a] the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, engine temperature level, at least one of an electrical circuit and an electrical device, an equipment device, a computer, a command computer, an electronic command computer, a diagnostic computer, an ignition system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical, at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside

the vehicle, activity outside the vehicle, and activity at the vehicle.

51. (Amended) The apparatus of claim 47, wherein said first control device detects at least one of a use of the vehicle [use], an unauthorized use of the vehicle, an access at least one of into and onto the vehicle, and a theft of the vehicle.

54. (Amended) The apparatus of claim 47, further comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

55. (Amended) The apparatus of claim 47, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and



information at least one of from, for, and regarding, said at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

56. (Amended) The apparatus of claim 47, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the third control device, wherein the third control device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

58. (Amended) The apparatus of claim 47, wherein the third control device transmits a first control signal to the second control device, and further wherein the second control device[s] processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device processes said second control signal and generates a third

control signal, wherein said third control signal at least one of activates, enables, de-activates, and disables, [said] at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

61. (Amended) The apparatus of claim 47, further comprising:

a voice synthesizing device, wherein said voice [activating] synthesizing device generates a voice message indicative of at least one of operation of the apparatus, status of the apparatus, operation of said first control device, and operation of the vehicle.

67. (Amended) A control apparatus, comprising:

a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, wherein said first control device is located at the vehicle,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

68. (Amended) A control apparatus, comprising:

a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component, and appliance, wherein said first control device is located at the premises,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

72. (Amended) The apparatus of claim 67, wherein said first control device detects at least one of a use of the vehicle [use], an unauthorized use of the vehicle, an access at least one of into and onto the vehicle, and a theft of the vehicle.

75. (Amended) The apparatus of claim 67, further comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

76. (Amended) The apparatus of claim 67, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of [the] a vehicle[,] and [the] a vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

77. (Amended) The apparatus of claim 67, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the

communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding said at least one of [the] a vehicle and [the] a vehicle at least one of system, equipment system, subsystem, device, component, and appliance.

79. (Amended) The apparatus of claim 67, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control device[s] processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates, and disables, said at least one of [the] a vehicle and [the] a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

80. (Amended) The apparatus of claim 68, further comprising:

a monitoring device, wherein said monitoring device monitors at least one of the premises, the premises

operational status, the premises operation, [a] the premises at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system, an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises, activity outside the premises, and activity at the premises.

83. (Amended) The apparatus of claim 68, wherein

said first control device detects at least one of a use of the premises [use], an unauthorized use of the premises, an access at least one of into and onto the premises, and a theft of the premises.

86. (Amended) The apparatus of claim 68, further comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

87. (Amended) The apparatus of claim 68, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of [the] a premises[,] and [the] a premises at least one of system, equipment system, subsystem, device, component, and appliance.



88. (Amended) The apparatus of claim 68, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding said at least one of [the] a premises and [the] a premises at least one of system, equipment system, subsystem, device, component, and appliance.

90. (Amended) The apparatus of claim 68, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control device[s] processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates, and disables, said at least one of [the] a premises and [the] a premises at least one of system, equipment system,

subsystem, device, component, and appliance, in response to said second control signal.

93. (Amended) The apparatus of claim 91, further comprising:

a monitoring device, wherein said monitoring device monitors at least one of the premises, the premises operational status, the premises operation, [a] the premises at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system, an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a gun, a weapon system, a self-defense

system, an electronic warfare system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises, activity outside the premises, and activity at the premises.

96. (Amended) The apparatus of claim 91, wherein said first control device detects at least one of a use of the premises [use], an unauthorized use of the premises, an access at least one of into and onto the premises, and a theft of the premises.

99. (Amended) The apparatus of claim 91, further comprising:

at least one of a camera, a video recording device, a microphone, and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone, and an audio recording device, is at least one of stationary, mounted on an

object, moveable, moveable along a guiding device, and pivotable.

100. (Amended) The apparatus of claim 91, wherein said first control device at least one of receives, processes, and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of [the] a premises[, ] and [the] a premises at least one of system, equipment system, subsystem, device, component, and appliance.

101. (Amended) The apparatus of claim 91, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding said at least one of [the] a premises and [the] a premises at least one of system, equipment system, subsystem, device, component, and appliance.

103. (Amended) The apparatus of claim 91, wherein the third control device transmits a first control signal to the second control device, and further wherein the second control device[s] processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates, and disables, [said] at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component, and appliance, in response to said second control signal.

106. (Amended) The apparatus of claim 91, further comprising:

a voice synthesizing device, wherein said voice [activating] synthesizing device generates a voice message indicative of at least one of operation of the apparatus, status of the apparatus, operation of said first control device, and operation of the premises.

112. (Amended) A control method, comprising:

transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the second control device and remote from at least one of a vehicle and a premises;

transmitting a second signal from the second control device to a third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein the second control device is located at a location remote from the at least one of a vehicle and a premises;

at least one of generating a third signal and transmitting a third signal from the third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein said third signal is at least one of generated and transmitted in response to said second signal; and

at least one of activating, deactivating, enabling, and disabling, at least one of the vehicle, [the] a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises,

and [the] a premises at least one of system, equipment system, subsystem, device, component, and appliance.

114. (Amended) The apparatus of claim 68, wherein [said at least one of a] the premises at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a gun, a weapon system, a self-defense system, and an electronic warfare system.

REMARKS

This is an Amendment After Allowance Pursuant to 37 C.F.R. §1.312 in the above-identified application. Applicant has amended claims 48, 51, 54, 55, 56, 58, 61, 67, 68, 72, 75, 76, 77, 79, 80, 83, 86, 87, 88, 90, 93, 96, 99, 100, 101, 103, 106, 112 and 114.

Applicant has amended Claim 48 so as to replace "a" with -- the --, as shown, as antecedent basis for "vehicle at least one of system, equipment system, subsystem, device, component, and appliance," is provided in the respective base claim.

Applicant has amended Claim 51 so as to insert -- use of the -- before "vehicle" and so as to delete "use" after "vehicle", as shown, as antecedent basis for "vehicle" is provided in the respective base claim.

Applicant has amended Claim 54 so as to insert -- , -- (comma) after "microphone", as shown in both instances, in order to use consistent punctuation.



Applicant has amended Claim 55 so as to insert -- , -- (comma) after "processes" and after "component", as shown, in order to use consistent punctuation.

Applicant has amended Claim 56 so as to insert -- , -- (comma) after "component", as shown, in order to use consistent punctuation.

Applicant has amended Claim 58 so as to delete the "s" at the end of "devices" in order to correct an inadvertent error. Applicant has also amended Claim 58 so as to insert -- , -- (comma) after "de-activates" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 58 so as to delete "said", as shown, in order to correct an inadvertent error.

Applicant has amended Claim 61 so as to replace "activating" with -- synthesizing --, as shown, in order to correct an inadvertent error.

Applicant has amended Claim 67 so as to insert

-- , -- (comma) after "component", as shown, in order to use consistent punctuation.

Applicant has amended Claim 68 so as to insert -- , -- (comma) after "component", as shown, in order to use consistent punctuation.

Applicant has amended Claim 72 so as to insert -- use of the -- before "vehicle" and so as to delete "use" after "vehicle", as shown, as antecedent basis for "vehicle" is provided in the respective base claim.

Applicant has amended Claim 75 so as to insert -- , -- (comma) after "microphone", as shown in both instances, in order to use consistent punctuation.

Applicant has amended Claim 76 so as to insert -- , -- (comma) after "processes" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 76 so as to replace "the" with -- a --, as shown in both instances, and so as to delete the "," after "vehicle", as shown, in order to correct an inadvertent error.

Applicant has amended Claim 77 so as to insert -- , -- (comma) after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 77 so as to insert -- said -- after "regarding", as shown, and so as to replace "the" with -- a --, as shown in both instances, in order to correct an inadvertent error.

Applicant has amended Claim 79 so as to delete the "s" at the end of "devices" in order to correct an inadvertent error. Applicant has also amended Claim 79 so as to insert -- , -- (comma) after "de-activates" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 79 so as to replace "the" with -- a --, as shown in both instances, in order to correct an inadvertent error.

Applicant has amended Claim 80 so as to insert -- one -- after "at least", as shown, in order to correct an inadvertent error in the respective alternative claiming instance. Applicant has also amended Claim 80 in order to replace "a" with -- the --, as shown, as antecedent basis for "premises at least one of system, equipment system, subsystem, device, component, and appliance," is provided in the respective base claim.

Applicant has amended Claim 83 so as to insert -- use of the -- before "premises" and so as to delete "use" after "premises", as shown, as antecedent basis for "premises" is provided in the respective base claim.

Applicant has amended Claim 86 so as to insert -- , -- (comma) after "microphone", as shown in both instances, in order to use consistent punctuation.

Applicant has amended Claim 87 so as to insert -- , -- (comma) after "processes" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 87 so as to replace "the" with -- a --, as shown in both instances, and so as to delete the ", " after "premises", as shown, in order to correct an inadvertent error.

Applicant has amended Claim 88 so as to insert -- , -- (comma) after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 88 so as to insert -- said -- after "regarding", as shown, and so as to replace "the" with -- a --, as shown in both instances, in order to correct an inadvertent error.

Applicant has amended Claim 90 so as to delete the "s" at the end of "devices" in order to correct an inadvertent error. Applicant has also amended Claim 90 so as to insert -- , -- (comma) after "de-activates" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 90 so as to replace "the" with -- a --, as shown in both instances, in order to correct an inadvertent error.

Applicant has amended Claim 93 so as to replace "a" with -- the --, as shown, as antecedent basis for "premises at least one of system, equipment system, subsystem, device, component, and appliance," is provided in the respective base claim.

Applicant has amended Claim 96 so as to insert -- use of the -- before "premises" and so as to delete "use" after "premises", as shown, as antecedent basis for "premises" is provided in the respective base claim.

Applicant has amended Claim 99 so as to insert -- , -- (comma) after "microphone", as shown in both instances, in order to use consistent punctuation.

Applicant has amended Claim 100 so as to insert -- , -- (comma) after "processes" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 100 so as to replace "the" with -- a --, as shown in both instances, and so as to delete the "," after "premises", as shown, in order to correct an inadvertent error.

Applicant has amended Claim 101 so as to insert -- , -- (comma) after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 101 so as to insert -- said -- after "regarding", as shown, and so as to replace "the" with -- a --, as shown in both instances, in order to correct an inadvertent error.

Applicant has amended Claim 103 so as to delete the "s" at the end of "devices" in order to correct an inadvertent error. Applicant has also amended Claim 103 so as to insert -- , -- (comma) after "de-activates" and after "component", as shown, in order to use consistent punctuation. Applicant has also amended Claim 103 so as to delete "said", as shown, in order to correct an inadvertent error.

Applicant has amended Claim 106 so as to replace "activating" with -- synthesizing --, as shown, in order to correct an inadvertent error.

Applicant has amended Claim 112 so as to replace "the" with -- a --, as shown in both instances, in order to provide antecedent basis for "vehicle at least one of system, equipment system, subsystem, device, component, and appliance,", in the first instance, and in order to provide antecedent basis for "premises at least one of system, equipment system, subsystem, device, component, and appliance", in the second instance.

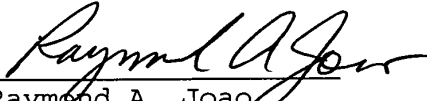
Applicant has amended Claim 114 so as to replace "said at least one of a" with -- the --, as shown, in order to correct an inadvertent error.

Applicant submits that the above amendments to the claims were not made for purposes related to patentability.

Applicant further submits that the above amendments to the claims do not contain new matter.

Entry of this Amendment After Allowance Pursuant  
to 37 C.F.R. §1.312 is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

July 25, 2001

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992



# 24

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on July 10, 2001.

*Raymond A. Joao*  
Raymond A. Joao

RECEIVED  
JUL 10 2001

RJ315

Technology Center 2600

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. TRIEU  
GROUP : 2632  
ALLOWED : JUNE 4, 2001  
BATCH NO. : H08

Box ISSUE FEE  
Assistant Commissioner For Patents  
Washington, D.C. 20231  
ATTN: OFFICIAL DRAFTSPERSON

SUBMISSION OF FORMAL DRAWINGS


Sir:

Applicant submits herewith the Formal Drawings for  
Figures 1, 2, 3, 4, 5A, 5B, 6A, 6B, 7, 8A, 8B, 9, 10, 11A, 11B,

12, 13, 14, 15 and 16 (20 sheets) for entry in the above-identified application.

It is respectfully requested that the Formal Drawings be entered into the above-identified application.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Date: July 10, 2001

encls.: Formal Drawings for Figures 1, 2, 3, 4, 5A, 5B, 6A, 6B, 7, 8A, 8B, 9, 10, 11A, 11B, 12, 13, 14, 15 and 16 (20 sheets)

Raymond A. Joao  
122 Bellevue Place  
Yonkers, New York 10703  
914) 969-2992

6542076

109/551,365

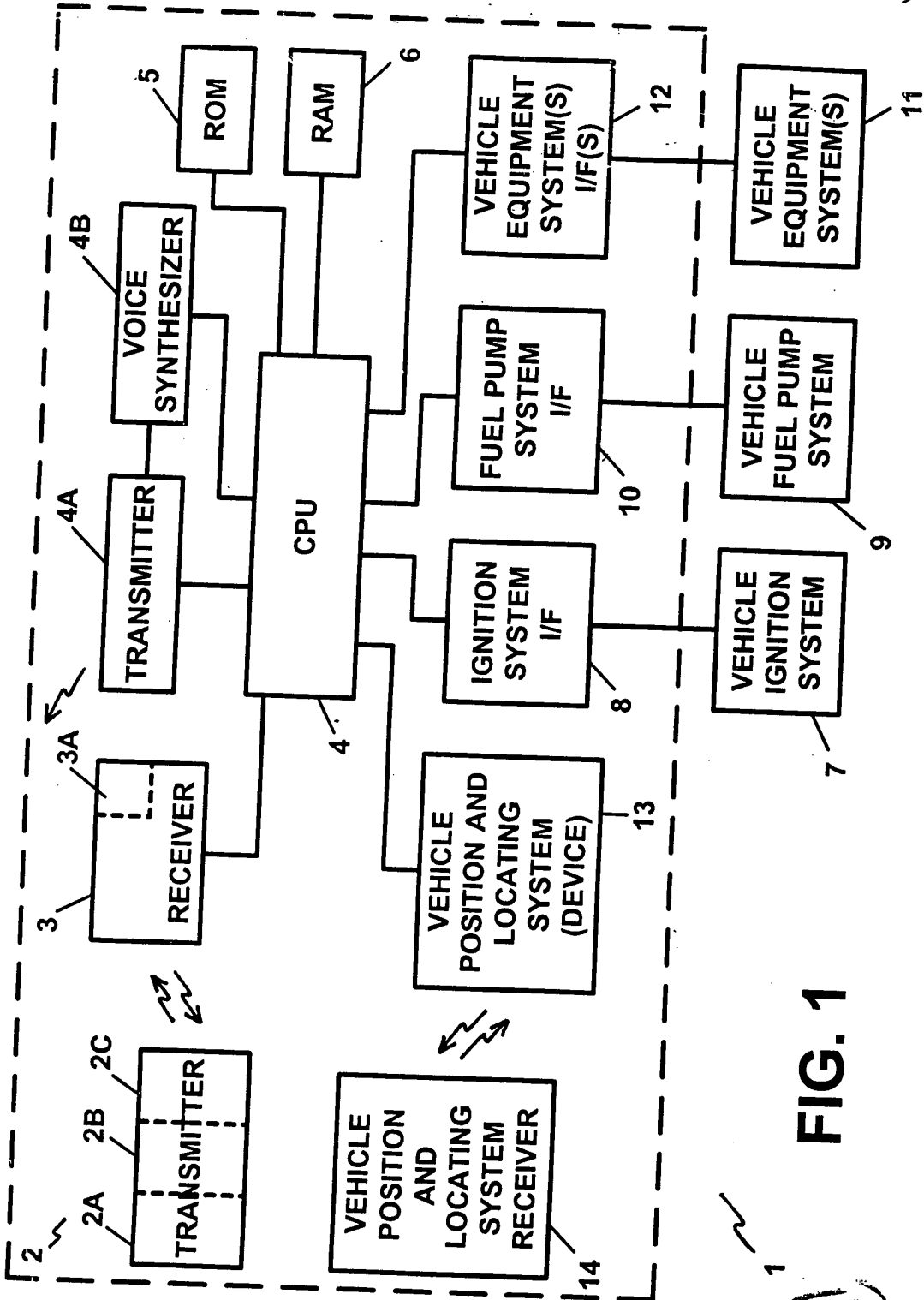
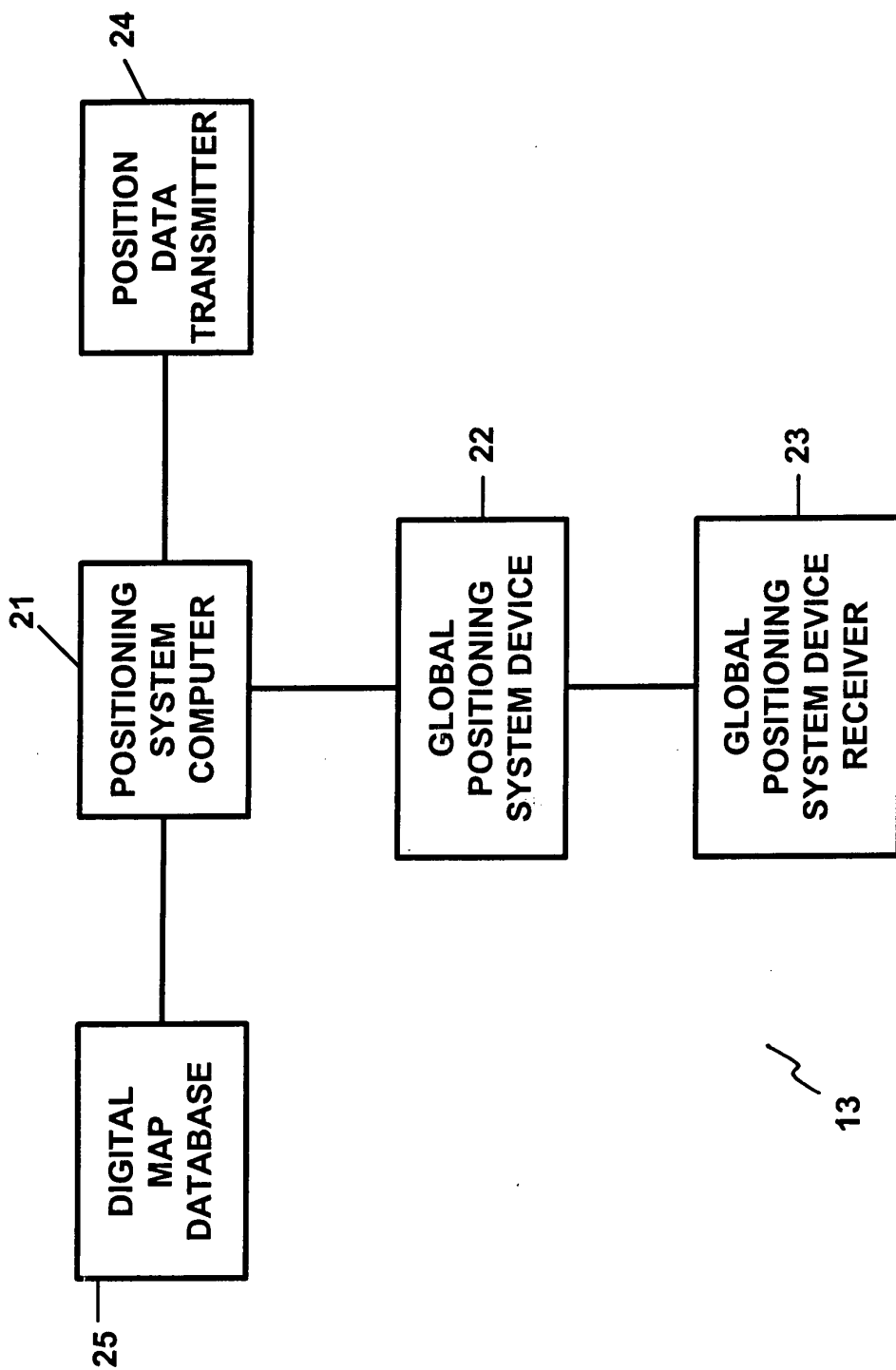


FIG. 1

20

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/551, 325



**FIG. 2**

13

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/55/365

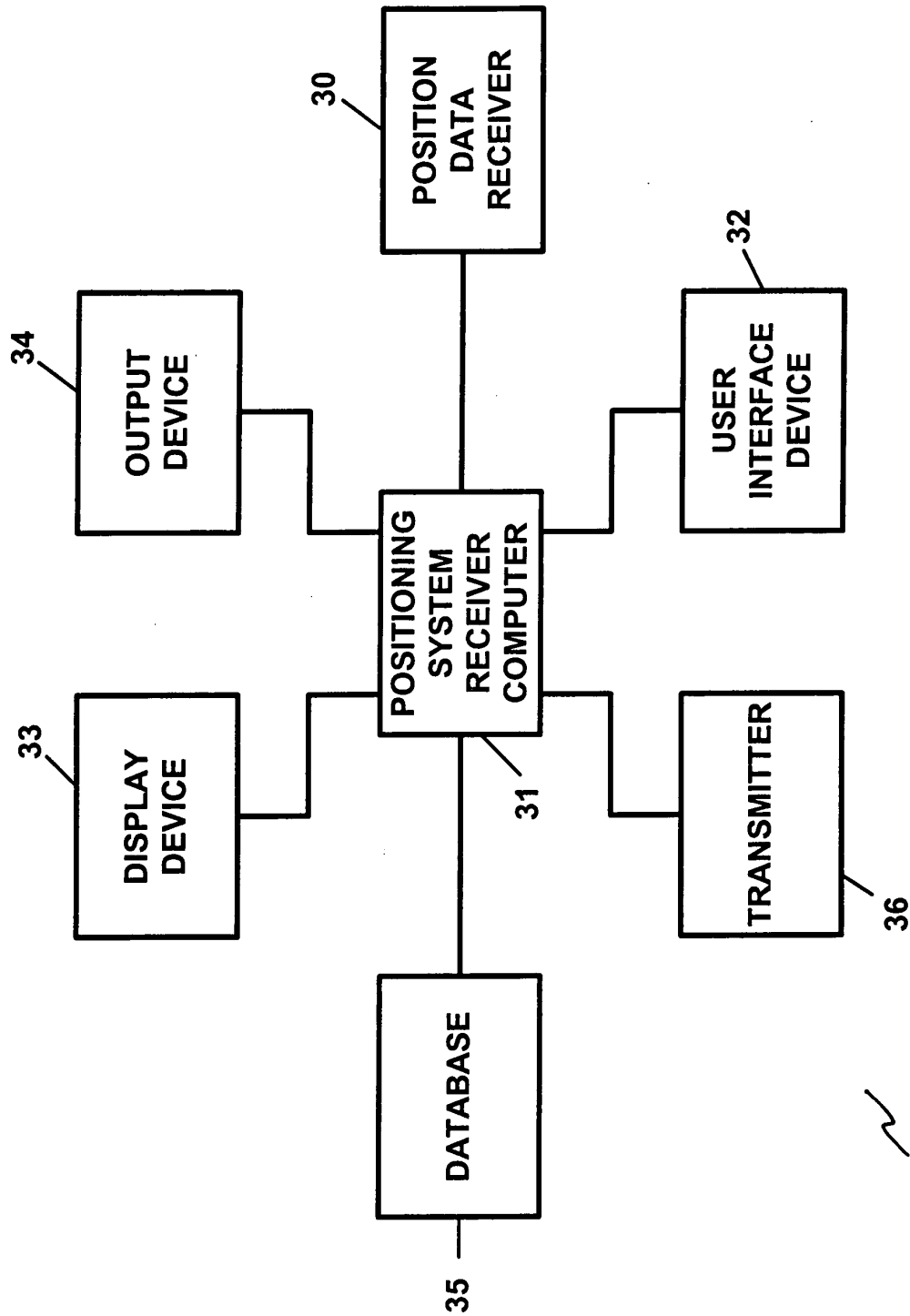
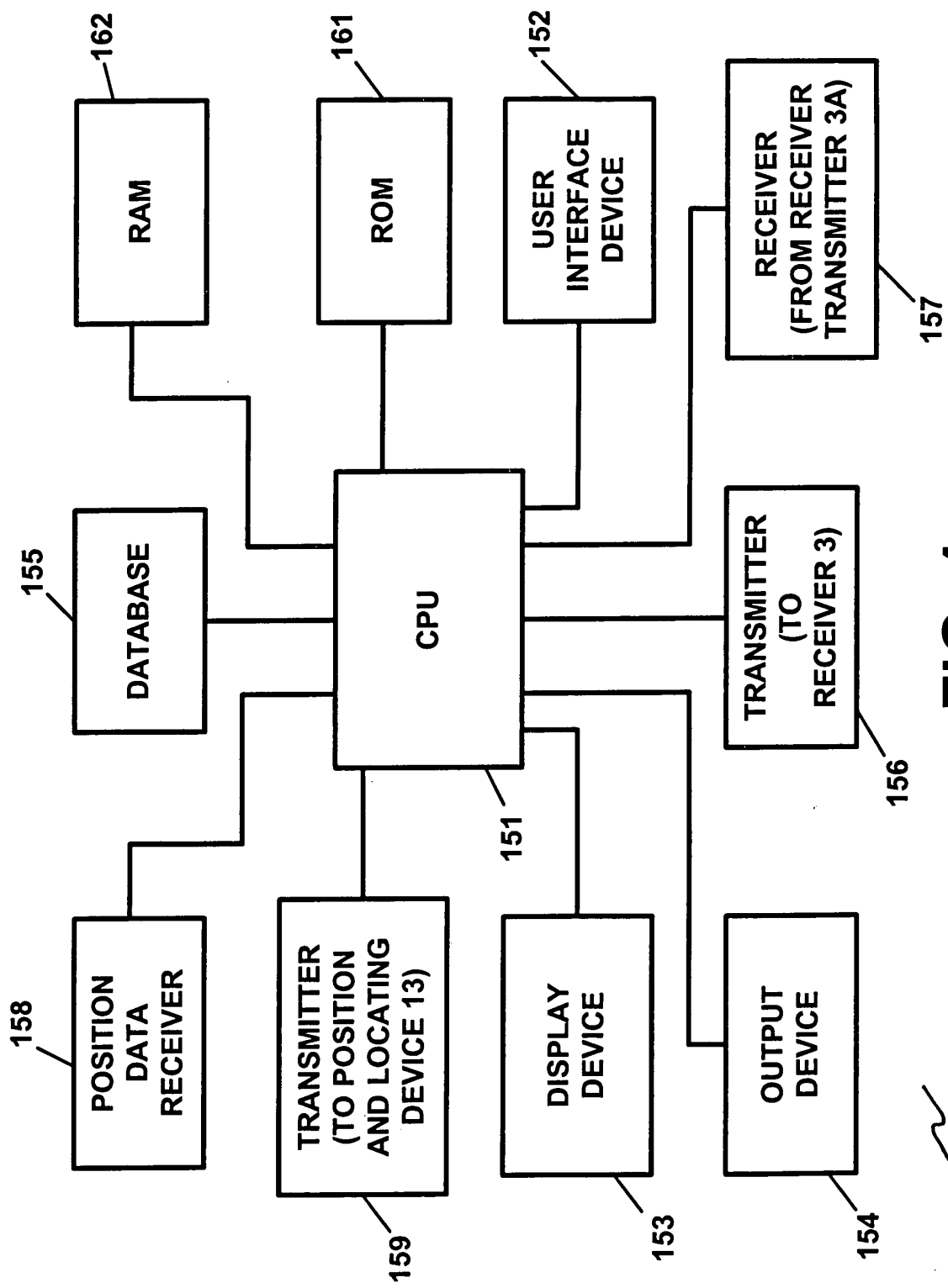


FIG. 3

14

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/55/365



**FIG. 4**

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | D.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/557,365

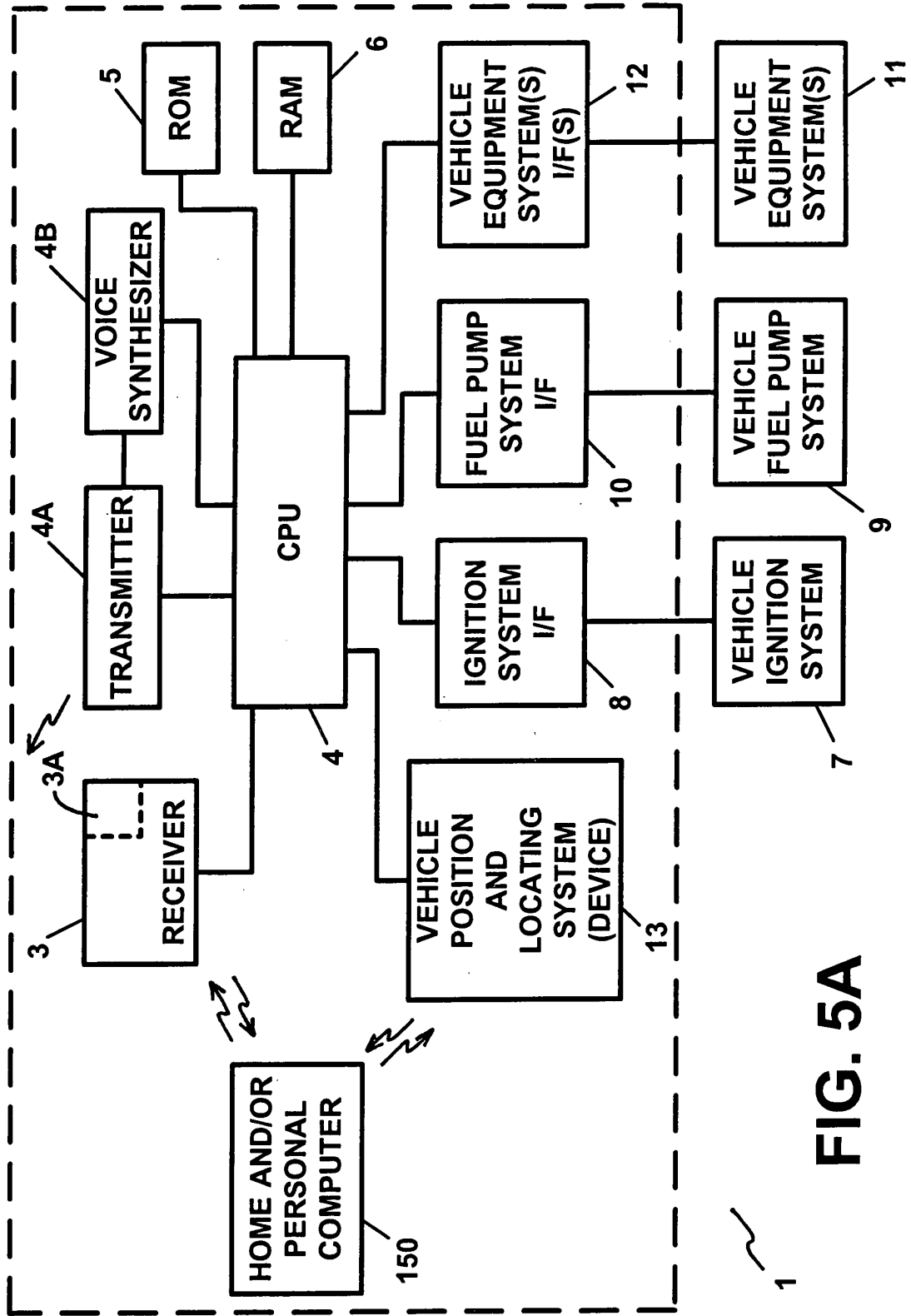


FIG. 5A

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/551,365

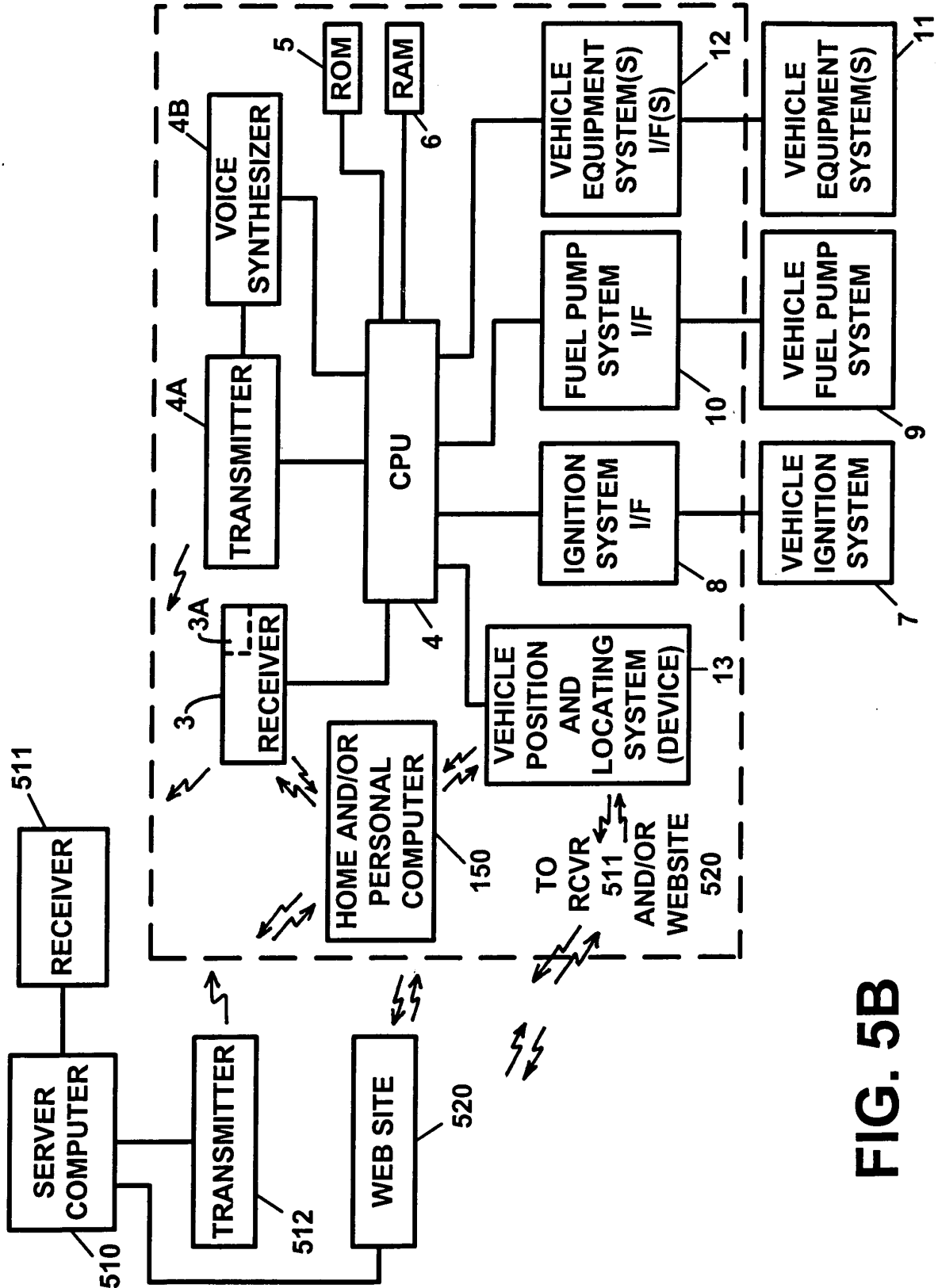
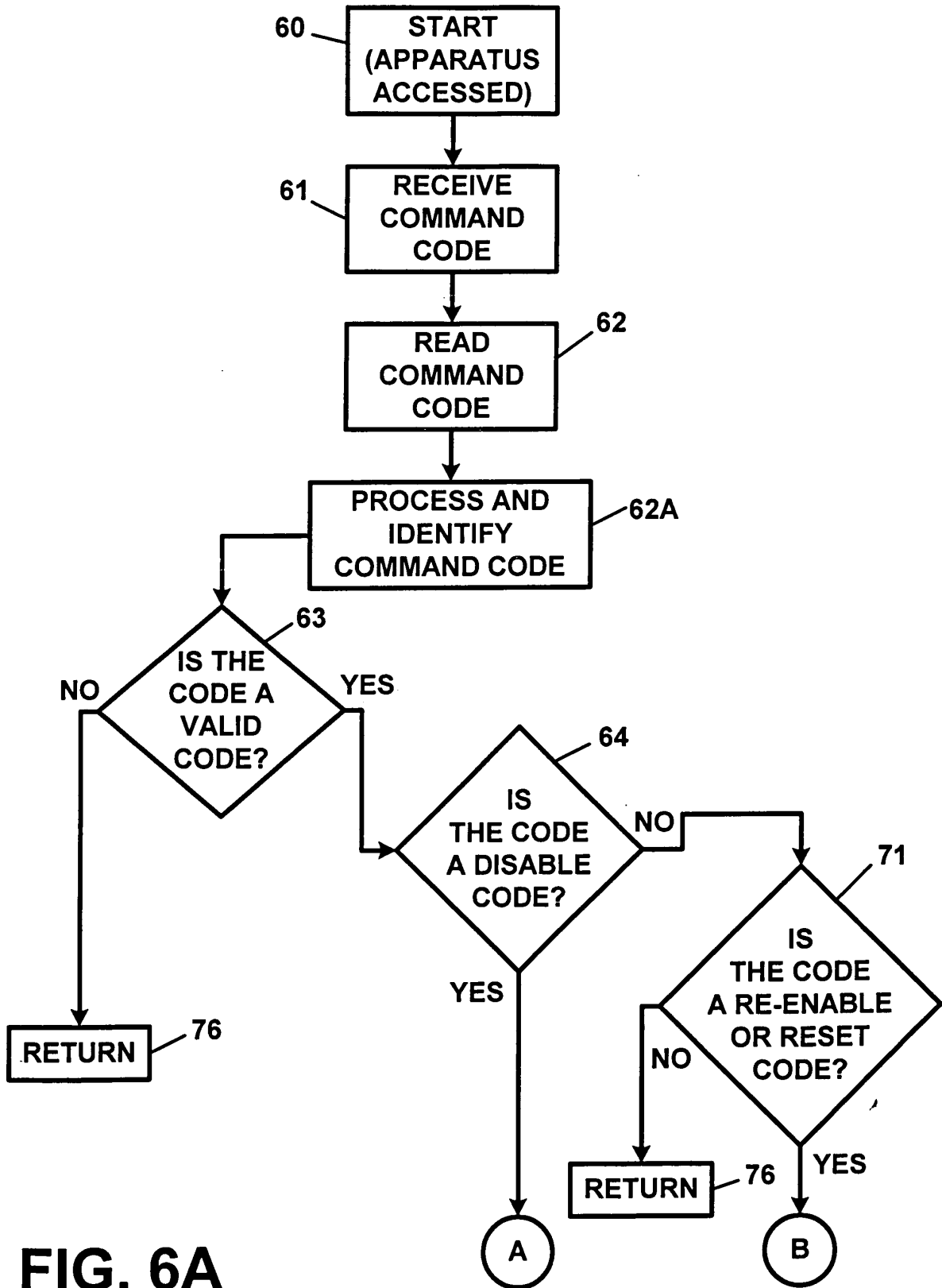


FIG. 5B



|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/557,365



**FIG. 6A**

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/551,365

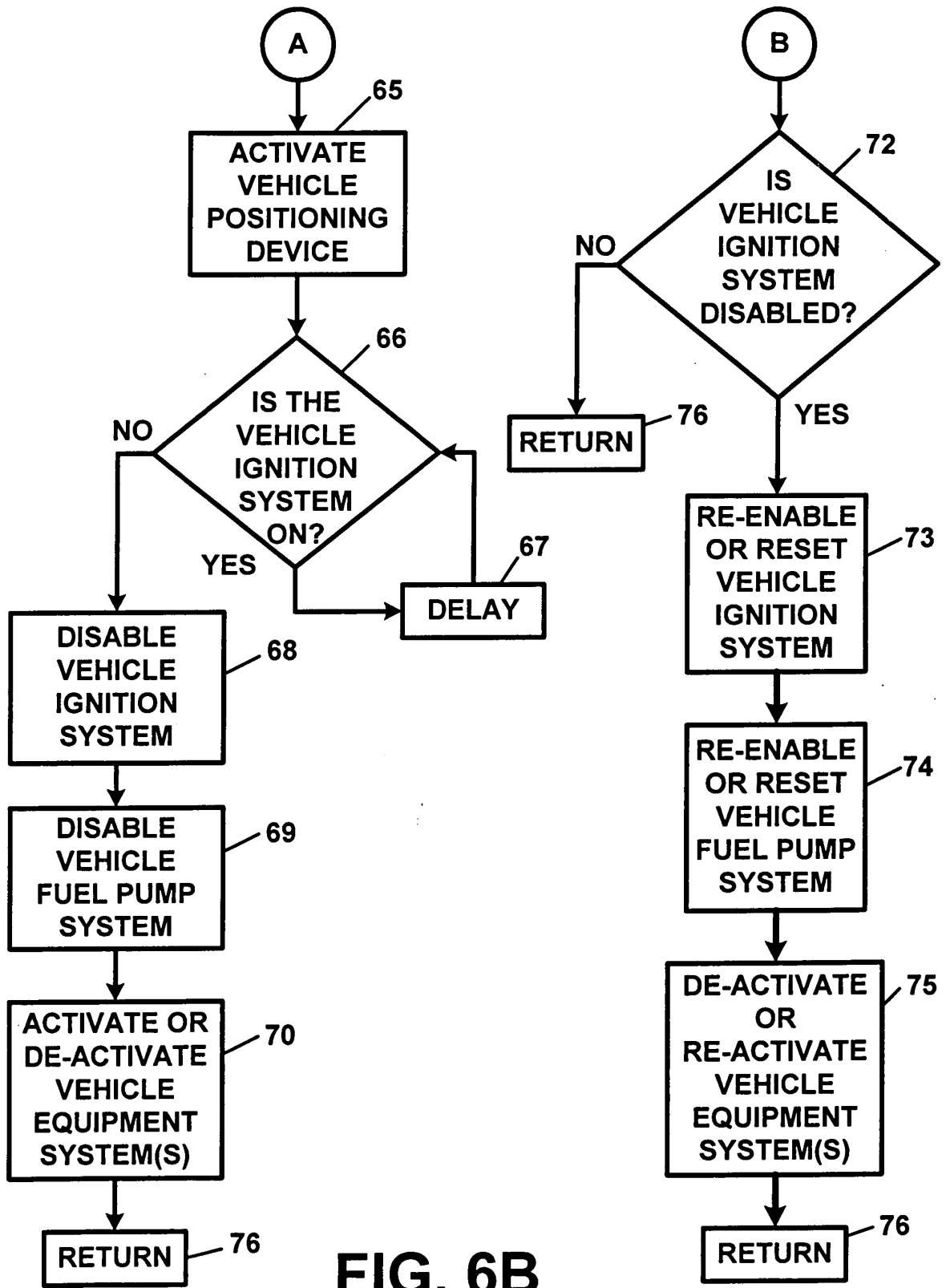
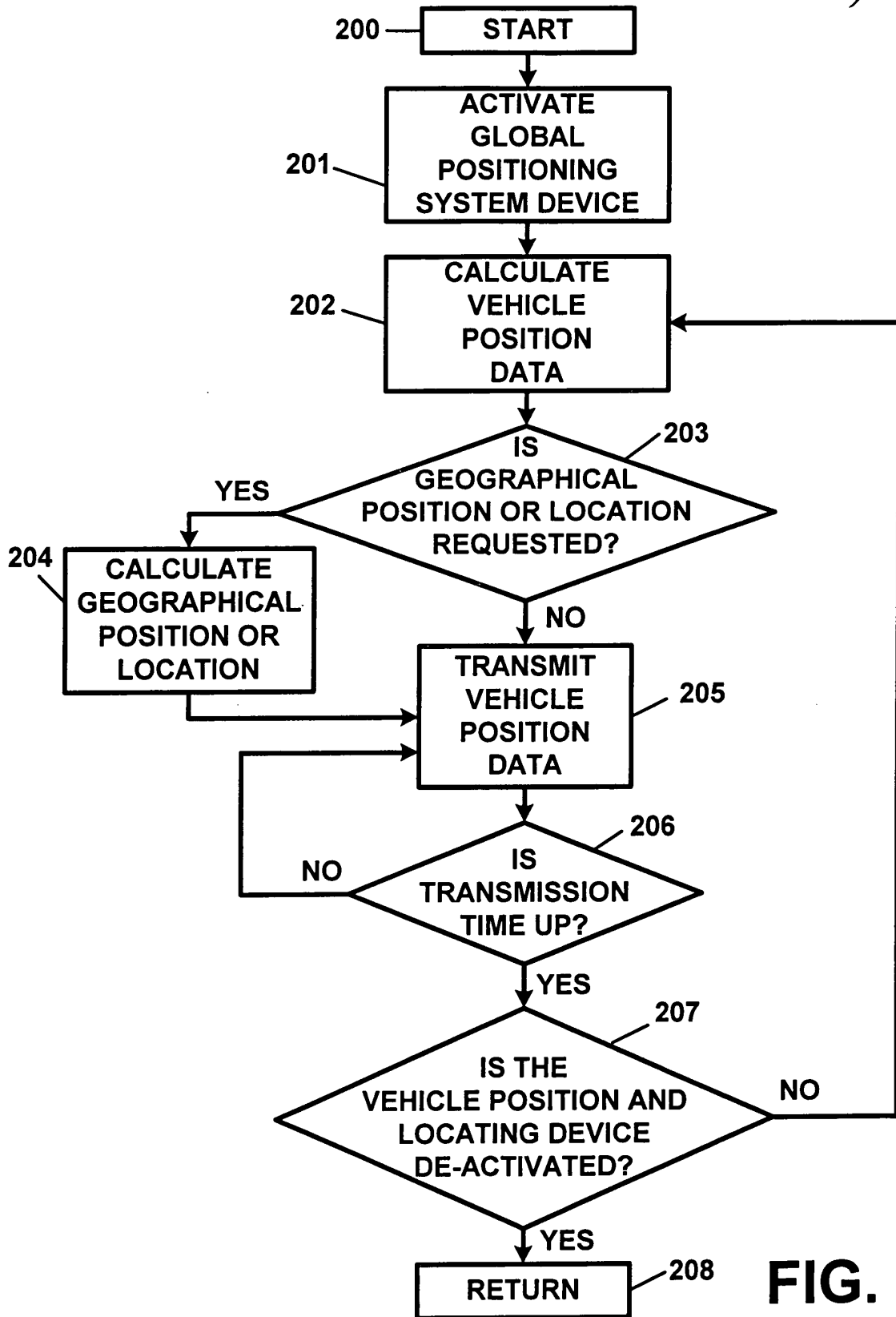


FIG. 6B

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

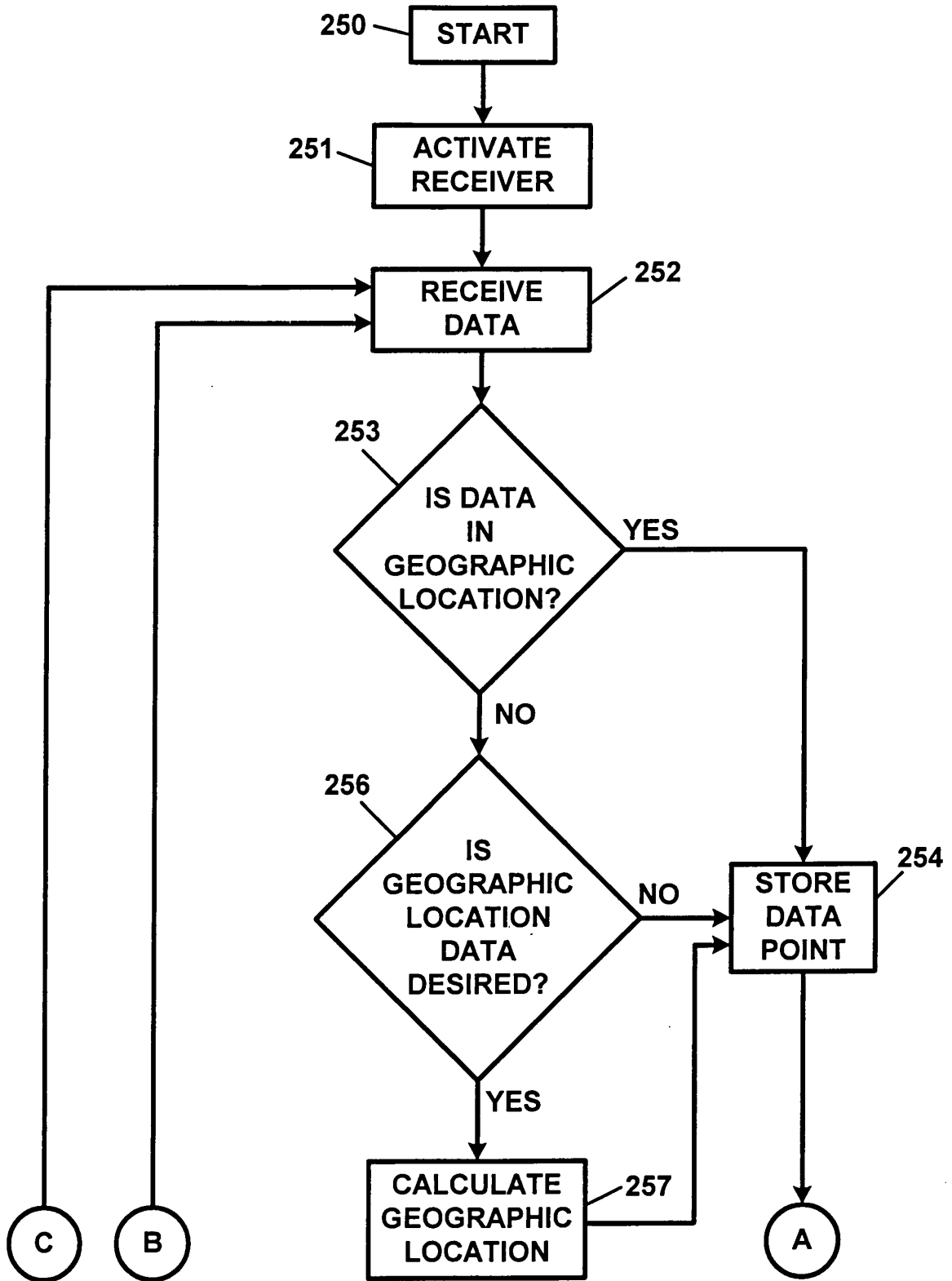
09/55/365



**FIG. 7**

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

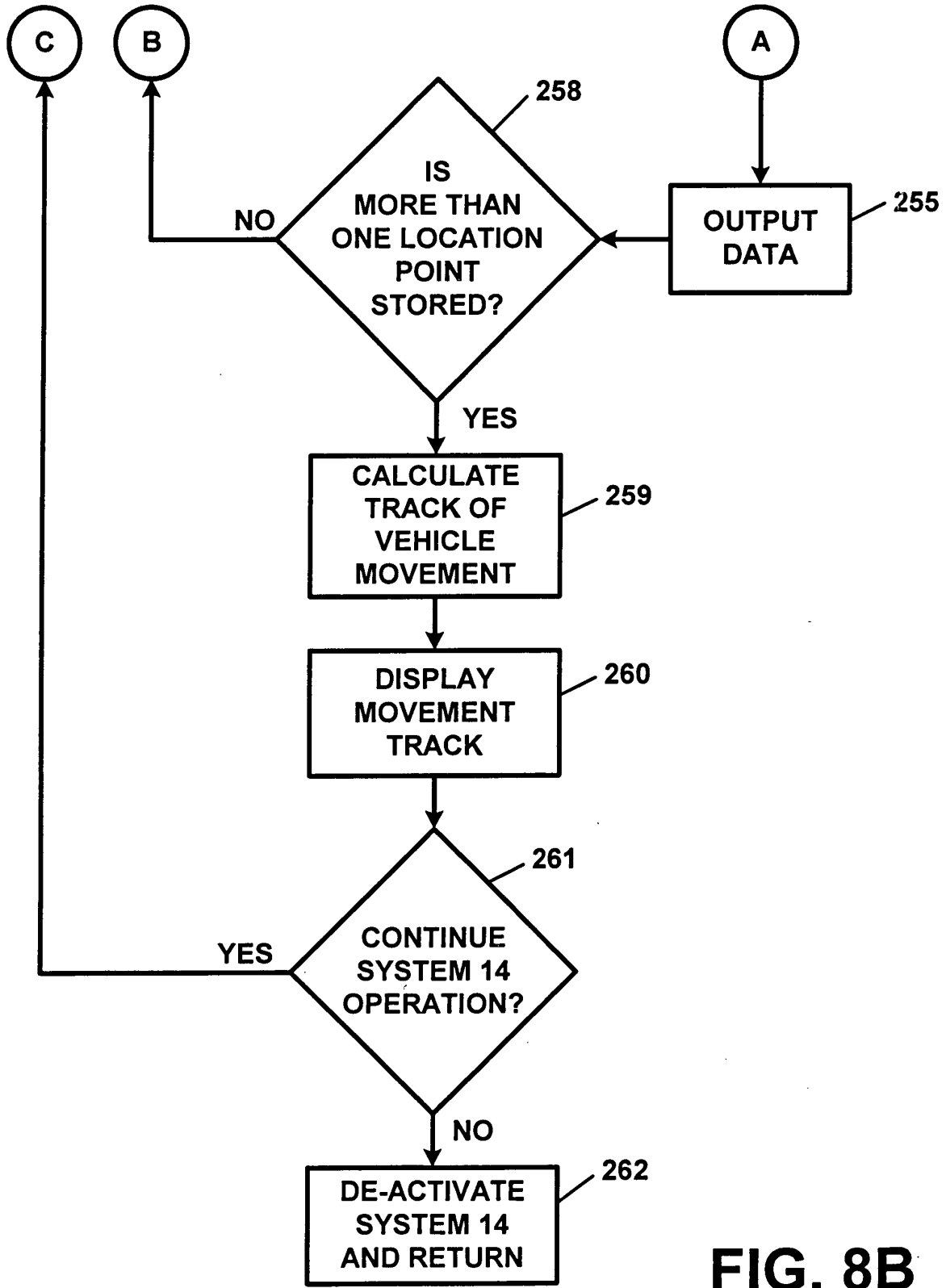
09/55/365



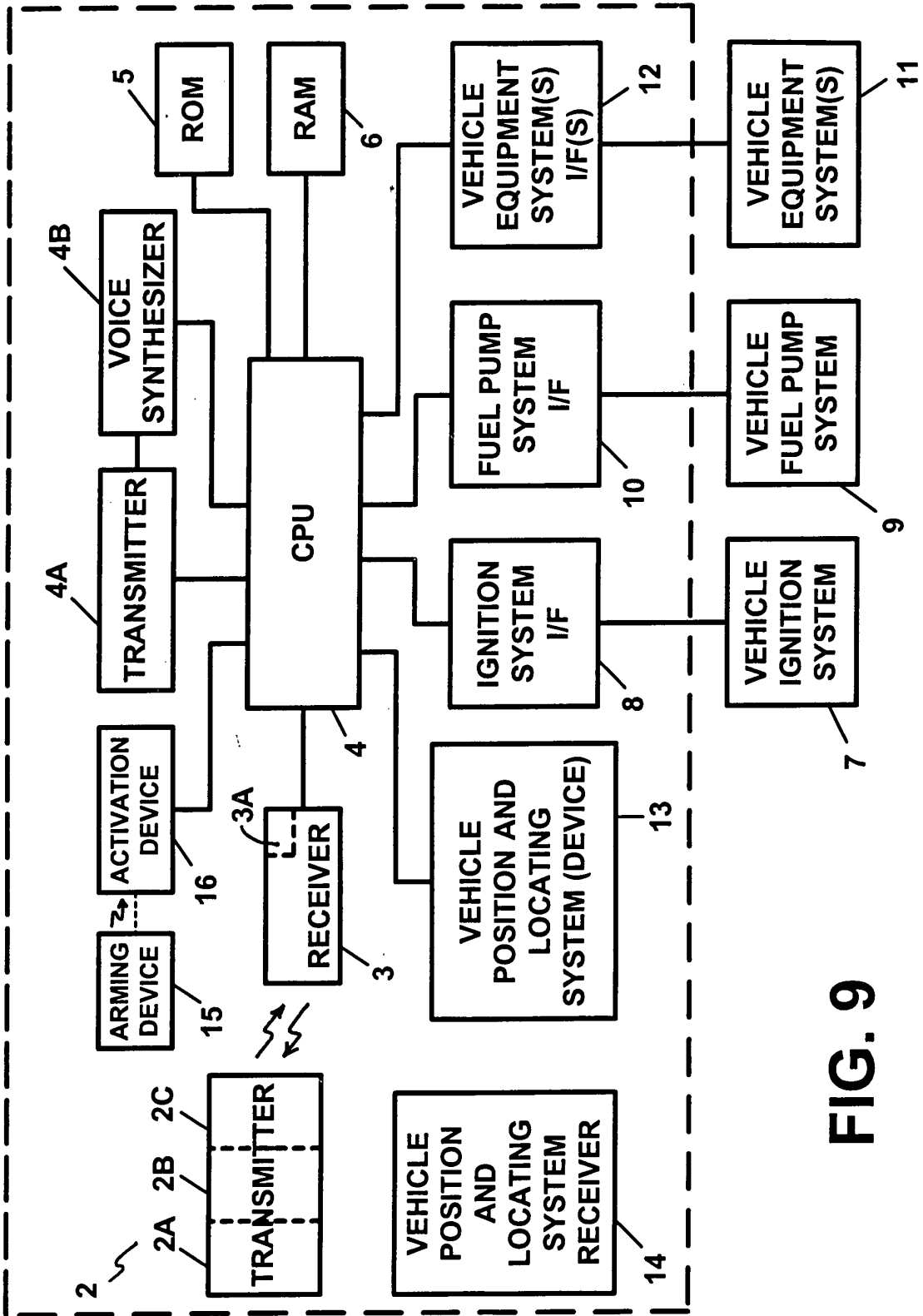
**FIG. 8A**

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/551,365



**FIG. 8B**



**FIG. 9**

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/551,365

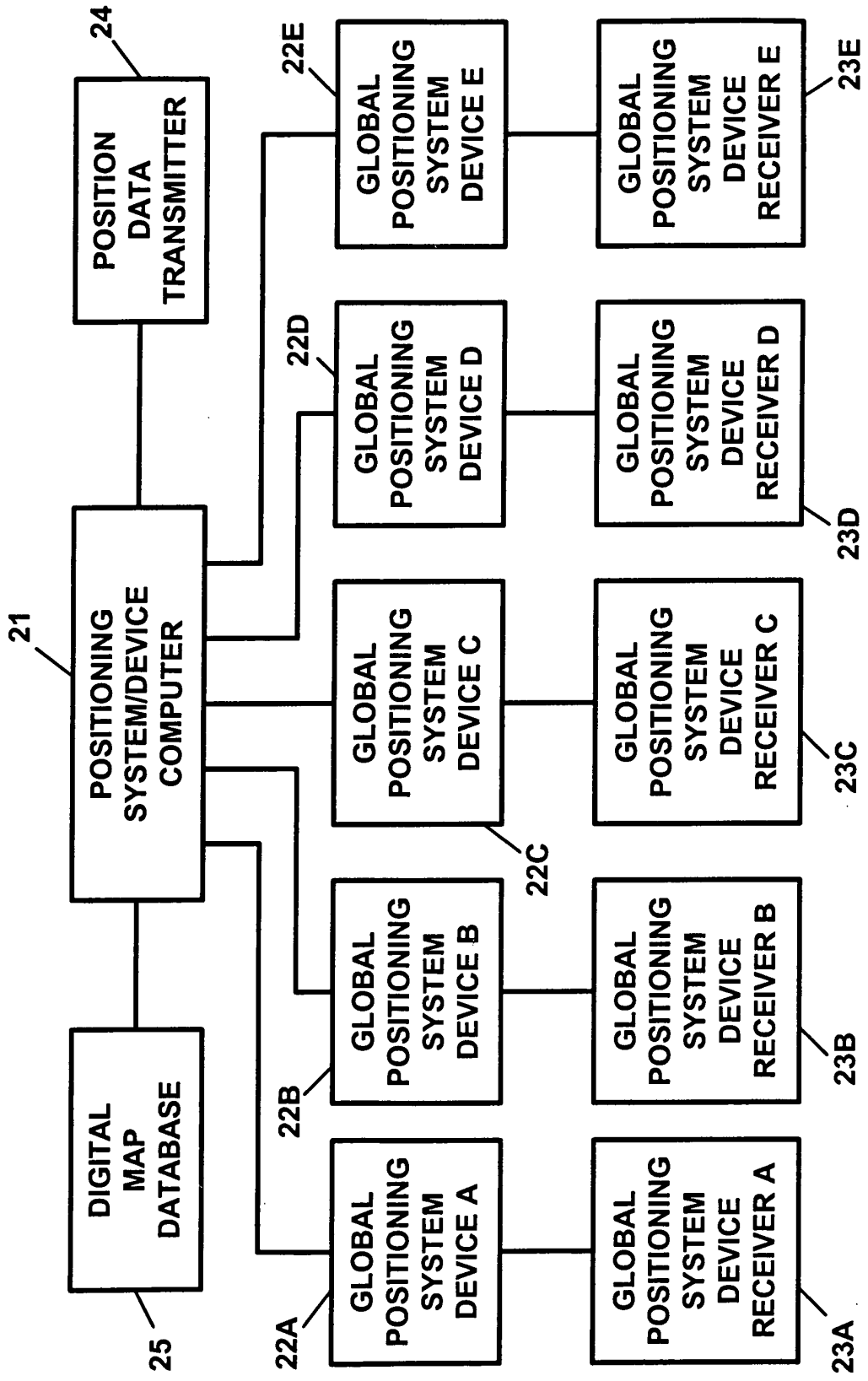
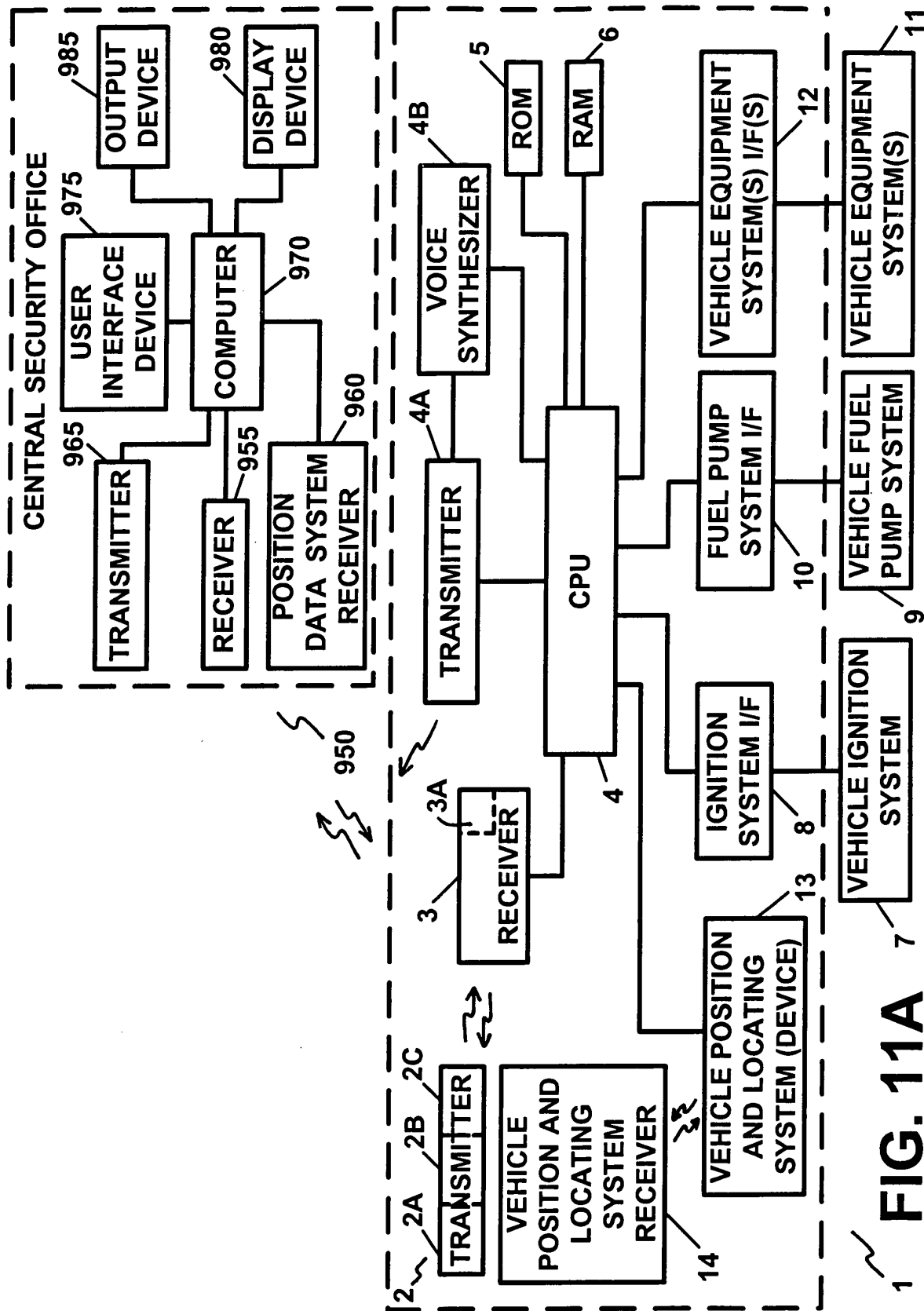


FIG. 10

130

09/55/365



**FIG. 11A**



09/55/345

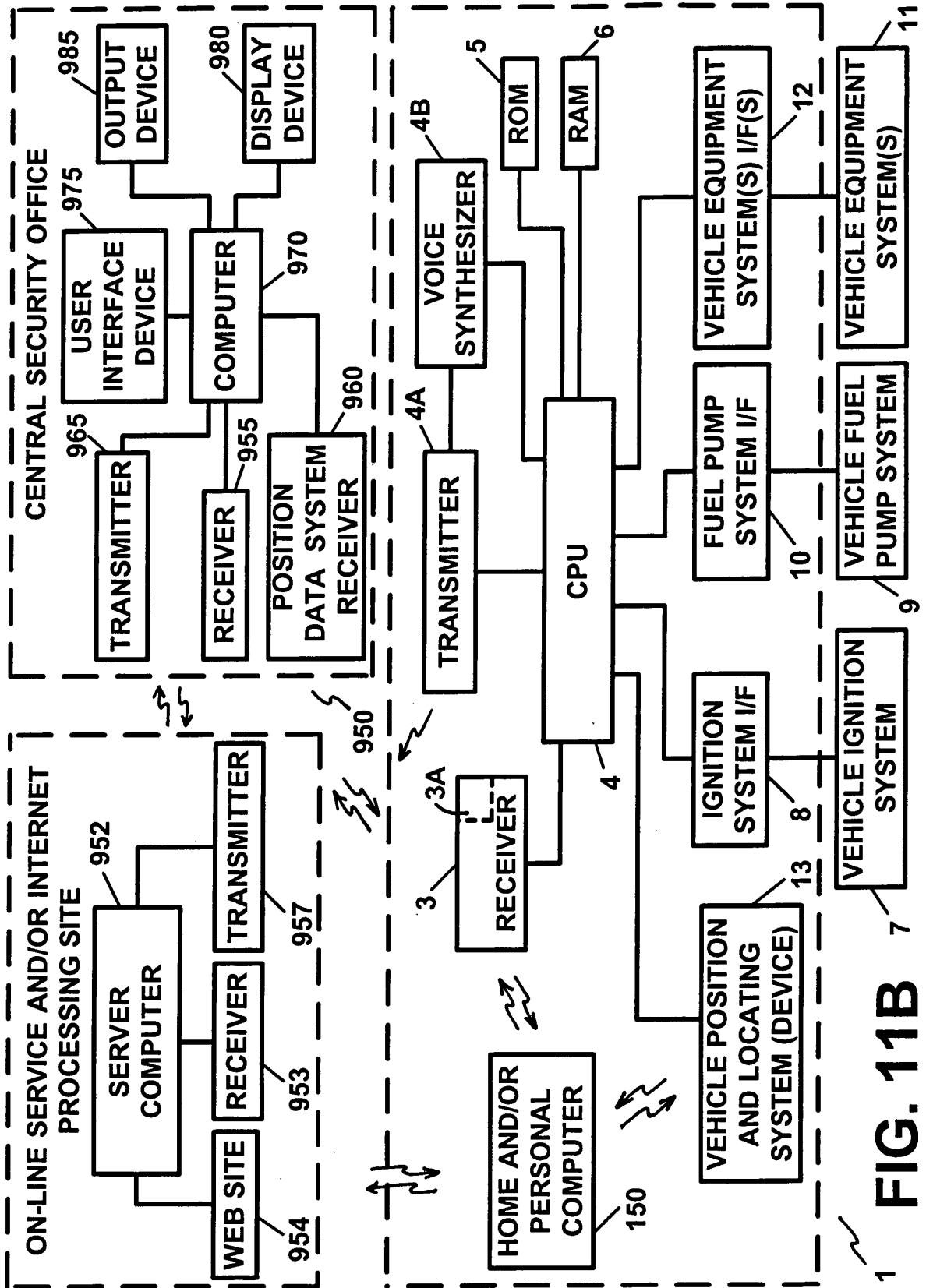


FIG. 11B

|           |           |          |
|-----------|-----------|----------|
| APPROVED  | O.G. FIG. |          |
| BY        | CLASS     | SUBCLASS |
| DRAFTSMAN |           |          |

09/55/365

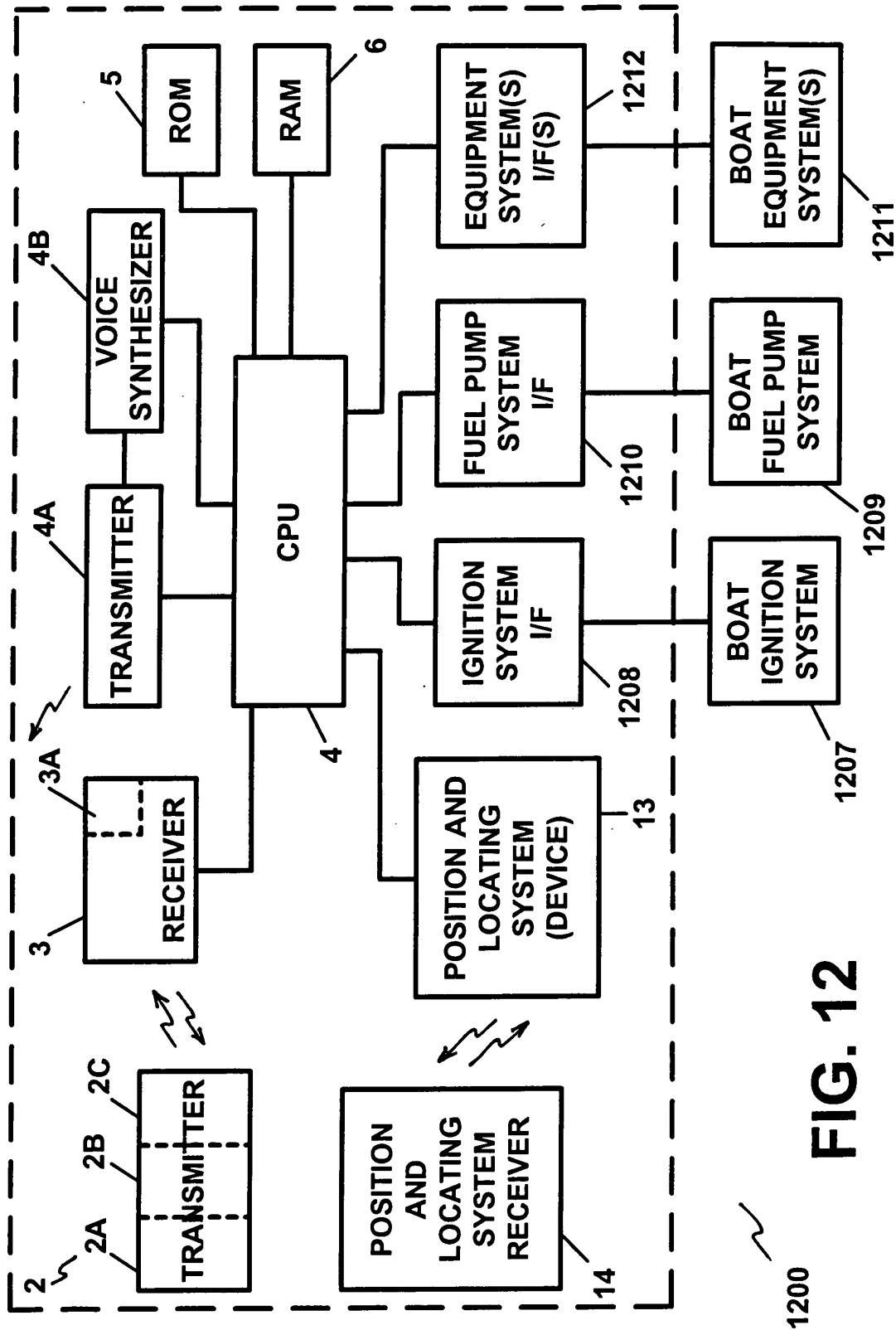
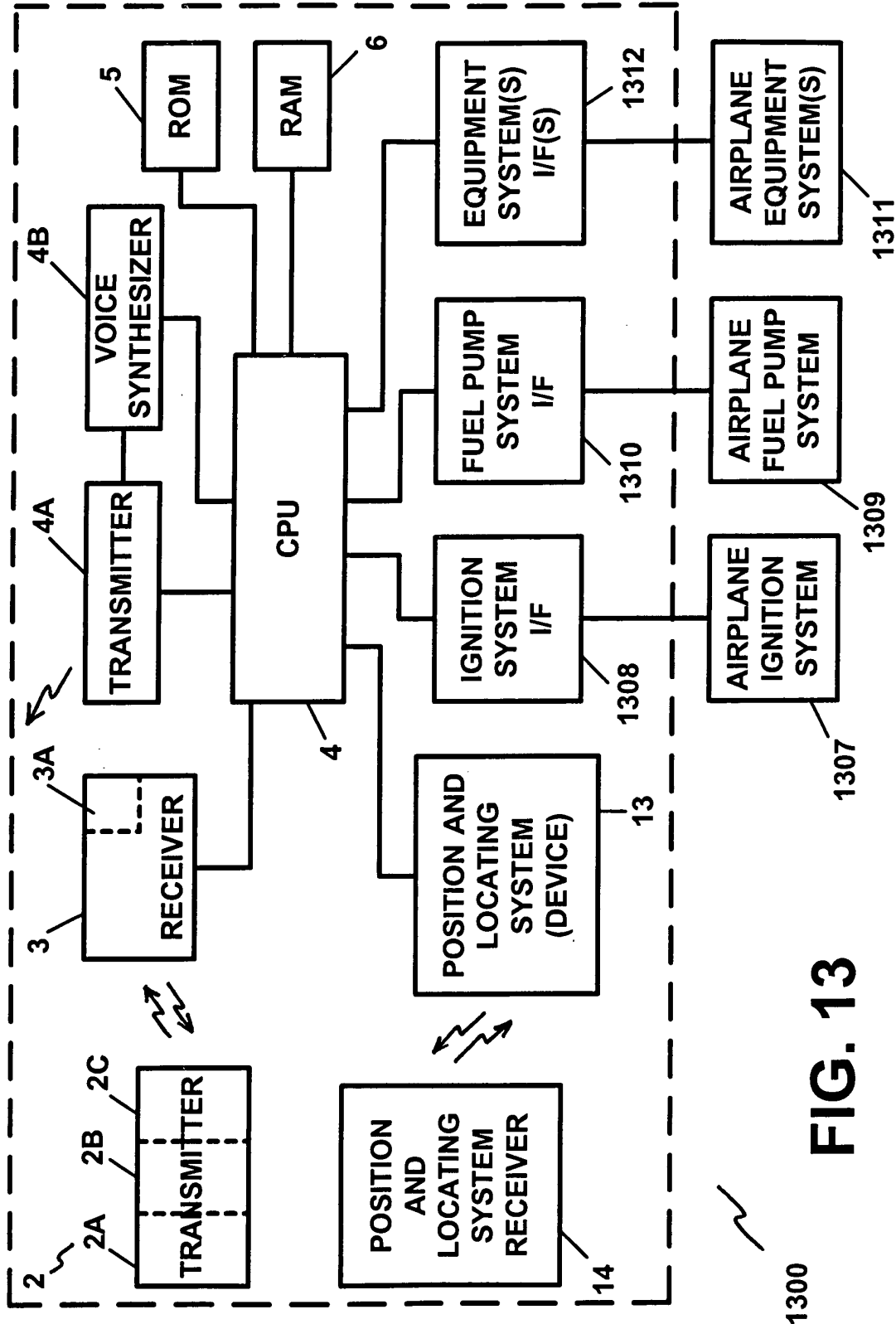


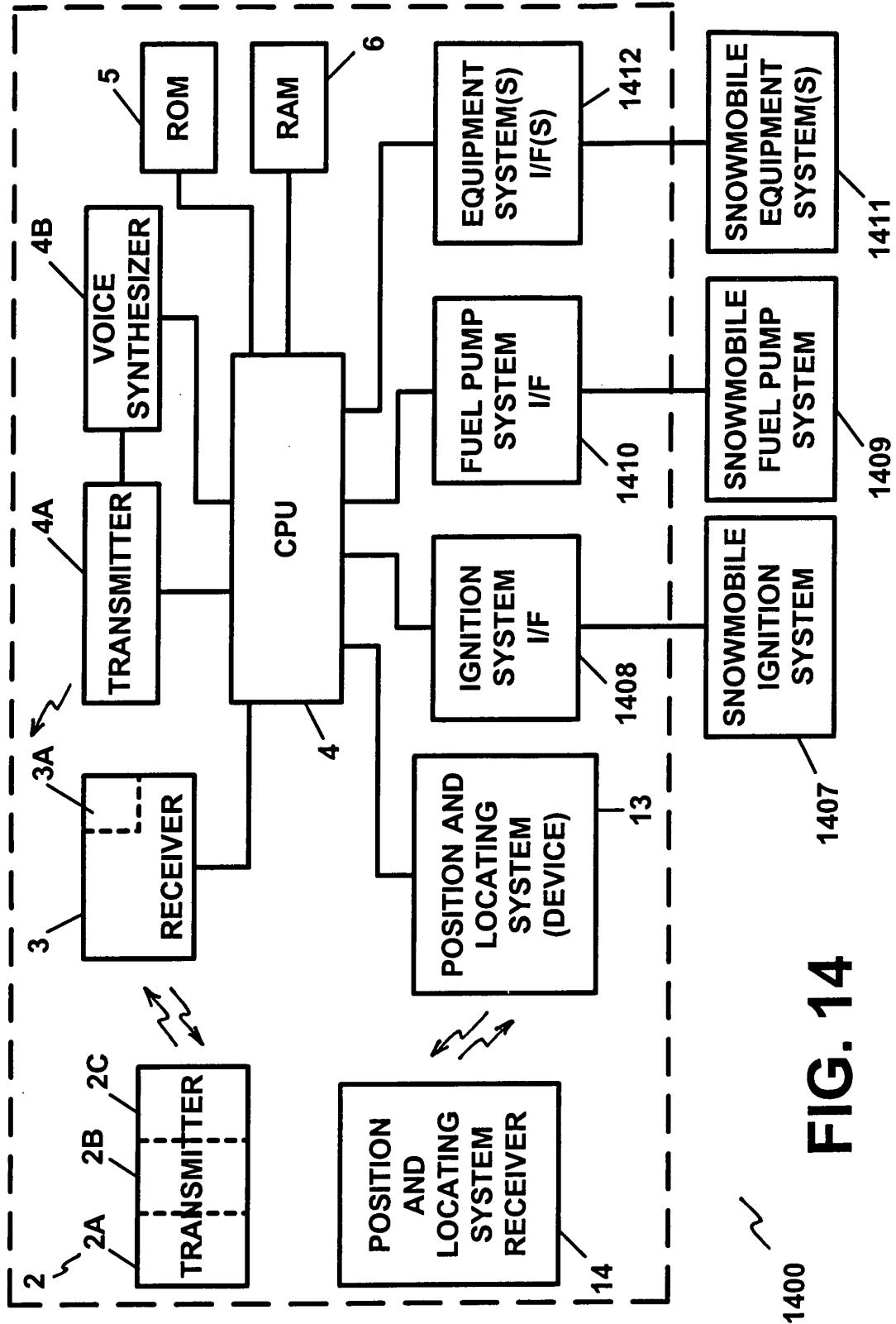
FIG. 12

09/55/305



**FIG. 13**

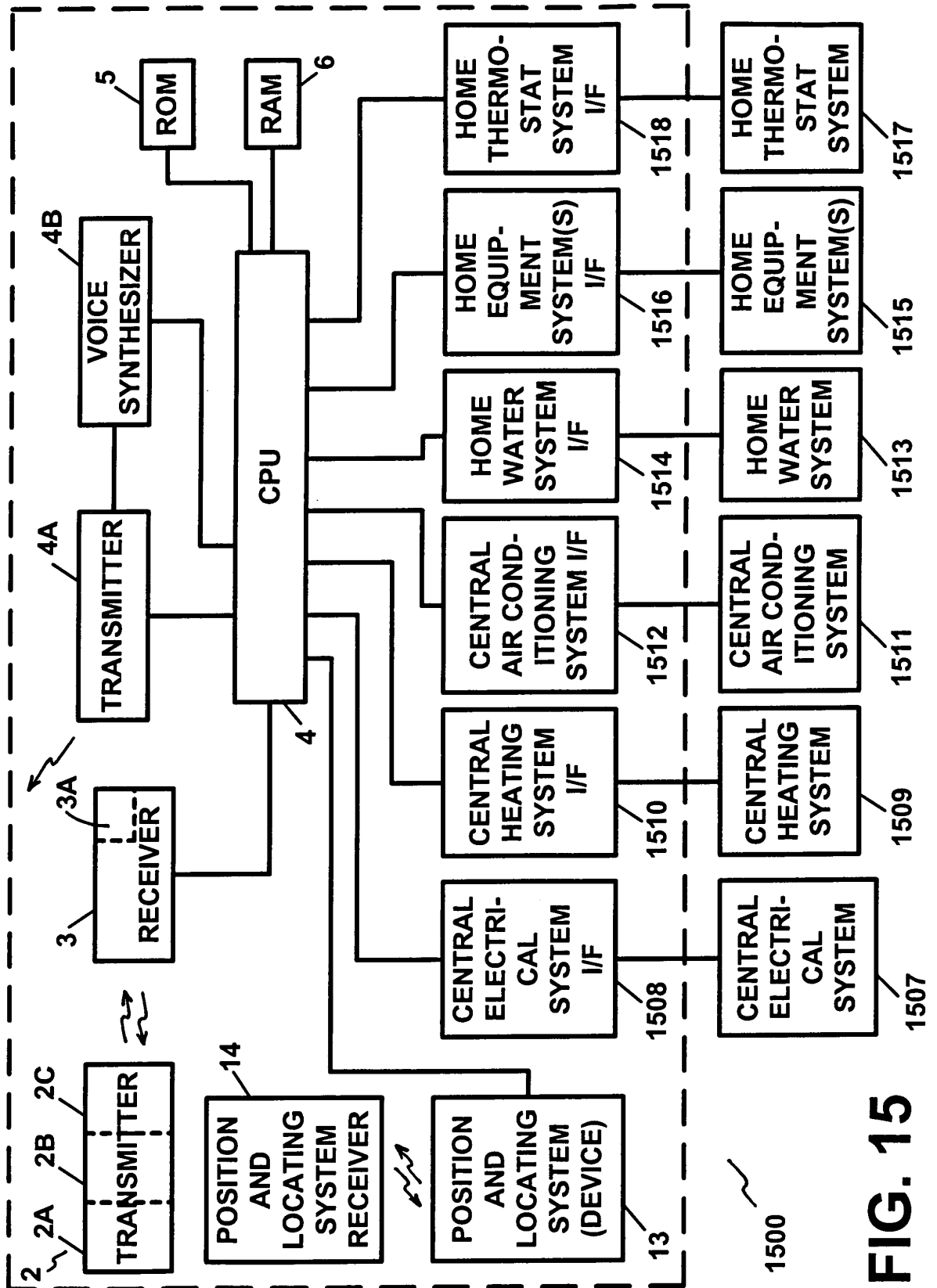
09/551,365



**FIG. 14**

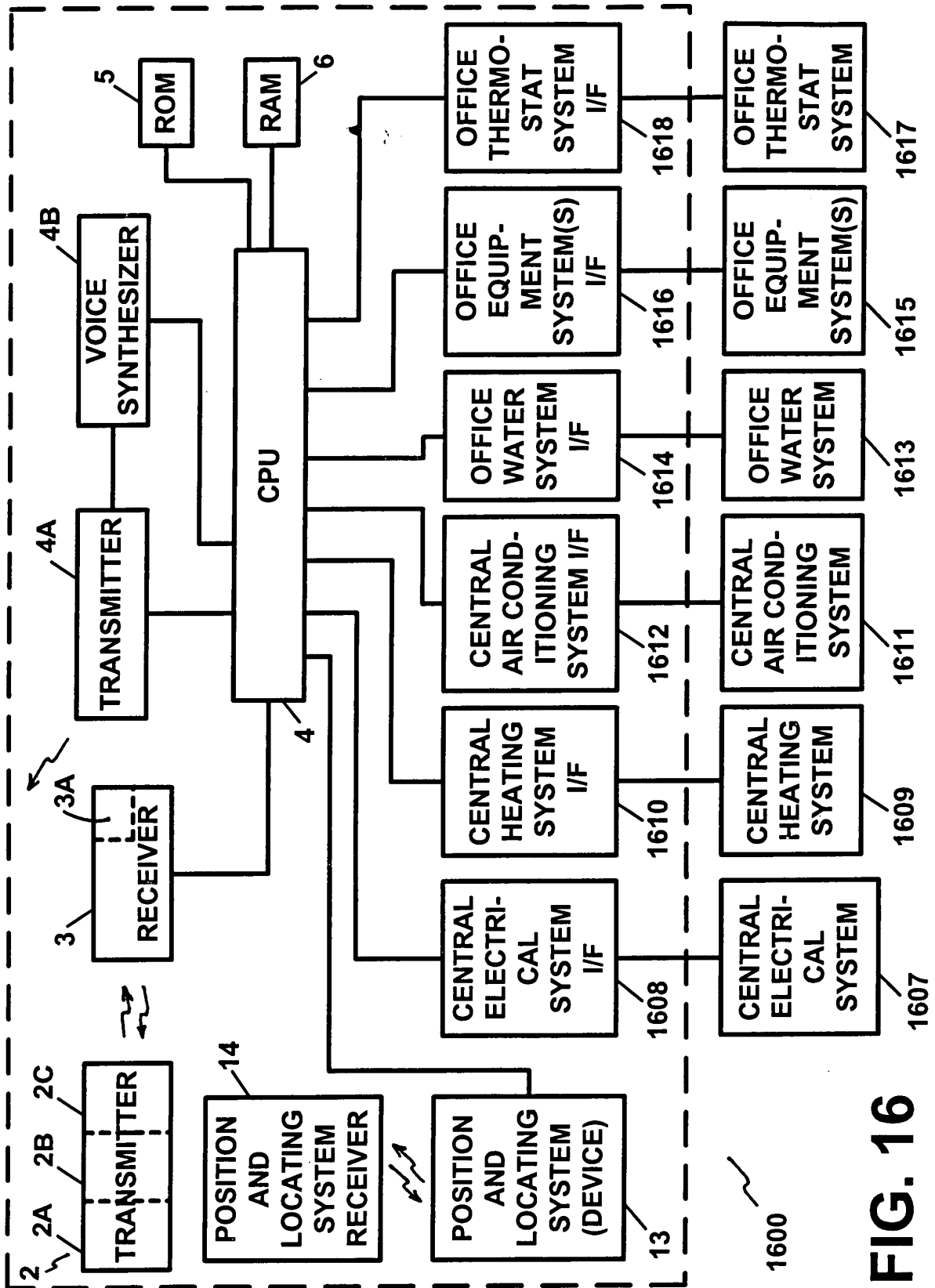
1400

09/551,365



**FIG. 15**

09/551,365



**FIG. 16**

**SUPPLEMENTAL  
Notice of Allowability**

|                               |                                       |  |
|-------------------------------|---------------------------------------|--|
| Application No.<br>09/551,365 | Applicant(s)<br>JOAO, RAYMOND ANTHONY |  |
| Examiner<br>Van T Trieu       | Art Unit<br>2632                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

- 1.  This communication is responsive to the third supplemental Amendment filed on May 22, 2001.
- 2.  The allowed claim(s) is/are 33,46-64 and 67-114.
- 3.  The drawings filed on \_\_\_\_\_ are acceptable as formal drawings.
- 4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    - 1.  Certified copies of the priority documents have been received.
    - 2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - 3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
- 5.  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION.** This three-month period for complying with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL is extendable under 37 CFR 1.136(a).

- 6.  Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
- 7.  Applicant MUST submit NEW FORMAL DRAWINGS
  - (a)  including changes required by the Notice of Draftperson's Patent Drawing Review( PTO-948) attached
    - 1)  hereto or 2)  to Paper No. \_\_\_\_\_.
  - (b)  including changes required by the proposed drawing correction filed May 22, 2001, which has been approved by the examiner.
  - (c)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

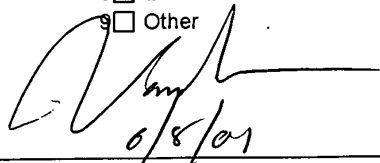
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

- 8.  Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE / SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

- 1  Notice of References Cited (PTO-892)
- 3  Notice of Draftperson's Patent Drawing Review (PTO-948)
- 5  Information Disclosure Statements (PTO-1449), Paper No. 7, 9.
- 7  Examiner's Comment Regarding Requirement for Deposit of Biological Material
- 2  Notice of Informal Patent Application (PTO-152)
- 4  Interview Summary (PTO-413), Paper No. \_\_\_\_\_.
- 6  Examiner's Amendment/Comment
- 8  Examiner's Statement of Reasons for Allowance
- 9  Other

  
6/8/01



UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office

**NOTICE OF ALLOWANCE AND ISSUE FEE DUE**

RAYMOND A JOAO ESQ  
122 BELLEVUE PLACE  
YONKERS NY 10703

WM01/0604

| APPLICATION NO.       | FILING DATE | TOTAL CLAIMS | EXAMINER AND GROUP ART UNIT | DATE MAILED                       |
|-----------------------|-------------|--------------|-----------------------------|-----------------------------------|
| 09/551,365            | 04/17/00    | 066          | TRIEU, V                    | 2632 06/04/01                     |
| First Named Applicant | JOAO,       |              |                             | 35 USC 154(b) term ext. = 0 Days. |

TITLE OF INVENTION CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

| ATTY'S DOCKET NO. | CLASS-SUBCLASS | BATCH NO. | APPLN. TYPE | SMALL ENTITY | FEE DUE  | DATE DUE |
|-------------------|----------------|-----------|-------------|--------------|----------|----------|
| 3 RJ315           | 340-539.000    | H09       | UTILITY     | YES          | \$620.00 | 09/04/01 |

**THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED.**

**THE ISSUE FEE MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED.**

**HOW TO RESPOND TO THIS NOTICE:**

I. Review the SMALL ENTITY status shown above.  
If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is changed, pay twice the amount of the FEE DUE shown above and notify the Patent and Trademark Office of the change in status, or
- B. If the status is the same, pay the FEE DUE shown above.

If the SMALL ENTITY is shown as NO:

- A. Pay FEE DUE shown above, or
- B. File verified statement of Small Entity Status before, or with, payment of 1/2 the FEE DUE shown above.

- II. Part B-Issue Fee Transmittal should be completed and returned to the Patent and Trademark Office (PTO) with your ISSUE FEE. Even if the ISSUE FEE has already been paid by charge to deposit account, Part B-Issue Fee Transmittal should be completed and returned. If you are charging the ISSUE FEE to your deposit account, section "4b" of Part B-Issue Fee Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give application number and batch number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

**IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.**

**PATENT AND TRADEMARK OFFICE COPY**

PTOL-85 (REV. 10-96) Approved for use through 06/30/99. (0651-0033)



**Notice of Allowability**

|                 |                       |  |
|-----------------|-----------------------|--|
| Application No. | Applicant(s)          |  |
| 09/551,365      | JOAO, RAYMOND ANTHONY |  |
| Examiner        | Art Unit              |  |
| Van T Trieu     | 2632                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--  
All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to the third supplemental Amendment filed on May 22, 2001.
2.  The allowed claim(s) is/are 46-64 and 67-114, and 33
3.  The drawings filed on \_\_\_\_\_ are acceptable as formal drawings.
4.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All    b)  Some\*    c)  None    of the:
    1.  Certified copies of the priority documents have been received.
    2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_\_.
5.  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE FOR SUBMITTING NEW FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION. This three-month period for complying with the REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL is extendable under 37 CFR 1.136(a).**

6.  Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.
7.  Applicant MUST submit NEW FORMAL DRAWINGS
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review( PTO-948) attached
    - 1)  hereto or 2)  to Paper No. \_\_\_\_\_.
  - (b)  including changes required by the proposed drawing correction filed May 22, 2001, which has been approved by the examiner.
  - (c)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.**

8.  Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any reply to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE / SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

- |  |   |
|--|---|
| 1 <input type="checkbox"/> Notice of References Cited (PTO-892)  | 2 <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| 3 <input checked="" type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)             | 4 <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| 5 <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449), Paper No. <u>7, 9.</u> | 6 <input type="checkbox"/> Examiner's Amendment/Comment                             |
| 7 <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material     | 8 <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | 9 <input type="checkbox"/> Other  |

## DETAILED ACTION

### *Allowable Subject Matter*

The following is an examiner's statement of reasons for allowance: there are no references teaching of a control apparatus for controlling of at least one of activating, deactivating, enabling and disabling of at least one of a vehicle and a premises having at least one of system, subsystem, component, equipment and appliance, wherein the first control device is responsive to a second signal and the second signal is at least generated by a second control device which is located remote from the vehicle and the premises. And further wherein the second control device is responsive to a third signal which is generated by a third control device which is located at a location remote from the vehicle and the premises and remote from the second control device.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

1. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner **Van Trieu** whose telephone number is (703) 308-5220. The examiner can normally be reached on Mon-Fri from 7:00 am to 4:00 pm.

Art Unit: 2632

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass**, can be reached on (703) 305-4717. The office facsimile number is (703) 308-6743. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)305-4700, Mon-Fri, 8:30 am to 5:00 pm.

A handwritten signature in black ink, appearing to read 'Van Trieu', with a long horizontal flourish extending to the right.

**Primary Examiner: Van Trieu**

**Group: 2632**

**Date: 05/30/01**

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

The drawing(s) filed (insert date 4-17-00) are:

- A.  approved by the Draftsperson under 37 CFR 1.84 or 1.152.
- B.  objected to by the Draftsperson under 37 CFR 1.84 or 1.152 for the reasons indicated below. The Examiner will require submission of new, corrected drawings when necessary. Corrected drawing must be submitted according to the instructions on the back of this notice.

|  |  |
|--|--|
| <p>1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings:<br/>         Black ink. Color.<br/> <input type="checkbox"/> Color drawings are not acceptable until petition is granted.<br/>         Fig(s) _____<br/> <input checked="" type="checkbox"/> Pencil and non black ink not permitted. Fig(s) <u>6A, 6B, 8A, 8B</u></p> <p>2. PHOTOGRAPHS. 37 CFR 1.84(b)<br/> <input type="checkbox"/> 1 full-tone set is required. Fig(s) _____<br/> <input type="checkbox"/> Photographs may not be mounted. 37 CFR 1.84(e)<br/> <input type="checkbox"/> Poor quality (half-tone). Fig(s) _____</p> <p>3. TYPE OF PAPER. 37 CFR 1.84(c)<br/> <input type="checkbox"/> Paper not flexible, strong, white, and durable.<br/>         Fig(s) _____<br/> <input type="checkbox"/> Erasures, alterations, overwritings, interlineations, folds, copy machine marks not accepted. Fig(s) _____<br/> <input type="checkbox"/> Mylar, velum paper is not acceptable (too thin).<br/>         Fig(s) _____</p> <p>4. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes:<br/> <input type="checkbox"/> 21.0 cm by 29.7 cm (DIN size A4)<br/> <input type="checkbox"/> 21.6 cm by 27.9 cm (8 1/2 x 11 inches)<br/> <input type="checkbox"/> All drawing sheets not the same size.<br/>         Sheet(s) _____<br/> <input type="checkbox"/> Drawings sheets not an acceptable size. Fig(s) _____</p> <p>5. MARGINS. 37 CFR 1.84(g): Acceptable margins:<br/>         Top 2.5 cm Left 2.5cm Right 1.5 cm Bottom 1.0 cm<br/>         SIZE: A4 Size<br/>         Top 2.5 cm Left 2.5 cm Right 1.5 cm Bottom 1.0 cm<br/>         SIZE: 8 1/2 x 11<br/>         Margins not acceptable. Fig(s) <u>1, 4, 16</u><br/> <input checked="" type="checkbox"/> Top (T) <input checked="" type="checkbox"/> Left (L)<br/> <input type="checkbox"/> Right (R) <input type="checkbox"/> Bottom (B)</p> <p>6. VIEWS. 37 CFR 1.84(h)<br/>         REMINDER: Specification may require revision to correspond to drawing changes.<br/>         Partial views. 37 CFR 1.84(h)(2)<br/> <input type="checkbox"/> Brackets needed to show figure as one entity.<br/>         Fig(s) _____<br/> <input type="checkbox"/> Views not labeled separately or properly.<br/>         Fig(s) _____<br/> <input type="checkbox"/> Enlarged view not labeled separately or properly.<br/>         Fig(s) _____</p> <p>7. SECTIONAL VIEWS. 37 CFR 1.84 (h)(3)<br/> <input type="checkbox"/> Hatching not indicated for sectional portions of an object.<br/>         Fig(s) _____<br/> <input type="checkbox"/> Sectional designation should be noted with Arabic or Roman numbers. Fig(s) _____</p> | <p>8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i)<br/> <input type="checkbox"/> Words do not appear on a horizontal, left-to-right fashion when page is either upright or turned so that the top becomes the right side, except for graphs. Fig(s) _____</p> <p>9. SCALE. 37 CFR 1.84(k)<br/> <input type="checkbox"/> Scale not large enough to show mechanism without crowding when drawing is reduced in size to two-thirds in reproduction.<br/>         Fig(s) _____</p> <p>10. CHARACTER OF LINES, NUMBERS, &amp; LETTERS. 37 CFR 1.84(j)<br/> <input type="checkbox"/> Lines, numbers &amp; letters not uniformly thick and well defined, clean, durable, and black (poor line quality).<br/>         Fig(s) _____</p> <p>11. SHADING. 37 CFR 1.84(m)<br/> <input type="checkbox"/> Solid black areas pale. Fig(s) _____<br/> <input type="checkbox"/> Solid black shading not permitted. Fig(s) _____<br/> <input type="checkbox"/> Shade lines, pale, rough and blurred. Fig(s) _____</p> <p>12. NUMBERS, LETTERS, &amp; REFERENCE CHARACTERS. 37 CFR 1.84(p)<br/> <input type="checkbox"/> Numbers and reference characters not plain and legible.<br/>         Fig(s) _____<br/> <input type="checkbox"/> Figure legends are poor. Fig(s) _____<br/> <input type="checkbox"/> Numbers and reference characters not oriented in the same direction as the view. 37 CFR 1.84(p)(1)<br/>         Fig(s) _____<br/> <input type="checkbox"/> English alphabet not used. 37 CFR 1.84(p)(2)<br/>         Figs _____<br/> <input type="checkbox"/> Numbers, letters and reference characters must be at least .32 cm (1/8 inch) in height. 37 CFR 1.84(p)(3)<br/>         Fig(s) _____</p> <p>13. LEAD LINES. 37 CFR 1.84(q)<br/> <input type="checkbox"/> Lead lines cross each other. Fig(s) _____<br/> <input type="checkbox"/> Lead lines missing. Fig(s) _____</p> <p>14. NUMBERING OF SHEETS OF DRAWINGS. 37 CFR 1.84(t)<br/> <input type="checkbox"/> Sheets not numbered consecutively, and in Arabic numerals beginning with number 1. Sheet(s) _____</p> <p>15. NUMBERING OF VIEWS. 37 CFR 1.84(u)<br/> <input type="checkbox"/> Views not numbered consecutively, and in Arabic numerals, beginning with number 1. Fig(s) _____</p> <p>16. CORRECTIONS. 37 CFR 1.84(w)<br/> <input type="checkbox"/> Corrections not made from prior PTO-948 dated _____</p> <p>17. DESIGN DRAWINGS. 37 CFR 1.152<br/> <input type="checkbox"/> Surface shading shown not appropriate. Fig(s) _____<br/> <input type="checkbox"/> Solid black shading not used for color contrast.<br/>         Fig(s) _____</p> |
| <p>COMMENTS</p> <hr/>  |  |

REVIEWER [Signature] DATE 5-30-01 TELEPHONE NO. \_\_\_\_\_

ATTACHMENT TO PAPER NO. 15

## REMINDER

Drawing changes may also require changes in the specification, e.g., if Fig. 1 is changed to Fig. 1A, Fig. 1B, Fig. 1C, etc., the specification, at the Brief Description of the Drawing, must likewise be changed. Please make such changes by 37 CFR 1.312 Amendment at the time of submitting drawings.

### INFORMATION ON HOW TO EFFECT DRAWING CHANGES

#### 1. Correction of Drawings - 37 CFR 1.85

File new drawings with the changes incorporated therein. Identifying indicia, if provided, should include the title of the invention, inventor's name, and application number, or docket number (if any) if an application number has not been assigned to the application. If this information is provided, it must be placed on the front of each sheet and centered within the top margin. The drawing should be filed as a separate paper with a transmittal letter addressed to the Drawing Review Branch.

#### 2. Timing for Corrections

Applicant is required to submit **acceptable** corrected drawings within the three-month shortened statutory period set in the Notice of Allowability (PTOL-37).

Failure to take corrective action within set period will result in **ABANDONMENT** of the Application.

#### 3. Corrections other than Defects Noted by the Drawing Review Branch on the Form PTO-948

All changes to the drawings, other than defects noted by the Drawing Review Branch, **MUST** be approved by the examiner before the application will be allowed. No changes will be permitted other than correction of defects, unless the examiner has approved the proposed changes.

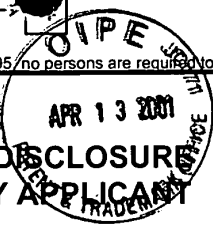
#46

Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**  
(use as many sheets as necessary)

Sheet 1 of 2

**Complete if Known**

|                        |                 |
|------------------------|-----------------|
| Application Number     | 09/551,365      |
| Filing Date            | APRIL 17, 2000  |
| First Named Inventor   | RAYMOND A. JOAO |
| Group Art Unit         | 2632            |
| Examiner Name          | VAN TRIEU       |
| Attorney Docket Number | RJ315           |

| U.S. PATENT DOCUMENTS |                       |                      |                                   |   |  |   |
|-----------------------|-----------------------|----------------------|-----------------------------------|---|--|---|
| Examiner Initials*    | Cite No. <sup>1</sup> | U.S. Patent Document |                                   | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|                       |                       | Number               | Kind Code <sup>2</sup> (if known) |   |  |   |
| ✓                     |                       | 5,334,974            |                                   | SIMMS, ET AL.                                   | 08-02-1994                                       | RECEIVED<br>APR 17 2001<br>Technology Center 2600                         |
| ✓                     |                       | 5,208,756            |                                   | SONG  | 05-04-1993                                       |   |
| ✓                     |                       | 5,003,317            |                                   | GRAY, ET AL.                                    | 03-26-1991                                       |   |
| ✓                     |                       | 5,287,398            |                                   | BRIAULT   | 02-15-1994                                       |   |
| ✓                     |                       | 5,173,932            |                                   | JOHANSSON, ET AL.                               | 12-22-1992                                       |   |
| ✓                     |                       | 5,276,728            |                                   | PAGLIAROLI, ET AL.                              | 01-04-1994                                       |   |
| ✓                     |                       | 5,113,427            |                                   | RYOICHI, ET AL.                                 | 05-12-1992                                       |   |
| ✓                     |                       | 5,081,667            |                                   | DRORI, ET AL.                                   | 01-14-1992                                       |   |
| ✓                     |                       | 4,882,579            |                                   | SIWIAK  | 11-21-1989                                       |   |
| ✓                     |                       | 5,031,103            |                                   | KAMIMURA, ET AL.                                | 07-09-1991                                       |   |
| ✓                     |                       | 5,513,244            |                                   | JOAO, ET AL.                                    | 04-30-1996                                       |   |
| ✓                     |                       | 5,138,649            |                                   | KRISBERGH, ET AL.                               | 08-11-1992                                       |   |
| ✓                     |                       | 5,389,935            |                                   | DROUULT, ET AL.                                 | 02-14-1995                                       |   |
| ✓                     |                       | 5,247,564            |                                   | ZICKER  | 09-21-1993                                       |   |
| ✓                     |                       | 5,587,715            |                                   | LEWIS   | 12-24-1996                                       |   |
| ✓                     |                       | 5,682,133            |                                   | JOHNSON, ET AL.                                 | 10-28-1997                                       |   |
| ✓                     |                       | 5,432,841            |                                   | RIMER   | 07-11-1995                                       |   |
| ✓                     |                       | 5,541,585            |                                   | DUHAME, ET AL.                                  | 07-30-1996                                       |   |
| ✓                     |                       | 4,959,713            |                                   | MOROTOMI, ET AL.                                | 09-25-1990                                       |   |
| ✓                     |                       | 5,557,254            |                                   | JOHNSON, ET AL.                                 | 09-17-1996                                       |   |

| FOREIGN PATENT DOCUMENTS |                       |                         |                     |                                   |   |  |   |                |
|--------------------------|-----------------------|-------------------------|---------------------|-----------------------------------|---|--|---|----------------|
| Examiner Initials*       | Cite No. <sup>1</sup> | Foreign Patent Document |                     |                                   | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sup>8</sup> |
|                          |                       | Office <sup>3</sup>     | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |
|                          |                       |                         |                     |                                   |   |  |   |                |

|                    |                  |                 |         |
|--------------------|------------------|-----------------|---------|
| Examiner Signature | <i>Van Trieu</i> | Date Considered | 5/30/01 |
|--------------------|------------------|-----------------|---------|

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>8</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

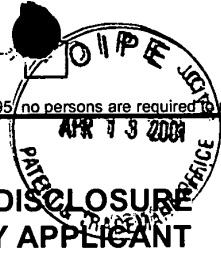
Please type a plus sign (+) inside this box

PTO/SB/08A (08-00)

Approved for use through 10/31/2002. OMB 0651-0031

U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it contains a valid OMB control number.



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet 2 of 2

**Complete if Known**

|                        |                 |
|------------------------|-----------------|
| Application Number     | 09/551,365      |
| Filing Date            | APRIL 17, 2000  |
| First Named Inventor   | RAYMOND A. JOAO |
| Group Art Unit         | 2632            |
| Examiner Name          | VAN TRIEU       |
| Attorney Docket Number | RJ315           |

**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | U.S. Patent Document |                                   | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|----------------------|-----------------------------------|---|--|---|
|                    |                       | Number               | Kind Code <sup>2</sup> (if known) |   |  |   |
| ✓                  |                       | 5,086,385            |                                   | LAUNEY, ET AL.                                  | 02-04-1992                                       |   |
| ✓                  |                       | 4,882,746            |                                   | SHIMADA   | 11-21-1989                                       |   |
| ✓                  |                       | 5,418,537            |                                   | BIRD  | 05-23-1995                                       |   |
| ✓                  |                       | 5,563,453            |                                   | NYFELT  | 10-08-1996                                       |   |
| ✓                  |                       | 5,223,844            |                                   | MANSELL ET AL.                                  | 06-29-1993                                       |   |
| ✓                  |                       | 5,515,043            |                                   | BERARD ET AL.                                   | 05-07-1996                                       |   |
| ✓                  |                       | 6,028,537            |                                   | SUMAN, ET AL.                                   | 02-22-2000                                       |   |
| ✓                  |                       | 5,572,438            |                                   | EHLERS, ET AL.                                  | 11-05-1996                                       |   |
| ✓                  |                       | 5,917,405            |                                   | JOAO  | 06-29-1999                                       |   |

RECEIVED  
APR 17 2001  
Technology Center 2600

**FOREIGN PATENT DOCUMENTS**

| Examiner Initials* | Cite No. <sup>1</sup> | Foreign Patent Document |                     |                                   | Name of Patentee or Applicant of Cited Document | Date of Publication of Cited Document MM-DD-YYYY | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T <sup>6</sup> |
|--------------------|-----------------------|-------------------------|---------------------|-----------------------------------|---|--|---|----------------|
|                    |                       | Office <sup>3</sup>     | Number <sup>4</sup> | Kind Code <sup>5</sup> (if known) |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |
|                    |                       |                         |                     |                                   |   |  |   |                |

Examiner Signature: *Van Trieu* Date Considered: 5/30/01

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U. S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.





I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on May 22, 2001.

12/10  
M. [Signature]

Raymond A. Joao 5-23-01  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE RECEIVED

MAY 22 2001

Technology Center 2600

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. Trieu GROUP : 2632

Assistant Commissioner for Patents  
Washington, D.C. 20231

THIRD SUPPLEMENTAL AMENDMENT

Sir:

This is a Third Supplemental Amendment in the above-identified application. Entry of this Third

Supplemental Amendment is respectfully requested.

05/23/2001 NMC GEE  
01 FC:203

180.00 OP

Please amend the application as follows:

D

IN THE CLAIMS:

Please cancel claims 65 and 66, without prejudice.

Please add the following new claims 93-114 as follows:

Sub. E13  
48  
-- 93.

The apparatus of claim 91, further comprising:

Q1  
cont

a monitoring device, wherein said monitoring device monitors at least one of the premises, the premises operational status, the premises operation, a premises at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system,

3<sup>2</sup>58

D

an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a gun, a weapon system, a self-defense system, an electronic warfare system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises, activity outside the premises, and activity at the premises.

Q1  
cont.

49

47

94. The apparatus of claim 91, further comprising:

a positioning device, wherein said positioning device determines the location of the premises, and further wherein said positioning device provides the location of the premises on at least one of a map and a digitized map.

50

47

95. The apparatus of claim 91, further comprising:

<sup>3</sup>  
359

D

at least one of a camera and a video recording device, wherein said at least one of a camera and a video recording device provides at least one of video surveillance at least one of inside, outside, and at, the premises, and video conferencing with an individual located at least one of inside, outside, and at, the premises.

Sub. E14

51

47

96. The apparatus of claim 91, wherein said first control device detects at least one of a premises use, an unauthorized use of the premises, an access at least one of into and onto the premises, and a theft of the premises.

DI  
cont.

52

47

97. The apparatus of claim 91, wherein the third control device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a videophone, a watch, a beeper, and a pager.

53

47

98. The apparatus of claim 91, further comprising:

4  
300

D

at least one of a microphone and an audio recording device, wherein said at least one of a microphone and an audio recording device provides at least one of audio surveillance at least one of inside, outside, and at, the premises, and audio conferencing with an individual located at least one of inside, outside, and at, the premises.

Sub. E15

54

99. The apparatus of claim 91, further comprising:

47

at least one of a camera, a video recording device, a microphone and an audio recording device,

DI  
cont.

wherein said at least one of a camera, a video recording device, a microphone and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

55

100. The apparatus of claim 91, wherein said first control device at least one of receives, processes and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of the premises, and the premises at least one of system,

47

361<sup>s</sup>

D

equipment system, subsystem, device, component and appliance.

56  
101.

47

The apparatus of claim 91, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component and appliance.

OK  
cont.

57  
102.

47

The apparatus of claim 91, wherein the premises at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a computer, a command computer, an electronic command computer, a fuel ~~system~~, an exhaust system, at least one of an electrical, a mechanical, and an electro-mechanical at least one of system and component, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home

362<sup>6</sup>

D

equipment system, a residential premises equipment system, an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a gun, a weapon system, a self-defense system, an electronic warfare system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, and further wherein the premises is at least one of a residential premises, a building, a commercial premises, construction equipment, farm equipment, an industrial structure, a drilling structure, a mining structure, industrial equipment, and construction equipment.

D1  
Cont.

Sub. E16

58  
103.

47

The apparatus of claim 91, wherein the third control device transmits a first control signal to the second control device, and further wherein the second control devices processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates and disables,

363

D

said at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component and appliance, in response to said second control signal.

<sup>59</sup>  
104. The apparatus of claim <sup>47</sup>91, wherein the operation of at least one of said apparatus and said first control device is at least one of programmed, automatically activated, and self-activating.

<sup>60</sup>  
105. The apparatus of claim <sup>47</sup>91, further comprising:

*DI*  
*Cent.*

at least one of an arming device and an activating device, wherein said at least one of an arming device and an activating device at least one of arms and activates apparatus operation, and further wherein said at least one of an arming device and an activating device is ~~located at the premises.~~

*Sub. E17*

<sup>61</sup>  
106. The apparatus of claim <sup>47</sup>91, further comprising:

a voice synthesizing device, wherein said voice



activating device generates a voice message indicative of at least one of operation of the apparatus, status of the apparatus, operation of said first control device, and operation of the premises.

<sup>603</sup> 107. The apparatus of claim <sup>602</sup> 92, wherein said first control device is at least one of a computer, a central processing computer, and a server computer.

<sup>604</sup> 108. The apparatus of claim <sup>602</sup> 92, wherein said apparatus is utilized at least one of on, over, and in conjunction with, a communication network, a telecommunication network, a wireless communication network, a radio communication network, an optical communication network, a satellite communication network, a personal communication services network, the Internet, and the World Wide Web.

<sup>605</sup> 109. The apparatus of claim <sup>602</sup> 92, wherein the second control device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive

DI  
Cont.

television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a videophone, a watch, a beeper, and a pager.

20  
~~110~~

17  
~~62~~

The apparatus of claim ~~62~~, wherein the second control device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a videophone, a watch, a beeper, and a pager.

It  
cont.

33  
~~111~~

21  
~~67~~

The apparatus of claim ~~67~~, wherein the vehicle at least one of system, equipment system, subsystem, device, component, and appliance is at least one of a gun, a weapon system, a self-defense system, an electronic warfare system and a "smart" at least one component and device, wherein said "smart" at least one component and device detects at least one of wear, a state of disrepair,

10  
Blade

D

and a defined at least one of condition and state of said  
at least one of component and device.

*sub. EP*  
*142*

142. A control method, comprising:

transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the second control device and remote from at least one of a vehicle and a premises;

*DI*  
*cont.*

transmitting a second signal from the second control device to a third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein the second control device is located at a location remote from the at least one of a vehicle and a premises;

at least one of generating a third signal and transmitting a third signal from the third control device, wherein the third control device is located at the at least one of a vehicle and a premises, and further wherein said third signal is at least one of generated and transmitted in response to said second signal; and

<sup>11</sup>  
*367*

*D*

at least one of activating, deactivating, enabling, and disabling, at least one of the vehicle, the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, the premises, and the premises at least one of system, equipment system, subsystem, device, component, and appliance.

<sup>146</sup>  
113. The apparatus of claim <sup>1</sup>47, wherein the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a gun, a weapon system, a self-defense system, an electronic warfare system, and a "smart" at least one component and device, wherein said "smart" at least one component and device detects at least one of wear, a state of disrepair, and a defined at least one of condition and state of said at least one of component and device.

DI  
COND.

<sup>140</sup>  
Sub. #19 124. The apparatus of claim <sup>34</sup>68, wherein said at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a gun, a weapon system, a self-defense system, and an electronic warfare system. --

D

IN THE DRAWINGS:

Please amend the Drawings in Figures 6 and 8 as shown in the attached copies of Figures 6 and 8 with the changes shown in red.

IN THE SPECIFICATION:

Please amend the Specification as follows (versions with markings to show changes made to the Specification are provided hereinbelow):

Please substitute the following paragraph for the pending paragraph beginning on Page 61, line 16:

*De* -- Figures 6A and 6B illustrate flow diagrams illustrating the preferred embodiment operational steps and/or sequences of operation of the apparatus and the method of the present invention; --.

Please substitute the following paragraph for the pending paragraph beginning on Page 62, line 4:

DB -- Figures 8A and 8B illustrate the preferred embodiment operation, in flow diagram form, of the vehicle position system receiver which is utilized in the apparatus of the present invention; --.

Please substitute the following paragraph for the pending paragraph beginning on Page 111, line 12:

DT -- The operation of the apparatus 1 of the present invention is described below with reference to the flow diagrams illustrated in Figures 6A and 6B, which flow diagrams illustrate a preferred embodiment method for utilization of the apparatus 1. The method of the present invention may be implemented as a computer program or software program which is utilized in conjunction with the CPU 4. The computer program or software program may be programmable so as to provide for the modification of same, if desired. --.

Please substitute the following paragraph for the pending paragraph beginning on Page 119, line 14:

DS  
cont. -- Figures 6A and 6B illustrate flow diagrams of a preferred embodiment of the operational steps and/or sequence

of operation of the apparatus and method of the present invention. With reference to Figures 6A and 6B, the receiver 3, upon receipt of the access code, will generate an interrupt in the CPU 4 which will activate an operational program or an interrupt service routine, at step 60, of the flow diagram. At step 61, the command code data is received by the apparatus 1. Upon receipt of the command code by the receiver 3, the command code is then transmitted to, or read by, the CPU 4 at step 62. The CPU 4 will then, at step 62A, perform a processing routine in order to identify the command code which has been entered. --.

DS  
cont.

---

Please substitute the following paragraph for the pending paragraph beginning on Page 126, line 11:

---

-- With reference once again to Figures 6A and 6B, the CPU 4, at step 69, will then issue a disabling signal to the vehicle fuel pump system 9 thereby de-activating the vehicle fuel pump system 9 and prohibiting the supply of fuel to the vehicle engine. The disabling signal from the CPU 4 can disable the vehicle fuel pump system 9 by any one of the well known methods for disabling a fuel pump system. In the case of electric fuel pump systems, said systems may be disabled by any one of the known methods for shutting-off or

He  
cont.

<sup>15</sup>  
371

D

"opening" an electrical circuit which provides power to, or control over, the fuel pump system 9, such as by a cut-off switch or relay, which methods and/or techniques may be similar to and/or analogous to those methods and/or techniques utilized in connection with disabling the vehicle ignition system 7. --.

Q  
A

Please substitute the following paragraph for the pending paragraph beginning on Page 133, line 6:

-- Upon the vehicle being found or recovered, such as in a manner resulting from utilizing the vehicle position and locating device 13, in the manner described hereinbelow, the authorized user or operator may once again access the apparatus 1 by entering the valid access code into the transmitter interface 2A and then by entering the valid re-enabling or reset command code. As described above, a valid access code will once again initiate the operation of the operational program or interrupt service routine, at step 60, which is described above and illustrated in Figures 6A and 6B. The valid re-enable or reset command code will then be received by the receiver 3, in the manner described above at step 61. --.

Q

<sup>16</sup>  
372

D



Please substitute the following paragraph for the pending paragraph beginning on Page 139, line 2:

DS

-- As noted above, with reference to Figures 6A and 6B, once a valid disable code has been recognized by the CPU 4, at step 64, the apparatus 1 will, at step 65, activate the vehicle position and locating device 13. The operation of the vehicle position and locating device 13 will then be initiated, at step 65, and will operate simultaneously and/or concurrently with, and independently of, the apparatus 1 and the CPU 4 in the performance of the operational steps 66-76 and 71-76 as described above. In this manner, the vehicle position and locating device 13 is utilized to calculate, determine and transmit vehicle position data in a manner independently of apparatus control over the vehicle ignition system 7, fuel pump system 9, and/or any of the vehicle equipment system(s) 11. --

Please substitute the following paragraph for the pending paragraph beginning on Page 139, line 16:

Dej  
cont.

-- Figure 7 illustrates the operation, in flow diagram form, of the vehicle position and locating device 13. As noted above, the operation of the vehicle position and

locating device 13 commences at step 65 as shown in Figures 6A and 6B and thereafter operates simultaneously and/or concurrently with, and independently of, the operation of the apparatus 1 and the CPU 4. With reference to Figure 7, the operation of the vehicle position and locating device 13 is initiated at step 200 of Figure 7. At step 201, the computer 21 of the vehicle position and locating device 13 activates the global positioning device 22, which is any one of the widely known global positioning devices. Once activated, the global positioning device 22 calculates vehicle position data at step 202 by using well known global positioning calculation methods and/or techniques. --.

Dg  
cont.

---

Please substitute the following paragraph for the pending paragraph beginning on Page <sup>142</sup>~~148~~, line 4:

---

-- Figures 8A and 8B illustrate the operation, in flow diagram form, of the vehicle position system receiver 14 which, as noted above, is located at the location of the authorized user or operator or at an office, agency or other entity which is authorized to receive the vehicle position and/or location data. The vehicle position system receiver 14 receives the vehicle position data which is transmitted by the vehicle position transmitter 24 of the vehicle position

D10  
cont.

<sup>18</sup>  
374

D

and locating device 13. In the preferred embodiment, the operation of the vehicle position system receiver 14 is activated upon receipt of a valid access code transmitted by the transmitter 3A. In this regard, the above-described access code, which is transmitted by the transmitter 3A, is also received by the receiver 30 of the vehicle position system receiver 14 thereby activating same. --.

Do  
cond

---

Please substitute the following paragraph for the pending paragraph beginning on Page 151, line 13:

---

-- Since the vehicle ignition system 7 is usually off at these times, the disabling, and the subsequent re-enabling of other vehicle systems will occur as described above with regards to Figures 6A and 6B. In this manner, the present invention may provide for an effective device by which to "lock-up" a vehicle, at any time, even when the vehicle is in the rightful possession, or under the control, of the vehicle owner and/or authorized operator. --.

DI

3<sup>19</sup>75

D

VERSIONS WITH MARKINGS TO SHOW CHANGES MADE TO SPECIFICATION

Pending paragraph beginning on Page 61, line 16:

[Figure 6 illustrates a flow diagram] Figures 6A and 6B illustrate flow diagrams illustrating the preferred embodiment operational steps and/or sequences of operation of the apparatus and the method of the present invention;

Pending paragraph beginning on Page 62, line 4:

[Figure 8 illustrates] Figures 8A and 8B illustrate the preferred embodiment operation, in flow diagram form, of the vehicle position system receiver which is utilized in the apparatus of the present invention;

Pending paragraph beginning on Page 111, line 12:

The operation of the apparatus 1 of the present invention is described below with reference to the flow [diagram] diagrams illustrated in [Figure 6] Figures 6A and 6B, which flow [diagram illustrates] diagrams illustrate a preferred embodiment method for utilization of the apparatus

D

1. The method of the present invention may be implemented as a computer program or software program which is utilized in conjunction with the CPU 4. The computer program or software program may be programmable so as to provide for the modification of same, if desired.

Pending paragraph beginning on Page 119, line 14:

[Figure 6 illustrates a flow diagram] Figures 6A and 6B illustrate flow diagrams of a preferred embodiment of the operational steps and/or sequence of operation of the apparatus and method of the present invention. With reference to [Figure 6] Figures 6A and 6B, the receiver 3, upon receipt of the access code, will generate an interrupt in the CPU 4 which will activate an operational program or an interrupt service routine, at step 60, of the flow diagram. At step 61, the command code data is received by the apparatus 1. Upon receipt of the command code by the receiver 3, the command code is then transmitted to, or read by, the CPU 4 at step 62. The CPU 4 will then, at step 62A, perform a processing routine in order to identify the command code which has been entered.

Pending paragraph beginning on Page 126, line 11:

D

With reference once again to [Figure 6] Figures 6A and 6B, the CPU 4, at step 69, will then issue a disabling signal to the vehicle fuel pump system 9 thereby deactivating the vehicle fuel pump system 9 and prohibiting the supply of fuel to the vehicle engine. The disabling signal from the CPU 4 can disable the vehicle fuel pump system 9 by any one of the well known methods for disabling a fuel pump system. In the case of electric fuel pump systems, said systems may be disabled by any one of the known methods for shutting-off or "opening" an electrical circuit which provides power to, or control over, the fuel pump system 9, such as by a cut-off switch or relay, which methods and/or techniques may be similar to and/or analogous to those methods and/or techniques utilized in connection with disabling the vehicle ignition system 7.

Pending paragraph beginning on Page 133, line 6:

Upon the vehicle being found or recovered, such as in a manner resulting from utilizing the vehicle position and locating device 13, in the manner described hereinbelow, the authorized user or operator may once again access the apparatus 1 by entering the valid access code into the

transmitter interface 2A and then by entering the valid re-enabling or reset command code. As described above, a valid access code will once again initiate the operation of the operational program or interrupt service routine, at step 60, which is described above and illustrated in [Figure 6] Figures 6A and 6B. The valid re-enable or reset command code will then be received by the receiver 3, in the manner described above at step 61.

Pending paragraph beginning on Page 139, line 2:

As noted above, with reference to [Figure 6] Figures 6A and 6B, once a valid disable code has been recognized by the CPU 4, at step 64, the apparatus 1 will, at step 65, activate the vehicle position and locating device 13. The operation of the vehicle position and locating device 13 will then be initiated, at step 65, and will operate simultaneously and/or concurrently with, and independently of, the apparatus 1 and the CPU 4 in the performance of the operational steps 66-76 and 71-76 as described above. In this manner, the vehicle position and locating device 13 is utilized to calculate, determine and transmit vehicle position data in a manner independently of apparatus control over the vehicle ignition system 7, fuel

D

pump system 9, and/or any of the vehicle equipment system(s)  
11.

Pending paragraph beginning on Page 139, line 16:

Figure 7 illustrates the operation, in flow diagram form, of the vehicle position and locating device 13. As noted above, the operation of the vehicle position and locating device 13 commences at step 65 as shown in [Figure 6] Figures 6A and 6B and thereafter operates simultaneously and/or concurrently with, and independently of, the operation of the apparatus 1 and the CPU 4. With reference to Figure 7, the operation of the vehicle position and locating device 13 is initiated at step 200 of Figure 7. At step 201, the computer 21 of the vehicle position and locating device 13 activates the global positioning device 22, which is any one of the widely known global positioning devices. Once activated, the global positioning device 22 calculates vehicle position data at step 202 by using well known global positioning calculation methods and/or techniques.

Pending paragraph beginning on Page 146, line 4:

D



[Figure 8 illustrates] Figures 8A and 8B illustrate the operation, in flow diagram form, of the vehicle position system receiver 14 which, as noted above, is located at the location of the authorized user or operator or at an office, agency or other entity which is authorized to receive the vehicle position and/or location data. The vehicle position system receiver 14 receives the vehicle position data which is transmitted by the vehicle position transmitter 24 of the vehicle position and locating device 13. In the preferred embodiment, the operation of the vehicle position system receiver 14 is activated upon receipt of a valid access code transmitted by the transmitter 3A. In this regard, the above-described access code, which is transmitted by the transmitter 3A, is also received by the receiver 30 of the vehicle position system receiver 14 thereby activating same.

Pending paragraph beginning on Page 151, line 13:

Since the vehicle ignition system 7 is usually off at these times, the disabling, and the subsequent re-enabling of other vehicle systems will occur as described above with regards to [Figure 6] Figures 6A and 6B. In this manner, the present invention may provide for an effective device by which to "lock-up" a vehicle, at any time, even when the

D

vehicle is in the rightful possession, or under the control,  
of the vehicle owner and/or authorized operator.

IN THE ABSTRACT OF THE DISCLOSURE:

Please cancel the Abstract of the Disclosure and  
please insert the new Abstract of the Disclosure which is  
Attached hereto on a separate sheet.

D

REMARKS

This is a Third Supplemental Amendment in the above-identified application. Claims 33, 46-64, and 67-114 are pending in this application. By this Third Supplemental Amendment, Applicant has cancelled claims 65 and 66, without prejudice, and Applicant has added new claims 93-114. Applicant has also amended the Drawings and the Specification. Applicant has also amended the Abstract of the Disclosure.

Applicant respectfully submits that no new matter is introduced by the addition of the newly added claims 93-114. Applicant respectfully submits that the addition of the newly added claims 93-114 was made for purposes unrelated to patentability. Applicant respectfully submits that new claims 93-114 were added in order to obtain additional claim coverage for the present invention. Applicant further respectfully submits that new claim 112 was added in order to obtain the broadest possible scope of coverage for the subject matter claimed therein. Applicant respectfully submits that the pending claims 33, 46-64 and 67-114 are in condition for allowance.

D

Applicant has also amended the Drawings in Figures 6 and 8 as shown in the attached copies of Figures 6 and 8 with the changes shown in red. Applicant has amended Figure 6 so as to label the first page of Figure 6 as "FIG. 6A" and so as to label the second page of Figure 6 as "FIG. 6B". Applicant has also amended the second page of Figure 6 so as to delete the term "(CONTINUED)".

Applicant has amended Figure 8 so as to label the first page of Figure 8 as "FIG. 8A" and so as to label the second page of Figure 8 as "FIG. 8B". Applicant has also amended the second page of Figure 8 so as to delete the term "(CONTINUED)".

Applicant respectfully submits that no new matter is introduced by the above amendments to the Drawings. A Letter to the Official Draftsperson, along with copies of Figures 6 and 8, with the changes shown in red, is submitted herewith.

Applicant has amended the Specification as indicated above in order to make the Specification consistent with the Drawings, as amended. Applicant

D

submits that no new matter is introduced by the above amendments to the Specification.

Applicant has also amended the Abstract of the Disclosure. A new Abstract of the Disclosure is attached hereto on a separate sheet.

Applicant submits herewith an executed Terminal Disclaimer with regards to prior U.S. Patent No. 5,917,405 along with the required fee. Applicant also submits herewith an executed Terminal Disclaimer with regards to co-pending U.S. Patent Application Serial No. 09/277,935 along with the required fee.

Entry of the above-identified Terminal Disclaimers is respectfully requested.

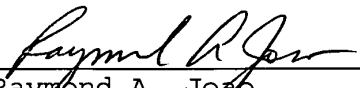
Applicant respectfully submits that the above-identified application is in condition for allowance and action to that end is respectfully requested.

A Fee Transmittal Sheet (in duplicate), along with a check in the amount of \$290.00 (\$180.00 for the twenty additional dependent claims, \$55.00 for payment for

D

the Terminal Disclaimer regarding U.S. Patent No. 5,917,405 and \$55.00 for payment for the Terminal Disclaimer regarding U.S. Patent Application Serial No. 09/277,935) is submitted herewith.

Respectfully Submitted,

  
\_\_\_\_\_  
Raymond A. Joao  
Reg. No. 35,907

- Encl.: - Abstract of the Disclosure  
- Letter to the Official Draftsperson  
- Copies of Figures 6 and 8 (2 sheets) with changes shown in red  
- Fee Transmittal Sheet (in duplicate)  
- Check for \$290.00 for the required fees as itemized above

May 22, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

D

ABSTRACT OF THE DISCLOSURE

Sub. No

Control apparatus and method including a first control device, located at the vehicle or premises, for monitoring or detecting an event, which generates and/or transmits a first notification signal containing event information to a second control device located remote from the vehicle or premises. The second control device generates and/or transmits a second notification signal to a remote communication device for providing notification of the event occurrence. Control apparatus and method including a first control device, located at a vehicle or premises, which generates and/or transmits a first signal for activating, deactivating, enabling, or disabling, a vehicle or a premises system, equipment system, subsystem, device, component, appliance, a vehicle, or a premises, in response to a signal generated and/or transmitted from a remote second control device. The second control device is responsive to a third signal generated and/or transmitted by a remote third control device.

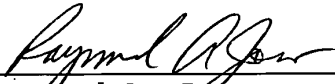
D/2

<sup>31</sup>  
376

D

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on May 22, 2001.

#13  
R. A. Joao  
5-22-01

  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. Trieu GROUP : 2632

RECEIVED  
MAY 22 2001  
Technology Center 2600

Assistant Commissioner for Patents  
Washington, D.C. 20231  
ATTN: OFFICIAL DRAFTSPERSON

PROPOSED DRAWING CHANGES LETTER

Sir:

Applicant submits herewith copies of Figures 6 and 8 with changes shown in red.

Applicant has amended Figure 6 so as to label the first page of Figure 6 as "FIG. 6A" and so as to label the



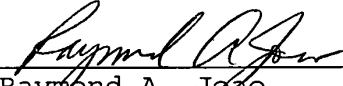
second page of Figure 6 as "FIG. 6B". Applicant has also amended the second page of Figure 6 so as to delete the term "(CONTINUED)".

Applicant has amended Figure 8 so as to label the first page of Figure 8 as "FIG. 8A" and so as to label the second page of Figure 8 as "FIG. 8B". Applicant has also amended the second page of Figure 8 so as to delete the term "(CONTINUED)".

Applicant respectfully submits that no new matter is introduced by the above amendments to the Drawings.

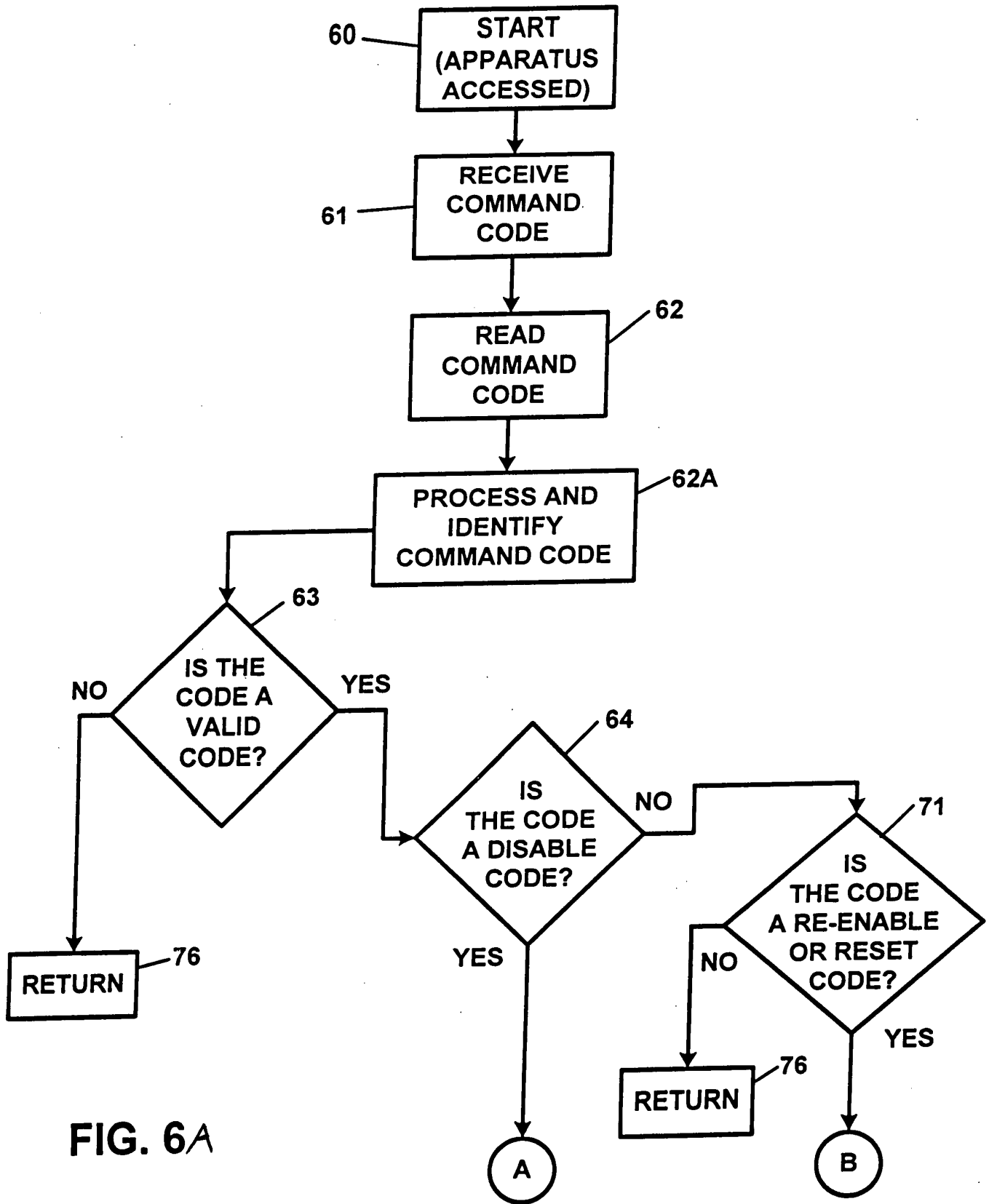
Entry of the above amendments to the Drawings is respectfully requested.

Respectfully Submitted,

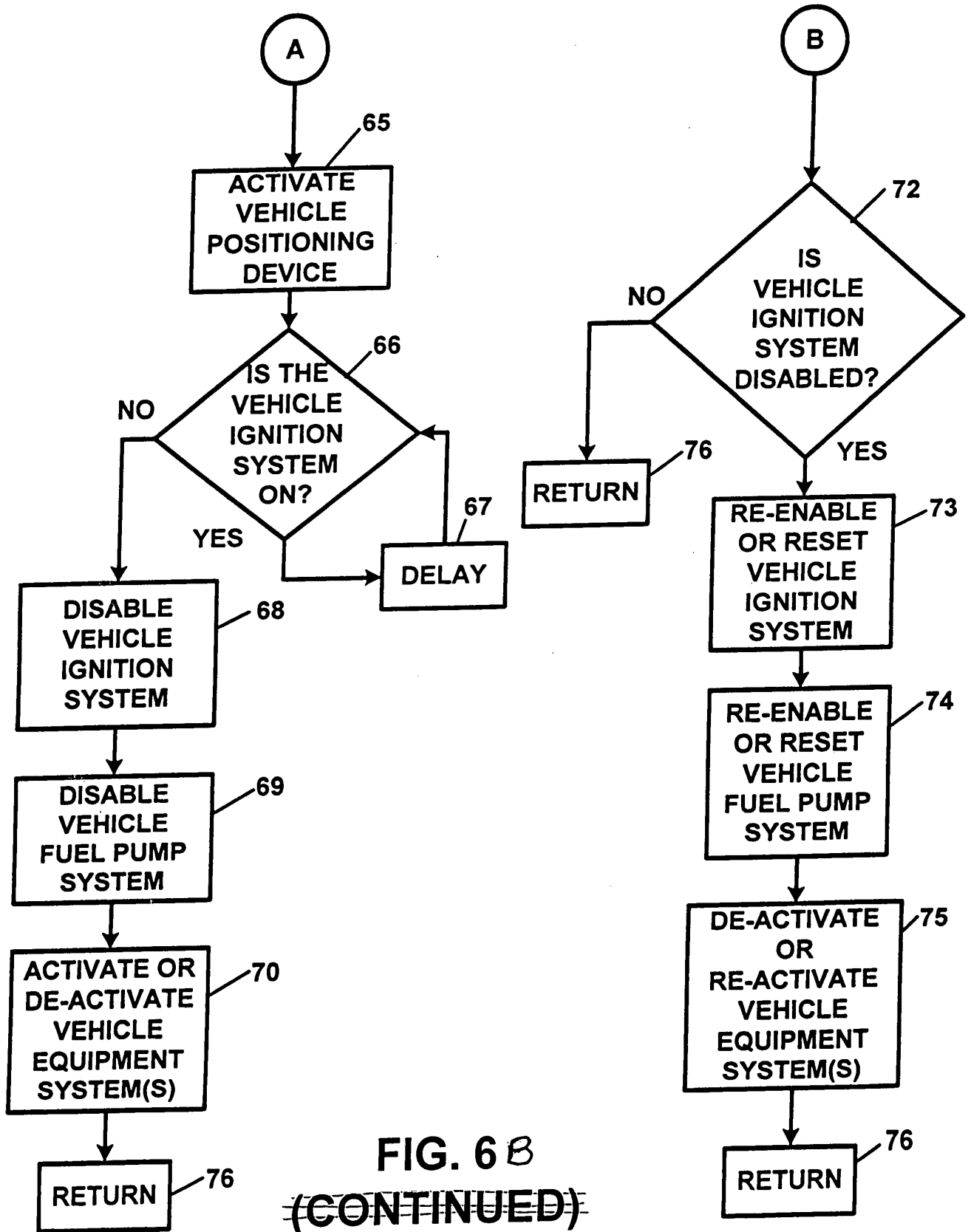
  
Raymond A. Joao  
Reg. No. 35,907

encls: Copies of Figures 6 and 8 (4 sheets)

May 22, 2001  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992



**FIG. 6A**



**FIG. 6B**  
~~(CONTINUED)~~

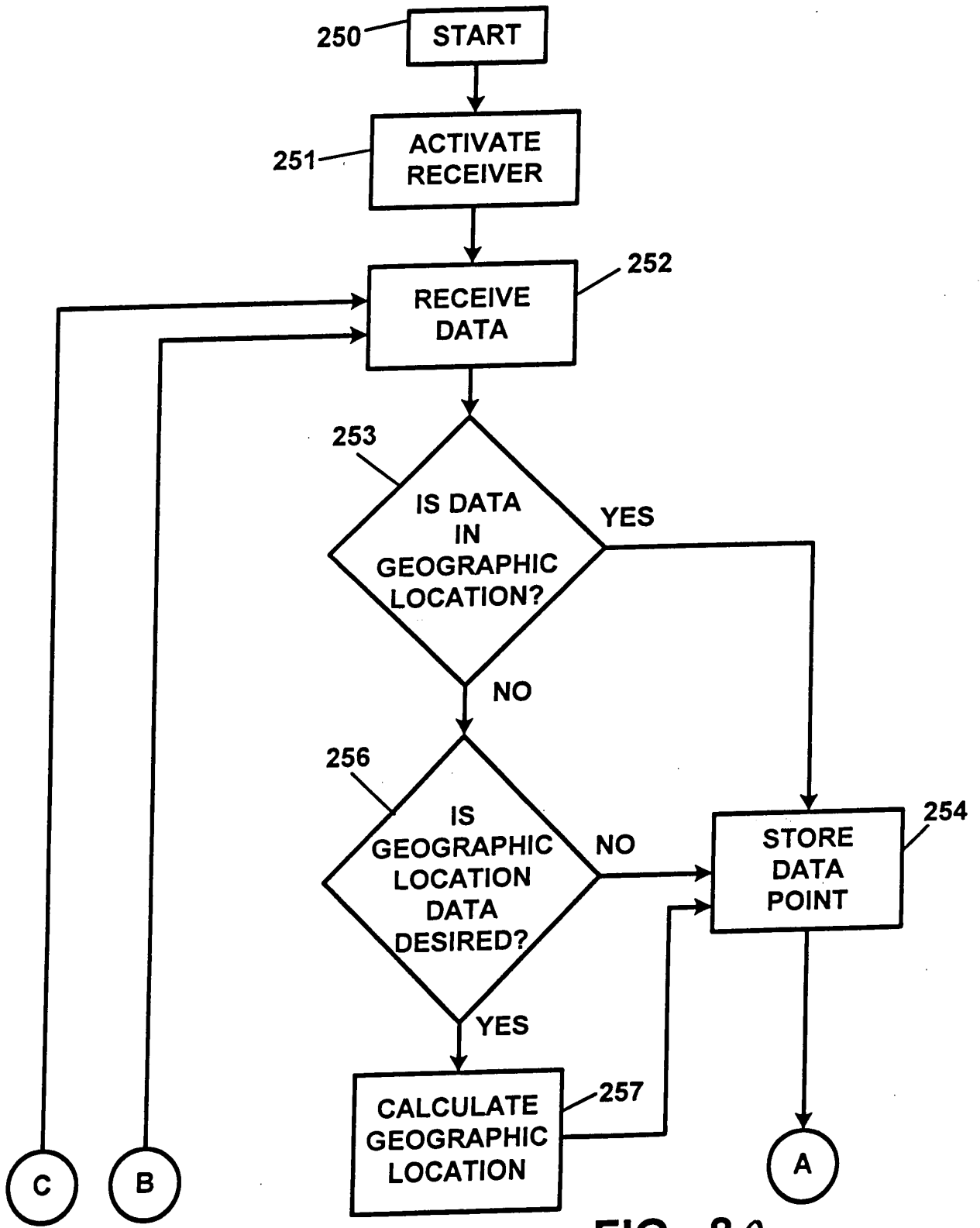
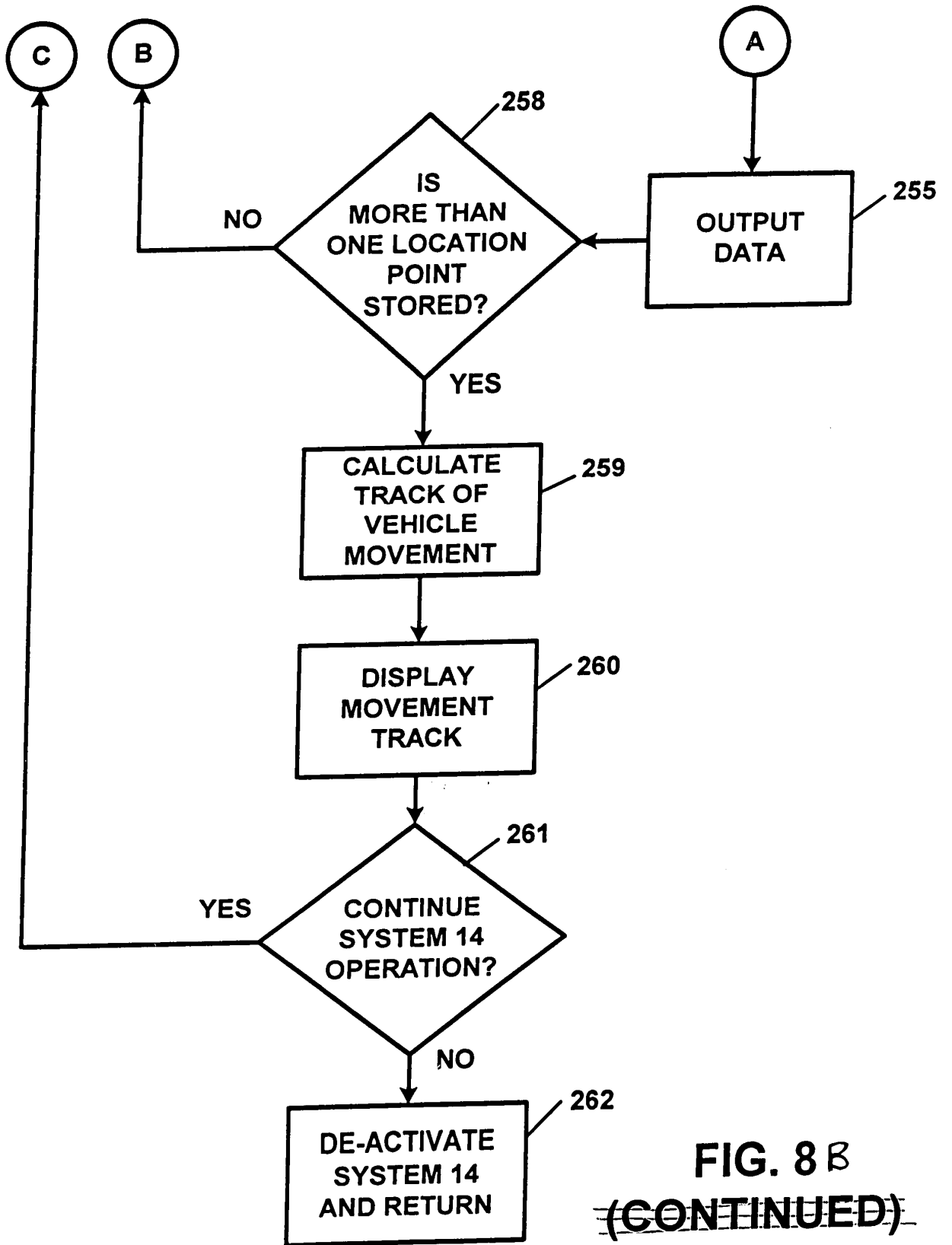


FIG. 8A



**FIG. 8B**  
**(CONTINUED)**



Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                                   |
|---|-----------------------------------|
| <b>TERMINAL DISCLAIMER TO OBTAIN A PROVISIONAL DOUBLE PATENTING REJECTION OVER A PENDING SECOND APPLICATION</b> | Docket Number (Optional)<br>RJ315 |
|---|-----------------------------------|

**RECEIVED**  
 MAY 22 2001  
 Technology Center 2600

In re Application of: **RAYMOND A. JOAO**  
 Application No.: **09/551,365**  
 Filed: **APRIL 17, 2000**  
 For: **CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD**

The owner, RAYMOND A. JOAO of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application, which would extend beyond the expiration date of the full statutory term defined in 35 U.S.C. 154 to 156 and 173 as shortened by any terminal disclaimer filed prior to the grant of any patent granted on pending second Application Number 09/274,935, filed on MARCH 29, 1999, of any patent on the pending second application. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and any patent granted on the second application are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 to 156 and 173 of any patent granted on the second application, as shortened by any terminal disclaimer filed prior to the patent grant, in the event that any such granted patent: expires for failure to pay a maintenance fee, is held unenforceable, is found invalid by a court of competent jurisdiction, is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321, has all claims canceled by a reexamination certificate, is reissued, or is in any manner terminated prior to the expiration of its full statutory term as shortened by any terminal disclaimer filed prior to its grant.

Check either box 1 or 2 below, if appropriate.

1.  For submissions on behalf of an organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2.  The undersigned is an attorney or agent of record.

Raymond A Joao 5/22/01  
 Signature Date

**RAYMOND A. JOAO**  
**REG. NO. 35,907**

Typed or printed name

05/23/2001 MHCGEE1 00000002 09551365  
 02 FC:248 55.00 OP

- Terminal disclaimer fee under 37 CFR 1.20(d) is included.

**WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.**

\*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).  
 Form PTO/SB/96 may be used for making this statement. See MPEP § 324.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                      |                 |
|---|----------------------|-----------------|
| <h2 style="margin: 0;">FEE TRANSMITTAL</h2> <h3 style="margin: 0;">for FY 2001</h3> <p style="font-size: small; margin: 5px 0;">Patent fees are subject to annual revision.</p> | Complete if Known    |                 |
|   | Application Number   | 09/551,365      |
|   | Filing Date          | APRIL 17, 2000  |
|   | First Named Inventor | RAYMOND A. JOAO |
|   | Examiner Name        | V. TRIEU        |
|   | Group Art Unit       | 2632            |
| TOTAL AMOUNT OF PAYMENT   |                      | (\$) 290.00     |
|   |                      | RECEIVED        |

MAY 22 2001  
Technology Center 2600

| METHOD OF PAYMENT   |
|---|
| <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit Account Number <input style="width: 100%;" type="text"/></p> <p>Deposit Account Name <input style="width: 100%;" type="text"/></p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p> |
| <p>2. <input checked="" type="checkbox"/> Payment Enclosed:</p> <p><input checked="" type="checkbox"/> Check    <input type="checkbox"/> Credit card    <input type="checkbox"/> Money Order    <input type="checkbox"/> Other</p>  |

| FEE CALCULATION (continued)                        |              |              |          |          |  |                          |
|--|--------------|--------------|----------|----------|--|--------------------------|
| 3. ADDITIONAL FEES                                 |              |              |          |          |  |                          |
| Fee Code   | Large Entity | Small Entity | Fee (\$) | Fee (\$) | Fee Description  | Fee Paid                 |
| 105  | 130          | 205          | 65       |          | Surcharge - late filing fee or oath  |                          |
| 127  | 50           | 227          | 25       |          | Surcharge - late provisional filing fee or cover sheet                     |                          |
| 139  | 130          | 139          | 130      |          | Non-English specification  |                          |
| 147  | 2,520        | 147          | 2,520    |          | For filing a request for <i>ex parte</i> reexamination                     |                          |
| 112  | 920*         | 112          | 920*     |          | Requesting publication of SIR prior to Examiner action                     |                          |
| 113  | 1,840*       | 113          | 1,840*   |          | Requesting publication of SIR after Examiner action                        |                          |
| 115  | 110          | 215          | 55       |          | Extension for reply within first month                                     |                          |
| 116  | 390          | 216          | 195      |          | Extension for reply within second month                                    |                          |
| 117  | 890          | 217          | 445      |          | Extension for reply within third month                                     |                          |
| 118  | 1,390        | 218          | 695      |          | Extension for reply within fourth month                                    |                          |
| 128  | 1,890        | 228          | 945      |          | Extension for reply within fifth month                                     |                          |
| 119  | 310          | 219          | 155      |          | Notice of Appeal   |                          |
| 120  | 310          | 220          | 155      |          | Filing a brief in support of an appeal                                     |                          |
| 121  | 270          | 221          | 135      |          | Request for oral hearing   |                          |
| 138  | 1,510        | 138          | 1,510    |          | Petition to institute a public use proceeding                              |                          |
| 140  | 110          | 240          | 55       |          | Petition to revive - unavoidable   |                          |
| 141  | 1,240        | 241          | 620      |          | Petition to revive - unintentional   |                          |
| 142  | 1,240        | 242          | 620      |          | Utility issue fee (or reissue)   |                          |
| 143  | 440          | 243          | 220      |          | Design issue fee   |                          |
| 144  | 600          | 244          | 300      |          | Plant issue fee  |                          |
| 122  | 130          | 122          | 130      |          | Petitions to the Commissioner  |                          |
| 123  | 50           | 123          | 50       |          | Processing fee under 37 CFR 1.17(q)  |                          |
| 126  | 180          | 126          | 180      |          | Submission of Information Disclosure Stmt                                  |                          |
| 581  | 40           | 581          | 40       |          | Recording each patent assignment per property (times number of properties) |                          |
| 146  | 710          | 246          | 355      |          | Filing a submission after final rejection (37 CFR § 1.129(a))              |                          |
| 149  | 710          | 249          | 355      |          | For each additional invention to be examined (37 CFR § 1.129(b))           |                          |
| 179  | 710          | 279          | 355      |          | Request for Continued Examination (RCE)                                    |                          |
| 169  | 900          | 169          | 900      |          | Request for expedited examination of a design application                  |                          |
| Other fee (specify) <b>TERMINAL DISCLAIMER (2)</b> |              |              |          |          |  | 110.00                   |
| *Reduced by Basic Filing Fee Paid                  |              |              |          |          |  | SUBTOTAL (3) (\$) 110.00 |

| FEE CALCULATION            |                            |                 |  |        |    |   |      |   |        |
|----------------------------|----------------------------|-----------------|--|--------|----|---|------|---|--------|
| 1. BASIC FILING FEE        |                            |                 |  |        |    |   |      |   |        |
| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid   |        |    |   |      |   |        |
| 101                        | 710                        | 201 355         | Utility filing fee   |        |    |   |      |   |        |
| 106                        | 320                        | 206 160         | Design filing fee  |        |    |   |      |   |        |
| 107                        | 490                        | 207 245         | Plant filing fee   |        |    |   |      |   |        |
| 108                        | 710                        | 208 355         | Reissue filing fee   |        |    |   |      |   |        |
| 114                        | 150                        | 214 75          | Provisional filing fee                                     |        |    |   |      |   |        |
| <b>SUBTOTAL (1)</b>        |                            |                 | (\$)   |        |    |   |      |   |        |
| 2. EXTRA CLAIM FEES        |                            |                 |  |        |    |   |      |   |        |
| Total Claims               |                            | 68              | 48**   | =      | 20 | X | 9.00 | = | 180.00 |
| Independent Claims         |                            |                 | - 3**  | =      |    | X |      | = |        |
| Multiple Dependent         |                            |                 |  | =      |    |   |      | = |        |
| Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid   |        |    |   |      |   |        |
| 103                        | 18                         | 203 9           | Claims in excess of 20                                     |        |    |   |      |   |        |
| 102                        | 80                         | 202 40          | Independent claims in excess of 3                          |        |    |   |      |   |        |
| 104                        | 270                        | 204 135         | Multiple dependent claim, if not paid                      |        |    |   |      |   |        |
| 109                        | 80                         | 209 40          | ** Reissue independent claims over original patent         |        |    |   |      |   |        |
| 110                        | 18                         | 210 9           | ** Reissue claims in excess of 20 and over original patent |        |    |   |      |   |        |
| <b>SUBTOTAL (2)</b>        |                            |                 | (\$)   | 180.00 |    |   |      |   |        |

| SUBMITTED BY      |                        |                                   |         | Complete (if applicable) |              |
|-------------------|------------------------|-----------------------------------|---------|--------------------------|--------------|
| Name (Print/Type) | RAYMOND A. JOAO        | Registration No. (Attorney/Agent) | 35,907  | Telephone                | 914-969-2992 |
| Signature         | <i>Raymond A. Joao</i> | Date                              | 5/22/01 |                          |              |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.



C/11  
4/25/01  
JD

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on April 20, 2001.

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **OFFICIAL**

APPLICANT : RAYMOND A. JOAO  
 SERIAL NO. : 09/551,365  
 FILED : APRIL 17, 2000  
 FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
 EXAMINER : V. Trieu                      GROUP : 2632



Assistant Commissioner for Patents  
Washington, D.C. 20231

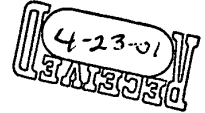
SECOND SUPPLEMENTAL AMENDMENT

Sir:

This is a Second Supplemental Amendment in the above-identified application. Entry of this Second Supplemental Amendment is respectfully requested.

C

OFFICIAL



Please amend the application as follows:

IN THE CLAIMS:

Please cancel claims 21-32 and claims 34-45, without prejudice, and please add the following new claims 69-92 as follows:

~~27~~ 69. The apparatus of claim ~~27~~, further comprising:

a monitoring device, wherein said monitoring device monitors at least one of the vehicle, the vehicle operational status, the vehicle operation, the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, engine temperature level, at least one of an electrical circuit and an electrical device, an equipment device, a computer, a command computer, an electronic command computer, an ignition

343

C

system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system, an alarm system, an anti-theft system, a recovery system, a positioning system, a locating system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the vehicle, activity outside the vehicle, and activity at the vehicle.

C1 cont

<sup>23</sup><sub>20</sub>. The apparatus of claim <sup>21</sup><sub>67</sub>, further comprising:

a positioning device, wherein said positioning device determines the location of the vehicle, and further wherein said positioning device provides the location of the vehicle on at least one of a map and a digitized map.

<sup>24</sup><sub>21</sub>. The apparatus of claim <sup>21</sup><sub>67</sub>, further comprising:

at least one of a camera and a video recording device, wherein said at least one of a camera and a video

344

C

recording device provides at least one of video surveillance at least one of inside, outside, and at, the vehicle, and video conferencing with an individual located at least one of inside, outside, and at, the vehicle.

*Sub E7* <sup>21</sup> 22. The apparatus of claim <sup>21</sup> 57, wherein said first control device detects at least one of a vehicle use, an unauthorized use of the vehicle, an access at least one of into and onto the vehicle, and a theft of the vehicle.

*C1 cont.*

<sup>21</sup> 23. The apparatus of claim <sup>21</sup> 57, wherein the communication device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a watch, a beeper, and a pager.

<sup>21</sup> 24. The apparatus of claim <sup>21</sup> 57, further comprising:

<sup>5</sup> 345

C

at least one of a microphone and an audio recording device, wherein said at least one of a microphone and an audio recording device provides at least one of audio surveillance at least one of inside, outside, and at, the vehicle, and audio conferencing with an individual located at least one of inside, outside, and at, the vehicle.

*C1 cont sub. EP 28*

<sup>28</sup> 25. The apparatus of claim <sup>21</sup> 67, further comprising:

at least one of a camera, a video recording device, a microphone and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

<sup>29</sup> 26. The apparatus of claim <sup>21</sup> 67, wherein said first control device at least one of receives, processes and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of the vehicle, and the vehicle at least one of system,

<sup>6</sup> 346

C

equipment system, subsystem, device, component and appliance.

*21*  
*31* The apparatus of claim *21*, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component and appliance.

*Cont*

*31* The apparatus of claim *21*, wherein the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a computer, a command computer, an electronic command computer, an ignition system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system,

*347*

*C*

an alarm system, an anti-theft system, a recovery system, a positioning system, a locating system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, and further wherein the vehicle is at last one of a motor vehicle, an automobile, a truck, a tractor trailer, a land vehicle, a marine vehicle, a marine vessel, a boat, an aircraft, a jet, a plane, construction equipment, farm equipment, a commercial vehicle, a recreational vehicle, a motorcycle, a snowmobile, a motor home, a mobile home, a water submersible vehicle, and an unmanned at least one of vehicle and equipment, an industrial structure, a drilling structure, a mining structure, industrial equipment, and construction equipment.

*C-1 cont.*

*Sub. Eq*

*21*

*21*

79. The apparatus of claim 67, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control devices processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates and disables, said at least one of the vehicle and the vehicle at least

*8 348*

*C*

one of system, equipment system, subsystem, device, component and appliance, in response to said second control signal.

<sup>35</sup>30. The apparatus of claim <sup>34</sup>38, further comprising:

*Cont.*

a monitoring device, wherein said monitoring device monitors at least one of the premises, the premises operational status, the premises operation, a premises at least of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system, an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system,

*349*

*C*



a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises, activity outside the premises, and activity at the premises.

*Cont.*

<sup>34</sup> 31. The apparatus of claim <sup>34</sup> 30, further comprising:

a positioning device, wherein said positioning device determines the location of the premises, and further wherein said positioning device provides the location of the premises on at least one of a map and a digitized map.

<sup>37</sup> 32. The apparatus of claim <sup>34</sup> 31, further comprising:

at least one of a camera and a video recording device, wherein said at least one of a camera and a video recording device provides at least one of video surveillance at least one of inside, outside, and at, the premises, and video conferencing with an individual located at least one of inside, outside, and at, the premises.

<sup>10</sup> 3500

C

Sub. #10

38

38. The apparatus of claim 38, wherein said first control device detects at least one of a premises use, an unauthorized use of the premises, an access at least one of into and onto the premises, and a theft of the premises.

31

C cont

39

39. The apparatus of claim 38, wherein the communication device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a watch, a beeper, and a pager.

34

40

40. The apparatus of claim 38, further comprising:

34

at least one of a microphone and an audio recording device, wherein said at least one of a microphone and an audio recording device provides at least one of audio surveillance at least one of inside, outside, and at, the premises, and audio conferencing with an individual located at least one of inside, outside, and at, the premises.

11 351

C

sub. E11

41

34

41. The apparatus of claim 34, further comprising:  
at least one of a camera, a video recording device,  
a microphone and an audio recording device,

Cont.

wherein said at least one of a camera, a video  
recording device, a microphone and an audio recording  
device, is at least one of stationary, mounted on an  
object, moveable, moveable along a guiding device, and  
pivotable.

42

34

42. The apparatus of claim 34, wherein said first  
control device at least one of receives, processes and  
detects, diagnostic at least one of data and information at  
least one of from, for, and regarding, said at least one of  
the premises, and the premises at least one of system,  
equipment system, subsystem, device, component and  
appliance.

43

34

43. The apparatus of claim 34, wherein said first  
control device transmits a first diagnostic signal to the  
second control device, and further wherein the second

352

C

control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component and appliance.

*C1 Cont*

*44*

*34*

89. The apparatus of claim 68, wherein the premises at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a computer, a command computer, an electronic command computer, a fuel system, an exhaust system, at least one of an electrical, a mechanical, and an electro-mechanical at least one of system and component, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, a residential premises equipment system, an office equipment system, a commercial premises equipment system, a home appliance, a residential premises appliance, an office appliance, a commercial premises appliance, a thermostat system, a positioning system, a locating system, a light system, an alarm system, an anti-theft system, a recovery

*C*

system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, and further wherein the premises is at least one of a residential premises, a building, a commercial premises, construction equipment, farm equipment, an industrial structure, a drilling structure, a mining structure, industrial equipment, and construction equipment.

C1  
cont.

Sub. EP2

45

34

90. The apparatus of claim 88, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control devices processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates and disables, said at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component and appliance, in response to said second control signal.

C

*Sub. F2*

*47*

*Cont.*

91. A control apparatus, which comprises:

a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, wherein said first control device is located at the premises,

wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the premises and

*15 355*

*C*

remote from the second control device.

*subtle*

*6/2/92*

A control apparatus, comprising:

*C1 cont.*

a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a premises at least one of system, equipment system, subsystem, device, component, and appliance, and a premises, wherein said first control device is located at a location remote from the premises,

wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from said first control device and remote from the premises,

wherein said first signal controls a third

*Cont.*

control device, wherein the third control device is located  
 at the premises, and further wherein the third control  
 device at least one of generates a third signal and  
 transmits a third signal for at least one of activating,  
 deactivating, enabling, and disabling, said at least one of  
 a premises at least one of system, equipment system,  
 subsystem, device, component, and appliance, and a  
 premises, in response to said first signal. --

---

*C*




REMARKS

Claims 33 and 46-92 are pending in this application. By this Second Supplemental Amendment, Applicant has cancelled claims 21-32 and 34-45, without prejudice, and Applicant has added new claims 69-92. Applicant respectfully submits that the present invention, as defined by newly added claims 69-92, is patentable over the prior art.

Entry of this Second Supplemental Amendment is respectfully requested. Applicant respectfully submits that the application is in condition for allowance and action to that end is respectfully requested.

Respectfully submitted,

  
Raymond A. Joao  
Reg. No. 35,907

April 20, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

17

18

Se  
#11

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

FAX COVER SHEET

To: Examiner Van Trieu  
Art Unit 2632  
703-308-5220

From: Raymond A. Joao, Esq.

Date: April <sup>23</sup> 20, 2001

Fax No.: 1-703-308-<sup>-6306</sup>~~4748~~

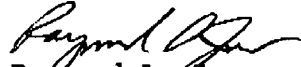
No. Pages: 18 (including cover)

Re: U.S. Patent Application Serial No. 09/551,365

Examiner Trieu:

Please find transmitted herewith a copy of a Second Supplemental Amendment which was filed today in the above-identified application.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No 35,907

C

9  
ac  
4/17

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Assistant Commissioner for Patents, Washington, D.C. 20231 on April 10, 2001.

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

|              |  |                 |
|--------------|--|-----------------|
| APPLICANT :  | RAYMOND A. JOAO  | <b>OFFICIAL</b> |
| SERIAL NO. : | 09/551,365   |                 |
| FILED :      | APRIL 17, 2000   |                 |
| FOR :        | CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD |                 |
| EXAMINER :   | V. Trieu   | GROUP : 2632    |

Assistant Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT

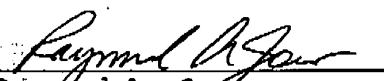
Sir:

Pursuant to 37 C.F.R. §1.97 and §1.98, Applicant respectfully requests that the documents listed on the attached INFORMATION DISCLOSURE STATEMENT BY APPLICANT forms (Substitute for form 1449A/PTO) be made of record and be considered in connection with the examination of this application.

The listed references, with the exception of U.S. Patent No. 5,917,405, were previously either submitted to the Office or cited by the Office in prior U.S. Patent Application Serial No. 09/277,935, which prior application is relied upon for priority. U.S. Patent No. 5,917,405 issued from prior U.S. Patent Application Serial No. 08/683,828, which prior application is also relied upon for priority.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT forms  
(Substitute for form 1449A/PTO) (2 sheets)

April 10, 2001  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

SR  
#8

RAYMOND A. JOAO  
122 BELLEVUE PLACE  
YONKERS, NEW YORK 10703  
(914) 969-2992

**FAX COVER SHEET**

To: Examiner Van Trieu  
Art Unit 2632  
703-308-5220

From: Raymond A. Joao

Date: April 17, 2001

Fax No.: 1-703-308-6743

No. Pages: 8 (including cover)

Re: U.S. Patent Application Serial Nos. 09/551,365 and  
09/277,935

Examiner Trieu:

Please find transmitted herewith copies of Information  
Disclosure Statements filed on April 10, 2001 in the above-  
identified applications.

Respectfully Submitted,



Raymond A. Joao  
Reg. No. 35,907

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on April 16, 2001.

*JPB*  
*W. H. She*  
*4-17-01*

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE **RECEIVED**  
APR 16 2001  
Technology Center 2600

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. Trieu GROUP : 2632

Assistant Commissioner for Patents  
Washington, D.C. 20231

SUPPLEMENTAL AMENDMENT

Sir:

This is a Supplemental Amendment in the above-identified application. Entry of this Supplemental

Amendment is respectfully requested.  
04/17/2001 HMC GEEA 00000001 09551365  
01 FC:203 198.00 DP  
02 FC:202 200.00 DP

*B*

Please amend the application as follows:

IN THE CLAIMS:

Please add the following new claims 47-68 as follows:

~~47.~~ A control apparatus, which comprises:

a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, wherein said first control device is located at the vehicle,

wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and

Sub. F1

B1  
cont.

329

B

transmitted from a second control device, wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates the second signal and transmits the second signal in response to a third signal, wherein the third signal is at least one of generated by a third control device and transmitted from a third control device, wherein the third control device is located at a location which is remote from the vehicle and remote from the second control device.

Sub. E1

~~74~~

The apparatus of claim ~~46~~<sup>47</sup>, further comprising:

BT  
Cont.

a monitoring device, wherein said monitoring device monitors at least one of the vehicle, the vehicle operational status, the vehicle operation, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, engine temperature level, at least one of an electrical circuit and an electrical

330

B



device, an equipment device, a computer, a command computer, an electronic command computer, a diagnostic computer, an ignition system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical, at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the vehicle, activity outside the vehicle, and activity at the vehicle.

B1  
Cont.

3

49. The apparatus of claim 47, further comprising:

a positioning device, wherein said positioning device determines the location of the vehicle, and further wherein said positioning device provides the location of the vehicle on at least one of a map and a digitized map.

4

50. The apparatus of claim 47, further comprising:

331

B

at least one of a camera and a video recording device, wherein said ~~at least one of a camera and a video recording device provides at least one of video surveillance at least one of inside, outside, and at, the vehicle, and video conferencing with an individual located at least one of inside, outside, and at, the vehicle.~~

*Sub. EW* ~~51.~~ The apparatus of claim ~~47~~<sup>1</sup>, wherein said first control device detects at least one of a vehicle use, an unauthorized use of the vehicle, an access at least one of into and onto the vehicle, and a theft of the vehicle.

*B1  
Cont.*

~~52.~~ The apparatus of claim ~~47~~<sup>1</sup>, wherein the third control device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a videophone, a watch, a beeper, and a pager.

*332<sup>5</sup>*

*B*

7 53. The apparatus of claim 47, further comprising:

at least one of a microphone and an audio recording device, wherein said at least one of a microphone and an audio recording device provides at least one of audio surveillance at least one of inside, outside, and at, the vehicle, and audio conferencing with an individual located at least one of inside, outside, and at, the vehicle.

Sub. P3

54. The apparatus of claim 47, further comprising:

at least one of a camera, a video recording device, a microphone and an audio recording device,

B1  
cont.

wherein said at least one of a camera, a video recording device, a microphone and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

9 55. The apparatus of claim 47, wherein said first control device at least one of receives, processes and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of

333

B

the vehicle and the vehicle at least one of system,  
equipment system, subsystem, device, component and  
appliance.

<sup>10</sup><sub>56</sub>. The apparatus of claim <sup>1</sup>~~47~~, wherein said first  
control device transmits a first diagnostic signal to the  
second control device, and further wherein the second  
control device processes said first diagnostic signal and  
at least one of generates a second diagnostic signal and  
transmits a second diagnostic signal to the third control  
device, wherein the third control device provides  
notification to an individual of a diagnosis at least one  
of for and regarding at least one of the vehicle and the  
vehicle at least one of system, equipment system,  
subsystem, device, component and appliance.

B  
Cont.

<sup>11</sup><sub>57</sub>. The apparatus of claim <sup>1</sup>~~47~~, wherein the vehicle  
at least one of system, equipment system, subsystem,  
device, component, and appliance, is at least one of a  
computer, a command computer, an electronic command  
computer, a diagnostic computer, an ignition system, a fuel  
system, an exhaust system, at least one of an electrical,  
mechanical, and electro-mechanical at least one of system  
and component, an equipment device, an equipment system, a

334

B

heating system, a cooling system, an air conditioning system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, and further wherein the vehicle is at least one of a motor vehicle, an automobile, a truck, a tractor trailer, a land vehicle, a marine vehicle, a marine vessel, a boat, an aircraft, a jet, a plane, construction equipment, farm equipment, a commercial vehicle, a recreational vehicle, a military vehicle, a motorcycle, a snowmobile, a motor home, a mobile home, a water submersible vehicle, and an unmanned at least one of vehicle and equipment, an industrial vehicle, a drilling vehicle, a mining vehicle, an industrial vehicle, and a construction vehicle.

B1  
cont.

Sub. E4 17

58. The apparatus of claim 47, wherein the third control device transmits a first control signal to the second control device, and further wherein the second control devices processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device processes said second control signal and generates a third

335<sup>8</sup>

B

control signal, wherein said third control signal at least one of activates, enables, de-activates and disables, said at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component and appliance, in response to said second control signal.

<sup>13</sup>  
~~59.~~ The apparatus of claim ~~47~~, wherein the operation of at least one of said apparatus and said first control device is at least one of programmed, automatically activated, and self-activating.

<sup>14</sup>  
~~60.~~ The apparatus of claim ~~47~~, further comprising:

*B1*  
*cont.*

at least one of an arming device and an activating device, wherein said at least one of an arming device and an activating device at least one of arms and activates apparatus operation, and further wherein said at least one of an arming device and an activating device is located at the vehicle.

*Sub. E5* <sup>15</sup>  
~~61.~~ The apparatus of claim ~~47~~, further comprising:

*336*

*B*

a voice synthesizing device, wherein said voice activating device generates a voice message indicative of at least one of operation of the apparatus, status of the apparatus, operation of said first control device, and operation of the vehicle.

17  
62. A control apparatus, comprising:

sub. 44  
a first control device, wherein said first control device at least one of generates a first signal and transmits a first signal for at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, wherein said first control device is located at a location remote from the vehicle,

BI  
COAT.  
wherein said first control device at least one of generates said first signal and transmits said first signal in response to a second signal, wherein the second signal is at least one of generated by a second control device and transmitted from a second control device, wherein the second control device is located at a location which is remote from said first control device and remote from the

10  
337

B

~~vehicle,~~

wherein said first signal controls a third control device, wherein the third control device is located at the vehicle, and further wherein the third control device at least one of generates a third signal and transmits a third signal for at least one of activating, deactivating, enabling, and disabling, said at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle, in response to said first signal.

B1  
cont.

<sup>18</sup><sub>63</sub>. The apparatus of claim <sup>17</sup><sub>62</sub>, wherein said first control device is at least one of a computer, a central processing computer, and a server computer.

<sup>19</sup><sub>64</sub>. The apparatus of claim <sup>17</sup><sub>62</sub>, wherein said apparatus is utilized at least one of on, over, and in conjunction with, a communication network, a telecommunication network, a wireless communication network, a radio communication network, an optical communication network, a satellite communication network, a personal communication services network, the Internet, and

<sup>11</sup>  
338

B



the World Wide Web.

65. The apparatus of claim 62, wherein said first control device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a videophone, a watch, a beeper, and a pager.

66. A control method, comprising:

transmitting a first signal from a first control device to a second control device, wherein the first control device is located at a location remote from the vehicle and remote from the second control device;

transmitting a second signal from the second control device to a third control device, wherein the third control device is located at the vehicle, and further wherein the second control device is located at a location remote from

B1  
cont.

<sup>12</sup>  
339

B

~~the vehicles~~

at least one of generating a third signal and transmitting a third signal from the third control device at the vehicle in response to said second signal; and

at least one of activating, deactivating, enabling, and disabling, at least one of a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, and a vehicle.

Sub. Etc 7/57. A control apparatus, comprising:

BI  
COAT.

a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component and appliance, wherein said first control device is located at the vehicle,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information

13  
340

b

regarding the event, and wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

34/ 38. A control apparatus, comprising:

B1  
cont.

a first control device, wherein said first control device at least one of monitors and detects an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component and appliance, wherein said first control device is located at the premises,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information

14  
341

B

BI  
COND.

regarding the event, and wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event. --

REMARKS

Claims 21-68 are pending in this application. By this Supplemental Amendment, Applicant has added new claims 47-68. Applicant respectfully submits that the present invention, as defined by newly added claims 47-68, is patentable over the prior art.

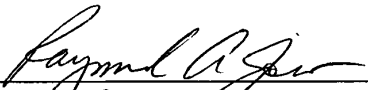
Entry of this Supplemental Amendment is respectfully requested. Applicant respectfully submits that the application is in condition for allowance and action to that end is respectfully requested.

<sup>15</sup>  
342

B

A Fee Transmittal Sheet (in duplicate), along with a check in the amount of \$398.00, for payment for the additional claims is submitted herewith.

Respectfully submitted,

  
\_\_\_\_\_  
Raymond A. Joao  
Reg. No. 35,907

Encls.: - Fee Transmittal Sheet (in duplicate)  
- Check in the amount of \$398.00 for the additional claims

April 16, 2001  
Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

|                          |                               |                                       |  |
|--------------------------|-------------------------------|---------------------------------------|--|
| <b>Interview Summary</b> | Application No.<br>09/551,365 | Applicant(s)<br>JOAO, RAYMOND ANTHONY |  |
|                          | Examiner<br>Van T Trieu       | Art Unit<br>2632                      |  |

All participants (applicant, applicant's representative, PTO personnel):

- (1) Van T Trieu. (3) \_\_\_\_\_  
 (2) Mr Raymond Joao. (4) \_\_\_\_\_

Date of Interview: 16 April 2001.

Type: a)  Telephonic b)  Video Conference  
 c)  Personal [copy given to: 1)  applicant 2)  applicant's representative]

Exhibit shown or demonstration conducted: d)  Yes e)  No.  
 If Yes, brief description:

Claim(s) discussed: 47-68.

Identification of prior art discussed: Lewis [US 5,796,365] and [US 5,587,715].

Agreement with respect to the claims f)  was reached. g)  was not reached. h)  N/A.

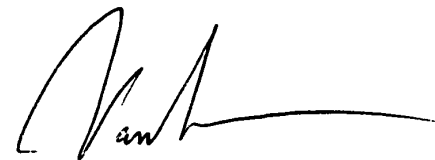
Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr Joao explains the newly added claims and the differences with the prior art.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i)  It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



Examiner's signature, if required

I hereby certify that this correspondence is being hand delivered to Examining Group 2600 on April 16, 2001.

#17  
M. H. [unclear]  
4-17-01

*Raymond A. Joao*  
Raymond A. Joao

RECEIVED

APR 16 2001

Technology Center 2600

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS  
AND METHOD  
EXAMINER : V. Trieu GROUP : 2632

Assistant Commissioner for Patents  
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT


Sir:

Pursuant to 37 C.F.R. §1.97 and §1.98, Applicant respectfully requests that the document listed on the attached INFORMATION DISCLOSURE STATEMENT BY APPLICANT form (Substitute for form 1449A/PTO) be made of record and be considered in connection with the examination of this application.

The cited reference, U.S. Patent No. 5,796,365, issued from a continuation application of U.S. Patent Application Serial No. 08/036,533 which application issued as U.S. Patent No. 5,587,715. U.S. Patent No. 5,587,715 was previously cited in the above-identified application. A text-only copy of U.S. Patent No. 5,796,365 is submitted herewith.

Applicant respectfully requests that U.S. Patent No. 5,796,365 be considered and be included on the list of considered references. Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,



Raymond A. Joao  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT form  
(Substitute for form 1449A/PTO) (1 sheet)  
- Text-only copy of U.S. Patent No. 5,796,365

April 16, 2001  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992






The listed references, with the exception of U.S. Patent No. 5,917,405, were previously either submitted to the Office or cited by the Office in prior U.S. Patent Application Serial No. 09/277,935, which prior application is relied upon for priority. U.S. Patent No. 5,917,405 issued from prior U.S. Patent Application Serial No. 08/683,828, which prior application is also relied upon for priority.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

Encls.: - INFORMATION DISCLOSURE STATEMENT BY APPLICANT forms  
(Substitute for form 1449A/PTO) (2 sheets)

April 10, 2001  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |                      |                 |
|---|----------------------|-----------------|
| <h1 style="margin: 0;">FEE TRANSMITTAL</h1> <h2 style="margin: 0;">for FY 2001</h2> <p style="font-size: small; margin: 5px 0;">Patent fees are subject to annual revision.</p> | Complete if Known    |                 |
|   | Application Number   | 09/551,365      |
|   | Filing Date          | APRIL 17, 2001  |
|   | First Named Inventor | RAYMOND A. JOAO |
|   | Examiner Name        | V. TRIEU        |
|   | Group Art Unit       | 2632            |
| TOTAL AMOUNT OF PAYMENT   | (\$) 398.00          |                 |
|   | Attorney Docket No.  | RJ315           |

| <p style="text-align: center; font-weight: bold; font-size: small;">METHOD OF PAYMENT</p> <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit Account Number <input style="width: 150px; height: 20px;" type="text"/></p> <p>Deposit Account Name <input style="width: 150px; height: 20px;" type="text"/></p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p> <p>2. <input checked="" type="checkbox"/> Payment Enclosed:</p> <p><input checked="" type="checkbox"/> Check    <input type="checkbox"/> Credit card    <input type="checkbox"/> Money Order    <input type="checkbox"/> Other</p> <p style="text-align: center; font-weight: bold; font-size: small;">FEE CALCULATION</p> <p><b>1. BASIC FILING FEE</b></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>101 710</td><td>201 355</td><td>Utility filing fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>106 320</td><td>206 160</td><td>Design filing fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>107 490</td><td>207 245</td><td>Plant filing fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>108 710</td><td>208 355</td><td>Reissue filing fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>114 150</td><td>214 75</td><td>Provisional filing fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (1)</b></td> <td><b>(\$)</b> <input style="width: 80px;" type="text"/></td> </tr> </tbody> </table> <p><b>2. EXTRA CLAIM FEES</b></p> <p>Total Claims <input style="width: 30px;" type="text"/> 68 <del>46</del> = <input style="width: 30px;" type="text"/> 22 <sup>Extra Claims</sup> × <input style="width: 30px;" type="text"/> 9.00 <sup>Fee from below</sup> = <input style="width: 60px;" type="text"/> 198.00 <sup>Fee Paid</sup></p> <p>Independent Claims <input style="width: 30px;" type="text"/> 9 - <input style="width: 30px;" type="text"/> 34 = <input style="width: 30px;" type="text"/> 5 × <input style="width: 30px;" type="text"/> 40.00 = <input style="width: 60px;" type="text"/> 200.00</p> <p>Multiple Dependent <input style="width: 30px;" type="text"/> = <input style="width: 30px;" type="text"/></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>103 18</td><td>203 9</td><td>Claims in excess of 20</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>102 80</td><td>202 40</td><td>Independent claims in excess of 3</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>104 270</td><td>204 135</td><td>Multiple dependent claim, if not paid</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>109 80</td><td>209 40</td><td>** Reissue independent claims over original patent</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>110 18</td><td>210 9</td><td>** Reissue claims in excess of 20 and over original patent</td><td><input style="width: 40px;" type="text"/></td></tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (2)</b></td> <td><b>(\$)</b> 398.00</td> </tr> </tbody> </table> | Large Entity Fee Code (\$) | Small Entity Fee Code (\$)   | Fee Description                                       | Fee Paid | 101 710 | 201 355 | Utility filing fee | <input style="width: 40px;" type="text"/> | 106 320 | 206 160 | Design filing fee | <input style="width: 40px;" type="text"/> | 107 490 | 207 245 | Plant filing fee | <input style="width: 40px;" type="text"/> | 108 710 | 208 355 | Reissue filing fee | <input style="width: 40px;" type="text"/> | 114 150 | 214 75 | Provisional filing fee | <input style="width: 40px;" type="text"/> | <b>SUBTOTAL (1)</b> |  |  | <b>(\$)</b> <input style="width: 80px;" type="text"/> | Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid | 103 18 | 203 9 | Claims in excess of 20 | <input style="width: 40px;" type="text"/> | 102 80 | 202 40 | Independent claims in excess of 3 | <input style="width: 40px;" type="text"/> | 104 270 | 204 135 | Multiple dependent claim, if not paid | <input style="width: 40px;" type="text"/> | 109 80 | 209 40 | ** Reissue independent claims over original patent | <input style="width: 40px;" type="text"/> | 110 18 | 210 9 | ** Reissue claims in excess of 20 and over original patent | <input style="width: 40px;" type="text"/> | <b>SUBTOTAL (2)</b> |  |  | <b>(\$)</b> 398.00 | <p style="text-align: center; font-weight: bold; font-size: small;">FEE CALCULATION (continued)</p> <p><b>3. ADDITIONAL FEES</b></p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th>Large Entity Fee Code (\$)</th> <th>Small Entity Fee Code (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105 130</td><td>205 65</td><td>Surcharge - late filing fee or oath</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>127 50</td><td>227 25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>139 130</td><td>139 130</td><td>Non-English specification</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>147 2,520</td><td>147 2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>112 920*</td><td>112 920*</td><td>Requesting publication of SIR prior to Examiner action</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>113 1,840*</td><td>113 1,840*</td><td>Requesting publication of SIR after Examiner action</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>115 110</td><td>215 55</td><td>Extension for reply within first month</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>116 390</td><td>216 195</td><td>Extension for reply within second month</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>117 890</td><td>217 445</td><td>Extension for reply within third month</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>118 1,390</td><td>218 695</td><td>Extension for reply within fourth month</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>128 1,890</td><td>228 945</td><td>Extension for reply within fifth month</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>119 310</td><td>219 155</td><td>Notice of Appeal</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>120 310</td><td>220 155</td><td>Filing a brief in support of an appeal</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>121 270</td><td>221 135</td><td>Request for oral hearing</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>138 1,510</td><td>138 1,510</td><td>Petition to institute a public use proceeding</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>140 110</td><td>240 55</td><td>Petition to revive - unavoidable</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>141 1,240</td><td>241 620</td><td>Petition to revive - unintentional</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>142 1,240</td><td>242 620</td><td>Utility issue fee (or reissue)</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>0143 440</td><td>243 220</td><td>Design issue fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>0144 600</td><td>244 300</td><td>Plant issue fee</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>122 130</td><td>122 130</td><td>Petitions to the Commissioner</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>123 50</td><td>123 50</td><td>Processing fee under 37 CFR 1.17(q)</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>126 180</td><td>126 180</td><td>Submission of Information Disclosure Stmt</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>581 40</td><td>581 40</td><td>Recording each patent assignment per property (times number of properties)</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>146 710</td><td>246 355</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>149 710</td><td>249 355</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>179 710</td><td>279 355</td><td>Request for Continued Examination (RCE)</td><td><input style="width: 40px;" type="text"/></td></tr> <tr><td>169 900</td><td>169 900</td><td>Request for expedited examination of a design application</td><td><input style="width: 40px;" type="text"/></td></tr> <tr> <td colspan="3">Other fee (specify) _____</td> <td><input style="width: 40px;" type="text"/></td> </tr> <tr> <td colspan="3" style="text-align: right;"><b>SUBTOTAL (3)</b></td> <td><b>(\$)</b> <input style="width: 80px;" type="text"/></td> </tr> </tbody> </table> <p style="font-size: x-small;">*or number previously paid, if greater; For Reissues, see above</p> <p style="font-size: x-small;">*Reduced by Basic Filing Fee Paid</p> | Large Entity Fee Code (\$) | Small Entity Fee Code (\$) | Fee Description | Fee Paid | 105 130 | 205 65 | Surcharge - late filing fee or oath | <input style="width: 40px;" type="text"/> | 127 50 | 227 25 | Surcharge - late provisional filing fee or cover sheet | <input style="width: 40px;" type="text"/> | 139 130 | 139 130 | Non-English specification | <input style="width: 40px;" type="text"/> | 147 2,520 | 147 2,520 | For filing a request for <i>ex parte</i> reexamination | <input style="width: 40px;" type="text"/> | 112 920* | 112 920* | Requesting publication of SIR prior to Examiner action | <input style="width: 40px;" type="text"/> | 113 1,840* | 113 1,840* | Requesting publication of SIR after Examiner action | <input style="width: 40px;" type="text"/> | 115 110 | 215 55 | Extension for reply within first month | <input style="width: 40px;" type="text"/> | 116 390 | 216 195 | Extension for reply within second month | <input style="width: 40px;" type="text"/> | 117 890 | 217 445 | Extension for reply within third month | <input style="width: 40px;" type="text"/> | 118 1,390 | 218 695 | Extension for reply within fourth month | <input style="width: 40px;" type="text"/> | 128 1,890 | 228 945 | Extension for reply within fifth month | <input style="width: 40px;" type="text"/> | 119 310 | 219 155 | Notice of Appeal | <input style="width: 40px;" type="text"/> | 120 310 | 220 155 | Filing a brief in support of an appeal | <input style="width: 40px;" type="text"/> | 121 270 | 221 135 | Request for oral hearing | <input style="width: 40px;" type="text"/> | 138 1,510 | 138 1,510 | Petition to institute a public use proceeding | <input style="width: 40px;" type="text"/> | 140 110 | 240 55 | Petition to revive - unavoidable | <input style="width: 40px;" type="text"/> | 141 1,240 | 241 620 | Petition to revive - unintentional | <input style="width: 40px;" type="text"/> | 142 1,240 | 242 620 | Utility issue fee (or reissue) | <input style="width: 40px;" type="text"/> | 0143 440 | 243 220 | Design issue fee | <input style="width: 40px;" type="text"/> | 0144 600 | 244 300 | Plant issue fee | <input style="width: 40px;" type="text"/> | 122 130 | 122 130 | Petitions to the Commissioner | <input style="width: 40px;" type="text"/> | 123 50 | 123 50 | Processing fee under 37 CFR 1.17(q) | <input style="width: 40px;" type="text"/> | 126 180 | 126 180 | Submission of Information Disclosure Stmt | <input style="width: 40px;" type="text"/> | 581 40 | 581 40 | Recording each patent assignment per property (times number of properties) | <input style="width: 40px;" type="text"/> | 146 710 | 246 355 | Filing a submission after final rejection (37 CFR § 1.129(a)) | <input style="width: 40px;" type="text"/> | 149 710 | 249 355 | For each additional invention to be examined (37 CFR § 1.129(b)) | <input style="width: 40px;" type="text"/> | 179 710 | 279 355 | Request for Continued Examination (RCE) | <input style="width: 40px;" type="text"/> | 169 900 | 169 900 | Request for expedited examination of a design application | <input style="width: 40px;" type="text"/> | Other fee (specify) _____ |  |  | <input style="width: 40px;" type="text"/> | <b>SUBTOTAL (3)</b> |  |  | <b>(\$)</b> <input style="width: 80px;" type="text"/> |
|---|----------------------------|--|---|----------|---------|---------|--------------------|---|---------|---------|-------------------|---|---------|---------|------------------|---|---------|---------|--------------------|---|---------|--------|------------------------|---|---------------------|--|--|---|----------------------------|----------------------------|-----------------|----------|--------|-------|------------------------|---|--------|--------|-----------------------------------|---|---------|---------|---------------------------------------|---|--------|--------|--|---|--------|-------|--|---|---------------------|--|--|--------------------|---|----------------------------|----------------------------|-----------------|----------|---------|--------|-------------------------------------|---|--------|--------|--|---|---------|---------|---------------------------|---|-----------|-----------|--|---|----------|----------|--|---|------------|------------|---|---|---------|--------|--|---|---------|---------|---|---|---------|---------|--|---|-----------|---------|---|---|-----------|---------|--|---|---------|---------|------------------|---|---------|---------|--|---|---------|---------|--------------------------|---|-----------|-----------|---|---|---------|--------|----------------------------------|---|-----------|---------|------------------------------------|---|-----------|---------|--------------------------------|---|----------|---------|------------------|---|----------|---------|-----------------|---|---------|---------|-------------------------------|---|--------|--------|-------------------------------------|---|---------|---------|---|---|--------|--------|--|---|---------|---------|---|---|---------|---------|--|---|---------|---------|---|---|---------|---------|---|---|---------------------------|--|--|---|---------------------|--|--|---|
| Large Entity Fee Code (\$)  | Small Entity Fee Code (\$) | Fee Description  | Fee Paid  |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 101 710   | 201 355                    | Utility filing fee   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 106 320   | 206 160                    | Design filing fee  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 107 490   | 207 245                    | Plant filing fee   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 108 710   | 208 355                    | Reissue filing fee   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 114 150   | 214 75                     | Provisional filing fee   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| <b>SUBTOTAL (1)</b>   |                            |  | <b>(\$)</b> <input style="width: 80px;" type="text"/> |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| Large Entity Fee Code (\$)  | Small Entity Fee Code (\$) | Fee Description  | Fee Paid  |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 103 18  | 203 9                      | Claims in excess of 20   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 102 80  | 202 40                     | Independent claims in excess of 3  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 104 270   | 204 135                    | Multiple dependent claim, if not paid                                      | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 109 80  | 209 40                     | ** Reissue independent claims over original patent                         | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 110 18  | 210 9                      | ** Reissue claims in excess of 20 and over original patent                 | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| <b>SUBTOTAL (2)</b>   |                            |  | <b>(\$)</b> 398.00                                    |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| Large Entity Fee Code (\$)  | Small Entity Fee Code (\$) | Fee Description  | Fee Paid  |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 105 130   | 205 65                     | Surcharge - late filing fee or oath  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 127 50  | 227 25                     | Surcharge - late provisional filing fee or cover sheet                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 139 130   | 139 130                    | Non-English specification  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 147 2,520   | 147 2,520                  | For filing a request for <i>ex parte</i> reexamination                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 112 920*  | 112 920*                   | Requesting publication of SIR prior to Examiner action                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 113 1,840*  | 113 1,840*                 | Requesting publication of SIR after Examiner action                        | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 115 110   | 215 55                     | Extension for reply within first month                                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 116 390   | 216 195                    | Extension for reply within second month                                    | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 117 890   | 217 445                    | Extension for reply within third month                                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 118 1,390   | 218 695                    | Extension for reply within fourth month                                    | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 128 1,890   | 228 945                    | Extension for reply within fifth month                                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 119 310   | 219 155                    | Notice of Appeal   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 120 310   | 220 155                    | Filing a brief in support of an appeal                                     | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 121 270   | 221 135                    | Request for oral hearing   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 138 1,510   | 138 1,510                  | Petition to institute a public use proceeding                              | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 140 110   | 240 55                     | Petition to revive - unavoidable   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 141 1,240   | 241 620                    | Petition to revive - unintentional   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 142 1,240   | 242 620                    | Utility issue fee (or reissue)   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 0143 440  | 243 220                    | Design issue fee   | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 0144 600  | 244 300                    | Plant issue fee  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 122 130   | 122 130                    | Petitions to the Commissioner  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 123 50  | 123 50                     | Processing fee under 37 CFR 1.17(q)  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 126 180   | 126 180                    | Submission of Information Disclosure Stmt                                  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 581 40  | 581 40                     | Recording each patent assignment per property (times number of properties) | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 146 710   | 246 355                    | Filing a submission after final rejection (37 CFR § 1.129(a))              | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 149 710   | 249 355                    | For each additional invention to be examined (37 CFR § 1.129(b))           | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 179 710   | 279 355                    | Request for Continued Examination (RCE)                                    | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| 169 900   | 169 900                    | Request for expedited examination of a design application                  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| Other fee (specify) _____   |                            |  | <input style="width: 40px;" type="text"/>             |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |
| <b>SUBTOTAL (3)</b>   |                            |  | <b>(\$)</b> <input style="width: 80px;" type="text"/> |          |         |         |                    |   |         |         |                   |   |         |         |                  |   |         |         |                    |   |         |        |                        |   |                     |  |  |   |                            |                            |                 |          |        |       |                        |   |        |        |                                   |   |         |         |                                       |   |        |        |  |   |        |       |  |   |                     |  |  |                    |   |                            |                            |                 |          |         |        |                                     |   |        |        |  |   |         |         |                           |   |           |           |  |   |          |          |  |   |            |            |   |   |         |        |  |   |         |         |   |   |         |         |  |   |           |         |   |   |           |         |  |   |         |         |                  |   |         |         |  |   |         |         |                          |   |           |           |   |   |         |        |                                  |   |           |         |                                    |   |           |         |                                |   |          |         |                  |   |          |         |                 |   |         |         |                               |   |        |        |                                     |   |         |         |   |   |        |        |  |   |         |         |   |   |         |         |  |   |         |         |   |   |         |         |   |   |                           |  |  |   |                     |  |  |   |

|                   |                 |                                   |              |
|-------------------|-----------------|-----------------------------------|--------------|
| SUBMITTED BY      |                 | Complete (if applicable)          |              |
| Name (Print/Type) | RAYMOND A. JOAO | Registration No. (Attorney/Agent) | 35,907       |
| Signature         |                 | Telephone                         | 914-969-2992 |
|                   |                 | Date                              | 4/16/01      |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

B



Applicant gratefully acknowledges the Examiner's time and courtesy extended during the personal interview with Applicant on February 27, 2001.

Based upon the following Amendments and Remarks, the application is deemed to be in condition for allowance and action to that end is respectfully requested.

Please amend the application as follows:

IN THE CLAIMS:

Please cancel claims 1-20, without prejudice, and please add the following new claims 21-46 as follows:

---

-- 21. A control apparatus, comprising:

A  
cont.

a first control device for at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component and appliance, wherein said first control device is located at the vehicle,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

A1  
cont.

22. The apparatus of claim 21, further comprising:

a monitoring device for monitoring at least one of the vehicle, the vehicle operational status, the vehicle operation, a vehicle at least one of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell

A

output, fuel cell fuel supply, fuel cell operation, engine temperature level, at least one of an electrical circuit and an electrical device, an equipment device, a computer, a command computer, an electronic command computer, an ignition system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system, an alarm system, an anti-theft system, a recovery system, a positioning system, a locating system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the vehicle, activity outside the vehicle, and activity at the vehicle.

A1  
cont.

23. The apparatus of claim 21, further comprising:

a positioning device for determining the location of the vehicle, wherein said positioning device provides the location of the vehicle on at least one of a map and a digitized map.

A

24. The apparatus of claim 21, further comprising:

at least one of a camera and a video recording device for providing at least one of video surveillance at least one of inside, outside, and at, the vehicle, and video conferencing with an individual located at least one of inside, outside, and at, the vehicle.

25. The apparatus of claim 21, wherein said first control device detects at least one of a vehicle use, an unauthorized use of the vehicle, an access at least one of into and onto the vehicle, and a theft of the vehicle.

26. The apparatus of claim 21, wherein the communication device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a watch, a beeper, and a pager.

A1  
cont.

A



27. The apparatus of claim 21, further comprising:

at least one of a microphone and an audio recording device for providing at least one of audio surveillance at least one of inside, outside, and at, the vehicle, and audio conferencing with an individual located at least one of inside, outside, and at, the vehicle.

28. The apparatus of claim 21, further comprising:

at least one of a camera, a video recording device, a microphone and an audio recording device,

wherein said at least one of a camera, a video recording device, a microphone and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

29. The apparatus of claim 21, wherein said first control device at least one of receives, processes and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of the vehicle, and the vehicle at least one of system,

A1  
cont.

A

equipment system, subsystem, device, component and appliance.

30. The apparatus of claim 21, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the vehicle and the vehicle at least one of system, equipment system, subsystem, device, component and appliance.

31. The apparatus of claim 21, wherein the vehicle at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a computer, a command computer, an electronic command computer, an ignition system, a fuel system, an exhaust system, at least one of an electrical, mechanical, and electro-mechanical at least one of system and component, an equipment device, an equipment system, a heating system, a cooling system, an air conditioning system, a light system,

A

AI  
cont.

an alarm system, an anti-theft system, a recovery system, a positioning system, a locating system, a door lock system, a hood lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, and further wherein the vehicle is at least one of a motor vehicle, an automobile, a truck, a tractor trailer, a land vehicle, a marine vehicle, a marine vessel, a boat, an aircraft, a jet, a plane, construction equipment, farm equipment, a commercial vehicle, a recreational vehicle, a motorcycle, a snowmobile, a motor home, a mobile home, a water submersible vehicle, and an unmanned at least one of vehicle and equipment, an industrial structure, a drilling structure, a mining structure, industrial equipment, and construction equipment.

A1  
cont.

32. The apparatus of claim 21, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control device processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates and disables, said at least one of the vehicle and the vehicle at least

A

one of system, equipment, system, subsystem, device,  
component and appliance, in response to said second control  
signal.

6733. A control method, comprising:

at least one of monitoring and detecting an event  
regarding at least one of a vehicle and a vehicle at least  
one of system, equipment system, subsystem, device,  
component and appliance, at the vehicle; and

at least one of generating a first notification  
signal and transmitting a first notification signal to a  
second control device, wherein said first notification  
signal contains information regarding the event, and  
further wherein the second control device is located at a  
location which is remote from the vehicle,

wherein the second control device at least one of  
generates a second notification signal and transmits a  
second notification signal to a communication device  
associated with an individual, wherein the communication  
device is located remote from the second control device,  
and further wherein the communication device generates a

sub. 6733

A1  
cont.

325<sup>9</sup>

A

third notification signal which provides notification to an individual of the occurrence of the event.

34. A control apparatus, comprising:

a first control device for at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component and appliance, wherein said first control device is located at the premises,

wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a

A1  
cont.

<sup>10</sup>  
326

A

third notification signal which provides notification to an individual of the occurrence of the event.

35. The apparatus of claim 34, further comprising:

a monitoring device for monitoring at least one of the premises, the premises operational status, the premises operation, a premises at least of system, equipment system, subsystem, device, component, and appliance, at least one of fuel supply, water supply, and coolant supply, at least one of electrical generator operation and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, temperature level, at least one of an electrical circuit and an electrical device, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, an office equipment system, a thermostat system, a positioning system, a locating system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, activity inside the premises,

*Al  
Cont.*

*A*

activity outside the premises, and activity at the premises.

36. The apparatus of claim 34, further comprising:

a positioning device for determining the location of the premises, wherein said positioning device provides the location of the premises on at least one of a map and a digitized map.

37. The apparatus of claim 34, further comprising:

at least one of a camera and a video recording device for providing at least one of video surveillance at least one of inside, outside, and at, the premises, and video conferencing with an individual located at least one of inside, outside, and at, the premises.

38. The apparatus of claim 34, wherein said first control device detects at least one of a premises use, an unauthorized use of the premises, an access at least one of into and onto the premises, and a theft of the premises.

39. The apparatus of claim 34, wherein the

A

A1  
cont.

communication device is at least one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications device, a personal communications services device, a display telephone, a video telephone, a watch, a beeper, and a pager.

40. The apparatus of claim 34, further comprising:

at least one of a microphone and an audio recording device for providing at least one of audio surveillance at least one of inside, outside, and at, the premises, and audio conferencing with an individual located at least one of inside, outside, and at, the premises.

41. The apparatus of claim 34, further comprising:

at least one of a camera, a video recording device, a microphone and an audio recording device,

A1  
Cont.

A



wherein said at least one of a camera, a video recording device, a microphone and an audio recording device, is at least one of stationary, mounted on an object, moveable, moveable along a guiding device, and pivotable.

42. The apparatus of claim 34, wherein said first control device at least one of receives, processes and detects, diagnostic at least one of data and information at least one of from, for, and regarding, said at least one of the premises, and the premises at least one of system, equipment system, subsystem, device, component and appliance.

43. The apparatus of claim 34, wherein said first control device transmits a first diagnostic signal to the second control device, and further wherein the second control device processes said first diagnostic signal and at least one of generates a second diagnostic signal and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis at least one of for and regarding at least one of the premises and the

AI  
cont.

A

premises at least one of system, equipment system, subsystem, device, component and appliance.

44. The apparatus of claim 34, wherein the premises at least one of system, equipment system, subsystem, device, component, and appliance, is at least one of a computer, a command computer, an electronic command computer, a fuel system, an exhaust system, at least one of an electrical, a mechanical, and an electro-mechanical at least one of system and component, an equipment device, an electrical system, a heating system, an air conditioning system, a water system, a home equipment system, an office equipment system, a thermostat system, a positioning system, a locating system, a light system, an alarm system, an anti-theft system, a recovery system, a door lock system, a horn, a surveillance system, a video device, a video recording device, an audio device, an audio recording device, a battery, a fuel cell, and a "smart" window, and further wherein the premises is at least one of a residential premises, a building, a commercial premises, construction equipment, farm equipment, an industrial structure, a drilling structure, a mining structure, industrial equipment, and construction equipment.

As  
cont.

A

45. The apparatus of claim 34, wherein the communication device transmits a first control signal to the second control device, and further wherein the second control device processes the first control signal and transmits a second control signal to said first control device, and further wherein said first control device at least one of activates, enables, de-activates and disables, said at least one of the premises and the premises at least one of system, equipment system, subsystem, device, component and appliance, in response to said second control signal.

46. A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component and appliance, at the premises; and

at least one of generating a first notification signal and transmitting a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and

*AI subject*  
*cont.*

wherein the second control device is located at a location which is remote from the premises,

wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event. --

IN THE ABSTRACT OF THE DISCLOSURE:

Please cancel the Abstract of the Disclosure and please insert the new Abstract of the Disclosure which is attached hereto on a separate sheet.

REMARKS

Claims 21-46 are pending in this application. Applicant has canceled claims 1-20, without prejudice, and Applicant has added new claims 21-46. Applicant has also amended the Abstract of the Disclosure.

Based upon the foregoing Amendments and the following Remarks, the application is deemed to be in condition for allowance and action to that end is respectfully requested.

I. THE 35 U.S.C. §102(E) REJECTIONS:

The Examiner asserts that claims 1-20 are rejected under 35 U.S.C. §102(e) as being anticipated by Launey et al., U.S. Patent No. 5,086,385 (Launey).

As noted above, Applicant has canceled claims 1-20, without prejudice, and Applicant has added new claims 21-46. Applicant respectfully submits that the present invention, as defined by claims 21-46, is patentable over the prior art.

IA. THE PRESENT INVENTION, AS DEFINED BY CLAIMS 21-32, IS PATENTABLE OVER LAUNEY:

Applicant respectfully submits that the present invention, as defined by claims 21-32, is patentable over Launey. Applicant respectfully submits that the present

A

invention, as defined by independent claim 21, is patentable over Launey.

Applicant submits that Launey does not disclose or suggest a control apparatus comprising a first control device for at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component and appliance, wherein said first control device is located at the vehicle, wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the vehicle, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the



occurrence of the event, all of which features are specifically recited features of independent claim 21.

In view of the foregoing, Applicant submits that Launey does not disclose or suggest many of the specifically recited features of independent claim 21, which features are important and recited features of said independent claim. In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 21, is patentable over Launey. Applicant further submits that claims 22-32, which claims depend directly from independent claim 21, so as to include all of the limitations of independent claim 21 and which further serve to narrow the scope of independent claim 21, are also patentable as said claims depend from allowable subject matter.

Allowance of pending claims 21-32 is, therefore, respectfully requested.

**IB. THE PRESENT INVENTION, AS DEFINED BY CLAIM 33, IS PATENTABLE OVER LAUNEY:**

Applicant respectfully submits that the present invention, as defined by independent claim 33, is patentable over Launey.



Applicant submits that Launey does not disclose or suggest a control method comprising at least one of monitoring and detecting an event regarding at least one of a vehicle and a vehicle at least one of system, equipment system, subsystem, device, component and appliance, at the vehicle, and at least one of generating a first notification signal and transmitting a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and further wherein the second control device is located at a location which is remote from the vehicle, wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event, all of which features are specifically recited features of independent claim 33.

A



In view of the foregoing, Applicant submits that Launey does not disclose or suggest many of the specifically recited features of independent claim 33, which features are important and recited features of said independent claim. In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 33, is patentable over Launey.

Allowance of pending claim 33 is, therefore, respectfully requested.

**IC. THE PRESENT INVENTION, AS DEFINED BY CLAIMS 34-45, IS PATENTABLE OVER LAUNEY:**

Applicant respectfully submits that the present invention, as defined by claims 34-45, is patentable over Launey. Applicant respectfully submits that the present invention, as defined by independent claim 34, is patentable over Launey.

Applicant submits that Launey does not disclose or suggest a control apparatus comprising a first control device for at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem,

A

device, component and appliance, wherein said first control device is located at the premises, wherein said first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event, all of which features are specifically recited features of independent claim 34.

In view of the foregoing, Applicant submits that Launey does not disclose or suggest many of the specifically recited features of independent claim 34, which features are important and recited features of said independent claim. In view of the above, Applicant respectfully submits that the

A

present invention, as defined by independent claim 34, is patentable over Launey. Applicant further submits that claims 35-45, which claims depend directly from independent claim 34, so as to include all of the limitations of independent claim 34 and which further serve to narrow the scope of independent claim 34, are also patentable as said claims depend from allowable subject matter.

Allowance of pending claims 34-45 is, therefore, respectfully requested.

**ID. THE PRESENT INVENTION, AS DEFINED BY CLAIM 46, IS PATENTABLE OVER LAUNEY:**

Applicant respectfully submits that the present invention, as defined by independent claim 46, is patentable over Launey.

Applicant submits that Launey does not disclose or suggest a control method comprising at least one of monitoring and detecting an event regarding at least one of a premises and a premises at least one of system, equipment system, subsystem, device, component and appliance, at the premises, and at least one of generating a first notification signal and transmitting a first notification

A

signal to a second control device, wherein said first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the premises, wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual, wherein the communication device is located remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event, all of which features are specifically recited features of independent claim 46.

In view of the foregoing, Applicant submits that Launey does not disclose or suggest many of the specifically recited features of independent claim 46, which features are important and recited features of said independent claim. In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 46, is patentable over Launey.

Allowance of pending claim 46 is, therefore, respectfully requested.

A

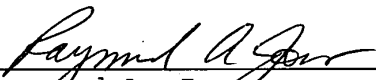
II. CONCLUSION:

In view of the foregoing, the application is deemed to be in condition for allowance and action to that end is respectfully requested.

A Petition For A One-Month Extension Of Time along with a check for \$55.00, for the required fee, is submitted herewith.

A Fee Transmittal sheet along with a check in the amount of \$94.00, for the additional claims, is also submitted herewith.

Respectfully submitted,

  
\_\_\_\_\_  
Raymond A. Joao  
Reg. No. 35,907

Encls.: - Abstract of the Disclosure  
- Petition For A One-Month Extension Of Time  
- Check for \$55.00 for the required fee  
- Fee Transmittal Sheet (in duplicate)  
- Check in the amount of \$94.00 for the additional claims

March 26, 2001  
Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

A

RECEIVED

APR X 2 2001

Technology Center 2600

09/551,365

ABSTRACT OF THE DISCLOSURE

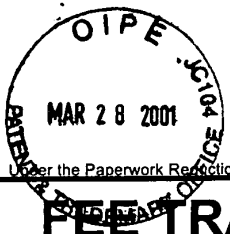
Sub. 012

O I P E J C I O A F E  
M A R 2 8 2 0 0 1  
U S P A T E N T & T R A D E M A R K O F F I C E

A control apparatus and method including a first control device for at least one of monitoring and detecting an event. The first control device is located at the vehicle or premises. The first control device at least one of generates a first notification signal and transmits a first notification signal to a second control device, wherein the first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the vehicle or premises, and further wherein the second control device at least one of generates a second notification signal and transmits a second notification signal to a communication device associated with an individual. The communication device is located remote from the second control device. The communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

PP

A



RECEIVED  
APR X 2 2001

PTO/SB/17 (11-00)

Approved for use through 10/31/2002. OMB 0651-0032  
Technology Center, 2001  
U.S. DEPARTMENT OF COMMERCE  
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|   |   |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
|---|---|--------------------|------------|-------------|----------------|----------------------|-----------------|---------------|----------|----------------|------|---------------------|-------|
| <h2 style="margin:0;">FEE TRANSMITTAL</h2> <h3 style="margin:0;">for FY 2001</h3> <p style="font-size: small; margin: 5px 0;">Patent fees are subject to annual revision.</p>                           | <p style="text-align: center; font-weight: bold; font-size: small;">Complete if Known</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr><td>Application Number</td><td>09/551,365</td></tr> <tr><td>Filing Date</td><td>APRIL 17, 2000</td></tr> <tr><td>First Named Inventor</td><td>RAYMOND A. JOAO</td></tr> <tr><td>Examiner Name</td><td>V. TRIEU</td></tr> <tr><td>Group Art Unit</td><td>2632</td></tr> <tr><td>Attorney Docket No.</td><td>RJ315</td></tr> </table> | Application Number | 09/551,365 | Filing Date | APRIL 17, 2000 | First Named Inventor | RAYMOND A. JOAO | Examiner Name | V. TRIEU | Group Art Unit | 2632 | Attorney Docket No. | RJ315 |
| Application Number  | 09/551,365  |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
| Filing Date   | APRIL 17, 2000  |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
| First Named Inventor  | RAYMOND A. JOAO   |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
| Examiner Name   | V. TRIEU  |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
| Group Art Unit  | 2632  |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
| Attorney Docket No.   | RJ315   |                    |            |             |                |                      |                 |               |          |                |      |                     |       |
| <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td style="width:50%;">TOTAL AMOUNT OF PAYMENT</td> <td style="width:50%; text-align: right;">(\$)<br/>94.00</td> </tr> </table> | TOTAL AMOUNT OF PAYMENT   | (\$)<br>94.00      |            |             |                |                      |                 |               |          |                |      |                     |       |
| TOTAL AMOUNT OF PAYMENT   | (\$)<br>94.00   |                    |            |             |                |                      |                 |               |          |                |      |                     |       |

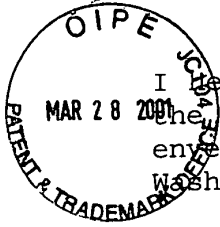
| <p style="text-align: center; font-weight: bold; font-size: small;">METHOD OF PAYMENT</p> <p>1. <input type="checkbox"/> The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:</p> <p>Deposit Account Number: <input style="width: 150px;" type="text"/></p> <p>Deposit Account Name: <input style="width: 150px;" type="text"/></p> <p><input type="checkbox"/> Charge Any Additional Fee Required Under 37 CFR 1.16 and 1.17</p> <p><input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27</p> <p>2. <input type="checkbox"/> Payment Enclosed:</p> <p><input type="checkbox"/> Check   <input type="checkbox"/> Credit card   <input type="checkbox"/> Money Order   <input type="checkbox"/> Other</p> | <p style="text-align: center; font-weight: bold; font-size: small;">FEE CALCULATION (continued)</p> <p>3. ADDITIONAL FEES</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>Fee Code</th> <th>Large Entity (\$)</th> <th>Small Entity (\$)</th> <th>Fee Description</th> <th>Fee Paid</th> </tr> </thead> <tbody> <tr><td>105</td><td>130</td><td>205</td><td>65</td><td>Surcharge - late filing fee or oath</td><td></td></tr> <tr><td>127</td><td>50</td><td>227</td><td>25</td><td>Surcharge - late provisional filing fee or cover sheet</td><td></td></tr> <tr><td>139</td><td>130</td><td>139</td><td>130</td><td>Non-English specification</td><td></td></tr> <tr><td>147</td><td>2,520</td><td>147</td><td>2,520</td><td>For filing a request for <i>ex parte</i> reexamination</td><td></td></tr> <tr><td>112</td><td>920*</td><td>112</td><td>920*</td><td>Requesting publication of SIR prior to Examiner action</td><td></td></tr> <tr><td>113</td><td>1,840*</td><td>113</td><td>1,840*</td><td>Requesting publication of SIR after Examiner action</td><td></td></tr> <tr><td>115</td><td>110</td><td>215</td><td>55</td><td>Extension for reply within first month</td><td></td></tr> <tr><td>116</td><td>390</td><td>216</td><td>195</td><td>Extension for reply within second month</td><td></td></tr> <tr><td>117</td><td>890</td><td>217</td><td>445</td><td>Extension for reply within third month</td><td></td></tr> <tr><td>118</td><td>1,390</td><td>218</td><td>695</td><td>Extension for reply within fourth month</td><td></td></tr> <tr><td>128</td><td>1,890</td><td>228</td><td>945</td><td>Extension for reply within fifth month</td><td></td></tr> <tr><td>119</td><td>310</td><td>219</td><td>155</td><td>Notice of Appeal</td><td></td></tr> <tr><td>120</td><td>310</td><td>220</td><td>155</td><td>Filing a brief in support of an appeal</td><td></td></tr> <tr><td>121</td><td>270</td><td>221</td><td>135</td><td>Request for oral hearing</td><td></td></tr> <tr><td>138</td><td>1,510</td><td>138</td><td>1,510</td><td>Petition to institute a public use proceeding</td><td></td></tr> <tr><td>140</td><td>110</td><td>240</td><td>55</td><td>Petition to revive - unavoidable</td><td></td></tr> <tr><td>141</td><td>1,240</td><td>241</td><td>620</td><td>Petition to revive - unintentional</td><td></td></tr> <tr><td>142</td><td>1,240</td><td>242</td><td>620</td><td>Utility issue fee (or reissue)</td><td></td></tr> <tr><td>143</td><td>440</td><td>243</td><td>220</td><td>Design issue fee</td><td></td></tr> <tr><td>144</td><td>600</td><td>244</td><td>300</td><td>Plant issue fee</td><td></td></tr> <tr><td>122</td><td>130</td><td>122</td><td>130</td><td>Petitions to the Commissioner</td><td></td></tr> <tr><td>123</td><td>50</td><td>123</td><td>50</td><td>Processing fee under 37 CFR 1.17(q)</td><td></td></tr> <tr><td>126</td><td>180</td><td>126</td><td>180</td><td>Submission of Information Disclosure Stmt</td><td></td></tr> <tr><td>581</td><td>40</td><td>581</td><td>40</td><td>Recording each patent assignment per property (times number of properties)</td><td></td></tr> <tr><td>146</td><td>710</td><td>246</td><td>355</td><td>Filing a submission after final rejection (37 CFR § 1.129(a))</td><td></td></tr> <tr><td>149</td><td>710</td><td>249</td><td>355</td><td>For each additional invention to be examined (37 CFR § 1.129(b))</td><td></td></tr> <tr><td>179</td><td>710</td><td>279</td><td>355</td><td>Request for Continued Examination (RCE)</td><td></td></tr> <tr><td>169</td><td>900</td><td>169</td><td>900</td><td>Request for expedited examination of a design application</td><td></td></tr> <tr><td colspan="5">Other fee (specify) _____</td></tr> <tr> <td colspan="4" style="text-align: right;">*Reduced by Basic Filing Fee Paid</td> <td style="text-align: right;">SUBTOTAL (3) (\$)</td> </tr> </tbody> </table> | Fee Code          | Large Entity (\$) | Small Entity (\$)  | Fee Description | Fee Paid | 105 | 130 | 205 | 65 | Surcharge - late filing fee or oath |  | 127 | 50 | 227 | 25 | Surcharge - late provisional filing fee or cover sheet |  | 139 | 130 | 139 | 130 | Non-English specification |  | 147 | 2,520 | 147 | 2,520 | For filing a request for <i>ex parte</i> reexamination |  | 112 | 920* | 112 | 920* | Requesting publication of SIR prior to Examiner action |  | 113 | 1,840* | 113 | 1,840* | Requesting publication of SIR after Examiner action |  | 115 | 110 | 215 | 55 | Extension for reply within first month |  | 116 | 390 | 216 | 195 | Extension for reply within second month |  | 117 | 890 | 217 | 445 | Extension for reply within third month |  | 118 | 1,390 | 218 | 695 | Extension for reply within fourth month |  | 128 | 1,890 | 228 | 945 | Extension for reply within fifth month |  | 119 | 310 | 219 | 155 | Notice of Appeal |  | 120 | 310 | 220 | 155 | Filing a brief in support of an appeal |  | 121 | 270 | 221 | 135 | Request for oral hearing |  | 138 | 1,510 | 138 | 1,510 | Petition to institute a public use proceeding |  | 140 | 110 | 240 | 55 | Petition to revive - unavoidable |  | 141 | 1,240 | 241 | 620 | Petition to revive - unintentional |  | 142 | 1,240 | 242 | 620 | Utility issue fee (or reissue) |  | 143 | 440 | 243 | 220 | Design issue fee |  | 144 | 600 | 244 | 300 | Plant issue fee |  | 122 | 130 | 122 | 130 | Petitions to the Commissioner |  | 123 | 50 | 123 | 50 | Processing fee under 37 CFR 1.17(q) |  | 126 | 180 | 126 | 180 | Submission of Information Disclosure Stmt |  | 581 | 40 | 581 | 40 | Recording each patent assignment per property (times number of properties) |  | 146 | 710 | 246 | 355 | Filing a submission after final rejection (37 CFR § 1.129(a)) |  | 149 | 710 | 249 | 355 | For each additional invention to be examined (37 CFR § 1.129(b)) |  | 179 | 710 | 279 | 355 | Request for Continued Examination (RCE) |  | 169 | 900 | 169 | 900 | Request for expedited examination of a design application |  | Other fee (specify) _____ |  |  |  |  | *Reduced by Basic Filing Fee Paid |  |  |  | SUBTOTAL (3) (\$) |
|---|---|-------------------|-------------------|--|-----------------|----------|-----|-----|-----|----|-------------------------------------|--|-----|----|-----|----|--|--|-----|-----|-----|-----|---------------------------|--|-----|-------|-----|-------|--|--|-----|------|-----|------|--|--|-----|--------|-----|--------|---|--|-----|-----|-----|----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|--|--|-----|-------|-----|-----|---|--|-----|-------|-----|-----|--|--|-----|-----|-----|-----|------------------|--|-----|-----|-----|-----|--|--|-----|-----|-----|-----|--------------------------|--|-----|-------|-----|-------|---|--|-----|-----|-----|----|----------------------------------|--|-----|-------|-----|-----|------------------------------------|--|-----|-------|-----|-----|--------------------------------|--|-----|-----|-----|-----|------------------|--|-----|-----|-----|-----|-----------------|--|-----|-----|-----|-----|-------------------------------|--|-----|----|-----|----|-------------------------------------|--|-----|-----|-----|-----|---|--|-----|----|-----|----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|--|--|-----|-----|-----|-----|---|--|-----|-----|-----|-----|---|--|---------------------------|--|--|--|--|-----------------------------------|--|--|--|-------------------|
| Fee Code  | Large Entity (\$)   | Small Entity (\$) | Fee Description   | Fee Paid   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 105   | 130   | 205               | 65                | Surcharge - late filing fee or oath  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 127   | 50  | 227               | 25                | Surcharge - late provisional filing fee or cover sheet                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 139   | 130   | 139               | 130               | Non-English specification  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 147   | 2,520   | 147               | 2,520             | For filing a request for <i>ex parte</i> reexamination                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 112   | 920*  | 112               | 920*              | Requesting publication of SIR prior to Examiner action                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 113   | 1,840*  | 113               | 1,840*            | Requesting publication of SIR after Examiner action                        |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 115   | 110   | 215               | 55                | Extension for reply within first month                                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 116   | 390   | 216               | 195               | Extension for reply within second month                                    |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 117   | 890   | 217               | 445               | Extension for reply within third month                                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 118   | 1,390   | 218               | 695               | Extension for reply within fourth month                                    |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 128   | 1,890   | 228               | 945               | Extension for reply within fifth month                                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 119   | 310   | 219               | 155               | Notice of Appeal   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 120   | 310   | 220               | 155               | Filing a brief in support of an appeal                                     |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 121   | 270   | 221               | 135               | Request for oral hearing   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 138   | 1,510   | 138               | 1,510             | Petition to institute a public use proceeding                              |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 140   | 110   | 240               | 55                | Petition to revive - unavoidable   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 141   | 1,240   | 241               | 620               | Petition to revive - unintentional   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 142   | 1,240   | 242               | 620               | Utility issue fee (or reissue)   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 143   | 440   | 243               | 220               | Design issue fee   |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 144   | 600   | 244               | 300               | Plant issue fee  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 122   | 130   | 122               | 130               | Petitions to the Commissioner  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 123   | 50  | 123               | 50                | Processing fee under 37 CFR 1.17(q)  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 126   | 180   | 126               | 180               | Submission of Information Disclosure Stmt                                  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 581   | 40  | 581               | 40                | Recording each patent assignment per property (times number of properties) |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 146   | 710   | 246               | 355               | Filing a submission after final rejection (37 CFR § 1.129(a))              |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 149   | 710   | 249               | 355               | For each additional invention to be examined (37 CFR § 1.129(b))           |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 179   | 710   | 279               | 355               | Request for Continued Examination (RCE)                                    |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| 169   | 900   | 169               | 900               | Request for expedited examination of a design application                  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| Other fee (specify) _____   |   |                   |                   |  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |
| *Reduced by Basic Filing Fee Paid   |   |                   |                   | SUBTOTAL (3) (\$)  |                 |          |     |     |     |    |                                     |  |     |    |     |    |  |  |     |     |     |     |                           |  |     |       |     |       |  |  |     |      |     |      |  |  |     |        |     |        |   |  |     |     |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |       |     |     |   |  |     |       |     |     |  |  |     |     |     |     |                  |  |     |     |     |     |  |  |     |     |     |     |                          |  |     |       |     |       |   |  |     |     |     |    |                                  |  |     |       |     |     |                                    |  |     |       |     |     |                                |  |     |     |     |     |                  |  |     |     |     |     |                 |  |     |     |     |     |                               |  |     |    |     |    |                                     |  |     |     |     |     |   |  |     |    |     |    |  |  |     |     |     |     |   |  |     |     |     |     |  |  |     |     |     |     |   |  |     |     |     |     |   |  |                           |  |  |  |  |                                   |  |  |  |                   |

|                   |                        |                                   |              |
|-------------------|------------------------|-----------------------------------|--------------|
| SUBMITTED BY      |                        | Complete (if applicable)          |              |
| Name (Print/Type) | RAYMOND A. JOAO        | Registration No. (Attorney/Agent) | 35,907       |
| Signature         | <i>Raymond A. Joao</i> | Telephone                         | 914-969-2992 |
|                   |                        | Date                              | 3/26/01      |

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

#4  
2675018  
JD



I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231 on March 26, 2001.

RECEIVED

APR X 2 2001

Technology Center 2600

*Raymond A. Joao*  
Raymond A. Joao

RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO  
SERIAL NO. : 09/551,365  
FILED : APRIL 17, 2000  
FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD  
EXAMINER : V. Trieu GROUP : 2632

Assistant Commissioner for Patents  
Washington, D.C. 20231

PETITION FOR ONE-MONTH EXTENSION OF TIME

Sir:

Applicant hereby petitions for a one-month extension of time with regard to the Office Action dated November 29, 2000.

03/23/2001 HDREESS1 00000044 09551365

03 FC:215

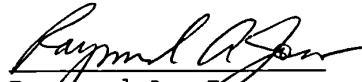
55.00 OP

It is respectfully requested that a one-month extension of time be granted so that a response can be made to the above-identified Office Action.



A check in the amount of \$55.00, for the required fee,  
is submitted herewith.

Respectfully Submitted,



Raymond A. Joao

Reg. No. 35,907

Encl. Check in the amount of \$55.00

March 26, 2001

Raymond A. Joao, Esq.  
122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

2

2

|                          |                 |                       |  |
|--------------------------|-----------------|-----------------------|--|
| <b>Interview Summary</b> | Application No. | Applicant(s)          |  |
|                          | 09/551,365      | JOAO, RAYMOND ANTHONY |  |
|                          | Examiner        | Art Unit              |  |
|                          | Van T Trieu     | 2632                  |  |

All participants (applicant, applicant's representative, PTO personnel):

- (1) Van T Trieu. (3) \_\_\_\_\_  
(2) Mr. Raymond Joao. (4) \_\_\_\_\_

Date of Interview: 27 February 2001.

Type: a)  Telephonic b)  Video Conference  
c)  Personal [copy given to: 1)  applicant 2)  applicant's representative]

Exhibit shown or demonstration conducted: d)  Yes e)  No.  
If Yes, brief description:

Claim(s) discussed: \_\_\_\_\_

Identification of prior art discussed:

Agreement with respect to the claims f)  was reached. g)  was not reached. h)  N/A.

Substance of Interview including description of the general nature of what was agreed to if an agreement was reached, or any other comments: Mr Joao explains the invention to the examiner and will file an Amendment.

(A fuller description, if necessary, and a copy of the amendments which the examiner agreed would render the claims allowable, if available, must be attached. Also, where no copy of the amendments that would render the claims allowable is available, a summary thereof must be attached.)

i)  It is not necessary for applicant to provide a separate record of the substance of the interview (if box is checked).

Unless the paragraph above has been checked, THE FORMAL WRITTEN REPLY TO THE LAST OFFICE ACTION MUST INCLUDE THE SUBSTANCE OF THE INTERVIEW. (See MPEP Section 713.04). If a reply to the last Office action has already been filed, APPLICANT IS GIVEN ONE MONTH FROM THIS INTERVIEW DATE TO FILE A STATEMENT OF THE SUBSTANCE OF THE INTERVIEW. See Summary of Record of Interview requirements on reverse side or on attached sheet.

Examiner Note: You must sign this form unless it is an Attachment to a signed Office action.



Examiner's signature, if required



**UNITED STATES DEPARTMENT OF COMMERCE  
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 09/551,365      | 04/17/00    | JOAO                 | R RJ315             |

RAYMOND A JOAO ESQ  
122 BELLEVUE PLACE  
YONKERS NY 10703

TM02/1129

EXAMINER

| TRIFILV  |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
| 2532     | 2            |

DATE MAILED:

11/29/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

|                              |                               |                                       |  |
|------------------------------|-------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>09/551,365 | Applicant(s)<br>JOAO, RAYMOND ANTHONY |  |
|                              | Examiner<br>Van T Trieu       | Art Unit<br>2632                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1)  Responsive to communication(s) filed on 17 April 2000.
- 2a)  This action is FINAL.                      2b)  This action is non-final.
- 3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4)  Claim(s) 1-20 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5)  Claim(s) \_\_\_\_\_ is/are allowed.
- 6)  Claim(s) 1-20 is/are rejected.
- 7)  Claim(s) \_\_\_\_\_ is/are objected to.
- 8)  Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9)  The specification is objected to by the Examiner.
- 10)  The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved.
- 12)  The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14)  Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

**Attachment(s)**

- |   |  |
|---|--|
| 15) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 18) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 16) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 19) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 17) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 20) <input type="checkbox"/> Other:  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

1. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by **Launey et al** [US 5,086,385].

Regarding claim 1, **Launey et al** discloses an expandable home automation system for communicating and controlling of at least one of the appliances and subsystems within the home as well as systems external to the home. The system includes a central processor 10 (second control device) received a control signal from a hand-held remote 22 (first control device) to operate the audio/video system, heating/cooling system, access control systems, garage door system, security system, telephone system, appliances and lighting systems via wireless technology (third control device) through a plurality of secondary processors 26, 26b, see Figs. 1-3 and 12, col. 2, lines 41-61, col. 4, lines 34-50, col. 11, lines 54-64, col. 15, lines 2-10 and col. 24, lines 13-29.

Regarding claim 2, all the claimed subject matters are cited in respect to claim 1 above, such as lighting system and other appliances within the premise.

Regarding claim 3, **Launey et al** discloses a control system that can speak in the location of the intruder or fire while displaying that location on a floor plan screen of the home, see col. 23, lines 2-4.

Regarding claim 4, **Launey et al** discloses a control system that includes security camera and video recorder, see Figs. 1 and 3h, col. 11, lines 54-68, col. 14, lines 24-28 and col. 18, lines 13-19.

Regarding claim 5, **Launey et al** discloses a control system that an unauthorized control of certain functions such as the security function of the instant home automation system, see Figs. 3j and 3k, col. 18, lines 58-64.

Regarding claim 6, **Launey et al** discloses a control system that home automation system includes audio/video system, heating/cooling system, access control systems, security system, telephone system, appliances and lighting systems via wireless technology, see Fig. 1, col. 2, lines 42-54, col. 4, lines 34-50, col. 11, lines 54-64 and col. 15, lines 2-10.

Regarding claim 7, **Launey et al** discloses a control system that home automation system includes remote microphones 64 and audio recording device, see Fig. 1, col. 10, lines 3-16, col. 11, lines 54-64 and col. 13, lines 3-18.

Art Unit: 2632

Regarding claim 8, **Launey et al** discloses a control system that includes security camera and video recorder mounted at the front/entrance door or in the garage, see Figs. 1 and 3h, col. 11, lines 54-68, col. 14, lines 24-28 and col. 18, lines 13-19.

Regarding claim 9, **Launey et al** discloses a control system that home automation system includes audio recording device and remote microphones 64 for the user to communicate with the system by voice within the premise, see Fig. 1, col. 10, lines 3-16, col. 11, lines 54-64 and col. 13, lines 3-18.

Regarding claim 10, **Launey et al** discloses a control system that home automation system includes diagnostic routines 526, see Fig. 5a, col. 26, lines 44-56.

Regarding claim 11, all the claimed subject matters are cited in respect to claims 1 and 10 above.

Regarding claim 12, all the claimed subject matters are cited in respect to claims 1 and 10 above.

Regarding claim 13, all the claimed subject matters are cited in respect to claim 1 above.

Art Unit: 2632

Regarding claim 14, all the claimed subject matters are cited in respect to claims 2 and 13 above.

Regarding claim 15, all the claimed subject matters are cited in respect to claims 3 and 13 above.

Regarding claim 16, all the claimed subject matters are cited in respect to claim 1 above.

Regarding claim 17, all the claimed subject matters are cited in respect to claim 1 above.

Regarding claim 18, **Launey et al** discloses an expandable home automation system for communicating and controlling of at least one of the appliances and subsystems within the home as well as systems external to the home. The system includes a central processor 10 (second control device) received a control signal from a hand-held remote 22 (first control device) to operate the audio/video system, heating/cooling system, access control systems, garage door system, security system, telephone system, appliances and lighting systems via wireless technology (third control device) through a plurality of secondary processors 26, 26b, see Figs. 1-3 and 12, col. 2, lines 41-61, col. 4, lines 34-50, col. 11, lines 54-64, col. 15, lines 2-10 and col. 24, lines 13-29.



Regarding claim 19, all the claimed subject matters are cited in respect to claims 10 and 18 above.

Regarding claim 20, all the claimed subject matters are cited in respect to claim 18 above.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Suman et al** discloses a control module which selectively controls the operation of at least one lamp and one garage door opener through a remote controller. [US 5,793,300] and [US 5,903,226]


2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner **Van Trieu** whose telephone number is (703) 308-5220. The examiner can normally be reached on Mon-Fri from 7:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. **Jeffery Hofsass**, can be reached on (703) 305-4717. The office facsimile number is (703) 308-6743.

Application/Control Number: 09/551,365  
Art Unit: 2632

Page 7

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703)305-3900, Mon-Fri, 8:30 am to 5:00 pm.

  
Examiner: Van Trieu  
Group: 2632  
Date: 11/27/00

**ATTACHMENT TO AND MODIFICATION OF**  
**NOTICE OF ALLOWABILITY (PTO-37)**

*(November, 2000)*

**NO EXTENSIONS OF TIME ARE PERMITTED TO FILE CORRECTED OR FORMAL DRAWINGS, OR A SUBSTITUTE OATH OR DECLARATION**, notwithstanding any indication to the contrary in the attached Notice of Allowability (PTO-37).

If the following language appears on the attached Notice of Allowability, the portion lined through below is of no force and effect ~~and~~ is to be ignored<sup>1</sup>:

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE **THREE MONTHS** FROM THE "DATE MAILED" of this Office action. Failure to comply will result in ABANDONMENT of this application. ~~Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).~~

Similar language appearing in any attachments to the Notice of Allowability, such as in an Examiner's Amendment/Comment or in a Notice of Draftperson's Patent Drawing Review, PTO-948, is also to be ignored.

---

<sup>1</sup> The language which is crossed out is contrary to amended 37 CFR 1.85(c) and 1.136. See "Changes to Implement the Patent Business Goals", 65 Fed. Reg. 54603, 54629, 54641, 54670, 54674 (September 8, 2000), 1238 Off. Gaz. Pat. Office 77, 99, 110, 135, 139 (September 19, 2000).

**Notice of References Cited**

Application/Control No.

09/551,365

Applicant(s)/Patent Under

Reexamination

JOAO, RAYMOND ANTHONY

Examiner

Van T Trieu

Art Unit

2632

Page 1 of 1

**U.S. PATENT DOCUMENTS**

| *                        |   | DOCUMENT NO. | DATE      | NAME                | CLASS | SUBCLASS | DOCUMENT SOURCE **       |                          |
|--------------------------|---|--------------|-----------|---------------------|-------|----------|--------------------------|--------------------------|
|                          |   |              |           |                     |       |          | APS                      | OTHER                    |
| <input type="checkbox"/> | A | 5,086,385    | Feb. 1992 | R. O. Launey, et al | 340   | 825.37   | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | B | 5,793,300    | Aug. 1998 | M. J. Suman, et al  | 340   | 825.2    | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | C | 5,903,226    | May. 1999 | M. J. Suman, et al  | 340   | 825.69   | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | D |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | E |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | F |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | G |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | H |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | I |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | J |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | K |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | L |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | M |              |           |                     |       |          | <input type="checkbox"/> | <input type="checkbox"/> |

**FOREIGN PATENT DOCUMENTS**

| *                        |   | DOCUMENT NO. | DATE | COUNTRY | NAME | CLASS | SUBCLASS | DOCUMENT SOURCE **       |                          |
|--------------------------|---|--------------|------|---------|------|-------|----------|--------------------------|--------------------------|
|                          |   |              |      |         |      |       |          | APS                      | OTHER                    |
| <input type="checkbox"/> | N |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | O |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | P |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | Q |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | R |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | S |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | T |              |      |         |      |       |          | <input type="checkbox"/> | <input type="checkbox"/> |

**NON-PATENT DOCUMENTS**

| *                        |   | DOCUMENT (Including Author, Title Date, Source, and Pertinent Pages) | DOCUMENT SOURCE **       |                          |
|--------------------------|---|--|--------------------------|--------------------------|
|                          |   |  | APS                      | OTHER                    |
| <input type="checkbox"/> | U |  | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | V |  | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | W |  | <input type="checkbox"/> | <input type="checkbox"/> |
| <input type="checkbox"/> | X |  | <input type="checkbox"/> | <input type="checkbox"/> |

\*A copy of this reference is not being furnished with this Office action. (See Manual of Patent Examining Procedure, Section 707.05(a).)

\*\*APS encompasses any electronic search i.e. text, image, and Commercial Databases.

U.S. Patent and Trademark Office  
PTO-892 (Rev. 03-98)

Notice of References Cited

Part of Paper No. 2

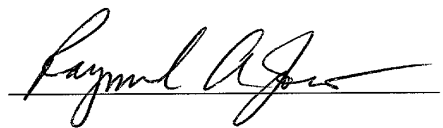


04-18-00

A

04/17/00  
1c777 U.S. PTO

"Express Mail" No.: EK356632576US Date: April 17, 2000  
I hereby certify that this correspondence is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to the Assistant Commissioner for Patents, Box Patent Application, Washington, D.C. 20231.



RJ315

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO

SERIAL NO.: PLEASE ASSIGN

FILED : CONCURRENTLY HEREWITH

FOR : CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

EXAMINER : T. EDWARDS

GROUP : 2736

Assistant Commissioner for Patents  
Box Patent Application  
Washington, D.C. 20231

TRANSMITTAL LETTER

Sir:


Please find enclosed herewith the following papers for filing as a Patent Application:

1. Utility Patent Application Transmittal Sheet;
2. Fee Transmittal Sheet (in duplicate);

09551365-041700

3. Declaration (3 pages);
4. Small Entity Status Form;
5. Application, including Specification, Claims and Abstract of the Disclosure (336 pages), and Drawings (20 sheets);
6. Check in the amount of \$345.00 for the filing fee; and
7. Return receipt postcard.


Respectfully Submitted,

  
Raymond A. Joao  
Reg. No. 35,907

April 17, 2000

122 Bellevue Place  
Yonkers, New York 10703  
(914) 969-2992

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

|  |                                   |                                |
|--|-----------------------------------|--------------------------------|
| <b>STATEMENT CLAIMING SMALL ENTITY STATUS<br/>(37 CFR 1.9(f) &amp; 1.27(b))--INDEPENDENT INVENTOR</b>  | Docket Number (Optional)<br>RJ315 |                                |
| Applicant, Patentee, or Identifier: <u>RAYMOND ANTHONY JOAO</u>  |                                   |                                |
| Application or Patent No.: _____   |                                   |                                |
| Filed or Issued: <u>APRIL 17, 2000</u>   |                                   |                                |
| Title: <u>CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD</u>   |                                   |                                |
| As a below named inventor, I hereby state that I qualify as an independent inventor as defined in 37 CFR 1.9(c) for purposes of paying reduced fees to the Patent and Trademark Office described in:   |                                   |                                |
| <input checked="" type="checkbox"/> the specification filed herewith with title as listed above.   |                                   |                                |
| <input type="checkbox"/> the application identified above.   |                                   |                                |
| <input type="checkbox"/> the patent identified above.  |                                   |                                |
| I have not assigned, granted, conveyed, or licensed, and am under no obligation under contract or law to assign, grant, convey, or license, any rights in the invention to any person who would not qualify as an independent inventor under 37 CFR 1.9(c) if that person had made the invention, or to any concern which would not qualify as a small business concern under 37 CFR 1.9(d) or a nonprofit organization under 37 CFR 1.9(e). |                                   |                                |
| Each person, concern, or organization to which I have assigned, granted, conveyed, or licensed or am under an obligation under contract or law to assign, grant, convey, or license any rights in the invention is listed below:   |                                   |                                |
| <input checked="" type="checkbox"/> No such person, concern, or organization exists.   |                                   |                                |
| <input type="checkbox"/> Each such person, concern, or organization is listed below.   |                                   |                                |
| Separate statements are required from each named person, concern, or organization having rights to the invention stating their status as small entities. (37 CFR 1.27)   |                                   |                                |
| I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR 1.28(b))  |                                   |                                |
| <u>RAYMOND ANTHONY JOAO</u><br>NAME OF INVENTOR  | _____<br>NAME OF INVENTOR         | _____<br>NAME OF INVENTOR      |
| <br>Signature of inventor   | _____<br>Signature of inventor    | _____<br>Signature of inventor |
| <u>4/17/00</u><br>Date   | _____<br>Date                     | _____<br>Date                  |

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

002FD0-99EF5500



RJ315

CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

00240 59E556

RELATED APPLICATIONS

This application is a continuation-in-part application of U.S. Patent Application Serial No. 09/277,935, filed March 29, 1999, which is a continuation application of U.S. Patent Application Serial No. 08/683,828, filed July 18, 1996, now U.S. Patent No. 5,917,405, a continuation-in-part application of U.S. Patent Application Serial No. 08/622,749, filed March 27, 1996, abandoned, and a continuation-in-part application of U.S. Patent Application Serial No. 08/587,628, filed January 17, 1996, abandoned, which in turn is a continuation application of U.S. Patent Application Serial No. 08/489,238, filed June 12, 1995, now U.S. Patent No. 5,513,244, which in turn is a continuation application of U.S. Patent Application Serial No. 08/073,755, filed June 8, 1993, abandoned. This application also claims the benefit of priority of U.S. Provisional Patent Application Serial No. 60/187,735, filed March 8, 2000, and U.S. Provisional Patent Application Serial No. 60/190,379, filed March 17, 2000.

00240-594560

FIELD OF THE INVENTION

The present invention pertains to a control, monitoring and/or security apparatus and method and, in particular, to a control, monitoring, and/or security, apparatus and method for exercising and/or providing control, monitoring and/or security, vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises, commercial premises, structures and/or equipment, in a network environment.

BACKGROUND OF THE INVENTION

Anti-theft devices for vehicles and premises are known in the prior art for preventing and/or thwarting the theft of a vehicle and/or of a premises. Vehicle recovery devices or systems are also known for recovering a motor vehicle. These known anti-theft and/or vehicle recovery devices may be of the active or passive variety and are typically available in many forms (i.e. steering wheel locks, hood locks, ignition system cut-off devices, alarms, vehicle homing devices with associated receiving devices, etc.). In some cases, these devices may be of a very simple

004FH059E1560

design, while in other cases, they may be of a more sophisticated design. However, as is well known, these known anti-theft and/or vehicle recovery devices or systems may be easily defeated by thieves, and especially, by professional thieves and/or have other disadvantages associated with their use. Experience has shown that even the most sophisticated of anti-theft devices may be defeated by an experienced, and determined, thief, and that vehicle recovery systems also have drawbacks associated with their use.

In the case of some vehicle recovery devices, their use may be limited by the availability, or lack thereof, of the corresponding tracker or receiver device(s) in the particular locality, or the lack of same by the law enforcement department in a particular area.

In recent times, an even more disturbing criminal practice, involving the theft of motor vehicles, has rendered most anti-theft devices virtually useless. This criminal practice, known as car-jacking, has gained widespread attention. Car-jacking usually occurs when a thief or thieves confront a motorist or motor vehicle operator, when the motor vehicle engine is running, or when

002440 5927560

the car thief obtains easy access to the motor vehicle ignition keys and to the motor vehicle, either by force or by the threat of force, thereby bypassing, and rendering useless, any of the widely known anti-theft and/or theft-deterrent devices, thereby gaining control and/or possession of the motor vehicle. In these instances, the motorist or motor vehicle operator is well advised to surrender the motor vehicle. However, once surrendered, the motor vehicle is virtually lost to the car thief.

Anti-theft and/or theft-deterrent devices which attempt to defeat the ultimate vehicle theft, such as caused by car-jacking, by disabling the motor vehicle during the "getaway", such as by shutting off power to the motor vehicle engine, have major disadvantages and drawbacks in that they could shut-off the vehicle engine at an inopportune instant in time, thereby causing a dangerous condition to exist which could lead to an accident and resulting injuries to individuals as well as damage to property. These accidents may arise when the motor vehicle power is suddenly shut-off while the vehicle is in motion, which condition could cause the vehicle to suddenly, or even gradually, lose power on a roadway or highway, while traveling at a moderate or at a high rate of speed and/or

004740-5927560

when a power steering and/or a power braking system, which derives its power from the vehicle engine, suddenly loses power upon the loss of the engine power. As noted above, accidents such as these may result in injuries to people, both inside and outside the vehicle, as well as property damage caused by, and to, the vehicle.

The above described disadvantages and drawbacks of the prior art devices may also pose accident liability concerns to those manufacturers and/or sellers of these devices, as well as to the owner or operator of the motor vehicle, as these entities and/or individuals may be held liable for the injuries and/or the damages sustained as a result of the above described accidents.

Vehicle recovery systems are known which include a vehicle homing device, which is activated and which emits homing signals which are used to home in on, or to locate, the vehicle. These vehicle recovery systems usually require that the law enforcement agency have corresponding homing signal receivers and/or equipment and that they be kept in operating condition, in order to effectively home in on, or locate, the vehicle. Unless the local police or law enforcement authorities have such equipment, the homing

signal recovery device serves little purpose in recovering the vehicle in that locale.

Other vehicle recovery systems require that a police report be made prior to an activation of the homing and/or recovery equipment, which practice could result in the loss of valuable time in the vehicle recovery process. The above problems concerning vehicle security are equally applicable to and present an equal or even greater problem in providing security for marine vessels and vehicles, aircraft and/or recreational vehicles.

Providing security for residential premises, commercial premises, structures, and/or equipment, is also of great concern, especially when such premises, structures and/or equipment are left vacant for hours and/or days at a time. These concerns may arise while residential premises are left unoccupied during the working day, when second homes and/or vacation homes are left unoccupied for days, weeks and months at a time, and in commercial premises which may also be left unoccupied for long periods of time such as after working hours or during weekends or other prolonged periods of time when these premises may be closed and/or unoccupied.

004749560

While anti-theft and/or security systems exist for residential and/or commercial premises, such systems fail to enable the owner or occupant and/or other authorized individual to conveniently and effectively exercise and/or perform control, monitoring and/or security functions with regards to these premises. The same holds true for other types or structures and/or equipment. The ability to conveniently and effectively enable one to exercise and/or to perform control, monitoring and/or security functions would prove to be invaluable in allowing owners, occupants and/or other authorized individuals to exercise and/or to provide control, monitoring and/or security functions over these premises, from a remote location and at any time.

SUMMARY OF THE INVENTION

The present invention provides an apparatus and a method for overcoming the disadvantages and drawbacks which are associated with the known prior art control, monitoring and/or security systems and provides a control, monitoring and/or security apparatus and method and, in particular, to a control, monitoring, and/or security, apparatus and method for exercising and/or providing control, monitoring and/or



security, vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises, commercial premises, structures and/or equipment, in a network environment.

The present invention also provides an apparatus and a method which also overcomes the shortcomings of prior art anti-theft and/or theft deterrent systems and, in particular, anti-theft and/or theft-deterrent systems for vehicles, marine vessels and vehicles, aircraft and recreational vehicles as well as for residential premises and/or for commercial premises.

The apparatus of the present invention includes a transmitter system for transmitting an electrical, an electronic, an electromagnetic or other suitable signal, transmittable over a communication system and/or medium, upon an activation by the owner or authorized user or operator of the vehicle, motor vehicle, marine vessel, aircraft, recreational vehicle, and/or the owner, occupant and/or authorized individual of and for the residential premises and/or the commercial premises.

The transmitter should also consist of a user

interface device and a transmitting device. The transmitter should also have a receiver associated therewith for receiving signals. In this regard, the transmitter/receiver combination may be replaced and/or implemented with and/or by a transceiver. The transmitter transmits a signal, in response to an authorized user or operator accessing and/or activating the apparatus.

The transmitter system is a remote system, which may or may not be physically connected to the remainder of the apparatus. Further, the transmitter system is not located in the vehicle, motor vehicle, marine vessel or vehicle, aircraft, recreational vehicle, residential premises and/or commercial premises, but rather, is located external from, and/or separate and apart from, the vehicle.

The apparatus also includes a receiver for receiving the signals which are transmitted by the transmitter or transceiver system. The receiver receives the signal(s) which is transmitted by the transmitter or transceiver and provides an indication, in the form of a signal transmission, back to the transmitter or transceiver and, in particular, the transmitter receiver, which signifies that a signal has been received by the apparatus.

002FD 53E T 560

The receiver also generates data which is indicative of the signal, or a portion thereof, which has been received. The receiver should also be provided with its own transmitter. In this regard, this receiver/transmitter combination may also be replaced and/or implemented with and/or by a transceiver.

The transmitter/receiver combination should provide for the transmission and for the reception of a multitude of remote electrical, electronic, electromagnetic, and/or other suitable signals, over long distances and/or in a mobile and/or a wireless communications environment. Telephone signals and telephone communication devices can be utilized in the present invention as well as personal computers which can be utilized with telecommunications and/or other suitable communication systems and/or mediums.

Upon receiving the signal, the receiver generates a distinct signal which is indicative of the signal transmitted from the transmitter. At least a portion of the transmitted signal may include a valid access code, which accesses the receiver and the apparatus. The access code serves to provide for security measures which may be taken in conjunction with the use of the apparatus.

The apparatus also includes a controller or a CPU 4 (CPU), which is electrically connected with the receiver and which receives, or reads, whichever the case may be, the signal or signals, or portions thereof, which are generated by the receiver. The CPU also has associated therewith a read only memory device(s) and random access memory device(s). The data which is received by the receiver is processed by the apparatus.

The CPU may also have a transmitter associated therewith for transmitting signals to the transmitter receiver or transceiver. In this manner, the CPU of the apparatus may respond to a user data transmission, command, or inquiry with a transmitted signal.

In the case of vehicles, motor vehicles, marine vessels and vehicles, aircraft and recreational vehicles (hereinafter referred to collectively as "vehicles"), the CPU is electrically connected and/or linked to the vehicle ignition system, which is located externally from the apparatus. The CPU may or may not be connected with and/or linked to the vehicle ignition system through an ignition system interface. The CPU may transmit signals to, as well

as receive signals from, the vehicle ignition system. In this manner, the CPU and the vehicle ignition system may exchange information between each other.

The CPU, upon receiving an appropriate signal from the receiver, and upon the completion of a data processing routine, may issue a suitable signal, to the vehicle ignition system. This signal may be one which will disable, re-enable and/or reset the vehicle ignition system. The CPU may also interrogate the ignition system and/or receive data from the ignition system which is indicative of ignition system status.

The CPU may also be electrically connected and/or linked to the vehicle fuel system which is also located externally from the apparatus. The CPU may or may not be connected with and/or linked to the vehicle fuel system through a fuel system interface. The CPU is capable of issuing a signal, to disable, re-enable and/or reset the vehicle fuel system. The CPU may also interrogate and/or receive data from the fuel system which is indicative of fuel system status. The CPU may also provide control over the vehicle exhaust system in a similar fashion or in an analogous manner.

00440-59E550

CONFIDENTIAL

The CPU may also be electrically connected and/or linked to at least one or more of a variety of vehicle equipment systems. The vehicle equipment system or systems are located externally from the apparatus and may or may not be connected and/or linked to the CPU via a respective and/or associated vehicle equipment system or systems interface. The vehicle equipment system or systems, which varies for each type of vehicle (i.e., vehicle, motor vehicle, marine vessel or vehicle, aircraft and/or recreation vehicle) may include, but is not limited to, an exterior and/or an interior siren or alarm, a horn, a vehicle exterior light system(s), a power door lock or other locking system or device, a hood locking system, a video recording device and/or a camera, and/or an audio recording device, for providing surveillance of the vehicle interior and/or exterior, an intercom system, for providing communications between vehicle users and/or occupants and the owner, operator and/or authorized individual, cellular or mobile phones and/or any one or more of the widely known vehicle anti-theft systems, alarm systems and/or stolen vehicle and/or other type of vehicle recovery systems and/or devices.



The apparatus may also comprise a vehicle position and locating system receiver, which is employed for receiving and/or processing the data which is transmitted from the vehicle position and locating device.

The vehicle position and locating device may comprise a positioning system computer and a global positioning device with associated global positioning system receiver. The vehicle position and locating device may also comprise a position data transmitter for transmitting the vehicle position and/or location data to the vehicle position system receiver. The vehicle position and locating device may also comprise a data base which contains digital and/or digitized map data, which can be utilized in order to determine the geographical position of the vehicle from the calculated "raw" position data obtained from the global positioning device. In this manner, vehicle position and/or location on a map may be obtained.

Vehicle position and/or location data can be transmitted to the vehicle position system receiver which may be located at, or accessible to, the authorized user or operator and/or authorized individual at any location and/or at the location of an authorized office or agency, such as





also comprise a transmitter for sending data and/or signals to the vehicle position and locating device and/or for transmitting signals to the CPU and/or to the transmitter receiver.

The system receiver may also be utilized in conjunction with a home and/or a personal computer and/or other personal communications device and/or apparatus which may be utilized with an associated receiver or equivalent peripheral device(s).

A home and/or personal computer, and/or other personal communications device and/or apparatus may also be utilized for performing the functions of the transmitter and the vehicle position and locating system receiver. The apparatus may also be utilized in conjunction with a computer network such as an on-line service and/or on, or over, the Internet and/or the World Wide Web, by employing an appropriate server computer and/or an associated Web Site and/or Web Site technology in conjunction with an appropriate communication medium.

Upon the occurrence, or the discovery thereof, of the theft of a vehicle, or simply in order to monitor

vehicle status or location, the authorized user or operator may activate the apparatus by entering an access code into the transmitter or transceiver interface. Entry of a valid access code will activate a signal transmission from the transmitter or transceiver to access the apparatus.

The authorized user or operator can then transmit a command code from the transmitter or transceiver to the receiver of the apparatus. In a case when the vehicle has been stolen, the command code may be a vehicle disable command code. It should also be noted that a vehicle re-enable or reset command code, or any other suitable command code, monitoring code, etc., which would represent a function or operation to be performed by the apparatus, may also be entered. The command code is then transmitted to, and received by, the receiver.

The command code data is then transmitted to, or read by, the CPU for command code identification and for further processing, if necessary. In this manner, an authorized user or operator, upon learning of the theft of the vehicle, or simply attempting to ascertain the status and/or location of the vehicle, may easily access and/or activate the apparatus by simply "calling up" or

transmitting a signal to the apparatus.

In the case where the motor vehicle has been stolen, and the authorized user or operator wants to prevent and/or thwart the theft of the vehicle and recover the vehicle, the command code which may be entered may be a vehicle disable command code (disable code) which will disable the vehicle and activate the vehicle position and/or locating device. If the authorized user or operator desires to re-enable the vehicle, such as when the motor vehicle has been found or recovered, so as to render the vehicle re-enabled or operational, the command code to be entered may be a vehicle re-enable or reset command code.

If a valid disable code is transmitted to the apparatus, the vehicle position and locating device is activated and various vehicle systems, including the vehicle ignition system, fuel or fuel pump system and/or exhaust system, and/or at least one or more of a variety of utilized vehicle equipment system(s), may either be activated, deactivated, or reset depending upon the circumstances.

The operation of the vehicle position and locating device may proceed and continue simultaneously and/or

concurrently with the operation of the apparatus and the CPU. Any one or more of a vehicle equipment systems, including a vehicle alarm and/or homing device may also be activated.

Upon the vehicle being found or recovered, such as in a manner resulting from utilizing the vehicle position and locating device, the authorized user or operator may once again access the apparatus by entering a valid access code and by then entering a valid re-enable or reset command code.

The CPU may then issue a control signal to re-enable or reset the vehicle ignition system, vehicle fuel or fuel pump system and/or exhaust system and/or de-activate or re-activate, any one or more of the various vehicle equipment systems which are utilized. The vehicle position and/or locating device may also be de-activated.

Safeguards may be employed in order to prevent a wrong or a mis-dialed number or unauthorized transmission(s) from accidentally accessing and activating the apparatus, and further, may serve to prevent an unauthorized or an unwanted disabling or re-enabling or setting or resetting of

the vehicle ignition system, the vehicle fuel or fuel pump system and/or the vehicle exhaust system and/or the activation, de-activation, or resetting of any one or more of the various vehicle equipment systems which may be utilized.

As noted above, a disable command code may cause the apparatus to activate a vehicle position and locating device which may operate simultaneously and/or concurrently with, and independently of, the operation of the apparatus and the CPU. Once activated, the vehicle position and locating device may activate the global positioning device which calculates vehicle position data by using well known global positioning calculation methods and/or techniques.

Once the vehicle position data has been calculated, the position data can then be transmitted to the vehicle position system receiver which is located at the location of the authorized user or operator, or at the authorized office, agency or other entity. Geographic position and/or location data (i.e. street location, location on a map, etc.) for the vehicle may also be obtained by processing the position and/or location data in conjunction with digital map and/or other suitable data.

002740 59E7560

The transmission of position data may be repeated for a predetermined time interval, after which the global positioning device may calculate updated position data.

The vehicle position data which is received by the vehicle position system receiver may then be employed to find and/or to recover the vehicle. Vehicle position data may be updated, continuously and/or in some other suitable manner, by repeating the global positioning calculations.

Vehicle position data, along with updated vehicle position data, may also be utilized in order to track and/or to monitor vehicle movement. Vehicle position data may also be displayed and/or output for use in finding and/or recovering the vehicle.

The authorized user or operator may discontinue operation of and/or de-activate the global positioning device and/or the vehicle position system receiver, such as when the vehicle has been found or recovered and/or at any other time.

The global positioning device may be utilized to locate and/or to track vehicle movement anywhere in the

world. In this manner, the apparatus of the present invention may be utilized to disable or de-activate vital vehicle systems and/or to find and/or recover a stolen vehicle and/or to monitor vehicle operation and/or vehicle location and/or movement.

Further, the present invention provides for an apparatus and a method for disabling and/or re-enabling various systems of the vehicle, when the vehicle is not in use, simply by "calling up" the apparatus so as to disable the vehicle and, thereby, provide added security against vehicle theft and/or to prevent damage to the vehicle and/or to any components thereof. In this manner, an authorized user or operator may disable the vehicle ignition system, fuel or fuel pump system, exhaust system and/or any one or more of a variety of the vehicle equipment systems, of a vehicle which may be parked and/or in use, from any location and/or at any time.

An authorized user or operator may also access the apparatus at any time and, with the use of an appropriate command code, may determine the operating status of the vehicle, the apparatus, and/or any one or more of the various vehicle systems so as to determine if, for example,



the ignition system or fuel or fuel pump system is activated or on, thereby alerting the authorized user or operator that someone is operating the vehicle. An authorized user or operator may also access the apparatus so as to determine vehicle position and/or location data or information and/or the geographic location of the vehicle. In this manner, the authorized user or operator can determine the status and/or the location of his or her vehicle at any time and for any reason. In this regard, a safe and an effective anti-theft and/or vehicle recovery apparatus and method is provided by the present invention.

The apparatus of the present invention may be utilized in conjunction with a multitude and/or a variety of valid command codes, wherein each different command code may selectively disable or re-enable or reset any one or any combination of the vehicle systems, such as the vehicle ignition system, the vehicle fuel or fuel pump system, the vehicle exhaust system and/or any one or more of the various vehicle equipment systems which may be utilized. In this manner, the authorized user or operator may utilize the present invention to selectively disable, re-enable, deactivate or re-activate any one or more of the vehicle systems, or a combination thereof, at his or her discretion,

at any time, and from any location.

As noted above, an authorized user or operator may also utilize command codes for determining status of the apparatus or of the vehicle, or of any one or more of the vehicle systems. A command code may also be employed to simply determine vehicle position.

The apparatus may also be programmable by the user or operator via the transmitter or transceiver, or at the vehicle, so that certain parameters, such as the timing, and/or the degree of disabling or re-enabling, of the various vehicle systems may be programmed.

By utilizing a multitude of command codes, including disable codes and/or re-enable or reset codes, which codes affect different vehicle systems, or combinations thereof, it is also possible to selectively control the vehicle systems from a remote location. The apparatus may also be programmed for automatic activation and/or self-activation and/or automatic and/or programmed operation via a command code(s), so that the apparatus may become activated upon a certain occurrence, or lack thereof, and thereafter, provide for the disabling and/or the re-

enabling of any one or more of the vehicle systems along with activating the vehicle position and/or locating device. The apparatus may also provide information pertaining to vehicle theft, status and/or position.

The apparatus may also be designed and/or programmed to detect its unauthorized use and/or its use by an unauthorized individual. In this regard, the vehicle is capable of reporting itself as being stolen.

In another preferred embodiment of the present invention, an arming device and an activation device may be utilized in conjunction with the apparatus in place of the transmitter/ receiver combination so as to provide for an automatic monitoring and/or activation of the apparatus. In such an embodiment, the command code(s) may be a default code and/or be user selected and/or programmable. Automatic activation may also be programmed by the user or operator via a command code(s) with apparatus operation activated upon the occurrence, or lack thereof, of a specified event.

In this manner, the arming device/activation device combination may be utilized so as to activate the apparatus and/or any one or more of the vehicle systems,

including the ignition system, the fuel or fuel pump system, the exhaust system and/or any one or more of the various vehicle equipment systems which are utilized in conjunction with the apparatus. The vehicle position and locating device may also be activated via the automatic activation of the apparatus.

In yet another preferred embodiment of the present invention, the vehicle position and locating device may comprise a plurality of global positioning devices which may be strategically located at various points and/or locations in or on the vehicle. Each of the global positioning devices may be placed at different points and/or locations in, or on, the vehicle, with the distances between each of the respective devices being recorded and stored. Upon the activation of the global positioning devices and the calculation of each position or location of each device, any change in distance between any two or more of the respective devices could be utilized in order to determine if the vehicle, or any portion thereof, has been dismantled or structurally altered, at least in part, or possibly to a greater extent.

The apparatus and the method of the present

004470597560

invention may also be utilized in conjunction with a central security office or agency, such as a private security service and/or by a local or regional law enforcement office or agency, in order to provide a prompt means by which to report a vehicle theft, provide for a manner in which to disable and/or re-enable a vehicle or vehicle system, and to determine vehicle position and/or location so as to facilitate the locating and the recovery of the vehicle. In this regard, the present invention may be utilized so as to allow control, monitoring and/or security functions to be exercised and/or performed by an authorized third party. The present invention may also be utilized so as to provide for a prompt law enforcement theft reporting, law enforcement response to the theft report and recovery of the vehicle.

An authorized user or operator may register their vehicle and apparatus with a central security office or agency such as by registering vehicle identification information along with vehicle access and command code data and any other pertinent information. Upon the occurrence of a vehicle theft, or the discovery thereof, the authorized user or operator can access the apparatus so as to exercise and/or to perform control, monitoring and/or security

functions over same while, at the same time, allowing for a control, monitoring and/or a security function to be exercised and/or performed by the central security office or other entity.

The apparatus, which is utilized at the central security office and/or other entity, may have the same control capabilities over the vehicle as that of the apparatus utilized in the vehicle. In this regard, status of the apparatus, the vehicle, any one or more of the various vehicle systems, and/or the vehicle position and/or location data may be obtained by the apparatus located at the central security office and/or other entity.

The apparatus which is utilized at the central security office may also be utilized in connection with an on-line service and/or on, or over, the Internet and/or the World Wide Web so as to provide for a means by which the authorized user or operator may utilize the apparatus in conjunction with a home and/or a personal computer and/or a commercial or industrial computer system (i.e., an internet server computer) and/or any other appropriate device.

In another embodiment, an access code may be only

transmitted to, and received by, the central security office apparatus and the vehicle may be accessed and controlled via an access and command code(s) which are transmitted by and from the central security office apparatus. Transmitter devices may also be located in the vehicle so as or to allow a vehicle occupant(s) to transmit signals directly to the central security office and/or agency and/or central equipment, (i.e., satellite, cellular communications site etc.) such as in instances where help may be required and/or in emergency situations.

In yet another embodiment, the access code may only be transmitted to, and received at, the vehicle. In this embodiment, the apparatus which is located in the vehicle may then transmit data to the apparatus located at the central security office thereby alerting the central security office or agency of the vehicle theft or status inquiry. The apparatus at the central security office may thereafter exercise and/or provide control over and/or monitor the functions of, the vehicle apparatus for a plurality of vehicles. Further, the central security office apparatus may also provide the means by which to allow a central security office or local or regional law enforcement office or agency to provide security monitoring over the

vehicle(s) which are registered therewith.

In the case where the apparatus may be automatically activated, the vehicle apparatus may transmit a signal, indicative of vehicle theft and/or an unauthorized use or operation of the vehicle, to the central security office apparatus thereby reporting the unauthorized use or operation, or theft, of the vehicle before the authorized user or operator is able to discover same.

The central security office apparatus may also be utilized so as to verify and/or monitor apparatus accessing and/or activation by the authorized user or operator. The authorized user or operator may also "call" the central security office from any location, via any communication means and/or device in order to determine the status and/or the whereabouts or location of his or her vehicle. Both the vehicle apparatus and the central security office apparatus can exercise and/or perform the same control, monitoring and/or security functions over the vehicle.

The present invention can also be utilized, in a similar and/or analogous manner, to provide control, monitoring and/or security for boats, marine vessels,



airplanes and aircraft, and/or recreational vehicles of any kind or type.

In still another embodiment, the present invention may be utilized in conjunction with a residential premises, residential building and/or a home and/or a household control, monitoring and/or security system.

In the case where the present invention is utilized in conjunction with a residential premises, residential building and/or a home and/or a household control, monitoring and security system, the CPU may be electrically connected and/or linked to the home and/or household electrical system, which is located externally from the apparatus. The CPU may or may not be connected with and/or linked to the home electrical system through an electrical system interface. The CPU may transmit signals to, as well as receive signals from, the home electrical system. In this manner, the CPU and the home electrical system, may exchange information between each other.

The CPU, upon receiving an appropriate signal from the receiver, and upon the completion of the requisite data processing routine may issue an electrical, an electronic,

and/or any other suitable signal, including a digital command signal, to the home electrical system. This electrical, electronic and/or other suitable signal or digital command signal may be one which will disable, re-enable or reset the home electrical system. The CPU may also interrogate the electrical system and/or receive data from the electrical system which is indicative of electrical system status (i.e., whether the electrical system is on or off and/or to what extent certain portions thereof may be on or off).

The CPU may also be electrically connected and/or linked to the home heating system which is also located externally from the apparatus. The CPU may or may not be connected with and/or linked to the home heating system through a heating system interface. The CPU is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home heating system. The CPU may also interrogate and/or receive data from the home heating system which is indicative of home heating system status (i.e., whether the heating system is on or off and/or to what extent certain portions thereof may be on or off).

00240 59E 560

The CPU may also be electrically connected and/or linked to the home air conditioning system which is also located externally from the apparatus. The CPU may or may not be connected with and/or linked to the home air conditioning system through an air conditioning system interface. The CPU is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home air conditioning system. The CPU may also interrogate and/or receive data from the home air conditioning system which is indicative of home air conditioning system status (i.e., whether the air conditioning system is on or off and/or to what extent certain portions thereof may be on or off).

The CPU may also be electrically connected and/or linked to the home water system which is also located externally from the apparatus. The CPU may or may not be connected and/or linked to the home water system through a home water system interface (i.e., electrical shut-off valve). The CPU is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home water system. The CPU may also interrogate and/or receive data from the home water system which is indicative of the water system

status (i.e., whether the home water system or any portion thereof is on or off).

The CPU may also be electrically connected and/or linked to the home thermostat or environmental control system so as to control and monitor interior temperature. In this manner, the home thermostat system may then be adjusted and/or controlled by the user or operator via the apparatus. The home thermostat system may be connected to the home heating system and/or to the home air conditioning system so as to activate, set and/or control the operation of these systems so as to achieve the desired temperature and/or environmental conditions in the home.

The CPU may also be electrically connected and/or linked, via interfaces if needed, to any one or more of a variety of home equipment systems which may include a home anti-theft and/or burglary alarm system, an interior and/or exterior siren or alarm, interior and/or exterior lighting systems, electrical and/or electronically controlled locking devices for doors and/or windows, including electrical and/or electronic dead bolt locks and/or other types of locking devices, electrical systems and devices for controlling electrical circuits or systems room-by-room,

device-by-device, and/or appliance-by-appliance.

The home equipment system may also include devices for controlling any one or more of the electrical circuitry, such as circuits controlled by fuses, circuit breakers or equivalent devices, devices for controlling and/or monitoring hot water heater(s), garage door opener(s), lawn sprinkler system(s), electric fences and/or fencing, in-ground or above-ground pool equipment, filters and/or heaters, home water valves, individual room water valves, home fire detector equipment and home fire extinguishment equipment, jacuzzis, hot tubs, pet feeders and/or any other electrical and/or electronic devices and/or appliances and/or those devices and/or appliances which may be electrically and/or electronically controllable. Home equipment systems may door and window closing, opening and locking devices.

The home equipment systems may also include any and all home appliances such as televisions, telephones, telephone answering machines, VCRs, stoves, ovens, microwave ovens, door bells, individual lights or lamps, blenders, toasters, irons, computers, word processors, stereos, radios, and any other home appliance and/or devices which

may be electrically and/or electronically activated and/or controllable.

The home equipment systems may also include video recording equipment, which may include video recording device(s) and/or a camera(s), such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, surveillance systems, display telephones and/or other communication devices, including personal communication devices.

The video recording device(s) and/or camera(s) may be digital recording devices or cameras or other suitable video recording and/or photography equipment. The video recording device(s) and/or camera(s) may be located at any location on and in the interior and/or at the exterior of the home or premises and may have associated therewith transmitting devices for transmitting the recorded video or photograph(s) to the owner or occupant and/or other authorized individual so as to provide surveillance and/or monitoring capabilities for the home and/or premises.

The home equipment system may also include audio recording equipment, which may include microphones and/or

tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, display telephones and/or other communication devices, including personal communication devices.

The audio recording device(s) may have a transceiver or transmitter/receiver system associated therewith for transmitting audio information to the owner or occupant and/or authorized individual so as to provide for the monitoring and/or the surveillance of the interior and/or the exterior of the home.

The home equipment systems may also include an intercom system or device or telephone, cellular, digital or otherwise, for providing a means by which to allow the user or operator, or other authorized individual, to communicate with the persons present in, or occupants of, the home or the premises. The home equipment systems may also include monitoring device(s) for reading and/or monitoring the home fuel supply, gas meter and/or gas usage, water supply, water meter and/or water usage, electrical generator and/or alternator operation, electricity meter and/or electricity usage, heat and/or air conditioning usage, gas and/or oil or

00240 52500

other fuel supply and/or usage, telephone usage, appliance usage, etc., a home control system and/or any other home operation and/or system function.

The monitoring device(s) may have associated therewith a transceiver or transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s). The monitoring devices and the corresponding devices which they monitor may be linked via wireless devices and/or over a wireless medium.

When used in conjunction with a residential premises, residential building and/or home or household system, the apparatus and method of the present invention may be utilized and/or operates in the same or in a similar and/or analogous manner as it is utilized and/or operates in conjunction with vehicles so as to provide control, monitoring and/or security functions for and over a home and/or residential premises. In this manner, a homeowner or occupant may access a home system at any time, and from any location, and thereby exercise and/or provide

002740 59675560



control, monitoring and/or security functions over any home system, equipment, device and/or appliance. The owner or occupant may also monitor the status, state, or operation of any home system, equipment, device and/or appliance.

Lastly, the owner or occupant may exercise and/or perform security related functions or operations on, and over, the home system, equipment, device and/or appliance.

In still another embodiment, the apparatus and method of the present invention may be utilized in conjunction with a commercial building, commercial office and/or commercial premises control, monitoring and/or security system. In the case where the present invention is utilized in conjunction with a commercial building, commercial office and/or commercial premises control, monitoring and/or security system, the CPU may be electrically connected and/or linked to the commercial office and/or premises electrical system, heating system, air-conditioning system, water system, thermostat system, and/or to at least any one or more of a variety of commercial office and/or premises equipment systems, which may include an anti-theft and/or burglary alarm system, an interior and/or exterior siren or alarm, interior and/or exterior lighting and/or lighting system(s), electrical

and/or electronically controlled locking devices for doors and/or windows, including electrical and/or electronic dead-bolt locks and/or locking devices.

The CPU may also be connected and/or linked to commercial office and/or premises equipment systems which include electrical systems for controlling electrical circuits or systems room-by-room, device-by-device, and/or appliance-by-appliance, devices for controlling any one or more of the electrical circuitry, such as circuits controlled by fuses, circuit breakers or equivalent devices, devices for controlling and/or monitoring hot water heaters, garage door openers, lawn sprinkler systems, electric fences and/or fencing, in-ground or above-ground pool and/or fountain equipment, filters and/or heaters, fire detector equipment, fire extinguishment equipment, and office equipment, power door and/or window closing, opening and locking equipment and any other electrical and/or electronic device or item or any device and/or item which is electrically or electronically controllable.

The commercial office and/or premises equipment systems may also include any and all commercial office and/or premises appliances such as televisions, telephones,

telephone answering machines, alarm systems, VCRs, stoves, ovens, microwave ovens, door bells, individual lights or lamps, office equipment and appliances, computer and associated peripherals, word processors, stereos, radios, manufacturing equipment and any other commercial office and/or premises equipment.

The commercial office and/or premises equipment system may also include a video recording equipment, which may include video recording device(s) and/or a camera(s), such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, display telephones and/or other communication devices, including personal communication devices, and/or a still picture camera(s). The video recording device(s) or camera(s) may be digital recording devices or cameras or other suitable devices or cameras, including typical video recording devices or cameras for providing video recording and/or surveillance.

The video recording device(s) or camera(s) may have a transceiver or transmitter/receiver system associated therewith for transmitting video images and/or photographs, recorded by the video recording device(s) or camera(s), to

the owner or occupant and/or authorized individual so as to provide for the monitoring and/or the surveillance of the interior and/or the exterior of the commercial office and/or premises.

The commercial office and/or premises equipment system may also include audio recording equipment, which may include microphones and/or tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, display telephones and/or other communication devices, including personal communication devices.

The audio recording device(s) may have a transceiver or transmitter/receiver system associated therewith for transmitting audio information to the owner or occupant and/or authorized individual so as to provide for the monitoring and/or the surveillance of the interior and/or the exterior of the commercial office and/or premises.

The commercial office and/or premises equipment system may also include an intercom system or device or telephone, cellular, digital or otherwise, for providing a

004740-59E1550

means by which to allow the owner or occupant, or other authorized individual, to communicate with the persons present in, or occupants of, the commercial office and/or premises. The commercial office and/or premises equipment system may also include monitoring device(s) for reading and/or monitoring the commercial office and/or premises fuel supply, fuel usage, water supply, water usage, electricity meter, electricity usage, electrical generator and/or alternator operation, heat and/or air conditioning usage, gas and/or oil or other fuel usage, telephone usage, commercial office and/or premises equipment and/or appliance usage, etc., and/or commercial office and/or premises control system and/or any other commercial office and/or premises operation and/or system function.

The monitoring device(s) may have associated therewith a transceiver or transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s). The monitoring devices and the corresponding equipment and/or devices to be monitored may be linked via wireless devices and/or over wireless

communication systems.

The commercial office and/or premises equipment system or systems receives signals from the CPU, which signals serve to activate or de-activate, or vice versa, whichever the case may be, the respective commercial office and/or premises equipment system(s) which are utilized in conjunction with the apparatus.

When utilized in conjunction with a commercial office and/or premises, the apparatus and method of the present invention is utilized and/or operates in the same, or in a similar and/or analogous, manner as it is utilized and/or operates in conjunction with vehicles and/or with residential premises, etc., so as to allow control, monitoring and/or security functions to be exercised and/or performed on, and over, a commercial office and/or premises.

In this manner, an owner, occupant and/or authorized individual may access a commercial office and/or premises system at any time and from any location and thereby exercise and/or perform control, monitoring and/or security functions over any commercial office and/or premises system, equipment, device and/or appliance. The

owner, occupant or authorized individual may also monitor the status, state or operation of any commercial office and/or premises system, equipment, device and/or appliance.

In any of the above described embodiments, the present invention may be utilized in conjunction with any suitable communication device(s) and/or communication system(s). In this manner, the present invention may be utilized in conjunction with a telephone, a touch tone telephone, a cordless telephone and/or a cellular or mobile telephone, a home and/or a personal computer having associated telecommunication devices or other suitable peripheral device(s) such as a modem and/or a fax/modem, personal communication devices which can operate over an appropriate telecommunications system, and/or other suitable communications systems and/or mediums, including radio signal, optical, satellite and/or other communications systems and/or mediums. Any suitable communication system and/or medium may be utilized.

Personal communication service (PCS) systems and devices, including stationary, portable and/or hand-held devices, may also be utilized. Digital signal communications devices and systems may also be utilized.

Interactive and/or digital televisions, personal communication devices, personal communication services (PCS) devices, personal digital assistants, cellular telephones, display telephones, display cellular telephones and electronically equipped watches and/or other devices and/or effects may also be utilized for performing user interactive control, monitoring and/or security functions in conjunction with the present invention.

The interface devices utilized in any of the various embodiment of the present invention may be wireless devices or modules which need not be directly connected to the CPU or to its respective equipment system in a hard-wired manner. In this regard, hard-wired electrical connections may be unnecessary. In the case of wireless interface devices or modules, corresponding wireless technology and/or systems should be utilized in order to provide for the wireless control and/or operation of the respective equipment(s).

The present invention can be utilized to access, monitor, and/or record or store, operation data and/or information for any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or



recreational vehicles, at a location remote from the respective vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles. The present invention can be utilized to access, monitor, and/or record or store, operation data and/or information for any of the herein-described residential premises and/or commercial premises. Any of the respective operation data and/or information can be obtained at, and/or stored at, any of the transmitters, home and/or personal computers, computers, and/or server computers, described herein.

Accordingly, it is an object of the present invention to provide a control, monitoring and/or security, apparatus and method.

It is another object of the present invention to provide a control, monitoring and/or security, apparatus and method for any one or more of vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises.

It is still another object of the present invention to provide a control, monitoring and/or security, apparatus and method for any one or more of vehicles, motor

vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises, which can provide for the remote control, monitoring and/or accessing, of the respective vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises.

It is yet another object of the present invention to provide a control, monitoring and/or security apparatus and method which provides for the selective control, activation and/or de-activation and/or for the programmed control of any one or more of an ignition system, a fuel system, an exhaust system and/or any one or more of various equipment systems of, and for, vehicles, motor vehicles, marine vessels and vehicles, aircraft and/or recreational vehicles.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which provides for the selective control, activation and/or deactivation and/or for the programmed control of any one or more of an electrical system, heating system, water system, air conditioning system, thermostat system and/or

any one or more of the various systems, equipment systems, devices and/or appliances, etc., of, and for, residential premises and/or commercial premises.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which is utilized in conjunction with a global positioning system or other positioning system and which provides for a determination of the position and/or location of, and for, vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which provides programming, information gathering, and monitoring capabilities for, and regarding, the status of and/or the operating state(s) of various systems of, and for, vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises.

It is still another object of the present invention to provide a control, monitoring and/or security

004110-594560

apparatus and method for vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises which is utilized in conjunction with a home and/or a personal computer, a telephone, a display telephone, a cellular telephone, a television, an interactive television, a digital television, a personal digital assistant and/or a personal communications services device and/or other personal communications devices.

It is yet another object of the present invention to provide a control, monitoring and/or security apparatus and method for vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises which may be utilized, operated and/or controlled via, over, or with, an on-line service, and/or on, or over, the Internet and/or the World Wide Web.

It is still another object of the present invention to provide a control, monitoring and/or security apparatus and method for vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises which



conjunction with a central security office and/or agency and/or with, or over, an on-line service and/or on, or over, the Internet and/or the World Wide Web and/or other information structure, infra-structure, system and/or communication system or medium.

It is yet another object of the present invention to provide a control, monitoring and/or security apparatus and method which is programmable and which may be programmed for self-activation and/or programmed operation.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which provides video conferencing with individuals and/or occupants of any of the vehicles, boats, marine vessels, airplanes, residential premises, and/or commercial premises described herein.

It is still another object of the present invention to provide a control, monitoring and/or security apparatus and method which can control and/or monitor fuel cells, fuel cell operation, fuels cell electrical power output, fuel cell fuel supply level, or fuel cell by-product output.

0041807560

It is yet another object of the present invention to provide a control, monitoring and/or security apparatus and method which can facilitate the monitoring of the status, operating status, and/or condition, of any of the vehicles and/or premises described herein and/or any of the systems, components, and/or devices of any of the respective vehicles and/or premises described herein.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which facilitates the transmitting of data and/or information recorded and/or read by the monitoring device(s) to the user or operator of the respective vehicle and/or premises.

It is still another object of the present invention to provide a control, monitoring and/or security apparatus and method which facilitates the receiving of signals and/or control signals by which the user or operator may exercise control over the respective vehicle, premises, and/or monitoring device(s) associated therewith.

It is still another object of the present invention to provide a control, monitoring and/or security

apparatus and method which facilitates the detection of failures in any of the vehicles and/or premises, and/or any of the respective equipment systems described herein.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which facilitates the reporting of a failure(s) of any of the systems, equipment systems, devices, components, and/or appliances utilized in conjunction with the vehicles and/or premises described herein, to an individual, a central processing computer, and/or a centralized office.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which facilitates the utilization of a command computer in conjunction with controlling, monitoring, and/or providing diagnostics for, any of the systems, equipment systems, devices, components, and/or appliances utilized in conjunction with the vehicles and/or premises described herein.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which facilitates the use of a command computer for





with the respective vehicles and/or premises.

It is another object of the present invention to provide a control, monitoring and/or security apparatus and method which facilitates the control of the movement, the motion or the operation of any of the vehicles and/or premises and/or any of the systems, devices and/or components of and/or associated with the respective vehicles and/or premises.

It is another object of the present invention to provide a control, monitoring, and/or security, apparatus and method which provides for the remote accessing of operation data for any one or more of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles.

It is still another object of the present invention to provide a control, monitoring, and/or security, apparatus and method which provides for the remote accessing, obtaining, or storage, of operation data for any one or more of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles.

It is yet another object of the present invention to provide a control, monitoring, and/or security, apparatus and method which provides for the remote accessing of operation data for any one or more of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles, by any appropriate computer and/or communication device, in a network environment.

It is another object of the present invention to provide a control, monitoring, and/or security, apparatus and method which provides for the remote accessing, obtaining, or storage, of operation data for any one or more of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles, by any appropriate computer and/or communication device, in a network environment.

It is another object of the present invention to provide a control, monitoring, and/or security, apparatus and method which provides for the remote accessing, obtaining, or storage, of operation data for any one or more

002440 59E7560

of the herein-described residential premises and/or commercial premises.

Other objects and advantages of the present invention will be apparent to those individuals skilled in the art upon a review of the Description Of The Preferred Embodiment taken in conjunction with the Drawings which follow.

**BRIEF DESCRIPTION OF THE DRAWINGS**

In the Drawings:

Figure 1 illustrates a block diagram of the apparatus which is the subject of the present invention;

Figure 2 illustrates the vehicle position and locating device of Figure 1 illustrating the main components thereof in block diagram form;

Figure 3 illustrates the vehicle position and locating system receiver of Figure 1 illustrating the components thereof in block diagram form;

00470-59E1550

Figure 4 illustrates a block diagram of a computer system which is utilized in another preferred embodiment of Figure 1 for performing the functions of, and for, the transmitter and the vehicle position and locating system receiver of the apparatus of the present invention;

Figure 5A illustrates the apparatus of Figure 1 wherein the computer of Figure 4 is utilized in another preferred embodiment in order to replace and to perform the functions of the transmitter and the vehicle position and locating system receiver of the apparatus of the present invention.

Figure 5B illustrates another preferred embodiment of the apparatus of the present invention wherein the apparatus is utilized in conjunction with an on-line service and/or on, or over, the Internet and/or the World Wide Web;

Figure 6 illustrates a flow diagram illustrating the preferred embodiment operational steps and/or sequences of operation of the apparatus and the method of the present invention;

Figure 7 illustrates the preferred embodiment

operation, in flow diagram form, of the vehicle position and locating device which is utilized in the apparatus of the present invention;

Figure 8 illustrates the preferred embodiment operation, in flow diagram form, of the vehicle position system receiver which is utilized in the apparatus of the present invention;

Figure 9 illustrates another preferred embodiment of the present invention wherein an arming device and an activation device are utilized in conjunction with, and for, an automatic activation of the apparatus of the present invention;

Figure 10 illustrates another preferred embodiment of the vehicle position and locating device which includes a plurality of global positioning devices and corresponding global positioning receivers;

Figure 11A illustrates another preferred embodiment of the present invention wherein the apparatus is utilized in conjunction with a central security office or agency;

Figure 11B illustrates yet another preferred embodiment of the present invention wherein the apparatus of Figure 11A is utilized in conjunction with an on-line service and/or on, or over, the Internet and/or the World Wide Web.

Figure 12 illustrates another preferred embodiment of the present invention, wherein the apparatus and method is utilized in conjunction with a boat;

Figure 13 illustrates another preferred embodiment of the present invention, wherein the apparatus and method is utilized in conjunction with an airplane;

Figure 14 illustrates another preferred embodiment of the present invention wherein the apparatus is utilized in conjunction with a snowmobile;

Figure 15 illustrates another preferred embodiment of the present invention wherein the apparatus and method is utilized in conjunction with a home or residential premises control system; and

Figure 16 illustrates another preferred embodiment of the present invention wherein the apparatus and method is utilized in conjunction with a commercial office and/or premises control system.

DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention pertains to a control, monitoring, and/or security, apparatus and method and, in particular, to a control, monitoring and/or security apparatus and method for exercising and/or providing control, monitoring and/or security, vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises, commercial premises, structures and/or equipment, in a network environment.

The terms "individual", "owner", "user", "operator", "occupant", and/or the plural of same, refer to any individual, individuals, owner, owners, user, users, operator, operators, occupant, and/or occupants, of any of the herein-described vehicle, boats, marine vessels, airplanes, aircraft, residential premises, commercial premises, and/or any of the systems, subsystems, devices,

004740 5947550





illustrated in Figure 1, the apparatus 1 includes a transmitter system 2, for transmitting an electrical, an electronic, an electromagnetic or other suitable signal, upon an activation by a motor vehicle owner or authorized user or operator, hereinafter referred to collectively as the "authorized user or operator".

While the foregoing description of the preferred embodiment is directed to a motor vehicle and, in particular, to an automobile, the term "motor vehicle" includes, but is not limited to, automobiles, trucks, buses, school buses, trains, subway trains, mass transportation vehicles, tractor trailers, construction equipment, equipment, mobile structures, mobile and/or moveable industrial and/or commercial and/or equipment, structures and/or work platforms, mining equipment, drilling equipment, drilling platforms, farm equipment, commercial vehicles, recreational vehicles, motorcycles, recreational vehicles, motor and/or mobile homes, etc. Any of the above noted vehicles may be manned and/or unmanned and may also include law enforcement and/or military vehicles and/or equipment. The present invention may also be utilized in marine vehicles and/or vessels, boats, ships, aircraft, airplanes, jets, submersible and/or underwater vehicles and/or vessels,

space vehicles and/or vessels and satellites, all of which may be manned and/or unmanned. The present invention may also be employed in conjunction with gasoline, diesel, alternate fuel and/or electrically powered and/or propelled vehicles.

In the preferred embodiment, the transmitter system 2 consists of a user interface device 2A and a transmitting device or transmitter 2B. The transmitter 2 also has a receiver 2C for receiving signals as will be described below. In this regard, the transmitter/receiver combination may also be implemented by utilizing a transceiver. The user interface device 2A provides the means by which the authorized user or operator may access or activate the apparatus 1, as well as the means by which the authorized user or operator may enter access and/or command codes into the transmitter system 2. The transmitter 2B transmits a signal, in response to the authorized user or operator accessing or activating the apparatus 1. The user interface device 2A also includes a device (not shown) for providing an audio and/or a video indication of system operation and/or status as well as providing information indicative of data received by the receiver 2C.

00440-5925560

The transmitter system 2 is a remote system, which is not physically connected to the remainder of the apparatus 1. Further, the transmitter system 2, in the preferred embodiment, is not located in the motor vehicle, but rather, is located external from, and separate and apart from, the motor vehicle. In the preferred embodiment, the transmitter system 2 or transceiver, is designed to be capable of transmitting signals over long distances, i.e. tens, hundreds, and/or thousands of miles or farther. The transmitter system 2 or transceiver, in the preferred embodiment, is also capable of transmitting a multitude of signals. As will be described below, this capability to transmit a multitude of signals allows for the transmission of a variety of command codes, and of multiple command codes, to the apparatus 1, which in turn, provides for an apparatus which may provide for a multitude of responses in the control and operation thereof.

In the preferred embodiment, the transmitter system 2 or transceiver is a touch tone telephone which may be a line-connected telephone, a cordless telephone and/or a cellular or mobile telephone. As described hereinafter, the transmitter system 2 may also be a home and/or a personal computer, having associated telecommunication devices or

other suitable peripheral device(s) such as a modem and/or a fax/modem, or other personal communication device, which can operate over an appropriate telecommunications system, and/or other suitable communications systems, including radio signal, optical, satellite and/or other communications systems. The communications system utilized may operate anywhere in the electromagnetic and/or radio spectrum. In this regard, personal communication service (PCS) systems and devices, including stationary, portable and/or hand-held devices, may also be utilized. Digital signal communications devices and systems may also be utilized. Interactive and/or digital televisions, personal communication devices, personal communication services (PCS) devices, personal digital assistants, cellular telephones, display telephones, video telephones, display cellular telephones and electronically equipped watches and/or other devices and/or effects or accessories may also be utilized for user interactive and/or display or output applications and/or functions.

Applicant hereby incorporates by reference herein the subject matter of U.S. Patent No. 5,081,667 which teaches a system for integrating a cellular telephone with a vehicle security system. Applicant also hereby incorporates

by reference herein the subject matter of U.S. Patent No. 5,276,728 which teaches a remotely activated automobile disabling system. Applicant further hereby incorporates by reference herein the subject matter of U.S. Patent No. 5,113,427 which teaches a radio signal responsive vehicle device control system, and further, use of a personal paging unit in a paging system for receiving a radio signal. Applicant also hereby incorporates by reference herein the subject matter of U.S. Patent No. 4,882,746, which teaches a cordless telephone system. Applicant further hereby incorporates by reference herein the subject matter of U.S. Patent No. 5,138,649 which teaches a portable telephone handset with remote control. Applicant further hereby incorporates by reference herein the subject matter of U.S. Patent No. 5,195,126 which teaches an emergency alert and security apparatus and method.

Referring once again to Figure 1, the apparatus 1 also includes a receiver 3, for receiving the signals which are transmitted by the transmitter system 2. The receiver 3 may be any receiver which is capable of receiving the remote electrical, electronic, electromagnetic, and/or other signals, which may be transmitted by the transmitter system 2. In the preferred embodiment, the receiver 3 is also

capable of receiving any of a wide variety of signals, and/or multitude of signals, which may be transmitted by the transmitter system 2.

The transmitter system 2/receiver 3 combination, of the apparatus 1 is implemented, in the preferred embodiment, by a telephone/telephone beeper or pager system which systems and related techniques are well known in the telecommunications art. In such a telephone/telephone beeper or pager system, the transmitter 2 can be any touch-tone telephone which provides a user interface, in the form of the touch-tone keypad or buttons, or the like, for entering a data code or sequence, and which may provide a means by which to transmit a signal, in response to the entered data, to an appropriate receiver device which is typically a telephone beeper or pager which may be serviced by an appropriate communications system or service.

The receiver 3 or beeper or pager, or the communication system which services same, in turn, provides an indication, in the form of a signal transmission, back to the transmitter 2 and, in particular, to the transmitter receiver 2C, which signifies that a signal has been received by the apparatus 1. The receiver 3 also generates data

which is indicative of the signal, or a portion thereof, which has been received. In this regard, in the preferred embodiment, the receiver 3 is provided with its own transmitter 3A, or the communication system or service which services the receiver 3 may provide a transmitter (not shown) as may be the case with certain pager systems, such as and including two-way pager systems, for transmitting signals back to the transmitter system 2. The receiver 3/transmitter 3A combination, in appropriate cases, may be replaced with and/or implemented by a transceiver. The receiver 3 and/or receiver 3/transmitter 3A combination or transceiver may also be a cellular and/or mobile telephone which can receive and transmit signals at and from a mobile location.

It should be noted that the telephone/telephone beeper or pager system, including two-way pager systems, may be replaced with any other type of transmitter/receiver combination, electronic or otherwise, which provides for the transmission and reception of a multitude of remote electrical, electronic, electromagnetic, and/or other suitable signals, over long distances and/or in a mobile and/or a wireless communications environment. As noted above, a personal computer system which may be adapted to

002740-594550



such operation, or a personal communication device(s) or personal communication services (PCS) device(s) may also be utilized for, or in, any of the transmitter/receiver system combinations described herein. Two way pagers may also be utilized for any, or in any, of the transmitter/receiver system combinations described herein.

In the preferred embodiment, upon receiving the signal, the receiver 3, generates a distinct signal which may be a digital, an electrical, an electronic and/or an electromagnetic or other suitable signal, which signal is indicative of the signal transmitted from the transmitter 2B of the transmitter system 2 and received by the receiver 3.

At least a portion of the signal transmitted from the transmitter system 2 to the receiver 3 may include a valid access code, which accesses the receiver 3, and the apparatus 1, which access code serves to provide for security measures which may be taken in conjunction with the use of the apparatus 1.

The apparatus 1 also includes a controller or a CPU 4 (CPU) 4, which is electrically connected with the receiver 3 and transmitter 3A and which receives, or reads,

whichever the case may be, the digital signal or signals, or portions thereof, which are received by the receiver 3 and/or generated by the receiver 3 in response to the received signal. The CPU 4 may be any type of digital processing device. In the preferred embodiment, the CPU 4 is implemented by a microprocessor. The CPU 4 also has associated therewith a read only memory device (ROM) 5 and a random access memory device (RAM) 6 for storing data which is utilized by the apparatus 1. The data which is received by the receiver 3 is processed by the apparatus 1 in the manner described below.

The use of a microprocessor as the CPU 4 provides for versatility in apparatus programmability, as well as facilitates an apparatus which can be made as small in size as possible. The CPU 4 may also be implemented by a micro-computer, a mini-computer, or any other digital computer device or system, along with the requisite associated memory devices and other necessary and/or selected peripheral devices. The functions of the CPU 4 may also be performed by appropriately integrating the apparatus 1 with the electronic command computer of the vehicle.

It should be noted that the provision of an

apparatus 1, which is as small in size as possible, allows for an apparatus which may be more easily installed and concealed in the vehicle, so as to prevent its being located and defeated by a car thief. It is also envisioned that the apparatus 1 may be installed in the motor vehicle during the vehicle's manufacture and/or assembly process so as to insure that it will not be easily detectable or accessible by a car thief. The more cancelable the apparatus, the less likelihood that it could be located and defeated. It is envisioned that the apparatus 1 and any associated circuitry and/or wiring, may be designed into the motor vehicle so as to be inaccessible to a thief.

The CPU 4 also has a transmitter 4A associated therewith for transmitting signals to the transmitter system 2 or transceiver. In this manner, the CPU 4 of the apparatus 1 may respond to a user data transmission, command, or inquiry with a transmitted signal which may include digital as well as other data and may also include electronically synthesized voice data which is generated by a voice synthesizer 4B which is connected to the CPU 4 and the transmitter 4A as shown in Figure 1. The transmitter 4A and optional voice synthesizer 4B may be utilized so as to provide information to an authorized user or operator which

may include, but not be limited to, apparatus status, vehicle operation status, and the status of each vehicle system, equipment and/or device which is utilized in conjunction with the apparatus as well as vehicle position data.

The CPU 4 is electrically connected and/or linked to the motor vehicle ignition system 7, which is located externally from the apparatus 1. The CPU 4 may or may not be connected and/or linked with the vehicle ignition system 7 through an ignition system interface 8 which is also shown in Figure 1. The CPU 4 may transmit signals to, as well as receive signals from, the vehicle ignition system 7. In this manner, the CPU 4 and the vehicle ignition system 7, may exchange information between each other. In this manner, the CPU 4, upon receiving an appropriate signal from the receiver 3, and upon the completion of the requisite data processing routine, which will be described below, may issue an electrical, an electronic, and/or any other suitable signal, including a digital command signal, to the vehicle ignition system 7. This electrical, electronic and/or other suitable signal or digital command signal may be one which will disable the vehicle ignition system 7 or one which will re-enable or reset the vehicle ignition

002770 9947560

system 7. The CPU 4 may also interrogate the ignition system 7 and/or receive data from the ignition system 7 which is indicative of ignition system status (i.e., whether the ignition system 7 is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the motor vehicle fuel pump system 9 which is also located externally from the apparatus 1. The CPU 4 may or may not be connected with the vehicle fuel pump system 9 through a fuel pump system interface 10 which is also shown in Figure 1. In the case of an electrical or an electronic fuel pump system, the CPU 4 may provide an electrical, an electronic, and/or other suitable signal, including a digital signal, which will disable, re-enable, or reset the vehicle fuel pump system 9.

In the case of a mechanical fuel pump system, the CPU 4 may provide an electrical, electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable an electrical valve system, which may be used to control the operation of the mechanical fuel pump system. Whichever the case may be, the CPU 4 will be capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable, to

002140 522556

re-enable, or to reset the vehicle fuel pump system 9. The CPU 4 may also interrogate and/or receive data from the fuel pump system 9 which is indicative of fuel pump system status (i.e., whether the fuel pump system 9 is on or off). The CPU 4 may also be electrically connected and/or linked to an appropriate device (not shown) for controlling the operation of a vehicle exhaust system device. The vehicle exhaust system device may be a device for blocking the flow of exhaust gases through the exhaust system.

The CPU 4, in the preferred embodiment, is also electrically connected and/or linked to at least one or more of a vehicle equipment system or systems 11. The vehicle equipment system or systems 11 are located externally from the apparatus 1 and may or may not be connected and/or linked to the CPU 4, via a vehicle equipment system or systems interface 12 which may or may not be required for each one of the variety or multitude of the vehicle equipment systems which may be utilized in conjunction with the apparatus.

The vehicle equipment system or systems 11 may include a loud siren or alarm, which may be located in the passenger compartment of the motor vehicle and, which may

00440-397560

00440 594560

produce a loud piercing sound so as to make it unbearable for an intruder to remain inside the motor vehicle passenger compartment. The vehicle equipment system 11 may also include an external siren or alarm, which may produce a loud piercing sound, which may be utilized to draw attention to the motor vehicle. The vehicle equipment system 11 may also include a horn, which may blare continuously or intermittently, so as to also draw attention to the motor vehicle. The vehicle equipment system(s) 11 may also include the vehicle external light systems(s), which may include the vehicle head lights, tail lights or flashers, which may be constantly illuminated or which may blink on and off repeatedly so as to draw attention to the motor vehicle.

The vehicle equipment system(s) 11 may also include a power door lock system, for securing the vehicle passenger compartment so as to prevent an entry thereunto or an exit therefrom. In addition, the vehicle equipment system(s) 11 may include a hood locking system, such as a mechanical hood locking system, for locking the vehicle hood so as to prevent an unauthorized access into the vehicle engine compartment so as to prevent any tampering with the apparatus 1 or with other systems and/or components of the





therewith a transceiver or transmitter/receiver system for transmitting video images recorded by the video recording device(s) or camera(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the video recording device(s) or camera(s).

The video recording device(s) or camera(s) may be located at any location on the interior of the vehicle such as, for example, in the dashboard of the vehicle so that the user or operator, or any other authorized individual, may observe and/or photograph the driver of the vehicle, or the occupants and/or cargo of the vehicle. The video recording(s) or camera(s) may also be located on the vehicle exterior. The video recording device(s) or camera(s) may have wide angles for maximum angular viewing and may also be pivotable and/or movable. The video device(s) or camera(s) can be moveable along a track or other guiding device or element so that the respective video recording device or camera can be moved along the vehicle interior or exterior. The video recording device(s) or camera(s) may record and/or transmit the recorded video and/or the picture(s) in real time and/or live. The video recording device(s) or camera(s) may also be equipped with a storage medium, for

storing the recorded video and/or picture(s), and a transmitter or transceiver for transmitting the stored video and/or picture(s) to the user or operator at a later time. In this manner, real-time, as well as deferred, video and/or picture(s) transmissions may be provided.

The vehicle equipment system(s) 11 may also include audio recording equipment, which may include audio recording device(s) such as microphones and/or tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, telephones, cellular telephones, display telephones, video telephones, and/or other communication devices, including personal communication devices. The audio recording device(s) may be digital audio recording devices or other suitable audio devices including typical audio recording devices. The audio recording device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting the recorded audio to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the audio recording device(s).

The audio recording device(s) may be located at any location on the interior and/or exterior of the vehicle so that the user or operator, or any other authorized individual, may hear what is transpiring, and/or what has transpired, inside and/or outside the vehicle. The audio recording device(s) may also be pivotable and/or movable. The audio recording device(s) microphone(s) can be moveable along a track or other guiding device or element so that the respective audio recording device or microphone can be moved along the vehicle interior or exterior. The audio recording device(s) may record and/or transmit the recorded audio in real time and/or live. The audio recording device(s) may also be equipped with a storage medium, for storing the recorded audio, and a transmitter or transceiver for transmitting the stored audio at a later time. In this manner, real-time as well as deferred audio transmissions may be provided.

The vehicle equipment system(s) 11 may also include an intercom system or device or telephone, cellular, digital or otherwise, for providing a means by which to allow the user or operator, or other authorized operator, to communicate with the operator and/or occupants of the vehicle over a designated communication line. The vehicle

equipment system 11 can also include video conferencing devices and/or equipment for enabling the vehicle occupants and/or individuals inside the vehicle, outside the vehicle, and/or in the vicinity of the vehicle, to engage in and/or partake in video conferences and/or video conferencing with others via a communication network.

The vehicle equipment system(s) 11 can also include the vehicle battery or batteries, vehicle fuel cell or fuel cells, battery monitoring equipment, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell temperature measuring device, fuel cell by-product (i.e. water or other by-product, heat, etc.) measuring device, fuel cell output measuring device (i.e. voltmeter, ammeter, current measure, power meter, etc.), an air bag deployment device, an air bag deployment detection device, a vehicle dashboard display device, a gyroscope for measuring vehicle pitch, roll, yaw, or attitude, a gyrocompass for measuring direction of travel, a vehicle data recorder and/or a vehicle operation data recorder, a navigation system, a navigation control and/or monitoring system, an automatic pilot, a radar system, a vehicle voice recorder, a vehicle voice recorder control and/or monitoring device, an emergency oxygen control and/or monitoring device, an

00440 594560

emergency oxygen deployment detection device, an air bag deployment device, an air bag deployment detection device, and/or a vehicle control console display device.

The vehicle equipment system(s) 11 may also include monitoring device(s) for reading and/or monitoring the status and/or condition of any of the vehicle fuel supply, water and/or coolant supply, electrical generator and/or alternator operation, battery charge level, fuel cell electrical power output, fuel cell fuel supply level, fuel cell operating temperature, fuel cell by-product output level, and/or engine temperature level and/or any other vehicle operation and/or system function and/or vehicle equipment system(s) operating status and/or condition. The monitoring device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s).

The vehicle equipment system(s) 11 may also include communication devices, such as two-way radios,

004740 99E550

radios, televisions, navigational devices and/or equipment, fire extinguishing equipment, radar devices and equipment, emergency and/or distress signal equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which may be utilized in a vehicle. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The vehicle equipment system(s) 11 may also include electrical and/or electronically controlled dead bolt locking devices for use on doors, windows, hood, trunk and/or in conjunction with any other opening components and/or components for gaining access to various locations on and/or in, and/or any systems, devices, and/or components of, the vehicle.

The vehicle equipment system(s) 11 may also include a wheel and/or brake locking device or mechanism. The vehicle equipment systems may also include hydraulic and/or pneumatic equipment and/or other equipment, including winches, etc, which may be remotely activated as described herein. The vehicle equipment system(s) 11 may also include vehicle communication devices including, but not limited to radios, televisions and entertainment devices, two-way radios, cellular telephones and equipment, etc. The vehicle

equipment system(s) 11 may also include systems for detecting failures in any of the above, or any other, equipment systems and report such failure(s) to the user or operator whether he or she is operating the vehicle or is not in the vehicle and/or for reporting such failures to a central office.

The vehicle equipment system(s) 11 can also include the vehicle command computer which is utilized to control and/or to the various electronic, electrical, mechanical, and/or electromechanical systems, components, devices, of the vehicle. The command computer can control and monitor any of the systems, components, and/or devices, of the vehicle, including, but not limited to, the ignition system, the fuel system, fuel injection system, electrical systems for ignition, lights, horn, door locks, exhaust system, windows, fuel pump, oil pump, engine timing device, battery, fuel cells, fuel supply device, video recording equipment, audio recording equipment, vehicle integrated positioning device, tire pressure indicator, and/or any other system, device, or component which can be controlled and/or monitored by the command computer.

The command computer can transmit control signals

004740-54E1350

and/or status request signals to any of the herein-described vehicle systems, components and/or devices so as to respectively control and/or monitor the operating status and/or condition of the respective system, component and/or device. The command computer can also receive signals from the respective systems, devices and/or components, with said signals containing data and/or information concerning the operating status, operating state, and/or condition, of the respective systems, devices and/or components. The command computer can be utilized so as to control, monitor, and/or provide diagnostic information for any of the vehicle systems, components, and/or devices, which are controlled and/or monitored with the command computer.

The vehicle equipment system(s) 11 can also include wear and/or usage indicators and/or detection devices which can be connected with either the command computer and/or the central processing computer and which can be utilized so as to monitor the wear and/or usage of any of the herein-described electronic, electrical, mechanical, and/or electro-mechanical, systems, devices, and/or components.

The vehicle equipment system(s) 11 can also

00240:G9EFS50





vessels, airplanes, aircraft, and/or recreational vehicles, can include and/or can utilize the teachings and/or the subject matter of the following U.S. Patents, the subject matter and teachings of which are hereby incorporated by reference herein and form a part of the disclosure of this patent application: U.S. Patent No. 6,009,356 which teaches and discloses a wireless transducer data capture and retrieval system for aircraft; U.S. Patent No. 6,002,972 which teaches and discloses a method and apparatus for measuring forces based upon differential pressure between surfaces of an aircraft; U.S. Patent No. 5,974,349 which teaches and discloses remote, aircraft, global, paperless maintenance; U.S. Patent No. 5,969,953 which teaches and discloses a stacked memory for flight recorders; U.S. Patent No. 5,890,079 which teaches and discloses a remote aircraft flight recorder and advisory system; U.S. Patent No. 5,845,240 which teaches and discloses selective recall and preservation of continuously recorder data; U.S. Patent No. 5,841,638 which teaches and discloses a stacked memory for flight recorders; U.S. Patent No. 5,826,827 which teaches and discloses and air-chute safety system; U.S. Patent No. 5,796,612, which teaches and discloses a method for flight parameter monitoring and control; U.S. Patent No. 5,761,625 which teaches and discloses reconfigurable algorithmic

004749560

networks for aircraft data management; U.S. Patent No. 5,756,934 which teaches and discloses 5,737,222 which teaches and discloses an apparatus for measuring lift forces based upon differential pressure between surfaces of an aircraft; U.S. Patent No. 5,627,753 which teaches and disclose a method and apparatus for recording data on cockpit voice recorder, U.S. Patent No. 5,457,630 which teaches and disclose a system for onboard lift analysis and apparatus therefor; U.S. Patent no. 5,331,577 which teaches and discloses an aircraft wing position indicator; U.S. Patent No. 5,283,643 which teaches and discloses a flight information recording method and device for aircraft; U.S. Patent No. 5,260,874 which teaches and discloses an aircraft flight emulation test system; U.S. Patent No. 5,239,468 which teaches and discloses automated helicopter maintenance monitoring; U.S. Patent No. 4,729,102 which teaches and discloses an aircraft data acquisition and recording system; U.S. Patent No. 4,682,292 which teaches and discloses a fault tolerant flight data recorder; U.S. Patent No. 4,660,145 which teaches and discloses a system for compressing aircraft flight data utilizing a multilevel time format; U.S. Patent No. 4,660,145 which teaches and discloses a system for compressing aircraft flight data utilizing a multilevel time format; U.S. Patent No.

00456789

4,656,585 which teaches and discloses an aircraft flight data recorder data acquisition system; U.S. Patent No. 4,644,494 which teaches and discloses a solid state memory for aircraft flight data recorder systems; U.S. Patent No. 4,604,711 which teaches and disclose an aircraft flight data display system; U.S. Patent No. 4,470,116 which teaches and discloses a digital flight data recording system; U.S. Patent No. 4,409,670 which teaches and disclose a solid-state digital flight data recorder; U.S. Patent No. 4,378,574 which teaches and discloses a digital data recorder and method; U.S. Patent No. 5,719,771 which teaches and discloses a system for mapping occurrences in a transport route; U.S. Patent No. 4,785,404 which teaches and discloses beating and passage time optimization computer navigation system for sailing vessels; U.S. Patent No. 4,775,028 which teaches and discloses a method and system for depth sounding; U.S. Patent No. 4,454,583 which teaches and discloses a navigation system; U.S. Patent No. 4,138,567 which teaches and discloses a shipboard apparatus for measuring ocean currents; U.S. Patent No. 4,050,301 which teaches and discloses an electromagnetic water current meter with synthetic direction field; U.S. Patent No. 5,988,645 which teaches and discloses a moving object monitoring system; U.S. Patent No. 5,982,048 which teaches and

CONFIDENTIAL

discloses a procedure for connecting a status detection device of a passive safety system for motor vehicles to a control unit; U.S. Patent No. 5,974,349 which teaches and discloses a remote, aircraft, global, paperless maintenance system; U.S. Patent No. 5,948,026 which teaches and discloses an automotive data recorder; U.S. Patent No. 5,917,434 which teaches and discloses an integrated taximeter/GPS position tracking system; U.S. Patent No. 5,897,602 which teaches and discloses a car navigation system; U.S. Patent No. 5,895,440 which teaches and discloses a battery monitor and cycle status indicator; U.S. Patent No. 5,892,437 which teaches and discloses an on-board brake warning device for air brake equipped vehicles; U.S. Patent No. 5,890,079 which teaches and discloses a remote aircraft flight recorder and advisory system; U.S. Patent No. 5,877,707 which teaches and discloses a GPS based seat belt monitoring system & method for using same; U.S. Patent No. 5,862,500 which teaches and discloses an apparatus and method for recording motor vehicle travel information; U.S. Patent No. 5,815,093 which teaches and discloses a computerized vehicle log; U.S. Patent No. 5,896,020 which teaches and discloses a laser based speed and accident reconstruction measuring apparatus and method; U.S. Patent No. 5,798,647 which teaches and discloses a diagnostic test

controller apparatus; U.S. Patent No. 5,796,612 which teaches and discloses a method for flight parameter monitoring and control; U.S. Patent No. 5,791,441 which teaches and discloses a brake failure monitoring system; U.S. Patent No. 5,547,149 which teaches and discloses an aircraft airbag protection apparatus and method; U.S. Patent No. 5,526,269 which teaches and discloses a digital operation recorder; U.S. Patent No. 5,497,419 which teaches and discloses a method and apparatus for recording sensor data; U.S. Patent No. 5,446,659 which teaches and discloses a traffic accident data recorder and traffic accident reproduction system; U.S. Patent No. 5,313,201 which teaches and discloses a vehicular display system; U.S. Patent No. 5,239,674 which teaches and discloses a method for transferring private data transmissions from a trucking communication system to a cellular communication; U.S. Patent No. 5,224,211 which teaches and discloses a method and apparatus for non-contact extraction of on-board vehicle trip recorders; U.S. Patent No. 5,128,874 which teaches and discloses an inertial navigation sensor integrated obstacle detection system; U.S. Patent No. 5,115,678 which teaches and discloses a method of checking the function of a driving wheel slip control system; U.S. Patent No. 5,068,656 which teaches and discloses a system and method for monitoring and

reporting out-of-route mileage for long haul trucks; U.S. Patent No. 5,065,321 which teaches a solid state event recorder; U.S. Patent No. 5,058,423 which teaches and discloses a method of checking the functioning of a driving wheel slip control system; U.S. Patent No. 5,058,423 which teaches and discloses a method of checking the functioning of a driving wheel slip control system; U.S. patent No. 5,056,056 which teaches and discloses a data recorder including a recirculating non-volatile memory; U.S. Patent No. 4,958,454 which teaches and discloses a data recorder; U.S. Patent No. 4,931,793 which teaches and discloses a system for providing a warning when vehicles approach a common collision point; U.S. Patent No. 4,853,850 which teaches and discloses a vehicle computer diagnostic interface apparatus; U.S. Patent No. 4,835,546 which teaches and discloses an electronic data recorder apparatus and method; U.S. Patent No. 4,775,028 which teaches and discloses a method and system for depth sounding; U.S. Patent No. 4,677,429 which teaches and discloses a vehicle information on-board computer; U.S. Patent No. 4,673,937 which teaches and discloses an automotive collision avoidance and/or air bag deployment radar; U.S. Patent No. 4,638,289 which teaches and discloses an accident data recorder; U.S. Patent No. 4,602,127 which teaches and

discloses a diagnostic data recorder; U.S. Patent No. 4,454,583 which teaches and discloses a navigation system; U.S. Patent No. 4,337,651 which teaches and discloses an apparatus for measuring and indicating braking vehicle speeds; U.S. Patent No. 4,263,945 which teaches and discloses an automatic fuel dispensing control system; U.S. Patent No. 4,258,421 which teaches and discloses a vehicle monitoring and recording system; U.S. Patent No. 4,236,215 which teaches and discloses a vehicular data handling and control system; U.S. Patent No. 4,201,908 which teaches a measurement and recording apparatus and system; U.S. Patent No. 4,156,286 which teaches and discloses a solid state data recorder; and U.S. Patent No. 4,137,553 which teaches and discloses a method and apparatus for magnetically recording vehicle running conditions.

As noted above, the use of any one or more of the vehicle equipment system or systems 11, and their associated interface devices 12, may be optional and may further include any other systems and/or devices which may, or are, utilized in and/or in conjunction with any of the above noted or envisioned vehicles. The vehicle equipment system(s) 11, especially when the apparatus is utilized in conjunction with law enforcement and/or military vehicles,



may also include guns and/or weapon systems and/or self defense systems and electronic warfare systems.

The vehicle equipment system or systems 11 receives signals from the CPU 4, which signals serve to activate or de-activate, or vice versa, whichever the case may be, the respective vehicle equipment system(s) 11 which are utilized in conjunction with the apparatus 1. The vehicle equipment system(s) 11 may also include any other suitable vehicle system or equipment, device or feature which may be utilized to draw attention to the motor vehicle and/or in some other way impede the vehicle theft. It should be noted that any of the interface devices 8, 10 and 12 may include any of the requisite interfacing circuitry which may be necessary to facilitate CPU 4 control over the respective systems which may be utilized.

The apparatus 1 also includes a vehicle position and locating device 13 which may be utilized in order to determine the position and/or the location of the vehicle. The vehicle position and locating device 13 can be utilized so as to determine the position of the vehicle anywhere in the world and provide for the transmission of vehicle position and/or location data to any appropriate system

002140 59E F 5960

receiver so that the vehicle may be located and/or tracked and recovered. In the preferred embodiment, the vehicle position and locating device 13 includes and utilizes a global positioning device and an associated transmitter for transmitting position and/or location data to the authorized user or operator and/or to an authorized office or agency authorized to receive and/or to monitor such data transmissions. Applicant hereby incorporates by reference herein the subject matter and teachings of U.S. Patent No. 5,959,577 which discloses a method and structure for distribution of travel information using network.

The apparatus 1 also includes a vehicle position and locating system receiver 14, which may be employed by the authorized user or operator and/or by the authorized office or agency, for receiving and/or processing the data which is transmitted from the vehicle position and locating device 13 as will be described in more detail hereinbelow. The apparatus 1 may also comprise a corresponding user interface device (not shown) for use in conjunction with the vehicle position locating system.

While the preferred embodiment, as illustrated in Figure 1, describes certain connections between various

00240594550

components and/or devices of the apparatus as being made by a direct and/or a wired electrical connection, it is noted that any direct and/or wired electrical connection(s) between any of the components and/or devices described herein, may be replaced with wireless devices, wireless communication devices, equipment, links and/or linkups, along with their respective and associated technologies and/or devices, which wireless devices and technologies are known and the teachings of which are incorporated by reference herein.

Figure 2 illustrates the vehicle position and locating device 13 of Figure 1 illustrating the main components thereof in block diagram form. The vehicle position and locating device 13, in the preferred embodiment, includes a positioning system computer 21 and a global positioning device 22 with associated global positioning system receiver 23. The positioning system computer 21 includes a CPU 4 (CPU) (not shown) and associated read only memory (ROM) device (not shown) and random access memory (RAM) device (not shown).

The vehicle position and locating device 13 also includes a position data transmitter 24, for transmitting

the vehicle position and/or location data to the vehicle position system receiver 14. The vehicle position and locating device 13 also includes a data base 25 which contains digital and/or digitized map data, which can be utilized to determine the geographical position of the vehicle from the calculated "raw" position data obtained from the global positioning device 22. In this regard, vehicle location on a map and/or street location may be obtained.

As will be described in more detail below, the positioning system computer 21 controls the operation of the vehicle position and locating device 13, including the operation of the global positioning device 22. The global positioning system receiver 23 receives the necessary signals from the global positioning satellites and/or satellite system(s) which are located in orbit above and around the earth. The signals which are received by the receiver 23 are processed by the global positioning device 22, in a manner which is well-known to those skilled in the global positioning art. Once the vehicle position data or "raw" data is calculated, the data is transmitted to, or read by, the positioning system computer 21.

Vehicle position and/or location data can then be transmitted to the vehicle position system receiver 14 which may be located at, or accessible to, the authorized user or operator and/or at the location of an authorized office or agency, such as at a central security office or agency or local or regional law enforcement office or agency, which is duly authorized to receive the vehicle position and/or location data for the vehicle.

Vehicle position and/or location data is transmitted by the transmitter 24 which, in the preferred embodiment, is a radio signal transmitter or a broadcast transmitter. The transmitter 24 may also be a cellular or mobile telephone or wireless or other communication device which is programmed to call and transmit the data to the vehicle position system receiver 14. The transmitter 24 may also be a digital signal transmitter or any other suitable transmitter. The global positioning data could also be obtained by the user or operator by directly "calling" the system receiver 14 and/or the CPU 4 of the apparatus 1.

In the preferred embodiment, the transmitter 24 includes a radio signal transmitter for transmitting vehicle position and/or location data to the vehicle position system

00440 994550

receiver 14, which may be at a location of the authorized user or operator and/or at a central security office or agency or at a local or regional law enforcement office or agency as will be described in more detail hereinbelow. In this regard, the vehicle position system receiver 14 includes a radio signal receiver which is tuned to receive the signals which are transmitted by the transmitter 24. If the transmitter 24 is a cellular or mobile telephone or other personal communication device, the system receiver 14 could be equipped with an associated cellular or mobile telephone or personal communication device or other suitable device, which can be used in conjunction with the cellular or mobile telephone transmitter. Digital communication transmitter/receiver combinations and/or transceivers may also be utilized.

The vehicle position and locating device 13 may also have its operation programmed so as to perform updated global positioning calculations, continuously, intermittently, at regular intervals and/or in any other suitable manner, so as to provide for a tracking of a vehicle movement. The vehicle positioning system computer 21, in the preferred embodiment, contains digital and/or digitized map data stored in database 25 for ascertaining

the geographical position of the vehicle from the calculated global positioning data ("raw" data) which is calculated by the global positioning device 22. In this manner, the calculated global positioning data, and/or processed geographical position data, can be provided for ascertaining vehicle position and/or location and, if appropriate, for ascertaining vehicle movement such as by monitoring and/or tracking vehicle position as it is updated.

The vehicle position system receiver 14 may be equipped with an appropriate computer system which also includes a digital and/or digitized map database for determining geographical location (i.e. map location, street location, or any other data which may be correlated and/or processed with the positioning data, etc.), from the received global positioning data, at the location of the receiver 14. The system receiver 14 may also be equipped with an alphanumeric pager device which can simply receive the position data and/or the geographical position data from an appropriately designed transmitter 24.

Figure 3 illustrates the vehicle position and locating system receiver 14 of Figure 1 illustrating the components thereof in block diagram form. In Figure 3, the

system receiver 14 includes a receiver 30 for receiving the data transmitted by the transmitter 24 of the vehicle position and locating device 13. In the preferred embodiment, the receiver 30 may be a radio signal receiver, a telephone, telecommunication and/or other system receiver, depending upon the type of transmitter which utilized for the transmitter 24. It is also important to note that the receiver 30 may be a personal communication system or personal communication services (PCS) receiver or device. The receiver 30 may also be a satellite dish receiver or a digital signal receiver.

The vehicle position and locating system receiver 14 also includes a computer 31 for controlling the operation of the system receiver 14. The positioning system receiver computer 31 includes a CPU 4 (CPU) (not shown) and associated read only memory (ROM) device(s) (not shown) and random access memory (RAM) device(s) (not shown). The computer 31 is connected to the receiver 30 for receiving and/or for reading the vehicle position and/or location data which is transmitted by the transmitter 24 and received by the receiver 30.

The system receiver 14 also includes a user



interface device 32, which may include a keyboard or a pointing device such as a mouse, a display device 33 such as a display monitor, an output device 34 such as a printer and a database 35 such as a data base containing digital and/or digitized map data for use in determining geographical position of a vehicle from the "raw" position data. The system receiver 14 may also comprise a transmitter 36 for sending data and/or signals to the vehicle position and locating device 13 and/or for transmitting signals to the CPU 4 and/or to the transmitter receiver 2C.

The system receiver 14 may also be implemented by utilizing a home and/or a personal computer which may be utilized with an associated receiver 30 or equivalent peripheral device(s). In the case of a home and/or a personal computer, the data received from the vehicle position and locating device 13 may be input into the computer, from the receiver 30, by any one of the well known methods and techniques for inputting data into a home and/or a personal computer from such an appropriate peripheral device(s). In cases wherein a telephone signal and/or a personal communication device or personal communication services (PCS) devices are utilized, a fax/modem or other suitable device may be utilized to send, and/or to receive,

data to, and from, the vehicle position and locating device 13. A television, appropriately equipped to receive and/or to transmit signals may also be utilized. It is also envisioned that digital televisions, interactive televisions, personal communications devices, personal communications services (PCS) devices, personal digital assistants, display telephones, electronically equipped watches, cellular telephones and/or display cellular telephones may also be utilized.

It is also important to note that the transmitter system 2 or transceiver and the vehicle position and locating system receiver 14 may be implemented by utilizing, and therefore replaced by, a home and/or a personal computer having the configuration illustrated in Figure 4. Figure 4 illustrates a block diagram of a computer system which provides all of the functions of, and/or for, the transmitter 2 or transceiver and the vehicle position and locating system receiver 14. In Figure 4, the home and/or personal computer, which is denoted by the reference numeral 150 includes a CPU 151 with associated read only memory (ROM) device 161 and random access memory (RAM) device 162, a user interactive or interface device 152 which includes a keyboard and/or a pointing device, a display device 153

which may be a display monitor, an output device 154 which may be a printer, and a database 155 which may contain access code and command code data as well as digital and/or digitized map data.

The computer 150 also includes a transmitter 156 for transmitting data to the receiver 3 and/or the CPU 4 and a receiver 157 for receiving data from the receiver transmitter 3A and/or the CPU 4. The computer 150 also includes a receiver 158 for receiving data from the vehicle position and locating device 13 and a transmitter 159 for transmitting data to the vehicle position and locating device 13. In the embodiment of Figure 4, data may be transmitted to and received from the computer 150 by using any of the conventionally known communication systems such as by utilizing radio signal communication devices, telecommunication devices, optical communication devices, satellite communication devices, and/or personal communication devices and/or personal communication services (PCS) devices, or any other suitable communications devices, including any of the types of devices described above. In the case of telecommunication devices, a fax/modem for sending and receiving data may be utilized in the computer 150. Digital communication devices may also be utilized.

Figure 5A illustrates the apparatus of Figure 1 wherein the computer 150 of Figure 4 is utilized as a substitute device for, and for performing the functions of, the transmitter 2 or transceiver and the vehicle position and locating system receiver 14.

In another preferred embodiment, the apparatus 1 can be utilized in conjunction with a computer so that the authorized user or operator can utilize the apparatus over an on-line service and/or on, or over, the Internet and/or the World Wide Web and/or other suitable communication network or medium.

Figure 5B illustrates another preferred embodiment wherein the apparatus 1 is utilized in conjunction with an on-line service and/or on, or over, the Internet and/or the World Wide Web and/or other suitable communication network or medium. In Figure 5B, the various transmitters of the apparatus 1, including the receiver transmitter 3A, the CPU transmitter 4A and the vehicle position and locating device transmitter 24, transmit their respective data transmissions to a receiver 500 associated with an on-line service or internet computer system or computer server 510 (hereinafter

00240594560

"server") which is specifically dedicated to the task of providing control over and/or monitoring the vehicle, the apparatus 1 and/or any one or more of the vehicle systems which are controlled and/or monitored by the apparatus 1. The server 510 can also perform vehicle monitoring, tracking and/or recovery functions. The server 510 also has associated therewith, and connected and/or linked thereto, a receiver 511 and a transmitter 512, for receiving and transmitting, respectively, all of the respective signals utilized for the complete and effective operation of the apparatus 1. The server 510 may be utilized in conjunction with an associated Web Site 520.

In the embodiment of Figure 5B, the authorized user or operator may transmit data directly to the apparatus 1 via the home and/or personal computer 150. The authorized user or operator may also transmit data directly to the server 510 over an appropriate communication network or medium.

By using the computer 150 in conjunction with an appropriate communication medium, the authorized user or operator may then access the dedicated server 510 such as on-line and/or via the Web Site 520 and thereby receive any

and all of the above-described data from the server 510 over the on-line service and/or on, or over, the Internet and/or the World Wide Web and/or other suitable communication network or medium. The authorized user or operator may also enter command codes and other data so as to provide control over the apparatus 1 via the server 510. The dedicated server 510 may be accessed via the associated Web Site 520. The dedicated server 510 may also process the data obtained by the apparatus 1 in any appropriate manner, if desired. The authorized user or operator may also access and provide control over the apparatus 1 via the server 510.

Applicant also hereby incorporates by reference herein all of the methods and/or techniques for providing information and/or data over on-line services and/or on, or over, the Internet and/or the World Wide Web or other suitable communication network or medium, along with client/server and/or Web Site technology and methods and/or techniques utilized in conjunction therewith, which are known as of the filing date of this application. Any and/or all data and/or information can be transmitted utilizing TCP/IP protocols and/or other communication protocols. Applicant hereby incorporates by reference herein the subject matter and teachings of Business Data

Communications, Raymond R. Panko, Prentice Hall, 1997. In this regard, the authorized user or operator may utilize the apparatus to its fullest capabilities over an on-line service and/or on, or over, the Internet and/or the World Wide Web or other suitable communication network or medium. In this manner, the embodiment of Figure 5B may allow the authorized user or operator to utilize the apparatus and/or to monitor the operation of the apparatus over the on-line service and/or on, or over, the Internet and/or the World Wide Web from any suitable computer and/or from any location.

The operation of the apparatus 1 of the present invention is described below with reference to the flow diagram illustrated in Figure 6, which flow diagram illustrates a preferred embodiment method for utilization of the apparatus 1. The method of the present invention may be implemented as a computer program or software program which is utilized in conjunction with the CPU 4. The computer program or software program may be programmable so as to provide for the modification of same, if desired.

Upon the occurrence, or the discovery thereof, of the theft of a motor vehicle, or simply to monitor vehicle

status or location, the authorized user or operator of the vehicle may activate the apparatus 1 by entering an access code into the transmitter interface 2A which, as noted above, may be a touch tone telephone keypad. The entry of a valid access code will activate a signal transmission from the transmitting device 2B in a manner similar to that of making a telephone call. In the preferred embodiment, the above sequence of events may occur by the authorized user or operator simply utilizing a touch-tone telephone, which may be a public pay telephone, a private telephone, a line telephone, a cordless or wireless telephone, or a cellular or mobile telephone, and by entering in the pre-determined access code which is assigned to the particular apparatus 1.

In the case of a touch-tone telephone/telephone beeper or pager system, wherein the beeper or pager is the receiver 3 in the apparatus 1, this access code would typically be a code which would comprise a given telephone area code and telephone number assigned to, or programmed for, the beeper or pager (receiver 3).

Upon receiving the transmitted signal, the receiver 3, or beeper or pager, or the communication system servicing the beeper or pager, will typically generate, via



transmitter 3A or by another appropriate device, which may or may not be an integral part of the receiver 3, a signal, electrical or otherwise, which is indicative of the receiver 3 having received the signal from the transmitter 2 and which further indicates that the receiver 3 has been accessed. In the case of a communication system or service which services the beeper or pager, the transmitter 3A may be located externally from the apparatus 1 and may be linked to the receiver 3 via the communication link which services the receiver 3 (i.e., the beeper or pager communications service system).

The received access signal is also sent to, or read by, the CPU 4 so as to alert the CPU 4 that the receiver 3, and the apparatus 1 have been accessed. The receiver 3, or the communication system servicing the receiver (beeper or pager), will then transmit a signal, via its transmitter 3A, to the transmitter receiver 2C which is indicative of the fact that the receiver 3, and the apparatus 1, have been accessed. This signal which is transmitted to the transmitter receiver 2C usually takes the form of an audible tone at the telephone headset which typically occurs when it is desired to communicate with a beeper or pager device.

00240-997559

The above sequence is analogous to the operation of a telephone/telephone beeper or pager system wherein, when the beeper or pager, or the communication system servicing the beeper or pager, has answered the call, the beeper awaits entry of a telephone number or code by the caller. The signal indication by the receiver 3 will then be followed by a period of silence during which period, the authorized user or operator may enter the desired command code data or command code, which may include a vehicle disable command code, a vehicle re-enable or reset command code, a cancel code, or any other suitable command code by which the authorized user or operator may exercise control over the apparatus 1. The authorized user or operator may then enter the code or number sequence into the transmitter interface 2A or, in this case, the telephone keypad.

In a case when the motor vehicle has been stolen, the command code may be a vehicle disable command code. It should also be noted that a vehicle re-enable or reset command code, or any other suitable command code, which would represent a function or operation to be performed by the apparatus 1, may also be entered, as the circumstances may require, at this time. The command code is then

transmitted from the transmitting device 2B of the transmitter system 2 and is received by the receiver 3 or beeper or pager. In the preferred embodiment, a command code received signal is then transmitted back to the transmitter system 2, via the receiver 3, or communication system, transmitter 3A, which provides an indication, to the authorized user or operator, that the command code has been received by the apparatus 1.

The command code data is then transmitted to, or read by, the CPU 4 for command code identification and for further processing, if necessary. In this manner, an authorized user or operator, upon learning of the theft of the vehicle, or simply attempting to ascertain the status and/or location of the vehicle, may easily access or activate the apparatus 1 by simply utilizing the nearest touch-tone telephone and by "calling up" the apparatus 1.

The telephone/telephone beeper system, described above, may be replaced with any remote transmitter/receiver system, such as by a remote transmitter, i.e., a television-type remote control unit, which control unit would require a user interface feature and which has the capability to remotely transmit a multitude of signals over long distances

0044959456

to an associated receiver. A two-way pager, or other appropriate two-way communication device may also be utilized. A home and/or personal computer, with requisite peripheral devices, a personal communication device and/or a personal communication services (PCS) device may also be utilized. Digital communications devices, interactive televisions and/or digital televisions may also be utilized. It is also envisioned that digital televisions, interactive televisions, personal communications devices, personal communications services (PCS) devices, personal digital assistants, display telephones, video telephones, electronically equipped watches and/or other effects or accessories, cellular telephones, display cellular telephones may also be utilized.

By utilizing a telephone/telephone beeper or pager system, or a wireless telephone and/or wireless communication device, in the preferred embodiment, a long range, remote-controlled system may be achieved which systems are usually very well maintained by telecommunication companies or carriers and are also very reliable. By using a telephone/telephone beeper or pager system, or wireless telephone and/or wireless communication device, the authorized user or operator does not have to

002440 59E1560

keep track of a separate remote control unit. In this manner, a reliable and efficient apparatus communication system is achieved. The apparatus 1 may also be equipped with an alternate and/or an auxiliary transmitter device(s), such as a remote control unit or home and/or personal computer system, which could be employed in addition to a telephone. In this manner, if the authorized user or operator should leave the remote control unit in the vehicle, or should lose it, the apparatus 1 may still be accessed by the authorized user or operator. Still further, some telephone/telephone beeper or pager systems, wireless telephones, and/or wireless communication devices, may have effective distance ranges on the order of hundreds or thousands of miles which may be economical and reliable for long range signal transmission.

In the case where the motor vehicle has been stolen, and the authorized user or operator wants to prevent or thwart the theft of the vehicle and recover the vehicle, the command code which is to be entered is a vehicle disable command code (disable code) which will disable the vehicle in the manner described below. Similarly, if the authorized user or operator desires to re-enable or reset the apparatus 1, such as when the motor vehicle has been recovered or

found, so as to render the vehicle re-enabled or operational, the command code to be entered will be a vehicle re-enable or reset command code (re-enable or reset code).

Once the command code has been entered, the receiver 3, via its transmitter 3A, may provide a signal indication to the transmitter system 2, which may take the form of audible tones to a headset, such as is known in beeper or pager systems, which serve to confirm receipt of the command code by the receiver 3 and the apparatus 1. The data entered into, and transmitted from, the transmitter system 2, and received by the receiver 3, will then be transmitted to, or read by, the CPU 4 for command code identification and for subsequent processing, if necessary.

If the authorized user or operator merely wants to determine the status of the vehicle and/or of any of the vehicle equipment systems (i.e., is the ignition system on, is the engine running, is a burglar alarm system armed, etc.), a status code may be entered and the CPU 4, after monitoring the vehicle systems, may report back to the authorized user or operator via the receiver transmitter 3A or the CPU transmitter 4A. If the authorized user or

operator wants to determine the location of the vehicle and/or if it is in motion, a location request code may be entered whereupon the vehicle position and locating device 13 may be actuated so as to determine vehicle position and/or location data, which data may then be transmitted to the user or operator via transmitter 24. The CPU transmitter 4A may also transmit vehicle position data as the CPU 4 may also have access to said data. In this manner, the user or operator may exercise control over the vehicle and/or monitor the operational status and/or state of the vehicle and/or of any of the vehicle systems and/or components. The user or operator may also monitor the position and/or movement of the vehicle.

Figure 6 illustrates a flow diagram of a preferred embodiment of the operational steps and/or sequence of operation of the apparatus and method of the present invention. With reference to Figure 6, the receiver 3, upon receipt of the access code, will generate an interrupt in the CPU 4 which will activate an operational program or an interrupt service routine, at step 60, of the flow diagram. At step 61, the command code data is received by the apparatus 1. Upon receipt of the command code by the receiver 3, the command code is then transmitted to, or read

00240-59E560

by, the CPU 4 at step 62. The CPU 4 will then, at step 62A, perform a processing routine in order to identify the command code which has been entered.

In the preferred embodiment, the command code should be of a pre-determined length and should be chosen to be one of a variety of codes which may be chosen so as to provide for the controlling of the apparatus 1 to perform any number of functions and/or to control the vehicle and/or any of the vehicle systems utilized in conjunction with the apparatus 1. The command code may be a valid disable code, a valid re-enable or reset code, a cancel code, a vehicle status code, a vehicle position and locating code, or any other suitable code which may be recognized by the CPU 4 so as to provide control over and/or monitoring of the apparatus 1. A command code may be utilized to indicate a cancel operation, or to identify a previous transmission as a false alarm. An incomplete code, an invalid code, or the absence of a command code after the apparatus 1 has been accessed, may be deemed to be a false alarm.

The cancel and false alarm categories are utilized in order to enable an authorized user or operator to cancel access to and/or activation of the apparatus 1, or to





service routine, will perform the appropriate apparatus control functions.

If a valid disable code is identified as having been transmitted, at step 64 (which may designate that the vehicle has been stolen), the CPU 4 will initiate and/or actuate the operation of the vehicle position and locating device 13 at step 65. The vehicle position and locating device 13 will then begin to, and continue to, perform the necessary routines in order to determine vehicle position and/or location as will be described below. The operation of the vehicle position and locating device 13 will proceed and continue simultaneously and/or concurrently with the operation of the apparatus 1 and the CPU 4 as described below.

The CPU 4, which is connected to the vehicle ignition system 7, so as to send and receive data to and from the vehicle ignition system 7, will perform a software test, at step 66, in order to determine whether the vehicle ignition system 7 is activated or is on (i.e. the vehicle is operating or is in motion). This will require a monitoring of the vehicle ignition system 7 by the CPU 4.

As noted above, a vehicle ignition system interface 8 is optional and may or may not be employed in order to facilitate this function of monitoring and controlling the vehicle ignition system 7 by the CPU 4.

If the vehicle ignition system 7 is determined to be activated or on, the CPU 4 will enter into a delay loop, at step 67. The purpose of the delay loop, at step 67, is to prevent the vehicle ignition system 7 from being de-activated or shut-down while the vehicle engine is still on or running. Such a test and delay loop routine serves to prevent accidents and resulting personal injury and property damage, such as may be caused when a vehicle suddenly loses power while in motion and/or is travelling at a moderate, or at a high, rate of speed or when such a loss of engine power may result in the failure of the vehicle power steering and/or power brake systems. In this manner, the CPU 4 will continue to interrogate the vehicle ignition system 7 after a pre-determined delay period, and will continue to do so until the vehicle ignition system 7 is determined to be shut-off and/or is non-operational.

While any delay period may be employed, at step 67, and may be programmed into the program software of the

apparatus 1, it is important to choose a delay period which can detect even the shortest duration of a vehicle ignition system shut-down. In the preferred embodiment, a delay period of one (1) second is utilized. This delay period, of course, may be changed in the program software, as desired, by utilizing known system programming methods and/or techniques.

After the delay period has elapsed, at step 67, the CPU 4 will again interrogate the ignition system 7, at step 66, and will continue to do so in the above described delay loop routine until the ignition system 7 is determined to be shut-off and/or is non-operational. Once it has been determined that the vehicle ignition system 7 is shut-off and/or is non-operational, the CPU 4, at step 68, will issue a disable signal to the vehicle ignition system 7.

The disable signal which is issued by the CPU 4, at step 68, will disable the vehicle ignition system 7, thereby preventing a restarting of the vehicle engine. The disabling function may be performed by the CPU 4 by issuing a data signal, which causes the vehicle ignition system circuitry to be shut-off or be "opened", such as by opening a switching device and/or a series of switching devices

(i.e. a switch or relay (not shown)), which is or are located in, or designed into, the ignition system circuitry, the starter motor, or at any other location in the ignition system 7, or by issuing a disabling signal to the digital or logic devices, which may be utilized in connection with the vehicle electronic command computer and/or other electrical components or systems.

It should be noted that any number of methods may be used, in conjunction with the apparatus 1, for disabling the vehicle ignition system 7. The CPU 4 can be utilized to provide control signals, to disable or re-enable, the vehicle ignition system 7 just as any microprocessor-based digital system provides control over the operation of the components and/or peripheral devices utilized in conjunction therewith. The techniques utilized, in order to provide such control over the vehicle ignition system 7 may be determined on a vehicle-by-vehicle basis.

Once the vehicle ignition system 7 has been disabled, only the issuance of a valid re-enable or reset command code, to the apparatus 1, may be utilized to re-enable or reset the vehicle ignition system 7. In this manner, a carefully concealed and installed placement of the

apparatus 1, within the vehicle, will provide for a completely disabled vehicle until such time as a valid access code, followed by a valid re-enable or reset command code, is entered by the authorized user or operator in a manner consistent with the operation of the apparatus 1. As can be readily appreciated, a carefully concealed apparatus 1, along with a strategically placed ignition cut-off circuitry or system, would render it most difficult, if not impossible, for the thief or thieves to practically defeat the apparatus 1.

With reference once again to Figure 6, the CPU 4, at step 69, will then issue a disabling signal to the vehicle fuel pump system 9 thereby de-activating the vehicle fuel pump system 9 and prohibiting the supply of fuel to the vehicle engine. The disabling signal from the CPU 4 can disable the vehicle fuel pump system 9 by any one of the well known methods for disabling a fuel pump system. In the case of electric fuel pump systems, said systems may be disabled by any one of the known methods for shutting-off or "opening" an electrical circuit which provides power to, or control over, the fuel pump system 9, such as by a cut-off switch or relay, which methods and/or techniques may be similar to and/or analogous to those methods and/or

00440 597560

techniques utilized in connection with disabling the vehicle ignition system 7.

In the case where electronic components are utilized, the digital components or logic gates in the control circuitry may also be disabled. In the case where a mechanical fuel pump is utilized, an electric valve assembly, which may provide a fuel pump operation cut-off or disconnect, may also be utilized thereby allowing any appropriate method for disabling an electrical fuel pump system to be utilized in order to disable the electric valve assembly, and ultimately, to shut-off or disable the mechanical fuel pump system. The vehicle fuel pump system interface 10 may be utilized, if necessary, in order to facilitate the above described disabling technique(s).

The CPU 4 can be utilized in order to provide control signals to disable or re-enable the vehicle fuel pump system 9 just as any microprocessor-based digital system provides control over the operation of components and peripheral devices utilized in conjunction therewith. It should be noted that the techniques utilized in order to provide control over (disable or re-enable) the vehicle fuel pump system 9 may be determined on a vehicle-by-vehicle or

002140-594560





system, may be activated, immediately or after a delay, for securing the vehicle passenger compartment so as to prevent an entry thereunto or an exit therefrom. It is also envisioned that there may be a delay between the disabling of the vehicle ignition system 7 and the activation of the power door lock system so as to allow the thief or thieves to get out of the car before the locking operation takes place.

It is also envisioned that a mechanical hood locking system may be utilized and activated so as to lock the hood and prevent an unauthorized access into the vehicle engine compartment. Such a vehicle hood locking feature could prevent tampering with the apparatus 1 or with other systems and/or components of the vehicle. A vehicle alarm system or anti-theft system(s), such as any one or more of the well known types of anti-theft and/or theft deterrent systems or devices may also be activated, and/or deactivated, when and if desired, by the CPU 4. The CPU 4 may also activate a vehicle homing and/or tracking or recovery device system such as a LoJack® Stolen Vehicle Recovery System and/or any other type of vehicle recovery system.

Any one or more of the above-described vehicle

equipment system(s) 11 which may include a power door lock system, including electronic and/or electrical dead bolt locking devices, for securing the vehicle passenger compartment, hood or trunk, so as to prevent an unauthorized entry thereunto, video recording equipment, for recording and supplying video information, and/or audio recording equipment, for recording and supplying audio information, may also be activated or deactivated.

The CPU 4 can be utilized in order to provide control signals to activate and/or to de-activate any one or more of the vehicle equipment systems 11 just as a microprocessor-based digital system provides control over components and/or over peripheral devices utilized in conjunction therewith. Such methods and/or techniques may be similar to those methods and/or techniques utilized to provide control by the CPU 4 over the vehicle ignition system 7 and the vehicle fuel pump system 9. It should be noted that the techniques utilized, in order to provide control over any of the vehicle equipment system(s) 11, may be determined on a vehicle-by-vehicle and/or system-by-system basis. It is also envisioned that a vehicle exhaust system may be de-activated and/or similarly controlled by the apparatus 1.

Once disabled, the vehicle ignition system 7, and the vehicle fuel pump system 9, will remain disabled even if the vehicle power supply should be drained. This is due to the fact that the digital circuitry, which is utilized in the apparatus 1, in the vehicle ignition system 7, in the vehicle fuel pump system 9, and/or in any of the vehicle equipment system(s) 11, may include digital "memory" devices such as logic gates, flip-flops, etc. and/or electromagnetic devices, such as switches or relays, which may be chosen so as to remain in their state unless altered or activated in a predefined fashion, electrically, electronically or otherwise, or under the power of an electrical signal or stimulus which is controllable only by an authorized user or operator. Further, even if the vehicle power is completely drained, these above mentioned devices, which may be chosen so as to require a predefined application of electrical or electronic power in order to change their state, or their operating mode or operation, would have their re-activation prevented, and thus, the vehicle ignition system 7, the vehicle fuel pump system 9, and/or any of the vehicle equipment system(s) 11, will remain in a disabled state.

It is also envisioned that back-up and/or supplemental power supplies, such as batteries, fuel cells, etc., (not shown) may also be utilized in conjunction with the apparatus 1 so as to prolong the continued activation or de-activation of the vehicle ignition, fuel pump and/or any of the vehicle equipment system(s) 11 which are utilized. Supplemental power systems are optional and may also be employed with the apparatus 1 so as to provide power for any unusual power requirements which may be required by the vehicle in which the apparatus 1 may be installed. The back-up and/or supplemental power supplies may also be solar powered and/or be constantly chargeable by a vehicle recharging and/or alternator system.

Upon the completion of apparatus 1 operation, at step 70, the CPU 4 will then exit the operational program or interrupt service routine at step 76. This signifies the completion of the operational program or interrupt service routine in the case of receiving a disable command code. The CPU 4 will then await the next accessing and/or activation of the apparatus 1 by the authorized user or operator, via entry of a valid access code into the transmitter system 2 as described above. Unless a valid access code, followed by a valid re-enable or reset command

00440 594560

code, is entered into the transmitter interface 2A, the vehicle ignition system 7, and the vehicle fuel pump system 9, will remain disabled and/or any of the utilized vehicle equipment system(s) 11, will remain in their activated or de-activated states.

Upon the vehicle being found or recovered, such as in a manner resulting from utilizing the vehicle position and locating device 13, in the manner described hereinbelow, the authorized user or operator may once again access the apparatus 1 by entering the valid access code into the transmitter interface 2A and then by entering the valid re-enabling or reset command code. As described above, a valid access code will once again initiate the operation of the operational program or interrupt service routine, at step 60, which is described above and illustrated in Figure 6. The valid re-enable or reset command code will then be received by the receiver 3, in the manner described above at step 61.

The command code data will then be transmitted to, or read by, the CPU 4, at step 62 and processed and identified at step 62A. The CPU 4, at step 63, will then determine whether the re-enable or reset command code, which

was entered, is a valid code. The CPU 4, at step 64, will then determine if the command code is a valid disable code. Since a valid re-enable or reset code has been entered, the CPU 4 will determine that the command code is not a disable code. The CPU 4 will then proceed to step 71 and will determine whether the command code is a valid re-enable or reset command code.

If the command code is not a valid re-enable or reset command code, the CPU 4 will exit the operational program or interrupt service routine, at step 76, and will await entry of the next valid access code and command code. It should be noted that, as an added security measure, the apparatus 1 may be programmed so that, upon the receipt of one or more invalid access and/or command codes, the apparatus 1 may require that the authorized user or operator re-program a new access code for the apparatus 1 through a central office or agency or maintenance service which provides service and/or maintenance for the apparatus 1. In any event, the apparatus 1 may be accessed by a valid access code with such accessing resetting the apparatus 1 and initiating the operation of the apparatus 1.

If, however, the entered command code is

002740 594550

identified as a valid re-enable or reset code, at step 71, the CPU 4, subsequent to such determination, but prior to actually re-enabling or resetting the vehicle ignition system 7, re-enabling the vehicle fuel pump system 9, and de-activating or re-activating, whichever the case may be, any one or more of the various vehicle equipment systems 11 which are utilized, will perform a test, at step 72, in order to verify that the vehicle ignition system 7 is, in fact, still disabled. If, at step 72, the vehicle ignition system is still enabled or on, the CPU 4 will exit the operational program or interrupt service routine and will await entry of the next valid access code and command code. This test, at step 72, is a safety feature which serves to ensure that no re-enabling or resetting signal will be issued by the apparatus 1 if the vehicle ignition system 7 is not disabled. In this manner, the operation of the vehicle ignition system 7 will not be interrupted or affected, which interruption may be unsafe if the vehicle is already in operation or in motion.

It should be noted that neither the vehicle fuel pump system 9 nor any of the various vehicle equipment systems 11 which may be utilized, should have their status of operation altered as any interruption of the status quo

of each of the respective systems, during normal vehicle operation, may also be unsafe.

If the vehicle ignition system 7 is determined to be disabled, at step 72, the CPU 4 will, at step 73, issue a control signal which will re-enable or reset the vehicle ignition system 7. This may be accomplished by any method and/or technique which would re-enable or re-activate the vehicle ignition system circuitry. The CPU 4, at step 74, will then issue a control signal to re-enable or reset the vehicle fuel pump system 9, if so desired, which may also be accomplished by re-enabling or re-activating the vehicle fuel pump system circuitry.

The CPU 4 will then, at step 75, issue control signals to each of the various vehicle equipment systems 11 which are utilized, so as to de-activate or re-activate the respective system(s) which had been activated or de-activated, respectively, earlier at step 70 or otherwise. Upon the completion of the above-described events, the vehicle will then be ready for operation, barring any need for service and/or for repairs. The CPU 4, upon the completion of step 75, will then exit the operational program or interrupt service routine, at step 76, and will



await the next valid accessing and/or activation of the apparatus 1.

As noted above, if the re-enable or reset command code is not a valid code, the CPU 4 will ignore the received data, will exit the operational program or interrupt service routine, at step 76, and will await the next valid accessing and/or activation of the apparatus 1. In this regard, if an invalid command code should be entered into the transmitter interface 2A, such as by an authorized user or operator who has made a mistaken entry, or who is trying to cancel the accessing and activation of the apparatus 1, or by an unauthorized person attempting to gain unauthorized access to the apparatus 1, the CPU 4, upon identifying the code as an invalid command code, will ignore the command code transmission, and will exit the operational program or interrupt service routine, at step 76. The CPU 4 will then await the next valid accessing and/or activation of the apparatus 1.

Any subsequent accessing of the apparatus 1 will reset the apparatus 1 thereby preventing the apparatus 1 from being left in a state of "limbo". In this manner, the apparatus 1 serves to prevent an unauthorized accessing



systems 11 which may be utilized.

As noted above, with reference to Figure 6, once a valid disable code has been recognized by the CPU 4, at step 64, the apparatus 1 will, at step 65, activate the vehicle position and locating device 13. The operation of the vehicle position and locating device 13 will then be initiated, at step 65, and will operate simultaneously and/or concurrently with, and independently of, the apparatus 1 and the CPU 4 in the performance of the operational steps 66-76 and 71-76 as described above. In this manner, the vehicle position and locating device 13 is utilized to calculate, determine and transmit vehicle position data in a manner independently of apparatus control over the vehicle ignition system 7, fuel pump system 9, and/or any of the vehicle equipment system(s) 11.

Figure 7 illustrates the operation, in flow diagram form, of the vehicle position and locating device 13. As noted above, the operation of the vehicle position and locating device 13 commences at step 65 as shown in Figure 6 and thereafter operates simultaneously and/or concurrently with, and independently of, the operation of the apparatus 1 and the CPU 4. With reference to Figure 7,

the operation of the vehicle position and locating device 13 is initiated at step 200 of Figure 7. At step 201, the computer 21 of the vehicle position and locating device 13 activates the global positioning device 22, which is any one of the widely known global positioning devices. Once activated, the global positioning device 22 calculates vehicle position data at step 202 by using well known global positioning calculation methods and/or techniques.

Once the vehicle position data has been calculated at step 202, a test is performed at step 203 in order to determine if the geographical position data (i.e., specific vehicle location identified on a map, location on identified roadway, etc.) has been requested. If geographical position or location data has been requested, the computer 21 will, at step 204, calculate the geographical position or location data of the vehicle in conjunction with the digital and/or digitized map data which is stored in the database 25. The calculated geographical position data of the vehicle will then be transmitted, at step 205, by the transmitter 24, of the vehicle position and locating device 13, to the vehicle position system receiver 14 which is located at the location of the authorized user or operator, or at the authorized office, agency or other entity.

004440 5947590

If, at step 203, geographic position data has not been requested, then the position data which is calculated by the global positioning system 22 is transmitted, at step 205, to the vehicle position system receiver 14. In the preferred embodiment, the calculated vehicle position data is transmitted repeatedly for a predefined time interval which time interval is facilitated by utilizing the time delay at step 206.

In the preferred embodiment, the position data is transmitted repeatedly for a time period of five (5) minutes, which time period is monitored by utilizing the time delay function at step 206. Once the pre-defined time delay period has elapsed, the computer 21 will, at step 207, determine whether the vehicle position and location device 13 has been de-activated, such as would occur once the vehicle has been found and/or recovered and/or if the apparatus 1 has been reset. If the vehicle position and location device 13 has not been de-activated, operation of the vehicle position and locating device 13 will return to step 202 and will once again calculate vehicle position data. In this manner, vehicle position and/or location data may be updated. If the vehicle position device 13 has been

de-activated, the computer 21 will, at step 208, exit the operational routine or interrupt service routine and will await its next re-activation.

Figure 8 illustrates the operation, in flow diagram form, of the vehicle position system receiver 14 which, as noted above, is located at the location of the authorized user or operator or at an office, agency or other entity which is authorized to receive the vehicle position and/or location data. The vehicle position system receiver 14 receives the vehicle position data which is transmitted by the vehicle position transmitter 24 of the vehicle position and locating device 13. In the preferred embodiment, the operation of the vehicle position system receiver 14 is activated upon receipt of a valid access code transmitted by the transmitter 3A. In this regard, the above-described access code, which is transmitted by the transmitter 3A, is also received by the receiver 30 of the vehicle position system receiver 14 thereby activating same.

In this regard, the access code is also utilized to activate the vehicle position system receiver 14. The vehicle position system receiver 14 may also be manually and/or in some other way activated by the authorized user or

operator or by the authorized agency, office or entity.

Operation of the vehicle position system receiver 14 is initiated at step 250. The computer 31 will, upon receipt of the activate signal, activate the receiver 30, at step 251, which will await transmission of the vehicle position or location data, from the vehicle position and locating device 13. Upon transmission of the vehicle position data from the vehicle position and locating device 13, the receiver 30 will, at step 252, receive the vehicle position data.

The computer 31 will then, at step 253, determine if the received data is geographic position data. If geographic position data is obtained, the computer 31 will, at step 254, store the position data in memory and will, at step 255, display the position data on the display 33. If geographic position data has not been received, the computer 31, at step 256, will generate an inquiry on the display 33 to determine if geographic position data is desired. The system will then await operator response via the user interface 32. If the user selects to receive geographic position data, the computer 31 will proceed to step 257 and calculate geographic position data from the received "raw"

position data.

The computer 31 will then, at step 254, store the data for the vehicle position and will, at step 255, display the vehicle position data on the display 33. If, at step 256, the user does not want to obtain geographic position data, the computer 31 will, at step 254, store the "raw" position data and display it on the display 33 in a latitude and/or longitude format, and/or in any other suitable and/or conventional format and/or manner which is utilized in conjunction with the global positioning device 22 or global positioning technology.

At step 258, the computer 31 will determine if more than one vehicle position data point has been stored. If only one vehicle position data point has been stored, the computer 31 will instruct the receiver 30 to receive the next vehicle position data transmission at step 252. If, at step 258, more than one vehicle position data point has been stored, the computer 31 will, at step 259, calculate the track of vehicle movement and display the vehicle movement track on the display 33 at step 260. The computer 31, at step 261, will then determine if the authorized user or operator desires to continue operation of the vehicle



position system receiver 14.

If the user or operator desires operation of the vehicle receiver system receiver 14 to continue, such as is the case when the vehicle has not yet been found or recovered, the computer 31 will return to operation, at step 252, and the receiver 30 will receive the next vehicle position data transmission and operation of the vehicle position system receiver 14 will continue. If, however, it is determined, at step 261, that the user or operator desires to discontinue operation of the vehicle position system receiver 14, such as is the case when the vehicle has been found or recovered, the vehicle position system receiver 14 will be de-activated and its operation will cease at step 262. Thereafter, the vehicle position system receiver 14 will await its next activation.

The above described operation of the vehicle position and locating device 13 and the vehicle position system receiver 14 will continue to operate, and continuously update vehicle position data until the vehicle is found and/or recovered, at which point these systems may be de-activated. It is envisioned that the apparatus 1 of the present invention may track and/or locate the vehicle

anywhere in the world. It is also important to note that vehicle position data, which is received at the vehicle position system receiver 14, may be output via a printer, via the computer display monitor and/or via a voice synthesized audio output via a speaker (not shown) which is connected to the vehicle position receiver system 14.

In this manner, the apparatus 1 of the present invention may be utilized to find and/or recover a stolen vehicle and/or to monitor vehicle operation and/or vehicle location and/or movement.

In the above described manner, the present invention provides for an apparatus and a method for allowing an authorized user or operator of a vehicle to prevent vehicle theft, to facilitate stolen vehicle recovery, and/or to safely surrender the vehicle under force, or threat of force, while affording the authorized user or operator the opportunity to prevent or seriously thwart the vehicle theft from a safe location or vantage point and facilitate vehicle recovery. The present invention may also be utilized to thwart, or prevent a vehicle theft even if the vehicle theft was discovered at a later time or from a location remote from the vehicle.

00410-5967560

Further, the present invention provides for an apparatus and a method for disabling and/or re-enabling various systems of the vehicle, when the vehicle is not in use, simply by "calling up" the apparatus 1, so as to disable the vehicle and provide added security against theft. In this manner, an authorized user or operator may disable the vehicle ignition system 7, fuel pump system 9 and/or any of a variety of the vehicle equipment systems 11, of a vehicle which may be parked or in use, from any location and/or at any time.

An authorized user or operator may also access the apparatus 1 at any time and, with the use of an appropriate command code, may determine the operating status of the vehicle and/or any one or more of the various vehicle systems so as to determine if, for example, the ignition system 7 or fuel pump system 9 is activated or on, thereby alerting the authorized user or operator that someone is operating the vehicle. An authorized user or operator may also access the apparatus 1 so as to determine vehicle position and/or location and/or the geographic location of the vehicle. In this manner, the authorized user or operator can provide monitoring and/or control over the

00470-39E1560

vehicle and/or any of the vehicle equipment systems and/or devices, determine the status of the vehicle and/or of any of the vehicle equipment systems or devices, and/or determine and/or monitor the location of his or her vehicle at any time and for any reason. In this regard, a safe and an effective anti-theft and/or vehicle recovery apparatus and method is provided by the present invention.

While, in the above description, the operation of the present invention has been described and illustrated in conjunction with the use of a valid disable command code and a valid re-enable or reset command code, it is also envisioned that any number of valid disable command codes and/or any number of valid re-enable or reset command codes may be utilized, wherein each different disable code or re-enable or reset code may selectively disable or re-enable or reset any one or any combination of the vehicle systems, such as the vehicle ignition system 7, the vehicle fuel pump system 9, and/or any one or more of the various vehicle auxiliary equipment systems 11 which may be utilized. In this manner, the authorized user or operator may utilize the present invention to selectively disable, re-enable, deactivate or re-activate any one or more of the vehicle systems, or a combination thereof, at his or her discretion,

004740 5947560

at any time, wherever he or she may be. The operational program and/or interrupt service routine may be altered, modified and/or supplemented in order to service the multitude of possible command codes which may be utilized in conjunction with the apparatus 1.

As noted above, an authorized user or operator may also utilize command codes for determining status of the apparatus 1, or of the vehicle, or any one or more of the vehicle systems. A command code may also be employed to simply determine vehicle position data. In any of the above cases, however, the operational program or interrupt service routine would have to be modified so as to identify and service each of the possible command codes. The operational program or interrupt service routine would also have to be modified so as to identify each of the possible valid command codes so as to provide for the appropriate CPU 4 and apparatus 1 response thereto.

The apparatus 1, the CPU 4, and/or any of the vehicle systems and/or devices and/or vehicle equipment systems, and/or the respective interface devices associated therewith or corresponding thereto, may also be programmable by the user or operator via the transmitter 2, and/or at the

00240 594560

vehicle in an appropriate manner and by an appropriately secured device, so that certain parameters, such as the timing, and/or the degree of disabling or re-enabling, of the various vehicle systems may be programmed and/or controlled. Any of the above-described systems and/or devices may be programmable for timed enabling and/or disabling, for timed activation, and/or for deferred activation, etc. By utilizing a multitude of command codes, including disable codes and/or re-enable or reset codes, which codes affect different vehicle systems, or combinations thereof, it is possible to selectively control the vehicle systems from a remote location. This feature provides for greater versatility in the utilization of the apparatus 1.

By providing the capability for utilizing different disable codes and/or re-enable or reset codes, the authorized user or operator may utilize the apparatus 1 of the present invention so as to disable or re-enable or reset the vehicle ignition system 7 and the vehicle fuel pump system 9, at any time, so as to disable the vehicle without activating or de-activating any of the vehicle equipment systems 11, and therefore, without drawing attention to the vehicle.

00440-591550

This feature would enable an authorized user or operator to disable, re-enable, or reset the vehicle ignition system 7, the vehicle fuel pump system 9, and/or activate or de-activate any one or more of the various vehicle equipment systems 11, so as to disable the vehicle at any time and from any location. In this manner, the authorized user or operator may disable the vehicle, and/or any of the vehicle systems, daily and/or nightly, while at work, before going to sleep at night, or at any other time, simply by accessing and activating the apparatus 1 by using the transmitter 2 or transceiver which may simply be a touch-tone telephone.

Since the vehicle ignition system 7 is usually off at these times, the disabling, and the subsequent re-enabling of other vehicle systems will occur as described above with regards to Figure 6. In this manner, the present invention may provide for an effective device by which to "lock-up" a vehicle, at any time, even when the vehicle is in the rightful possession, or under the control, of the vehicle owner and/or authorized operator.

In any and/or all of the embodiments described

00440 594560

herein, the present invention can be utilized in order to provide control over and/or to monitor, the vehicle, any of the vehicle systems, devices, and/or components, vehicle operating status, the operating status of the vehicle's systems, devices, and/or components, video and/or audio inside the vehicle, video and/or audio outside the vehicle, video and/or audio in the vicinity of the vehicle, to provide video conferencing with individuals inside, outside, and/or in the vicinity of the vehicle, to provide notification to a vehicle owner and/or operator of a an operational status and/or state of disrepair of the vehicle and/or a vehicle system, device, and/or component, to provide for remote vehicle diagnostic and/or repair functions, to provide notification from the vehicle CPU 4 regarding vehicle operation, operational status of the vehicle and/or any of the vehicle systems, devices, and/or components.

The present invention can also be utilized in order to provide video and/or audio confirmation and/or verification of and/or for any control, monitoring, and/or security, operation and/or activity which can be effected and/or facilitated via the apparatus of the present invention. In this manner, a user of the present invention



who may, for example, effect a control or monitoring function involving the vehicle (i.e. starting the engine, turning on the lights, activating the alarm, turning off the engine, turning the vehicle, and so on, etc.) can obtain a video and/or audio confirmation at and/or from the vehicle that the operation has been effected.

In any and/or all of the embodiments described herein, the respective vehicle equipment system(s) and/or the command computer can ascertain a state of disrepair in any vehicle system, device, and/or component, and can provide notification to the CPU 4. The CPU 4 can then generate and/or transmit an appropriate notification signal to the central processing computer servicing the vehicle. The central processing computer can thereafter generate and/or transmit an appropriate signal and/or message to the computer and/or communication device associated with the vehicle owner or operator.

In any and/or all of the embodiments described herein, the apparatus of the present invention can be utilized in order to notify the manufacturer, dealer, and/or repair center of a state of disrepair, thereby allowing the respective manufacturer, dealer, and/or repair center, to

monitor the repairs of the respective vehicles, maintain satisfactory inventories, and/or in other ways utilize this information to better service their respective clients and/or customers.

In any and/or all of the embodiments described herein, the present invention can be utilized in order to provide remote diagnostic services regarding the vehicle. The respective vehicle service individuals and/or entities can access the vehicle via the computer and/or communication device associated with the service individual and/or entity and via the central processing computer. Vehicle, vehicle system, vehicle device and/or vehicle component, diagnostic data and/or information can be obtained at and/or from the vehicle and can be transmitted back to the computer and/or communication device of the service individual and/or entity, via the central processing computer and/or directly. Thereafter, the diagnostic data and/or information can be presented to and/or diagnosed at and/or by the computer and/or communication device associated with the service individual and/or entity. In this manner, the present invention can be utilized in order to provide remote vehicle repair diagnostics. In instances wherein a repair can be effected by reprogramming a respective vehicle system,

device, and/or component, the service individual and/or entity can then transmit an appropriate repair signal to the vehicle from the computer and/or communication device associated with service individual and/or entity, either directly and/or via the central processing computer, to the CPU 4 located at the vehicle. Thereafter, the CPU 4 can effect the reprogramming of the respective vehicle system, device, and/or component. In this manner, the apparatus and method of the present invention can be utilized in order to effect remote diagnostics and repair of, for, and regarding and/or all of the vehicles, motor vehicles, boats, marine vessels, aircraft, equipment, structures, and/or premises described herein.

In any and/or all of the embodiments described herein, the apparatus and method of the present invention can be utilized in conjunction with "smart" vehicle components and/or devices. These "smart" components and/or devices can detect wear, state of disrepair, and/or any other defined condition and/or state, of the respective component and/or device. Upon the detection of a condition or state for which an individual owner or operator may desire and/or should be notified, the respective "smart" component and/or device can generate and/or transmit an

appropriate signal to the CPU 4 which can then generate and transmit a signal to the central processing computer. The central processing computer can thereafter generate and/or transmit an appropriate signal to the computer and/or communication device associated with the owner or operator of the vehicle. In a reverse fashion, a vehicle owner or operator and/or an agent thereof can access the "smart" component, via the apparatus and method of the present invention can determine the condition and/or state of the "smart" component.

Figure 9 illustrates another preferred embodiment of the present invention, wherein an arming device 15 and an activation device 16 are utilized in conjunction with the components of the apparatus 1 of Figure 1. In Figure 9, the arming device 15 is utilized to arm, activate, or access the apparatus 1 and provides a means by which to access the apparatus 1 separate and apart from the transmitter 2/receiver 3 combination.

The arming device 15 may be a remote transmitter such as those utilized in conjunction with anti-theft devices or systems and/or alarm systems. The arming device 15 may also be a switch, a card reader, including stripe

004740 59E7560

card readers, proximity card readers, turnstile card readers, insertion card readers, key and key insertion devices and readers, magnetic card readers and/or optical cards and/or card readers. The arming device 15 may also be a key switch, a key pad, a keyless activation device with associated key, and/or any other suitable device. The arming device may also be, or include, a voice recognition device(s) or reader(s), voice signature device(s) or reader(s), fingerprint recognition device(s) or reader(s), handprint recognition device(s) or reader(s), hand scanners and/or hand geometry readers. As with any of the above devices and/or components, the arming device(s) may be directly connected to the CPU 4 or may be linked to the CPU 4 via a wireless communication link or medium.

It is also envisioned that, with a suitable arming device 15, such as a keypad or other device for data input, the authorized user or operator may arm the apparatus 1 with a desired command code. In this manner, a programmable arming device may be utilized wherein apparatus operation, under the command of any of the variety of possible command codes, can be made automatic and/or programmable. An automatic activation may also be performed by an appropriate code being transmitted to the apparatus 1 via the

002740 59E75560

transmitter 2 or transceiver.

The activation device 16 is chosen to correspond with the arming device 15. In this regard, the activation device 16 may be a switch, a key switch, a keypad, a suitable card reader, including stripe card readers, proximity card readers, turnstile card readers, insertion card readers, key and key insertion devices and readers, magnetic card readers, optical card readers, insertion card readers, optical readers as well as a keyless security device. The activation device 16 is connected directly to the CPU 4 as shown in Figure 9 or it may be connected to the CPU 4 via a wireless communication link or medium.

In certain circumstances, such as when a keypad, key switch and/or any of the various cards and card readers are employed, the arming device 15 and the activation device 16 may be one and the same device and/or comprise one and the same combination of devices.

The embodiment of Figure 9 provides a mechanism by which an authorized user or operator may arm, activate, and/or access the apparatus 1. Upon the arming, activation or accessing of the apparatus 1, the CPU 4 will, upon the

activation of the vehicle ignition system 7, monitor the activation device 16. After a selected and predetermined time interval, chosen in the preferred embodiment to be ten (10) seconds, has elapsed, if the user or operator of the vehicle has failed to successfully activate the activation device 16, either by activating the switch, by using the associated key, by inputting a predetermined code (i.e. password or pass code) into the keypad, or by utilizing the appropriate card or key or other device corresponding to the utilized card reader or other associated device, the CPU 4 will issue an appropriate disabling and/or command signal to activate the apparatus 1 automatically so as to thereby disable the vehicle as described above and so as to also activate the vehicle position and locating device 13.

The command code may be pre-programmed as a default code and/or may be operator selected and programmed in any manner described above for user or operator entry of such a code. In this regard, if an unauthorized user or operator fails to properly activate the activation device 16, within the predetermined time period, the CPU 4 will recognize such failure as that which results from an unauthorized use or operation of the vehicle.

002740-59EFS60

In the above-described manner, the embodiment of Figure 9 provides a mechanism by which the apparatus 1, may be activated automatically or self-activated. By utilizing the embodiment of Figure 9, the authorized user or operator, after arming the apparatus 1, need not perform a transmission of an access code and a command code to the apparatus 1, as a default code, which is previously chosen and/or programmed into the apparatus 1 will provide a command signal to the CPU 4. As noted above, with an appropriate arming device 15, the command code may be user selected and/or programmable.

It is also important to note that the arming device 15/ activation device 16 may be utilized to activate the apparatus 1 and/or any one or more of the vehicle systems, including the ignition system 7, the fuel pump system 9, any one or more of the various vehicle equipment systems 11 which are utilized in conjunction with the apparatus 1, and/or the vehicle position and locating device 13. In this regard, the arming device 15 and the activation device 16 provide a mechanism by which to automatically activate the apparatus 1 along with any other anti-theft system utilized in the vehicle which may be controlled by the apparatus 1. The vehicle position and locating device



13 may also be activated by an automatic activation of the apparatus 1.

It is also possible to program the apparatus 1 with a command code so that the apparatus will be programmed to become activated, or de-activated, automatically, such as upon the occurrence, or lack thereof, of a pre-defined event or occurrence and/or at any desired time. If the apparatus 1 has been programmed to become activated automatically, the transmitter 4A of the CPU 4 can transmit data relating to vehicle status, apparatus status, the status of each of the vehicle systems utilized, as well as vehicle position data, to a respective receiver which is utilized by the authorized user or operator and/or at the receiver located at a central security office. In this regard, the present invention provides an apparatus and method by which a vehicle and/or a premises can report a theft situation and/or occurrence by itself. The apparatus can transmit a signal via transmitter 4A, or any other suitable apparatus transmitter, to a user, operator, owner, occupant or authorized office or individual of, and for, a respective vehicle or premises.

The apparatus may also be designed or programmed to notify the user, operator, owner, occupant, authorized

002140 525 550

central office or individual with, or by, multiple communication devices, methods and/or efforts. The apparatus may be designed or programmed to telephone, telephone at an alternate phone and/or at a business phone, beep or page, send a facsimile (fax) message transmission to, send a voice message transmission to, send an electronic mail message transmission to, and/or send a message to an answering service for, a user, operator, owner, occupant, authorized central office or individual of, and for, the respective vehicle or premises.

In this regard, the apparatus may be designed or programmed to telephone an owner, user, operator, occupant, or other authorized central office individual or other authorized individual, at a primary phone number, at an alternate or forwarding phone number and/or at a business phone number, send a beeper or pager message to the individual or central office and/or send a facsimile, an electronic mail message, a voice mail message and/or an answering service message to, or for, the individual or central office. In this manner, the apparatus may report a theft and/or a malfunction situation to the interested individual(s) by utilizing multiple notification and/or reporting avenues so as to provide and ensure that the

interested individual(s) are in fact notified as soon as possible.

The user, operator, owner or occupant of the respective vehicle or premises may also activate the apparatus from the vehicle or premises and transmit a signal to the receiver 955 of the apparatus 950 at the central office and/or to the receiver 2C, if necessary, so as to communicate with individuals at these receiver locations and/or to report an emergency, a breakdown and/or some other occurrence.

In this regard, the apparatus 1, when in the automatic activation mode, or simply when being monitored and/or during a status check, may transmit data to the appropriate and respective devices. Further, in this regard, the apparatus 1 of the present invention may be utilized to exercise and/or perform control, monitoring and/or security functions, to report and/or to prevent a vehicle theft and/or determine vehicle position and/or location, in instances when the authorized user or operator is unaware of the theft and/or does not have access to the apparatus or vehicle.

002440 59275560

The apparatus and method of the present invention may also be programmable for programmed and/or automatic activation, self-activation, programmed and/or automatic operation and/or self- operation. The apparatus and method of the present invention may provide for an immediate, as well as for a deferred, control, monitoring and/or security function, and/or response thereto, so as to provide for the immediate and/or the deferred control, activation, de-activation, programming, monitoring and/or security, etc., of any one or more of the respective vehicle systems, equipment, devices, appliances, etc., which may be utilized in the above described embodiments as well any of the embodiments described hereinbelow.

In yet another preferred embodiment of the present invention, the vehicle position and locating device 13 includes a plurality of global positioning devices which are strategically located at various points and/or locations in, or on, the vehicle. Figure 10 illustrates another preferred embodiment of the vehicle position and locating device which is denoted by the reference numeral 130. In Figure 10, the vehicle position and/or locating device 130 includes five (5) global positioning devices 22A, 22B, 22C, 22D and 22E with corresponding global positioning receivers 23A, 23B,

00240-594560



ascertained if a vehicle has been dismantled, "chopped", or stripped, which information may be vital in the recovery process, and in the insurance claims process. The embodiment of Figure 10 can also be utilized in order to ascertain if the vehicle has been compacted or "boxed." In this manner, the present invention may also be utilized in order to determine if the vehicle has been structurally altered in any manner.

The apparatus and the method of the present invention may also be utilized in conjunction with a central security office or agency, such as a private security service, or by local or regional law enforcement offices or agencies, in order to provide a prompt means by which to report a vehicle theft, provide for a manner in which to disable and/or re-enable a vehicle system, and/or to determine vehicle position and/or location so as to facilitate the recovery of the vehicle. In such an embodiment, vehicle owners will register their vehicles and any and all necessary information pertaining thereto, including access and command codes, with the central security office.

The present invention may also be utilized so as

to provide for a centralized control and/or monitoring of and/or for any of the vehicle and/or premises described herein, and/or for prompt law enforcement theft reporting, response to the theft report and/or recovery of the respective vehicles described herein. Figure 11A illustrates another preferred embodiment of the present invention wherein the apparatus 1 is utilized in conjunction with a central processing computer which can be located at a central security office or agency, such as a private security service, or by a local or regional law enforcement office or agency. In Figure 11A, the apparatus 1 is utilized in conjunction with an associated apparatus 950 which, in the preferred embodiment, is located at the central security office.

The apparatus 950 includes a receiver 955 which may, but need not, be identical to the receiver 3 which is utilized in the apparatus 1. The receiver 955 should be capable of receiving the various codes which can be transmitted by the transmitter 2 or transceiver (i.e. access code(s) and command code(s)) for any one or for any number of vehicles which may be registered with the central security office. The receiver 955 should be capable of receiving the access code(s) and command code(s) for each

registered apparatus.

In the embodiment of Figure 11A, the apparatus 950 also includes a central processing computer 970, which is connected to the receiver 955. The apparatus 950 also includes a vehicle position system receiver 960 for receiving position data which is transmitted from the vehicle position and locating device 13. The position data system receiver 960 is also connected to the central processing computer 970. The central processing computer 970 also includes the requisite memory ROM and RAM devices (not shown). The apparatus 950 also includes a display device 980, an user interface device 975 and an output device 985 which can be a printer, all of which devices are connected to the central processing computer 970 and are utilized in conjunction therewith.

The apparatus 950 also includes a transmitter 965 which is connected to the central processing computer 970. The transmitter 965 serves to transmit data to the apparatus 1. The transmitter 965 may also be utilized to transmit data to the transmitter 2, to the vehicle position system receiver 14 and/or to the home and/or personal computer 150, if utilized. Such data which is transmitted from the

00240-594560



transmitter 965 may include the various access and command codes and/or other codes, such as those codes for ascertaining the status of the vehicle, the apparatus 1, or any one or more of the vehicle systems which are controlled, monitored, and/or secured or used in conjunction with the apparatus 1.

In the preferred embodiment, the receiver 955, the vehicle position system receiver 960, and the transmitter 965 are the same types of devices as those utilized in the apparatus of Figure 1. In this regard, the receivers 955 and 960, and the transmitter 965, are devices for receiving, and transmitting, respectively, radio signals, satellite communication signals, telecommunications signals, optical communication signals and/or other signals and/or those signals, including digital signals, which are utilized in conjunction with personal communication devices and/or personal communication services (PCS) devices. The devices utilized should, however, be of the same type and/or operate compatibly with the corresponding transmitters and receivers of the apparatus 1.

It is envisioned that the authorized user or operator will register his or her vehicle with the apparatus

002440-5947560

950 such as by registering vehicle identification information along with vehicle access and command code data along with any other pertinent information described herein. Further, the receiver 955 is programmed to receive any and all of the signals transmitted from each one of the respective registered transmitters 2 of the respectively registered vehicles.

The vehicle position system receiver 960 is programmed to receive the vehicle position data which is transmitted by each one of the respectively registered vehicle position and locating devices 13 of each of the respectively registered vehicles.

The apparatus 950 is utilized in conjunction with the apparatus 1 in the following manner. As noted above, the central processing computer 970 is capable of recognizing all of the possible access code(s) and command code(s) which are recognized by the apparatus 1 for a particular vehicle. The apparatus 950 is capable of storing vehicle identification information as well as access code and command code data for a plurality of registered vehicles.

00440-534530

Upon the occurrence of a vehicle theft, or the discovery thereof, the authorized user or operator can access the apparatus 1 in the manner described above. In a first embodiment, the access code is transmitted to and received at, the receiver 3 of apparatus 1 and at the receiver 955 of apparatus 950. Upon receipt of the access code by both the receiver 3 and the receiver 950, both the apparatus 1 and the apparatus 950, respectively, will be accessed.

Applicant hereby incorporates by reference herein the subject matter of U.S. Patent No. 4,882,579 which teaches a code division multiplexed acknowledge back (ack-back) paging system which includes a central station which transmits a group of message signals to a group of ack-back pagers which are addressed as a group.

The signal received at the receiver 955 is transmitted to, or read from, the central processing computer 970 of the apparatus 950. The central processing computer 970 will then identify the vehicle which is stolen and/or which has been accessed. When the authorized user or operator transmits the command code, the command code is received at the receiver 955 of the apparatus 950 as well as

00440 536 550

at the receiver 3 of the apparatus 1. In this regard, when the apparatus 1 is processing the command code and performing the functions corresponding thereto, the central processing computer 970 of the apparatus 950 is simultaneously and/or concurrently processing the command code data so that the authorized personnel monitoring the apparatus 950 will be aware of which command code has been transmitted by the authorized user or operator and which operations are being exercised and/or performed, or are to be performed, on the vehicle (i.e., vehicle ignition system and/or fuel pump system disabled, etc.). The authorized personnel monitoring the apparatus 950 will also be aware of which operations and/or systems, equipment, devices and/or appliances, are being controlled, monitored and/or secured. The apparatus 950, in the preferred embodiment, may also be utilized to exercise and/or perform control, monitoring and/or security functions on, or over, the vehicle and/or any of the vehicle systems, equipment, devices and/or appliances.

Upon the transmission of the vehicle position data from the vehicle position and locating device 13, the vehicle position data will be transmitted to, and received by, the vehicle position system receiver 960 of the

apparatus 950 as well as by the vehicle position system receiver 14 of the apparatus 1. The central processing computer 970 of the apparatus 950 will process the received vehicle position data simultaneously and/or concurrently with the processing of said position data by the CPU 4 of the apparatus 1.

In this regard, the vehicle position data can be processed by, and at, the apparatus 950. Vehicle position data can then be displayed to authorized personnel at the central security office on the display device 980 or output via the output device 985 which may be a printer. While operation of the apparatus 950 may be automatic, authorized personnel may enter commands so as to provide control over, or operate, the apparatus 950 via the user interface 975, if desired.

In this manner, vehicle location or movement may be displayed, and/or tracked, on the display device 980 or output via the output device 985 at the central security office. In this regard, authorized personnel at the central security office or agency could locate or track the vehicle and alert the proper authorities.

004740-3927560

In yet another embodiment, the access code may be only transmitted to, and received by, the receiver 955 of the apparatus 950. The apparatus 1 may then be accessed and controlled via access and command codes which are transmitted by the transmitter 965 of the apparatus 950 which access and command codes are received by the receiver 3 of the respective vehicle. In this embodiment, the authorized personnel may provide control over the apparatus 1 by inputting data and commands into the user interface 975. In this embodiment, the vehicle position data and any data transmitted by the CPU 4 of the apparatus 1, is transmitted to, and received by, the vehicle position receiver system 960 and/or at the vehicle position system receiver 14, respectively.

In yet another embodiment, the access code may be transmitted and received only at the receiver 3 thereby accessing the apparatus 1. The vehicle transmitter 3A then transmits a data signal to the receiver 955 of the apparatus 950 thereby alerting the apparatus 950 that the vehicle has been stolen. Command code data as well as other data may then be transmitted to the apparatus 1 via the transmitter 965 of the apparatus 950. The apparatus 950 may be designed to operate and/or perform any and all of the described

002740-594560

functions automatically and without operator intervention. Vehicle position data may then be received by the vehicle position receiver system 960 and/or at the vehicle position system receiver 14, respectively. The vehicle position data may then be processed at the central processing computer 970 of the apparatus 950 and/or at the computer 31 of the vehicle position system receiver 14.

In this manner, the apparatus 950 can serve to provide control over, and monitor the functions of, the apparatus 1 for a vehicle or for a plurality of vehicles, and further, the apparatus 950 provides the means by which to allow a central security office or local or regional law enforcement office or agency to exercise and/or perform control, monitoring and/or security functions over the vehicles which are registered therewith. The apparatus and method of the present invention may also be utilized to monitor the operational status, operation and/or state or status of a one or more of the various vehicle systems, components and/or devices. In the case where the apparatus 1 is automatically activated, as described above, the apparatus 1 can transmit a signal, indicative of vehicle theft and/or an unauthorized use or operation of the vehicle, to the apparatus 950 thereby reporting the





system. Law enforcement efforts could be greatly assisted and enhanced as information which identifies the vehicle could then be immediately available to the central security office and/or to the local or regional law enforcement authorities. Such an embodiment could also greatly assist in processing insurance claims relating to stolen vehicles.

The apparatus 950 may also be utilized in connection with an on-line service and/or on, or over, the Internet and/or the World Wide Web, or other suitable communication network or medium, in a manner analogous to that described above in connection with the utilization of a home and/or a personal computer 150.

Figure 11B illustrates yet another preferred embodiment of the present invention wherein the apparatus of Figure 11A is utilized in conjunction with an on-line service and/or on, or over, the Internet and/or the World Wide Web or other suitable communication network or medium. In Figure 11B, the home and/or personal computer 150 of Figure 5A is utilized in place of the transmitter 2 or transceiver and the vehicle position system receiver 14. The apparatus 950 has associated therewith an on-line service and/or an Internet computer system or server 952

002140 5945560

with an associated server receiver 953 and transmitter 957 for receiving and transmitting, respectively, any and all data utilized in conjunction with the operation of the server 952, the apparatus 1 and the apparatus 950.

The transmitter 957 transmits any and all appropriate signals to the appropriate and respective devices of the arrangement of Figure 11B during apparatus operation. In this regard, the server 952 can exercise and/or perform control, monitoring and/or security functions on, or over, the apparatus 1 and the apparatus 950 and also provide for an apparatus which can be utilized, in its entirety, over an on-line service and/or on, or over, the Internet and/or the World Wide Web or other suitable communication network or medium. In Figure 11B, a Web Site 954 is associated with the server 952.

Any and all data received by the receiver 955 is also received by the server receiver 953. Data which is transmitted by the home and/or personal computer 150, the CPU transmitter 4A, the receiver transmitter 3A and the vehicle position and locating device transmitter 24 are received by the server receiver 953 as well as by the receivers 955 and 960, respectively.

00440-594590

The server 952 will process the data received by the server receiver 953 and perform the same processing functions and/or computing functions as the central processing computer 970, the CPU 4, and/or the computer 150.

The user may transmit data, via the home and/or personal computer 150, directly to the apparatus 1, to the apparatus 950 and/or to the server 952. By using the computer 150 in conjunction with an appropriate communications medium, the authorized user or operator may access the server 952 via the on-line service and/or via the associated Web site 954, or in any other appropriate manner, so as to provide control over, and/or obtain any and all of the above-described data and/or information regarding, his or her vehicle over the on-line service and/or on, or over, the Internet and/or the World Wide Web or other suitable communication network or medium.

The authorized user or operator may also access and provide control over or exercise and/or perform control, monitoring and/or security functions on, or over, the apparatus 1, the apparatus 950 and/or the server 952 via the on-line service and/or via the Web Site 954. In this



the vehicle systems. The apparatus and method of the present invention may be equipped with software and hardware for providing a systematic check of any and all of the apparatus and vehicle systems, including the status or state of the vehicle equipment systems, equipment, devices and/or appliances and provide data relating thereto to the user or operator and/or to the authorized individual(s) at the above-described central security office. The server transmitter 957 can transmit control signals and/or other data, including information to the authorized user or operator and to the apparatus 1 and/or to the apparatus 950. It is also envisioned that the server 952 and the central processing computer 970 may be combined into a single central computer system.

In the above manner, the apparatus and method of the present invention provides a remote-controlled control, monitoring and/or security system, or vehicle anti-theft and/or vehicle recovery apparatus and method, for use in conjunction with an on-line service and/or on, or over, the Internet and/or the World Wide Web or other suitable communication network or medium. In this manner, the apparatus and method of the present invention also provides for a remote-controlled control, monitoring and/or security

002700597560

system which provides visual, video, graphical, audio and/or audible information to the user. Use over the Internet and/or the World Wide Web and/or other related communication systems and/or mediums and/or over on-line services provides for global coverage, control, monitoring and/or security for the vehicle.

In any and/or all of the embodiments described herein, the present invention can be utilized in order to provide control over and/or to monitor, the vehicle, any of the vehicle systems, devices, and/or components, vehicle operating status, the operating status of the vehicle's systems, devices, and/or components, video and/or audio inside the vehicle, video and/or audio outside the vehicle, video and/or audio in the vicinity of the vehicle, to provide video conferencing with individuals inside, outside, and/or in the vicinity of the vehicle, to provide notification to a vehicle owner and/or operator of a an operational status and/or state of disrepair of the vehicle and/or a vehicle system, device, and/or component, to provide for remote vehicle diagnostic and/or repair functions, to provide notification from the vehicle CPU 4 regarding vehicle operation, operational status of the vehicle and/or any of the vehicle systems, devices, and/or



computer and/or communication device associated with the vehicle owner or operator.

In any and/or all of the embodiments described herein, the apparatus of the present invention can be utilized in order to notify the manufacturer, dealer, and/or repair center of a state of disrepair, thereby allowing the respective manufacturer, dealer, and/or repair center, to monitor the repairs of the respective vehicles, maintain satisfactory inventories, and/or in other ways utilize this information to better service their respective clients and/or customers.

In any and/or all of the embodiments described herein, the present invention can be utilized in order to provide remote diagnostic services regarding the vehicle. The respective vehicle service individuals and/or entities can access the vehicle via the computer and/or communication device associated with the service individual and/or entity and via the central processing computer.

Vehicle, vehicle system, vehicle device and/or vehicle component, diagnostic data and/or information can be obtained at and/or from the vehicle and can be transmitted

00240 5961560



back to the computer and/or communication device of the service individual and/or entity, via the central processing computer and/or directly. Thereafter, the diagnostic data and/or information can be presented to and/or diagnosed at and/or by the computer and/or communication device associated with the service individual and/or entity. In this manner, the present invention can be utilized in order to provide remote vehicle repair diagnostics.

In instances wherein a repair can be effected by reprogramming a respective vehicle system, device, and/or component, the service individual and/or entity can then transmit an appropriate repair signal to the vehicle from the computer and/or communication device associated with service individual and/or entity, either directly and/or via the central processing computer, to the CPU 4 located at the vehicle. Thereafter, the CPU 4 can effect the reprogramming of the respective vehicle system, device, and/or component. In this manner, the apparatus and method of the present invention can be utilized in order to effect remote diagnostics and repair of, for, and regarding and/or all of the vehicles, motor vehicles, boats, marine vessels, aircraft, equipment, structures, and/or premises described herein.

In any and/or all of the embodiments described herein, the apparatus and method of the present invention can be utilized in conjunction with "smart" vehicle components and/or devices. These "smart" components and/or devices can detect wear, state of disrepair, and/or any other defined condition and/or state, of the respective component and/or device. Upon the detection of a condition or state for which an individual owner or operator may desire and/or should be notified, the respective "smart" component and/or device can generate and/or transmit an appropriate signal to the CPU 4 which can then generate and transmit a signal to the central processing computer. The central processing computer can thereafter generate and/or transmit an appropriate signal to the computer and/or communication device associated with the owner or operator of the vehicle. In a reverse fashion, a vehicle owner or operator and/or an agent thereof can access the "smart" component, via the apparatus and method of the present invention can determine the condition and/or state of the "smart" component.

In another preferred embodiment, the vehicle equipment system(s) 11 can also include a vehicle operation

data monitoring device which monitors vehicle operation such as vehicle speed, the status of any of the vehicle systems (i.e. ignition system, fuel pump system, positioning system), and/or any of the vehicle equipment systems described herein, direction of travel, attitude of travel, video inside, outside, and/or at, the vehicle, audio inside, outside, and/or at, the vehicle, activity inside, outside, and/or at, the vehicle, and/or any other electrical, mechanical, electro-mechanical, hydraulic, and/or other system, equipment system, device, component, and/or appliance.

The vehicle operation data monitoring device can be connected to, and/or linked with, any of the herein-described systems, equipment systems, subsystems, devices, components, and/or appliances, including, but not limited to, speedometer, cruise control device, gyroscope, gyrocompass, directional light device(s), light system(s), door lock system(s), attitude measuring device(s), ignition system, braking system, electronic system(s), hydraulic system(s), video recording device(s) or camera(s), audio recording device(s) or microphone(s), and/or any other systems, equipment systems, devices, components, and/or appliances, described herein and/or otherwise, for

00240 596550

controlling and/or monitoring the operation of same and/or for monitoring activity at the vehicle.

The vehicle operation data monitoring device can operate and/or function in a manner similar to, and/or analogous to, an aircraft flight data recorder in monitoring and/or recording operation data. In addition, the vehicle operation data monitoring device can receive any and/or all of the data monitored and transmit same to the any of the herein-described transmitters 2, home and/or personal computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices, which can be utilized to receive this data and/or information. In this manner, the vehicle operation and/or movement can be monitored by, and/or at, any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers.

The vehicle operation data monitoring device can transmit any and/or all vehicle operation data to a respective transmitter(s), home and/or personal computer(s), computer(s), and/or server computer(s), in real-time, live, in a time-delayed manner, and/or in any other appropriate

00240 544560

manner. The vehicle operation data monitoring device can also record and/or store any of the operation data monitored thereby.

Any data and/or information which is received from the vehicle operation data monitoring device can be stored at any of the herein-described transmitters 2, home and/or personal computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices, which can be utilized to receive this data. The data and/or information which is received from the vehicle operation data monitoring device can be stored in any suitable manner which can typically involve storing same digitally, storing same digitally in an overwriting manner, so that, for example, the data can be stored and/or overwritten for a given time period and overwriting same, storing same in a looping and/or re-circulating storage medium or tape, storing same in a manner utilized in conjunction with, and/or similar to, the manner in which data and/or information is stored in aircraft flight data recorders and/or aircraft cockpit voice recorders.

The vehicle operation data monitoring device can

00440592560

004740-5967560

be accessed by any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers, and/or the individuals utilizing same, in order to monitor and/or ascertain vehicle operation, and/or video and/or audio activity inside, outside, and/or at, the vehicle, at any time and/or to retrieve and/or to access operating data regarding vehicle operation and/or movement, and/or video and/or audio activity inside, outside, and/or at, the vehicle, which has been recorded and/or stored by the vehicle operation data monitoring device. For example, vehicle operating data and/or information, along with video and/or audio information inside, outside, and/or at the vehicle, can be accesses and/or obtained.

The vehicle operation data monitoring device can be utilized to monitor vehicle operation, to investigate a malfunction, to diagnosis a malfunction or other problem, to investigate a cause of an accident, and/or can be utilized for any other purpose.

In a preferred embodiment, the vehicle operation data monitoring device can be programmed to monitor vehicle operation data and/or to transmit same to any respective transmitter, home and/or personal computer, computer,

central computer, and/or server computer, continuously, at certain times, and/or under certain conditions, such as a detection by the CPU 4 and/or by the vehicle operation data monitor.

The vehicle operation data monitoring device can also be activated remotely by any individual via any respective transmitter, home and/or personal computer, computer, central computer, and/or server computer, and/or user of same. The vehicle operation data monitoring device can also be activated by a vehicle operator and/or occupant and/or via any other individual.

The data and/or information obtained from the vehicle operation data monitoring device can be stored at any of the respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, for accessing at any time. The data and/or information can be stored at the vehicle operation data monitoring device, and/or at any of the herein-described and respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, in a "loop tape" manner and/or digitally in a looping and/or data

002140 5945569

overwriting manner so that, for example, only a most recent time period is recorded.

The vehicle operation data monitoring device can be utilized in conjunction with the present invention so as to obtain, to record, and/or access, and/or analyze, vehicle operation data at the vehicle and/or from a location remote from the vehicle, in a network environment, thereby facilitating the monitoring and/or the analysis of vehicle operation data.

In yet another preferred embodiment, the present invention is utilized in conjunction with a marine vessel or vehicle. Figure 12 illustrates an another preferred embodiment of the present invention, wherein the apparatus and method is utilized in conjunction with a boat. In Figure 12, the apparatus is denoted generally by the reference numeral 1200. While the boat described below is a motor-powered boat, any type of boat, including, but not limited to sailboats, may also be utilized in conjunction with the present invention.

In Figure 12, the components of the apparatus 1200 which are common to the apparatus 1 of Figure 1 are



00244 52550

designated by the same reference numerals. In Figure 12, the CPU 4 is electrically connected and/or linked to the boat ignition system 1207, which is located externally from the apparatus 1200. The CPU 4 may or may not be connected and/or linked with the boat ignition system 1207 through an ignition system interface 1208 which is also shown in Figure 12. The CPU 4 may transmit signals to, as well as receive signals from, the boat ignition system 1207. In this manner, the CPU 4 and the boat ignition system 1207, may exchange information between each other. In this manner, the CPU 4, upon receiving an appropriate signal from the receiver 3, and upon the completion of the requisite data processing routine(s), may issue an electrical, an electronic, and/or any other suitable signal, including a digital command signal, to the boat ignition system 1207. This electrical, electronic and/or other suitable signal, or digital command signal, may be one which will disable the boat ignition system 1207 or one which will re-enable or reset the boat ignition system 1207. The CPU 4 may also interrogate the boat ignition system 1207 and/or receive data from the boat ignition system 1207 which is indicative of boat ignition system status (i.e., whether the boat ignition system 1207 is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the boat fuel pump system 1209 which is also located externally from the apparatus 1. The CPU 4 may or may not be connected and/or linked with the boat fuel pump system 1209 through a fuel pump system interface 1210 which is also shown in Figure 12. In the case of an electrical or an electronic fuel pump system, the CPU 4 may provide an electrical, an electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable the boat fuel pump system 1209.

In the case of a mechanical fuel pump system, the CPU 4 may provide an electrical, electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable an electrical valve system, which may be used to control the operation of the mechanical fuel pump system. Whichever the case may be, the CPU 4 will be capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the boat fuel pump system 1209. The CPU 4 may also interrogate and/or receive data from the boat fuel pump system 1209 which is indicative of boat fuel pump system status (i.e., whether the boat fuel pump system 1209 is on

00440 991560

or off). The CPU 4 may also be electrically connected and/or linked to an appropriate device (not shown) for controlling the operation of a boat exhaust system.

The CPU 4, in the preferred embodiment, is also electrically connected and/or linked to at least one or more of a boat equipment system(s) 1211. The boat equipment system(s) 1211 are located externally from the apparatus 1 and may or may not be connected and/or linked to the CPU 4, via a boat equipment system(s) interface device(s) 1212 which may or may not be required for each one of the variety or multitude of the boat equipment systems which may be utilized in conjunction with the apparatus.

The boat equipment system(s) 1211 may include a loud siren or alarm, which may be located in the cabin or passenger compartment of the boat and, which may produce a loud piercing sound so as to make it unbearable for an intruder to remain inside the boat cabin and/or passenger compartment. The boat equipment system 1211 may also include an external siren or alarm, which may produce a loud piercing sound, which may be utilized to draw attention to the boat. The boat equipment system 1211 may also include a horn, which may blare continuously or intermittently, so as

004110-559559

to also draw attention to the boat. The boat equipment system(s) 1211 can also include "smart" windows which turn opaque and/or darker depending upon interior lighting.

The boat external light system(s), which may include the boat head lights, tail lights or flashers, which may be constantly illuminated or which may blink on and off repeatedly so as to draw attention to the boat, may also be utilized as a boat equipment system 1211. The boat equipment system 1211 may also include a power door or hatch locking system, including electronic and/or electrical dead bolt locking devices, for securing the boat cabin, cockpit or passenger compartment so as to prevent an entry thereunto or an exit therefrom. In addition, the boat equipment system(s) 1211 may include an engine compartment locking device, such as an electrical and/or mechanical locking device, for preventing unauthorized access into the boat engine compartment, so as to prevent any tampering with the apparatus 1 or with other systems and/or components of the boat.

The boat equipment system(s) 1211 may also include any one or more of the widely known boat anti-theft systems and may also include a boat recovery system or device,

including a homing and/or a tracking system, each of which system(s) may be activated by the apparatus 1200 of the present invention. The boat equipment system(s) 1211 may also include communication devices, such as two-way radios, radios, televisions, navigational devices and/or equipment, fire extinguishing equipment, pumping devices for pumping water out of the boat, radar devices and equipment, emergency and/or distress signal equipment, sonar devices and/or equipment, and any electrical, electronic and/or otherwise activated appliances and/ or equipment which may be utilized on a boat. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The boat equipment system(s) 11 may also include systems for detecting failures in any of the above or any other equipment systems and report such failures to the user or operator whether he or she is operating the boat or is not onboard the boat and/or for reporting such failures to a central office.

The boat equipment system(s) 1211 may also include video recording and/or photographing equipment, which may include video recording device(s) and/or a camera(s), such as those utilized in conjunction with personal computers,

televisions, digital televisions, interactive televisions, display telephones, video telephones, and/or other communication devices, including personal communication devices, or a still picture camera(s). The video recording device(s) or camera(s) may be digital recording devices or cameras or other suitable devices or cameras, including typical video recording devices or cameras. The video recording device(s) or camera(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting video images recorded by the video recording device(s) or camera(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the video recording device(s) or camera(s).

The video recording device(s) or camera(s) may be located at any location on the interior of the boat such as, for example, in the cabin, cockpit, and/or passenger compartment of the boat so that the user or operator, or any other authorized individual, may observe and/or photograph the operator of the boat, or the occupants and/or cargo of the boat. The video recording(s) or camera(s) may also be located on the boat exterior. The video recording device(s)

002740-341553

00240594560

or camera(s) may have wide angles for maximum angular viewing and may also be pivotable and/or movable. The video device(s) or camera(s) can be moveable along a track or other guiding device or element so that the respective video recording device or camera can be moved along the boat interior or exterior. The video recording device(s) or camera(s) may record and/or transmit the recorded video and/or the picture(s) in real time and/or live. The video recording device(s) or camera(s) may also be equipped with a storage medium, for storing the recorded video and/or picture(s), and a transmitter or transceiver for transmitting the stored video and/or picture(s) to the user or operator at a later time. In this manner, real-time, as well as deferred, video and/or picture(s) transmissions may be provided.

The boat equipment system(s) 1211 may also include audio recording equipment, which may include audio recording device(s) such as microphones and/or tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, telephones, cellular telephones, display telephones, video telephones, and/or other communication devices, including personal communication devices. The audio recording

device(s) may be digital audio recording devices or other suitable audio devices including typical audio recording devices. The audio recording device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting the recorded audio to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the audio recording device(s).

The audio recording device(s) may be located at any location on the interior and/or exterior of the boat so that the user or operator, or any other authorized individual, may hear what is transpiring, and/or what has transpired, inside and/or outside the boat. The audio recording device(s) may also be pivotable and/or movable. The audio device(s) or microphone(s) can be moveable along a track or other guiding device or element so that the respective audio recording device or microphone can be moved along the boat interior or exterior. The audio recording device(s) may record and/or transmit the recorded audio in real time and/or live. The audio recording device(s) may also be equipped with a storage medium, for storing the recorded audio, and a transmitter or transceiver for



transmitting the stored audio at a later time. In this manner, real-time as well as deferred audio transmissions may be provided.

The boat equipment system(s) 1211 may also include an intercom system or device or telephone, cellular, digital or otherwise for providing a means by which to allow the user or operator, or other authorized operator, to communicate with the operator and/or occupants of the boat. The boat equipment system 11 can also include video conferencing devices and/or equipment for enabling the boat occupants and/or individuals inside the boat, outside the boat, and/or in the vicinity of the boat, to engage in and/or partake in video conferences and/or video conferencing with others via a communication network.

The boat equipment system(s) 1211 can also include the boat battery or batteries, boat fuel cell or fuel cells, battery monitoring equipment, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell temperature measuring device, fuel cell by-product (i.e. water or other by-product, heat, etc.) measuring device, fuel cell output measuring device (i.e. voltmeter, ammeter, current measure, power meter, etc.), a boat rudder, a rudder control and/or

00240 592550

002740-594560

monitoring device, a depth sounding device and/or depth sounding control and/or monitoring device, a navigation system, a navigation control and/or monitoring system, an automatic pilot, a radar system, a sonar system, boat data recorder, a boat data recorder control and/or monitoring device, a boat cockpit voice recorder, a boat cockpit voice recorder control and/or monitoring device, an emergency oxygen control and/or monitoring device, an emergency oxygen deployment detection device, an air bag deployment device, an air bag deployment detection device, a boat dashboard or control console display device, a gyroscope for measuring boat pitch, roll, yaw, or attitude, a gyrocompass for measuring direction of travel, a boat data recorder and/or a boat operation data recorder.

The boat equipment system(s) 1211 may also include monitoring device(s) for reading and/or monitoring the status and/or condition of any of the boat fuel supply, water and/or coolant supply, electrical generator and/or alternator operation, battery charge level, fuel cell electrical power output, fuel cell fuel supply level, fuel cell operating temperature, fuel cell by-product output level, and/or engine or motor temperature level, marine control system and/or any other boat operation and/or system

function and/or boat equipment system(s) operating status and/or condition. The monitoring device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s).

The boat equipment system(s) 1211 may also include communication devices, such as two-way radios, radios, televisions, navigational devices and/or equipment, fire extinguishing equipment, radar devices and equipment, emergency and/or distress signal equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which may be utilized in a boat or marine vessel. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The boat equipment system(s) 1211 may also include electrical and/or electronically controlled dead bolt locking devices for use on doors, windows, and/or in conjunction with any other opening components and/or components for gaining access to various locations and/or in, and/or any systems, devices, and/or

00440 591580

components of, the boat.

The boat equipment system(s) 1211 may also include locks for preventing use and/or access to various locations, systems, devices, and/or components of the boat. The boat equipment systems may also include hydraulic and/or pneumatic equipment and/or other equipment, including winches, etc, which may be remotely activated as described herein. The boat equipment system(s) 11 may also include boat communication devices including, but not limited to radios, televisions and entertainment devices, two-way radios, cellular telephones and equipment, etc. The boat equipment system(s) 1211 may also include systems for detecting failures in any of the above, or any other, equipment systems and report such failure(s) to the user or operator whether he or she is operating the boat or is not in the boat and/or for reporting such failures to a central office.

The boat equipment system(s) 1211 can also include the boat command computer which is utilized to control and/or to the various electronic, electrical, mechanical, and/or electromechanical systems, components, devices, of the boat. The command computer can control and monitor any



The boat equipment system(s) 1211 can also include wear and/or usage indicators and/or detection devices which can be connected with either the command computer and/or the central processing computer and which can be utilized so as to monitor the wear and/or usage of any of the herein-described electronic, electrical, mechanical, and/or electro-mechanical, systems, devices, and/or components.

The boat equipment system(s) 11 can also include automatic control devices for controlling and/or monitoring boat systems and/or devices for boat movement and/or motion, such as, but not limited to, boat motor and/or transmission system for controlling boat forward and/or reverse direction of movement, boat acceleration system for controlling speed of movement, boat rudder system and/or boat steering system, boat pump system, and/or any other system and/or component for controlling and/or for effecting remote-control over the movement, motion and/or operation of the boat.

In the case of commercial equipment, industrial equipment, drilling equipment, mining equipment, excavating equipment, and/or other commercial equipment, the boat equipment system(s) 1211 may also include loading and/or

unloading mechanisms, cutting mechanisms, bailing mechanisms, winches and any and all of the various systems and devices utilized in conjunction with these boats and/or equipment.

As noted above, the use of any one or more of the vehicle equipment system or systems 11, and their associated interface devices 12, may be optional and may further include any other systems and/or devices which may, or are, utilized in and/or in conjunction with any of the above noted or envisioned vehicles. The vehicle equipment system(s) 11, especially when the apparatus is utilized in conjunction with law enforcement and/or military vehicles, may also include guns and/or weapon systems and/or self defense systems and electronic warfare systems.

As noted above, the use of any one or more of the boat equipment system(s) 1211, and their associated interface devices 1212, may be optional. Further, wireless devices may be utilized for any of the devices utilized in conjunction with the apparatus 1200.

The boat equipment system(s) 1211 receives signals from the CPU 4, which signals serve to activate or de-

activate, or vice versa, whichever the case may be, the respective boat equipment system(s) which are utilized in conjunction with the apparatus 1200. The boat equipment system(s) 1211 may also include any other suitable boat system or equipment feature which may be utilized to draw attention to the boat and/or in some other way to impede boat theft. It should be noted that any of the interface devices 1208, 1210 and 1212 may include any of the requisite interfacing circuitry which may be necessary to facilitate CPU 4 control over the respective systems which may be utilized.

In another preferred embodiment, the boat equipment system(s) 1211 can also include a boat operation data monitoring device which monitors boat operation such as boat speed, the status of any of the boat systems (i.e. ignition system, fuel pump system, positioning system), and/or any of the boat equipment systems described herein, direction of travel, attitude of travel, video inside, outside, and/or at, the boat, audio inside, outside, and/or at, the boat, activity inside, outside, and/or at, the boat, and/or any other electrical, mechanical, electro-mechanical, hydraulic, and/or other system, equipment system, device, component, and/or appliance.



002440-594560

The boat operation data monitoring device can be connected to, and/or linked with, any of the herein-described systems, equipment systems, subsystems, devices, components, and/or appliances, including, but not limited to, speedometer, cruise control device, rudder, gyroscope, gyrocompass, directional light device(s), light system(s), door lock system(s), depth sounding measurement devices, attitude measuring device(s), ignition system, braking system, electronic system(s), hydraulic system(s), video recording device(s) or camera(s), audio recording device(s) or microphone(s), and/or any other systems, equipment systems, devices, components, and/or appliances, described herein and/or otherwise, for controlling and/or monitoring the operation of same and/or for monitoring activity at the boat.

The boat operation data monitoring device can operate and/or function in a manner similar to, and/or analogous to, an aircraft flight data recorder in monitoring and/or recording operation data. In addition, the boat operation data monitoring device can receive any and/or all of the data monitored and transmit same to the any of the herein-described transmitters 2, home and/or personal

computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices, which can be utilized to receive this data and/or information. In this manner, the boat operation and/or movement can be monitored by, and/or at, any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers.

The boat operation data monitoring device can transmit any and/or all boat operation data to a respective transmitter(s), home and/or personal computer(s), computer(s), and/or server computer(s), in real-time, live, in a time-delayed manner, and/or in any other appropriate manner. The boat operation data monitoring device can also record and/or store any of the operation data monitored thereby.

Any data and/or information which is received from the boat operation data monitoring device can be stored at any of the herein-described transmitters 2, and/or home and/or personal computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices,

00240-594560

which can be utilized to receive this data. The data and/or information which is received from the boat operation data monitoring device can be stored in any suitable manner which can typically involve storing same digitally, storing same digitally in an overwriting manner, so that, for example, the data can be stored and/or overwritten for a given time period and overwriting same, storing same in a looping and/or re-circulating storage medium or tape, storing same in a manner utilized in conjunction with, and/or similar to, the manner in which data and/or information is stored in aircraft flight data recorders and/or aircraft cockpit voice recorders.

The boat operation data monitoring device can be accessed by any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers, and/or the individuals utilizing same, in order to monitor and/or ascertain boat operation, and/or video and/or audio activity inside, outside, and/or at, the boat, at any time and/or to retrieve and/or to access operating data regarding boat operation and/or movement, and/or video and/or audio activity inside, outside, and/or at, the boat, which has been recorded and/or stored by the boat operation data monitoring device. For example, boat operating data

and/or information, along with video and/or audio information inside, outside, and/or at the boat, can be accesses and/or obtained.

The boat operation data monitoring device can be utilized to monitor boat operation, to investigate a malfunction, to diagnosis a malfunction or other problem, to investigate a cause of an accident, and/or can be utilized for any other purpose.

In a preferred embodiment, the boat operation data monitoring device can be programmed to monitor boat operation data and/or to transmit same to any respective transmitter, home and/or personal computer, computer, central computer, and/or server computer, continuously, at certain times, and/or under certain conditions, such as a detection by the CPU 4 and/or by the boat operation data monitor.

The boat operation data monitoring device can also be activated remotely by any individual via any respective transmitter, home and/or personal computer, computer, central computer, and/or server computer, and/or user of same. The boat operation data monitoring device can

also be activated by a boat operator and/or occupant and/or via any other individual.

The data and/or information obtained from the boat operation data monitoring device can be stored at any of the respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, for accessing at any time. The data and/or information can be stored at the boat operation data monitoring device, and/or at any of the herein-described and respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, in a "loop tape" manner and/or digitally in a looping and/or data overwriting manner so that, for example, only a most recent time period is recorded.

The boat operation data monitoring device can be utilized in conjunction with the present invention so as to obtain, to record, and/or access, and/or analyze, boat operation data at the boat and/or from a location remote from the boat, in a network environment, thereby facilitating the monitoring and/or the analysis of boat operation data.

004743-5947560

00240 594550

The apparatus 1200 also includes a position and locating device 13 which can be utilized in order to determine the position and/or the location of the boat. The position and locating device 13 can be utilized so as to determine the position of the boat anywhere in the world and provide for the transmission of boat position and/or location data to any appropriate system receiver so that the boat may be located and/or tracked and recovered. In the preferred embodiment, the position and locating device 13 includes and utilizes a global positioning device and an associated transmitter for transmitting position and/or location data to the authorized user or operator and/or to an authorized office or agency authorized to receive and/or to monitor such data transmissions.

The apparatus 1200 of Figure 12 also includes a position and locating system receiver 14, which may be employed by the authorized user or operator and/or by the authorized office or agency, for receiving and/or processing the data which is transmitted from the position and locating device 13 as described above. The apparatus of may also comprise a user interface device (not shown).

The apparatus and method of the preferred

embodiment of Figure 12 may be utilized and/or operates in the same or in a similar and/or analogous manner as described above with regards to the embodiments of Figures 1-11B and/or consistent with the description of the various embodiments and features of the present invention as described herein. The apparatus and method of the present invention may also provide for the immediate, and/or for the deferred, control, activation, deactivation, programming, monitoring and/or security of any one or more of the boat and/or marine vessel or vehicle systems, equipment, devices, appliances, etc., in the same, similar and/or analogous manner as described above with its use in conjunction with vehicles and/or motor vehicles.

Although the present invention has been hereinabove described as being utilized in conjunction with a boat, it is noted that the present invention may be utilized in conjunction with a ship, cruise ship, or any other boat, manned or unmanned, regardless of size, shape or form, private, commercial and/or military. The boat equipment systems may also include guns and/or weapon systems and/or self-defense systems and/or electronic warfare systems. The present invention may also be utilized in conjunction with submersible vehicles such as submarines.

004740 59E 550

In yet another preferred embodiment, the present invention is utilized in conjunction with an aircraft, airplane, jet, or helicopter. Figure 13 illustrates another preferred embodiment of the present invention, wherein the apparatus and method is utilized in conjunction with an airplane. The apparatus of Figure 13 is denoted generally by the reference numeral 1300. In Figure 13, the components of the apparatus which are common to the apparatus 1 of Figure 1 are designated by the same reference numerals. In Figure 13, the CPU 4 is electrically connected and/or linked to the airplane ignition system 1307, which is located externally from the apparatus 1300. The CPU 4 may or may not be connected and/or linked with the airplane ignition system 1307 through an ignition system interface 1308 which is also shown in Figure 13.

The CPU 4 may transmit signals to, as well as receive signals from, the airplane ignition system 1307. In this manner, the CPU 4 and the airplane ignition system 1307, may exchange information between each other. In this manner, the CPU 4, upon receiving an appropriate signal from the receiver 3, and upon the completion of the requisite data processing routine, may issue an electrical, an



electronic, and/or any other suitable signal, including a digital command signal, to the airplane ignition system 1307. This electrical, electronic and/or other suitable signal, or digital command signal, may be one which will disable the airplane ignition system 1307 or one which will re-enable or reset the airplane ignition system 7. The CPU 4 may also interrogate the airplane ignition system 1307 and/or receive data from the airplane ignition system 1307 which is indicative of ignition system status (i.e., whether the airplane ignition system 1307 is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the airplane fuel pump or supply system 1309 which is also located externally from the apparatus 1300. The CPU 4 may or may not be connected and/or linked with the airplane fuel pump system 1309 through a fuel pump system interface 1310 which is also shown in Figure 13. In the case of an electrical or an electronic fuel pump system, the CPU 4 may provide an electrical, an electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable the airplane fuel pump or supply system 1309.

In the case of a mechanical fuel pump system, the

CPU 4 may provide an electrical, electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable an electrical valve system, which may be used to control the operation of the mechanical fuel pump system. Whichever the case may be, the CPU 4 will be capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the airplane fuel pump system 1309. The CPU 4 may also interrogate and/or receive data from the airplane fuel pump or supply system 1309 which is indicative of airplane fuel pump system status (i.e., whether the airplane fuel pump system 1309 is on or off). The CPU 4 may also be electrically connected and/or linked to an appropriate device (not shown) for controlling the operation of a airplane exhaust system.

The CPU 4, in the preferred embodiment, is also electrically connected to at least one or more of an airplane equipment system(s) 1311. The airplane equipment system(s) 1311 are located externally from the apparatus 1300 and may or may not be connected to the CPU 4, via an airplane equipment system(s) interface device(s) 1312 which may or may not be required for each one of the variety or multitude of the airplane equipment systems which may be

utilized in conjunction with the apparatus 1300.

The airplane equipment system(s) 1311 may include a loud siren or alarm, which may be located in the cabin, passenger compartment and/or cockpit of the airplane and, which may produce a loud piercing sound so as to make it unbearable for an intruder to remain inside the airplane cabin, passenger compartment and/or cockpit. The airplane equipment system(s) 1311 may also include an external siren or alarm, which may produce a loud piercing sound, which may be utilized to draw attention to the airplane. The airplane equipment system(s) 1311 may also include a horn, which may blare continuously or intermittently, so as to also draw attention to the airplane. The airplane equipment system(s) 1311 can also include "smart" windows which turn opaque and/or darker depending upon interior lighting.

The airplane external light system(s), which may include the airplane head lights, tail lights or flashers, which may be constantly illuminated or which may blink on and off repeatedly so as to draw attention to the airplane, may also be utilized as a airplane equipment system 1311. The airplane equipment system(s) 1311 may also include a power door or hatch locking system or device, for securing

the airplane cabin, passenger compartment and/or cockpit so as to prevent an unauthorized entry thereunto or an exit therefrom. In addition, the airplane equipment system(s) 1311 may include a locking system, such as a mechanical locking system, for preventing an unauthorized access into the airplane engine compartment so as to prevent tampering with the apparatus 1300 or with other systems and/or components of the airplane.

The airplane equipment system(s) 11 may also include any one or more of the widely known airplane anti-theft systems and may also include a airplane recovery system or device, including a homing and/or a tracking system, each of which system(s) may be activated by the apparatus 1300 of the present invention. The airplane equipment system(s) 1311 may also include landing gear, cabin and/or interior pressurization systems, devices, and/or cabin pressurization control and/or monitoring systems and/or devices, communication devices, such as two-way radios, radios, televisions, navigational devices and/or equipment, fire extinguishing equipment, radar devices and equipment, emergency and/or distress signal equipment, sonar devices and/or equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which

002740 59E7560

may be utilized on an airplane. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The airplane equipment system(s) 1311 may also include systems for detecting failures in any of the above or any other equipment systems and report such failures to the user or operator whether he or she is operating the airplane or is not onboard the airplane and/or for reporting such failures to a central office.

The airplane equipment system(s) 1311 may also include video recording and/or photographing equipment, which may include video recording device(s) and/or a camera(s), such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, display telephones, video telephones, and/or other communication devices, including personal communication devices, or a still picture camera(s). The video recording device(s) or camera(s) may be digital recording devices or cameras or other suitable devices or cameras, including typical video recording devices or cameras. The video recording device(s) or camera(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for

transmitting video images recorded by the video recording device(s) or camera(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the video recording device(s) or camera(s).

The video recording device(s) or camera(s) may be located at any location on the interior of the airplane such as, for example, in the dashboard, cabin, cockpit, and/or passenger compartment of the airplane so that the user or operator, or any other authorized individual, may observe and/or photograph the operator of the airplane, or the occupants and/or cargo of the airplane. The video recording(s) or camera(s) may also be located on the airplane exterior. The video recording device(s) or camera(s) may have wide angles for maximum angular viewing and may also be pivotable and/or movable. The video device(s) or camera(s) can be moveable along a track or other guiding device or element so that the respective video recording device or camera can be moved along the airplane interior or exterior. The video recording device(s) or camera(s) may record and/or transmit the recorded video and/or the picture(s) in real time and/or live. The video recording device(s) or camera(s) may also be equipped with a

storage medium, for storing the recorded video and/or picture(s), and a transmitter or transceiver for transmitting the stored video and/or picture(s) to the user or operator at a later time. In this manner, real-time, as well as deferred, video and/or picture(s) transmissions may be provided.

The airplane equipment system(s) 1211 may also include audio recording equipment, which may include audio recording device(s) such as microphones and/or tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, telephones, cellular telephones, display telephones, video telephones, and/or other communication devices, including personal communication devices. The audio recording device(s) may be digital audio recording devices or other suitable audio devices including typical audio recording devices. The audio recording device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting the recorded audio to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the audio recording device(s).

The audio recording device(s) may be located at any location on the interior and/or exterior of the airplane so that the user or operator, or any other authorized individual, may hear what is transpiring, and/or what has transpired, inside and/or outside the airplane. The audio recording device(s) may also be pivotable and/or movable. The audio device(s) or microphone(s) can be moveable along a track or other guiding device or element so that the respective audio recording device or microphone can be moved along the airplane interior or exterior. The audio recording device(s) may record and/or transmit the recorded audio in real time and/or live. The audio recording device(s) may also be equipped with a storage medium, for storing the recorded audio, and a transmitter or transceiver for transmitting the stored audio at a later time. In this manner, real-time as well as deferred audio transmissions may be provided.

The airplane equipment system(s) 1311 may also include an intercom system or device or telephone, cellular, digital, or otherwise for providing a means by which to allow the user or operator, or other authorized operator, to communicate with the operator and/or occupants of the





flight data recorder, a flight data recorder control and/or monitoring device, a cockpit voice recorder, a cockpit voice recorder control and/or monitoring device, a wing flap control and/or monitoring device, an emergency oxygen control and/or monitoring device, an emergency oxygen deployment detection device, an air bag deployment device, an air bag deployment detection device, an airplane cockpit or control console display device, a gyroscope for measuring airplane pitch, roll, yaw, or attitude, a gyrocompass for measuring direction of travel, an airplane data recorder and/or an airplane operation data recorder.

The airplane equipment system(s) 1311 may also include monitoring device(s) for reading and/or monitoring the airplane fuel supply, water and/or coolant supply, electrical generator and/or alternator operation, battery charge level, fuel cell electrical power output, fuel cell fuel supply level, fuel cell operating temperature, fuel cell by-product output level, and/or engine or motor temperature level, airplane flight control systems and/or any other airplane operation and/or system function and/or airplane equipment system(s) operating status and/or condition. The monitoring device(s), in a preferred embodiment, has associated therewith a transceiver or

00470-590560

transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s).

The airplane equipment system(s) 1311 may also include communication devices, such as two-way radios, radios, televisions, navigational devices and/or equipment, fire extinguishing equipment, radar devices and equipment, emergency and/or distress signal equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which may be utilized in an airplane or aircraft. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The airplane equipment system(s) 1311 may also include electrical and/or electronically controlled dead bolt locking devices for use on doors, windows, and/or in conjunction with any other opening components and/or components for gaining access to various locations on and/or in, and/or any systems, devices, and/or components of, the airplane.

The airplane equipment system(s) 1311 may also

004740 591590

include locks for preventing use and/or access to various locations, systems, devices, and/or components of the airplane. The airplane equipment systems may also include hydraulic and/or pneumatic equipment and/or other equipment, including hydraulic control devices and/or control systems, winches, etc, which may be remotely activated as described herein. The airplane equipment system(s) 1311 may also include airplane communication devices including, but not limited to radios, televisions and entertainment devices, two-way radios, cellular telephones and equipment, etc. The equipment system(s) 1311 may also include systems for detecting failures in any of the above, or any other, equipment systems and report such failure(s) to the user or operator whether he or she is operating the airplane or is not in the airplane and/or for reporting such failures to a central office.

The airplane equipment system(s) 1311 can also include the airplane command computer which is utilized to control and/or to the various electronic, electrical, mechanical, and/or electromechanical systems, components, devices, of the airplane. The command computer can control and monitor any of the systems, components, and/or devices, of the airplane, including, but not limited to, the

automatic pilot system, radar system, lift control system, control surface system, the ignition system, engine and/or thrusting system, braking system, the fuel system, fuel injection system, landing gear, fuel dumping system, electrical systems for ignition, lights, horn, door locks, exhaust system, windows, fuel pump, oil pump, engine timing device, battery, fuel cells, fuel supply device, video recording equipment, audio recording equipment, airplane integrated positioning device, and/or any other system, device, or component which can be controlled and/or monitored by the command computer.

The command computer can transmit control signals and/or status request signals to any of the herein-described airplane systems, components and/or devices so as to respectively control and/or monitor the operating status and/or condition of the respective system, component and/or device. The command computer can also receive signals from the respective systems, devices and/or components, with said signals containing data and/or information concerning the operating status, operating state, and/or condition, of the respective systems, devices and/or components. The command computer can be utilized so as to control, monitor, and/or provide diagnostic information for any of the airplane

00240 593590

systems, components, and/or devices, which are controlled and/or monitored with the command computer.

The airplane equipment system(s) 1311 can also include wear and/or usage indicators and/or detection devices which can be connected with either the command computer and/or the central processing computer and which can be utilized so as to monitor the wear and/or usage of any of the herein-described electronic, electrical, mechanical, and/or electro-mechanical, systems, devices, and/or components.

The airplane equipment system(s) 1311 can also include automatic control devices for controlling and/or monitoring airplane systems and/or devices for airplane take-off, flight, normal cruising, automatic pilot cruising, landing, airplane movement and/or motion, such as, but not limited to, airplane takeoff, thrust, engine or propeller system, forward thrust system for controlling airplane forward direction movement, airplane acceleration system for controlling speed of movement, airplane tail, wings, rudder, and/or other control surface systems and/or devices, airplane steering system, airplane braking system, airplane reverse thrust system, landing gear, airplane pump system,

0044034750

airplane turning and/or banking systems, and/or any other system and/or component for controlling and/or for effecting remote-control over the movement, motion and/or operation of the airplane.

In the case of commercial equipment, industrial equipment, the airplane equipment system(s) 1311 may also include loading and/or unloading mechanisms, winches, etc., and any and/or all of the various systems and devices utilized in conjunction with these boats and/or equipment.

In another preferred embodiment, the airplane equipment system(s) 1311 can also include a airplane operation data monitoring device which monitors airplane operation such as airplane speed, the status of any of the airplane systems (i.e. ignition system, fuel pump system, positioning system), and/or any of the airplane equipment systems described herein, direction of travel, attitude of travel, video inside, outside, and/or at, the airplane, audio inside, outside, and/or at, the airplane, activity inside, outside, and/or at, the airplane, and/or any other electrical, mechanical, electro-mechanical, hydraulic, and/or other system, equipment system, device, component, and/or appliance.

002140-596560

The airplane operation data monitoring device can be connected to, and/or linked with, any of the herein-described systems, equipment systems, subsystems, devices, components, and/or appliances, including, but not limited to, speedometer, cruise control device, auto pilot, control surfaces, horizontal stabilizer, vertical stabilizer, cabin pressure control, landing gear, ailerons, altimeter, navigation system, emergency parachute, emergency landing equipment, emergency evacuation equipment, data display, braking system, wing flaps, rudder, gyroscope, gyrocompass, directional light device(s), light system(s), door lock system(s), depth sounding measurement devices, attitude measuring device(s), ignition system, braking system, electronic system(s), hydraulic system(s), video recording device(s) or camera(s), audio recording device(s) or microphone(s), and/or any other systems, equipment systems, devices, components, and/or appliances, described herein and/or otherwise, for controlling and/or monitoring the operation of same and/or for monitoring activity at the airplane.

The airplane operation data monitoring device can



operate and/or function in a manner similar to, and/or analogous to, an aircraft flight data recorder in monitoring and/or recording operation data. In addition, the airplane operation data monitoring device can receive any and/or all of the data monitored and transmit same to the any of the herein-described transmitters 2, home and/or personal computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices, which can be utilized to receive this data and/or information. In this manner, the airplane operation and/or movement can be monitored by, and/or at, any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers.

The airplane operation data monitoring device can transmit any and/or all airplane operation data to a respective transmitter(s), home and/or personal computer(s), computer(s), and/or server computer(s), in real-time, live, in a time-delayed manner, and/or in any other appropriate manner. The airplane operation data monitoring device can also record and/or store any of the operation data monitored thereby.

00470-598-560

Any data and/or information which is received from the airplane operation data monitoring device can be stored at any of the herein-described transmitters 2, home and/or personal computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices, which can be utilized to receive this data. The data and/or information which is received from the airplane operation data monitoring device can be stored in any suitable manner which can typically involve storing same digitally, storing same digitally in an overwriting manner, so that, for example, the data can be stored and/or overwritten for a given time period and overwriting same, storing same in a looping and/or re-circulating storage medium or tape, storing same in a manner utilized in conjunction with, and/or similar to, the manner in which data and/or information is stored in aircraft flight data recorders and/or aircraft cockpit voice recorders.

The airplane operation data monitoring device can be accessed by any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers, and/or the individuals utilizing same, in order to monitor and/or ascertain airplane operation, and/or video

and/or audio activity inside, outside, and/or at, the airplane, at any time and/or to retrieve and/or to access operating data regarding airplane operation and/or movement, and/or video and/or audio activity inside, outside, and/or at, the airplane, which has been recorded and/or stored by the airplane operation data monitoring device. For example, airplane operating data and/or information, along with video and/or audio information inside, outside, and/or at the airplane, can be accesses and/or obtained.

The airplane operation data monitoring device can be utilized to monitor airplane operation, to investigate a malfunction, to diagnosis a malfunction or other problem, to investigate a cause of an accident, and/or can be utilized for any other purpose.

In a preferred embodiment, the airplane operation data monitoring device can be programmed to monitor airplane operation data and/or to transmit same to any respective transmitter, home and/or personal computer, computer, central computer, and/or server computer, continuously, at certain times, and/or under certain conditions, such as a detection by the CPU 4 and/or by the airplane operation data monitor.

The airplane operation data monitoring device can also be activated remotely by any individual via any respective transmitter, home and/or personal computer, computer, central computer, and/or server computer, and/or user of same. The airplane operation data monitoring device can also be activated by a airplane operator and/or occupant and/or via any other individual.

The data and/or information obtained from the airplane operation data monitoring device can be stored at any of the respective transmitters, home and/or personal computers, computers, central computers, and/or server computers for accessing at any time. The data and/or information can be stored at the airplane operation data monitoring device, and/or at any of the herein-described and respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, in a "loop tape" manner and/or digitally in a looping and/or data overwriting manner so that, for example, only a most recent time period is recorded.

The airplane operation data monitoring device can be utilized in conjunction with the present invention so as

to obtain, to record, and/or access, and/or analyze, airplane operation data at the airplane and/or from a location remote from the airplane, in a network environment, thereby facilitating the monitoring and/or the analysis of airplane operation data.

As noted above, the use of any one or more of the airplane equipment system(s) 1311, and their associated interface devices 1312, may be optional. Further, as described above, wireless devices may be utilized.

The airplane equipment system(s) 1311 receives signals from the CPU 4, which signals serve to activate or de-activate, or vice versa, whichever the case may be, the respective airplane equipment system(s) which are utilized in conjunction with the apparatus 1300. The airplane equipment system(s) 1311 may also include any other suitable airplane system or equipment feature which may be utilized to draw attention to the airplane and/or in some other way to impede the airplane theft. It should be noted that any of the interface devices 1308, 1310 and 1312 may include any of the requisite interfacing circuitry which may be necessary to facilitate CPU 4 control over the respective systems which may be utilized.

002740 002755

The apparatus 1300 also includes a position and locating device 13 which can be utilized in order to determine the position and/or the location of the airplane. The position and locating device 13 can be utilized so as to determine the position of the airplane anywhere in the world and provide for the transmission of airplane position and/or location data to any appropriate system receiver so that the airplane may be located and/or tracked and recovered. In the preferred embodiment, the position and locating device 13 includes and utilizes a global positioning device and an associated transmitter for transmitting position and/or location data to the authorized user or operator and/or to an authorized office or agency authorized to receive and/or to monitor such data transmissions.

The apparatus 1300 also includes a position and locating system receiver 14, which may be employed by the authorized user or operator and/or by the authorized office or agency, for receiving and/or processing the data which is transmitted from the position and locating device 13 as will be described above. The apparatus 1 may also comprise a user interface device (not shown).

The apparatus and method of the preferred embodiment of Figure 13 may be utilized and/or operates in the same or in a similar and/or analogous manner as described above with regards to the embodiments of Figures 1-12 and/or consistent with the description of the various embodiments and features of the present invention as described herein.

The apparatus and method of the present invention may also provide for the immediate, and/or for the deferred, control, activation, deactivation, programming, monitoring and/or security of any one or more of the airplane systems, equipment, devices, appliances, etc., in the same, similar and/or analogous manner as described herein.

Although the present invention has been described herein as being utilized in conjunction with an airplane, it is noted that the present invention may be utilized in conjunction with any aircraft, including airplanes, jets, gliders, spacecraft, space shuttles, satellites, manned or unmanned, regardless of size, shape or form, private, commercial and/or military. The airplane equipment systems may also include guns and/or weapon systems and/or self-defense systems and/or electronic warfare systems.





002140 002150

electronic, and/or any other suitable signal, including a digital command signal, to the snowmobile ignition system 1407. This electrical, electronic and/or other suitable signal, or digital command signal, may be one which will disable the snowmobile ignition system 1407 or one which will re-enable or reset the snowmobile ignition system 1407. The CPU 4 may also interrogate the snowmobile ignition system 1407 and/or receive data from the snowmobile ignition system 1407 which is indicative of ignition system status (i.e., whether the snowmobile ignition system 1407 is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the snowmobile fuel pump or supply system 1409 which is also located externally from the apparatus 1400. The CPU 4 may or may not be connected and/or linked with the snowmobile fuel pump system 1409 through a fuel pump system interface 1410 which is also shown in Figure 14. In the case of an electrical or an electronic fuel pump system, the CPU 4 may provide an electrical, an electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable the snowmobile fuel pump system 1409.

002740 394550

In the case of a mechanical fuel pump system, the CPU 4 may provide an electrical, electronic, and/or other suitable signal, including a digital signal, which will disable or re-enable an electrical valve system, which may be used to control the operation of the mechanical fuel pump system. Whichever the case may be, the CPU 4 will be capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the snowmobile fuel pump system 1409. The CPU 4 may also interrogate and/or receive data from the snowmobile fuel pump system 1409 which is indicative of snowmobile fuel pump system status (i.e., whether the snowmobile fuel pump system 1409 is on or off). The CPU 4 may also be electrically connected and/or linked to an appropriate device (not shown) for controlling the operation of a snowmobile exhaust system.

The CPU 4, in the preferred embodiment, is also electrically connected and/or linked to at least one or more of a snowmobile equipment system or system(s) 1411. The snowmobile equipment system(s) 1411 are located externally from the apparatus 1400 and may or may not be connected to the CPU 4, via a snowmobile equipment system interface 1412 which may or may not be required for each one of the variety

or multitude of the snowmobile equipment systems which may be utilized in conjunction with the apparatus.

The snowmobile equipment system(s) 1411 may include a loud siren or alarm, which may be located in, or on, the passenger compartment of the snowmobile and, which may produce a loud piercing sound so as to make it unbearable for an intruder to remain inside or on the snowmobile. The snowmobile equipment system(s) 1411 may also include an external siren or alarm, which may produce a loud piercing sound, which may be utilized to draw attention to the snowmobile. The snowmobile equipment system(s) 1411 may also include a horn, which may blare continuously or intermittently, so as to also draw attention to the snowmobile. The snowmobile equipment system(s) 1411 can also include "smart" windows which turn opaque and/or darker depending upon interior lighting.

The snowmobile light system(s), which may include the snowmobile head lights, tail lights or flashers, which may be constantly illuminated or which may blink on and off repeatedly so as to draw attention to the snowmobile, may also be utilized as a snowmobile equipment system 1411. The snowmobile equipment system(s) 1411 may also include a power

locking systems and/or devices as appropriate as well as steering mechanism locking devices, locking devices for preventing unauthorized access into or onto the snowmobile, snowmobile track locking devices for preventing movement of the snowmobile and/or locking devices for preventing unauthorized access to the snowmobile engine, so as to prevent any tampering with the apparatus or with other systems and/or components of the snowmobile.

The snowmobile equipment system(s) 1411 may also include any one or more of the known snowmobile anti-theft systems and may also include a snowmobile recovery system or device, including a homing and/or a tracking system, each of which system(s) may be activated by the apparatus of the present invention. The snowmobile equipment system(s) 1411 may include any other equipment systems, including any and all of the above-noted equipment systems described herein for use in conjunction with vehicles, boats and airplanes, including video and/or audio recording equipment and/or intercom equipment and/or any of the herein-described communications systems and/or devices.

The snowmobile equipment system(s) 1411 may include video recording and/or photographing equipment,





00470 59E1560

interactive televisions, telephones, cellular telephones, display telephones, video telephones, and/or other communication devices, including personal communication devices. The audio recording device(s) may be digital audio recording devices or other suitable audio devices including typical audio recording devices. The audio recording device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting the recorded audio to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the audio recording device(s).

The audio recording device(s) may be located at any location on the interior and/or exterior of the snowmobile so that the user or operator, or any other authorized individual, may hear what is transpiring, and/or what has transpired, inside and/or outside the snowmobile. The audio recording device(s) may also be pivotable and/or movable. The audio device(s) or microphone(s) can be moveable along a track or other guiding device or element so that the respective audio recording device or microphone can be moved along the snowmobile interior or exterior. The audio recording device(s) may record and/or transmit the

recorded audio in real time and/or live. The audio recording device(s) may also be equipped with a storage medium, for storing the recorded audio, and a transmitter or transceiver for transmitting the stored audio at a later time. In this manner, real-time as well as deferred audio transmissions may be provided.

The snowmobile equipment system 1311 can also include video conferencing devices and/or equipment for enabling the snowmobile occupants and/or users, individuals on the snowmobile, inside or outside the snowmobile, and/or in the vicinity of the snowmobile, to engage in and/or partake in video conferences and/or video conferencing with others via a communication network.

The snowmobile equipment system(s) 1411 can also include the snowmobile battery or batteries, snowmobile fuel cell or fuel cells, battery monitoring equipment, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell temperature measuring device, fuel cell by-product (i.e. water or other by-product, heat, etc.) measuring device, fuel cell output measuring device (i.e. voltmeter, ammeter, current measure, power meter, etc.), an air bag deployment device, an air bag deployment detection device, a





information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s).

The snowmobile equipment system(s) 1411 may also include communication devices, such as two-way radios, radios, televisions, navigational devices and/or equipment, fire extinguishing equipment, radar devices and equipment, emergency and/or distress signal equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which may be utilized in a snowmobile. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The snowmobile equipment system(s) 1411 may also include electrical and/or electronically controlled dead bolt locking devices for use on doors, windows, hood, trunk and/or in conjunction with any other opening components and/or components for gaining access to various locations on and/or in, and/or any systems, devices, and/or components of, the snowmobile.

The snowmobile equipment system(s) 1411 may also include a wheel and/or brake locking device or mechanism.

004740-59E1560

The snowmobile equipment systems may also include hydraulic and/or pneumatic equipment and/or other equipment, including winches, etc, which may be remotely activated as described herein. The snowmobile equipment system(s) 1411 may also include snowmobile communication devices including, but not limited to radios, televisions and entertainment devices, two-way radios, cellular telephones and equipment, etc. The snowmobile equipment system(s) 1411 may also include systems for detecting failures in any of the above, or any other, equipment systems and report such failure(s) to the user or operator whether he or she is operating the snowmobile or is not in the snowmobile and/or for reporting such failures to a central office.

The snowmobile equipment system(s) 1411 can also include the snowmobile command computer which is utilized to control and/or to the various electronic, electrical, mechanical, and/or electromechanical systems, components, devices, of the snowmobile. The command computer can control and monitor any of the systems, components, and/or devices, of the snowmobile, including, but not limited to, the ignition system, the fuel system, fuel injection system, electrical systems for ignition, lights, horn, door locks, exhaust system, windows, fuel pump, oil pump, engine timing

device, battery, fuel cells, fuel supply device, video recording equipment, audio recording equipment, snowmobile integrated positioning device, tire pressure indicator, and/or any other system, device, or component which can be controlled and/or monitored by the command computer.

The command computer can transmit control signals and/or status request signals to any of the herein-described snowmobile systems, components and/or devices so as to respectively control and/or monitor the operating status and/or condition of the respective system, component and/or device. The command computer can also receive signals from the respective systems, devices and/or components, with said signals containing data and/or information concerning the operating status, operating state, and/or condition, of the respective systems, devices and/or components. The command computer can be utilized so as to control, monitor, and/or provide diagnostic information for any of the snowmobile systems, components, and/or devices, which are controlled and/or monitored with the command computer.

The snowmobile equipment system(s) 1411 can also include wear and/or usage indicators and/or detection devices which can be connected with either the command

computer and/or the central processing computer and which can be utilized so as to monitor the wear and/or usage of any of the herein-described electronic, electrical, mechanical, and/or electro-mechanical, systems, devices, and/or components.

The snowmobile equipment system(s) 1411 can also include automatic control devices for controlling and/or monitoring snowmobile systems and/or devices for snowmobile movement and/or motion, such as, but not limited to, snowmobile transmission system for controlling snowmobile forward and/or reverse direction of movement, snowmobile acceleration system for controlling speed of movement, snowmobile braking system for controlling snowmobile braking, snowmobile steering system for steering the snowmobile, and/or any other system and/or component for controlling and/or for effecting remote-control over the movement and/or the motion of the snowmobile.

In another preferred embodiment, the snowmobile equipment system(s) 1411 can also include a snowmobile operation data monitoring device which monitors snowmobile operation such as snowmobile speed, the status of any of the snowmobile systems (i.e. ignition system, fuel pump system,

positioning system), and/or any of the snowmobile equipment systems described herein, direction of travel, attitude of travel, video inside, outside, and/or at, the snowmobile, audio inside, outside, and/or at, the snowmobile, activity inside, outside, and/or at, the snowmobile, and/or any other electrical, mechanical, electro-mechanical, hydraulic, and/or other system, equipment system, device, component, and/or appliance.

The snowmobile operation data monitoring device can be connected to, and/or linked with, any of the herein-described systems, equipment systems, subsystems, devices, components, and/or appliances, including, but not limited to, speedometer, cruise control device, gyroscope, gyrocompass, directional light device(s), light system(s), door lock system(s), attitude measuring device(s), ignition system, braking system, electronic system(s), hydraulic system(s), video recording device(s) or camera(s), audio recording device(s) or microphone(s), and/or any other systems, equipment systems, devices, components, and/or appliances, described herein and/or otherwise, for controlling and/or monitoring the operation of same and/or for monitoring activity at the snowmobile.

002740-59E1560

The snowmobile operation data monitoring device can operate and/or function in a manner similar to, and/or analogous to, an aircraft flight data recorder in monitoring and/or recording operation data. In addition, the snowmobile operation data monitoring device can receive any and/or all of the data monitored and transmit same to the any of the herein-described transmitters 2, home and/or personal computers 150, and/or any of the server computers 510, computers 970, and/or server computers 952, and/or any other computers and/or communication devices, which can be utilized to receive this data and/or information. In this manner, the snowmobile operation and/or movement can be monitored by, and/or at, any of the herein-described transmitters, home and/or personal computers, computers, and/or server computers.

The snowmobile operation data monitoring device can transmit any and/or all snowmobile operation data to a respective transmitter(s), home and/or personal computer(s), computer(s), and/or server computer(s), in real-time, live, in a time-delayed manner, and/or in any other appropriate manner. The snowmobile operation data monitoring device can also record and/or store any of the operation data monitored thereby.







conditions, such as a detection by the CPU 4 and/or by the snowmobile operation data monitor.

The snowmobile operation data monitoring device can also be activated remotely by any individual via any respective transmitter, home and/or personal computer, computer, central computer, and/or server computer, and/or user of same. The snowmobile operation data monitoring device can also be activated by a snowmobile operator and/or occupant and/or via any other individual.

The data and/or information obtained from the snowmobile operation data monitoring device can be stored at any of the respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, for accessing at any time. The data and/or information can be stored at the snowmobile operation data monitoring device, and/or at any of the herein-described and respective transmitters, home and/or personal computers, computers, central computers, and/or server computers, in a "loop tape" manner and/or digitally in a looping and/or data overwriting manner so that, for example, only a most recent time period is recorded.

004740-534560

The snowmobile operation data monitoring device can be utilized in conjunction with the present invention so as to obtain, to record, and/or access, and/or analyze, snowmobile operation data at the snowmobile and/or from a location remote from the snowmobile, in a network environment, thereby facilitating the monitoring and/or the analysis of snowmobile operation data.

In any and/or all of the embodiments described herein, the present invention can facilitate the transmission of data and/or information regarding the operation of any of the herein described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles, and/or any of the respective systems, equipment systems, subsystems, devices, components, and/or appliances thereof, thereby dispensing with the need to obtain this data and/or information from data recorders located in, at, or on, the respective vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles. In this manner, for example, data and/or information normally recorded and/or store on a flight data recorder and/or a cockpit voice recorder can be obtained and/or stored on, or at, any of the herein-described transmitters 2, home and/or personal computers

150, and/or any of the server computers 510, computers 970, and/or server computers 952, described herein. In this manner, the need to recover a respective data recorder from the respective vehicle, motor vehicle, boat, marine vessel, airplane, aircraft, and/or recreational vehicle, can be rendered unnecessary and/or can be dispensed with entirely.

As noted above, the use of any one or more of the snowmobile equipment system(s) 1411, and their associated interface devices 1412, may be optional. Further, as described above, wireless devices may also be utilized.

The snowmobile equipment system(s) 1411 receives signals from the CPU 4, which signals serve to activate or de-activate, or vice versa, whichever the case may be, the respective snowmobile equipment system(s) which are utilized in conjunction with the apparatus 1400. The snowmobile equipment system(s) 1411 may also include any other suitable snowmobile system or equipment feature which may be utilized to draw attention to the snowmobile and/or in some other way impede the snowmobile theft. It should be noted that any of the interface devices 1408, 1410 and 1412 may include any of the requisite interfacing circuitry which may be necessary to facilitate CPU 4 control over the respective systems

which may be utilized.

The apparatus 1400 also includes a position and locating device 13 which can be utilized in order to determine the position and/or the location of the snowmobile. The position and locating device 13 can be utilized so as to determine the position of the snowmobile anywhere in the world and provide for the transmission of position and/or location data to any appropriate system receiver so that the snowmobile may be located and/or tracked and recovered. In the preferred embodiment, the position and locating device 13 includes and utilizes a global positioning device and an associated transmitter for transmitting position and/or location data to the authorized user or operator and/or to an authorized office or agency authorized to receive and/or to monitor such data transmissions.

The apparatus 1400 of Figure 14 also includes a position and locating system receiver 14, which may be employed by the authorized user or operator and/or by the authorized office or agency, for receiving and/or processing the data which is transmitted from the snowmobile position and locating device 13 as described above. The apparatus 1

004740 5947360

may also comprise a user interface device (not shown).

The apparatus and method of the preferred embodiment of Figure 14 may be utilized and/or operates in the same or in a similar and/or analogous manner as described herein and/or consistent with the description of the various embodiments and features of the present invention.

The apparatus and method of the present invention may also provide for the immediate, and/or for the deferred control, activation, deactivation, programming, monitoring and/or security of any one or more of the snowmobile and/or recreational vehicle systems, equipment, devices, appliances, etc., in the same, similar and/or analogous manner as described above in conjunction with the various embodiments of the present invention.

Although the present invention has been described herein as being utilized in conjunction with a snowmobile, it is noted that the present invention may also be utilized in conjunction with any type of recreational vehicle, including jetskis, scooters, motorcycles, minibikes, hot-air balloons, go-carts, mopeds, etc, manned or unmanned,

regardless of size, shape or form, private, commercial and/or military. The recreational vehicle equipment systems may also include guns and/or weapon systems and/or self-defense systems and/or electronic warfare systems, if desired, and especially when used in law enforcement and/or military applications.

The present invention can be utilized in conjunction with a motor home, a mobile home and/or a camper as the present invention may be utilized to provide control, monitoring and/or security functions pertaining to motor vehicle equipment and home systems, equipment and appliances.

In still another preferred embodiment, the present invention can be utilized in conjunction with a residential premises, residential building and/or a home or a household control system. Figure 15 illustrates an another preferred embodiment of the present invention wherein the apparatus and method is utilized in conjunction with a home control system. The apparatus of Figure 15 is denoted generally by the reference numeral 1500. It is understood that, while the embodiment of Figure 15 is illustrated and described in conjunction with a home or a household system, the apparatus

004740-534550

1500 may be utilized in any residential premises and/or any residential building.

In Figure 15, the components of the apparatus 1500 which are common to the apparatus 1 of Figure 1 are designated by the same reference numerals. In Figure 15, the CPU 4 is electrically connected and/or linked to the home and/or household central electrical system 1507, which is located externally from the apparatus 1500. The CPU 4 may or may not be connected and/or linked with the home central electrical system 1507 through a central electrical system interface 1508 which is also shown in Figure 15.

The CPU 4 may transmit signals to, as well as receive signals from, the home central electrical system 1507. In this manner, the CPU 4 and the home central electrical system 1507, may exchange information between each other. In this manner, the CPU 4, upon receiving an appropriate signal from the receiver 3, and upon the completion of the requisite data processing routine, may issue an electrical, an electronic, and/or any other suitable signal, including a digital command signal, to the home central electrical system 1507. This electrical, electronic and/or other suitable signal, or digital command



signal, may be one which will disable the home central electrical system 1507 or one which will re-enable or reset the home central electrical system 1507. The CPU 4 may also interrogate the central electrical system 1507 and/or receive data from the central electrical system 1507 which is indicative of central electrical system status (i.e., whether the central electrical system 1507, or any portion thereof, is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the home central heating system 1509 which is also located externally from the apparatus 1500. The CPU 4 may or may not be connected and/or linked with the home central heating system 1509 through a central heating system interface 1510 which is also shown in Figure 15. The CPU 4 is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home central heating system 1509. The CPU 4 may also interrogate and/or receive data from the home central heating system 1509 which is indicative of home central heating system status (i.e., whether the central heating system 1509, or any portion thereof, is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the home central air conditioning system 1511 which is also located externally from the apparatus 1500. The CPU 4 may or may not be connected and/or linked with the home central air conditioning system 1511 through a central air conditioning system interface 1512 which is also shown in Figure 15. The CPU 4 is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home central air conditioning system 1511. The CPU 4 may also interrogate and/or receive data from the home central air conditioning system 1511 which is indicative of home central air conditioning system status (i.e., whether the central air conditioning system 1511, or any portion thereof, is on or off).

The CPU 4 may also be electrically connected and/or linked to the home water system 1513 which is also located externally from the apparatus 1500. The CPU 4 may or may not be connected and/or linked with the home water system 1513 through a home water system interface 1514 which is also shown in Figure 15. The home water system interface 1514, in the preferred embodiment, is an electrically controlled water shut-off valve(s) or similar device(s).

The CPU 4 is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home water system 1513. The CPU 4 may also interrogate and/or receive data from the home water system 1513 which is indicative of the state of the home water system 1513 (i.e. whether the home water system 1513 , or any portion thereof, is on or off). The home water system 1513 may then be controlled (i.e. turned on or off) and/or adjusted by the user or operator.

The CPU 4 may also be electrically connected and/or linked to the home thermostat or environmental control system 1517 so as to control and/or monitor home interior temperature. The CPU 4 may or may not be connected and/or linked with the home thermostat system 1517 through a home thermostat system interface 1518 which is also shown in Figure 15. The CPU 4 is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the home thermostat system 1517.

The CPU 4 may also interrogate and/or receive data from the home thermostat system 1517 which is indicative of the state of the home thermostat system 1517 (i.e. home

002740-5927560

interior temperature and/or whether the temperature of the home interior, or any portion thereof, is too hot, too cold, or acceptable). The home thermostat system 1517 may then be controlled and/or adjusted by the user or operator. In this manner, the home thermostat system 1517 may then be adjusted and/or controlled by the user or operator via the apparatus 1500. The home thermostat system 1517 may be connected and/or linked to the home central heating system 1509 and/or to the home central air conditioning system 1511 so as to activate, de-activate, set and/or control the operation of these systems, as necessary, in order to, and so as to, achieve the desired temperature and/or environmental conditions in the home.

The CPU 4, in the preferred embodiment, is also electrically connected and/or linked to at least one or more of a home equipment system(s) 1515. The home equipment system(s) 1515 are located externally from the apparatus 1500 and may or may not be connected and/or linked to the CPU 4, via a home system equipment system or systems interface 1516 which may or may not be required for each one of the variety or multitude of the home equipment system(s) 1515 which may be utilized in conjunction with the apparatus 1500.

004094560

The home equipment system(s) 1515 may include a home anti-theft and/or burglary alarm system, a loud siren or alarm, which may be located in the interior of the home, which may produce a loud piercing sound so as to make it unbearable for an intruder to remain inside the home, an exterior siren or alarm, which may produce a loud piercing sound, which may be utilized to draw attention to the home, and exterior lighting system(s) and interior lighting systems, which lighting systems may be turned on or turned off at the user or operator's discretion and which may be controlled to blink on and off to draw attention to the home. The home equipment system(s) 1515 can also include "smart" windows which turn opaque and/or darker depending upon interior lighting.

The home equipment system(s) 1515 may also include a electrical and/or electronically controlled locking devices for doors and/or windows, including electrical and/or electronic dead- bolt locking systems and devices, electrical systems for controlling electrical circuits or systems room-by-room, device-by-device, and/or appliance-by-appliance. The home equipment system(s) 1515 may also include devices for controlling any one or more of the

00440-334560

electrical circuits, such as circuits controlled by fuses, circuit breakers or equivalent devices. The home equipment system(s) 1515 may also include devices for controlling and/or monitoring hot water heaters, garage door openers, lawn sprinkler systems, electric fences and/or fencing, in-ground or above-ground pool equipment, filters and/or heaters, home central water valve, individual room water valve, home fire detector equipment and home fire extinguishment equipment. The home equipment system(s) 1515 may also include power door and window closing, locking and opening equipment. The home equipment system(s) 1515 can also include "smart" windows and/or "smart" glass which can turn opaque depending upon the amount and/or intensity of interior lighting.

The home equipment system(s) 1515 may also include any and all of a wide variety of home appliances such as televisions, telephones, telephone answering machines, alarm systems, VCRs, stoves, ovens, microwave ovens, door bells, individual lights or lamps, blenders, toasters, personal computers, word processors, stereos, radios, and any other home appliance and/or device which is electrically and/or electronically activated and/or controllable.

00240 99E1560

The home equipment system(s) 1515 may also include video recording and/or photographing equipment, which may include video recording device(s) and/or a camera(s), such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, display telephones, video telephones, and/or other communication devices, including personal communication devices, or a still picture camera(s). The video recording device(s) or camera(s) may be digital recording devices or cameras or other suitable devices or cameras, including typical video recording devices or cameras. The video recording device(s) or camera(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting video images recorded by the video recording device(s) or camera(s) to the owner or occupant and for receiving signals such as, for example, control signals, by which the owner or occupant may exercise control over the video recording device(s) or camera(s).

The video recording device(s) or camera(s) may be located at any location on the interior of the home such as, for example, in any room or rooms of the home so that the owner or occupant, or any other authorized individual, may





In this manner, real-time, as well as deferred, video and/or picture(s) transmissions may be provided.

The home equipment system(s) 1515 may also include audio recording equipment, which may include audio recording device(s) such as microphones and/or tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, telephones, cellular telephones, display telephones, video telephones, and/or other communication devices, including personal communication devices. The audio recording device(s) may be digital audio recording devices or other suitable audio devices including typical audio recording devices. The audio recording device(s), in a preferred embodiment, has associated therewith a transceiver or transmitter/receiver system for transmitting the recorded audio to the owner or occupant and for receiving signals such as, for example, control signals, by which the owner or occupant may exercise control over the audio recording device(s).

The audio recording device(s) may be located at any location on the interior and/or exterior of the home and/or residential premises so that the owner or occupant,

00240-344560

or any other authorized individual, may hear what is transpiring, and/or what has transpired, inside and/or outside the home and/or residential premises. The audio recording device(s) may also be pivotable and/or movable. The audio recording device(s) microphone(s) can be moveable along a track or other guiding device or element so that the respective audio recording device or microphone can be moved along the premises interior or exterior. The audio recording device(s) may record and/or transmit the recorded audio in real time and/or live. The audio recording device(s) may also be equipped with a storage medium, for storing the recorded audio, and a transmitter or transceiver for transmitting the stored audio at a later time. In this manner, real-time as well as deferred audio transmissions may be provided.

The home equipment system(s) 1515 may also include an intercom system or device or a telephone, cellular, digital or otherwise for providing a means by which to allow the user or operator, or other authorized operator, to communicate with the persons present in, or occupants of, the home. The home equipment system(s) 1515 can also include video conferencing devices and/or equipment for enabling the vehicle occupants and/or individuals inside the



home control system and/or any other home operation and/or system function and/or home equipment system(s) operating status and/or condition. The monitoring device(s), in a preferred embodiment, may have associated therewith a transceiver or transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control over the monitoring device(s).

The home equipment system(s) 1515 may also include communication devices, such as two-way radios, radios, televisions, fire extinguishing equipment, emergency and/or distress signal equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which may be utilized in a home. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The home equipment system(s) 1515 may also include electrical and/or electronically controlled dead bolt locking devices for use on doors, windows, and/or in conjunction with any other opening components and/or components for gaining access to various locations on and/or in, and/or any systems, devices,

002740-544550

and/or components of, the home and/or residential premises.

The home equipment system(s) 1515 may also include hydraulic and/or pneumatic equipment and/or other equipment, including winches, etc, which may be remotely activated as described herein. The home equipment system(s) 1515 may also include home communication devices including, but not limited to radios, televisions and entertainment devices, two-way radios, cellular telephones and equipment, etc. The home equipment system(s) 1515 may also include systems for detecting failures in any of the herein-described equipment systems and report such failure(s) to the user or operator whether he or she is in the home or not in the home and/or for reporting such failures to a central office.

The home equipment system(s) 1515 can also include the home and/or residential premises command computer which is utilized to control and/or to the various electronic, electrical, mechanical, and/or electromechanical systems, components, devices, of the home and/or residential premises. The command computer can control and monitor any of the herein-described systems, components, and/or devices, of the home and/or residential premises which can be controlled and/or monitored by the command computer.

0040921550

002110 002110 002110

The command computer can transmit control signals and/or status request signals to any of the herein-described home and/or residential premises systems, components, and/or devices, so as to respectively control and/or monitor the operating status and/or condition of the respective system, component, and/or device. The command computer can also receive signals from the respective systems, devices, and/or components, with said signals containing data and/or information concerning the operating status, operating state, and/or condition, of the respective systems, devices, and/or components. The command computer can be utilized so as to control, monitor, and/or provide diagnostic information for any of the home and/or residential premises systems, components, and/or devices, which are controlled and/or monitored with the command computer.

The home equipment system(s) 1515 can also include wear and/or usage indicators and/or detection devices which can be connected with either the command computer and/or the central processing computer and which can be utilized so as to monitor the wear and/or usage of any of the herein-described electronic, electrical, mechanical, and/or electro-mechanical, systems, devices, and/or components.

The home equipment system(s) 1515 can also include automatic control devices for controlling and/or monitoring home and/or residential premises systems, devices, and/or components, for home or residential premises maintenance and/or upkeep.

In the case of commercial, industrial, and/or farm and/or construction equipment, drilling equipment, mining equipment, excavating equipment, and/or other commercial equipment, the home equipment system(s) 1515 may also include loading and/or unloading mechanisms, cutting mechanisms, bailing mechanisms, winches and any and all of the various systems and devices utilized in conjunction with these premises and/or equipment.

As noted above, the use of any one or more of the home equipment system(s) 1515 and/or appliances or devices and their associated interface devices 1516, may be optional. The interface devices 1516 may be wireless devices or modules which need not be directly connected to the CPU 4 or to its respective equipment system. In this regard, hard-wired connections are not necessary. In the case of wireless interface devices or modules 1516,

002740-5955560

corresponding wireless technology and/or systems may be utilized to provide for the wireless control and operation of the respective equipment(s).

In the case of a mobile home, the apparatus 1500 may also comprise a position and locating device 13 which can be utilized in order to determine the position and/or the location of the mobile home. The mobile home position and locating device 13 can be utilized so as to determine the position of the mobile home anywhere in the world and provide for the transmission of position and/or location data to any appropriate system receiver so that the mobile home may be located and/or tracked and recovered. In a preferred embodiment, the mobile home position and locating device 13 includes and utilizes a global positioning device and an associated transmitter for transmitting position and/or location data to the authorized user, operator and/or authorized individual.

The apparatus 1500 may also comprise a mobile home position and locating system receiver 14, which may be employed by the authorized user, operator and/or authorized individual, for receiving and/or processing the data which is transmitted from the position and locating device 13 as



described in the preferred embodiments above. The apparatus 1 may also comprise a user interface device (not shown).

The home equipment system(s) receives signals from the CPU 4, which signals serve to activate or de-activate, or vice versa, whichever the case may be, the respective home equipment system(s) which are utilized in conjunction with the apparatus 1500. The home equipment system(s) 1515 may also include any other suitable home system or equipment feature which may be utilized to draw attention to the home and/or in some other way impede home theft. It should be noted that any of the interface devices may include any of the requisite interfacing circuitry which may be necessary to facilitate CPU 4 control over the respective systems which may be utilized. It is understood that, while the embodiment of Figure 15 is illustrated and described in conjunction with a home or a household system, the embodiment may also be utilized in any residential premises and/or any residential building.

The apparatus and method of the preferred embodiment of Figure 15 may be utilized and/or operates in the same or in a similar and/or analogous manner as described in conjunction with the embodiments described

00440-34550

above, and/or consistent with the description of the various embodiments and features of the present invention as described herein, so as to provide control, monitoring and/or security functions for, and over, a home and/or residential premises.

The apparatus and method of Figure 15 can provide for an immediate, as well as for a deferred, control, activation, de-activation, programming, monitoring and/or security function and/or response thereto of, and for, any one or more of the home and/or residential premises systems, equipment, devices, appliances, etc., in the same, similar and/or analogous manner as described above in conjunction with its utilization in the embodiments described herein.

As described above in conjunction with use of the apparatus and method of the present invention with vehicles, the present invention may, if desired, perform a test in order to determine the state or status of any particular system, equipment, device and/or appliance before exercising and/or performing a given control, monitoring and/or security function. Depending upon the outcome of the test, the apparatus and method of the present invention may execute, alter and/or defer the performance and/or execution

00240 994550

of the control, monitoring and/or security function. For example, a command to shut-off a home central electrical system may be deferred until after the operation of a home security system, which security system may be deemed to have priority in performing a monitoring and shut-down procedure for the entire home, has been successfully completed.

In this manner a homeowner or occupant may access a home system at any time and from any location and thereby exercise and/or perform control, monitoring and/or security functions on, or over, any home system, equipment and/or appliance. The owner or occupant may also monitor the status, state or operation of any home system, equipment, device and/or appliance. Lastly, the owner or occupant may perform security related functions or operations on, and over, the home system, equipment, device and/or appliance. As noted above, the present invention may be utilized in conjunction with a telephone, either analog or digital, a touch tone telephone, a cordless telephone and/or a cellular or mobile telephone, a home and/or a personal computer, having associated telecommunication devices or other suitable peripheral device(s) such as a modem and/or a fax/modem, or other personal communication devices, which may operate over an appropriate telecommunications system,

00240" 59E F560

and/or other suitable communications systems, including radio signal, optical, satellite and/or other communications systems.

In still another preferred embodiment, the apparatus of the present invention is utilized in conjunction with a commercial premises, commercial building, commercial office, industrial facility, commercial structure, industrial structure, manufacturing facility, manufacturing equipment, manufacturing machine, drilling platform, drilling rig, oil drilling platform, off-shore drilling platform, off-shore drilling rig, excavation equipment, construction equipment, mining platform, mining equipment, assembly facility, assembly line facility and/or equipment, assembly equipment, industrial robotic equipment, mass production facility, production facility, assembly line, and/or any other industrial structure, building, edifice, equipment, system, device, component thereof and/or control system thereof and/or therefore (hereinafter referred to as "commercial premises"). Figure 16 illustrates an another preferred embodiment of the present invention wherein the apparatus and method is utilized in conjunction with a commercial premises and/or commercial premises control system. It is understood that, while the

embodiment of Figure 16 is illustrated and described in conjunction with an commercial office and/or premises control system, the embodiment may also be utilized in any commercial building and/or any commercial premises and/or any type of building, structure, equipment, and/or premises. The apparatus of Figure 16 is denoted generally by the reference numeral 1600. In Figure 16, the components of the apparatus which are common to the apparatus of Figure 1 are designated by the same reference numerals.

In Figure 16, the CPU 4 is electrically connected and/or linked to the commercial office and/or premises central electrical system 1607, which is located externally from the apparatus 1600. The CPU 4 may or may not be connected and/or linked with the central electrical system 1607 through a central electrical system interface 1608 which is also shown in Figure 16. The CPU 4 may transmit signals to, as well as receive signals from, the central electrical system 1607. In this manner, the CPU 4 and the central electrical system 1607, may exchange information between each other. In this manner, the CPU 4, upon receiving an appropriate signal from the receiver 3, and upon the completion of the requisite data processing routine, may issue an electrical, an electronic, and/or any

other suitable signal, including a digital command signal, to the central electrical system 1607. This electrical, electronic and/or other suitable signal, or digital command signal, may be one which will disable the central electrical system 1607 or one which will re-enable or reset the central electrical system 1607.

The CPU 4 may also interrogate the central electrical system 1607 and/or receive data from the central electrical system 1607 which is indicative of central electrical system status (i.e., whether the central electrical system 1607, or any portion thereof, is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the commercial office and/or premises central heating system 1609 which is also located externally from the apparatus 1600. The CPU 4 may or may not be connected and/or linked with the central heating system 1609 through a central heating system interface 1610 which is also shown in Figure 16. The CPU 4 is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the central heating system 1609. The CPU 4 may

004705050

also interrogate and/or receive data from the central heating system 1609 which is indicative of central heating system status (i.e., whether the central heating system 1609, or any portion thereof, is on or off).

In the preferred embodiment, the CPU 4 is also electrically connected and/or linked to the commercial office and/or premises central air conditioning system 1611 which is also located externally from the apparatus 1600. The CPU 4 may or may not be connected and/or linked with the central air conditioning system 1611 through a central air conditioning system interface 1612 which is also shown in Figure 16. The CPU 4 is capable of issuing an electrical, electronic and/or other suitable signal, including a digital signal, to disable or to re-enable the central air conditioning system 1611. The CPU 4 may also interrogate and/or receive data from the central air conditioning system 1611 which is indicative of central air conditioning system status (i.e., whether the central air conditioning system 1611, or any portion thereof, is on or off).

The CPU 4 may also be electrically connected and/or linked to the commercial office and/or premises water system 1613 which is also located externally from the





00440-53E550

suitable signal, including a digital signal, to disable or to re-enable the thermostat system 1617. The CPU 4 may also interrogate and/or receive data from the thermostat system 1617 which is indicative of the temperature of the commercial office and/or premises interior (i.e., the interior temperature and/or whether interior temperature, or any portion thereof, is too hot, too cold, or acceptable). The thermostat system 1617 may then be adjusted and/or controlled by the user or operator. The thermostat system 1617 may be connected and/or linked to the central heating system 1609 and to the central air conditioning system 1611 so as to activate and/or control the operation of these systems in order to, and so as to, achieve the desired temperature in the commercial office and/or premises.

The CPU 4, in the preferred embodiment, is also electrically connected and/or linked to at least one or more of a commercial office and/or premises equipment system(s) 1615. The commercial office and/or premises equipment system(s) 1615 are located externally from the apparatus 1600 and may or may not be connected and/or linked to the CPU 4, via a commercial office and/or premises system equipment system(s) interface 1616 which may or may not be required for each one of the variety or multitude of the

commercial office and/or premises equipment systems which may be utilized in conjunction with the apparatus.

The commercial office and/or premises equipment system(s) 1615 may include a commercial office and/or premises anti-theft and/or burglary alarm system, loud siren or alarm, which may be located in the interior of the home, which may produce a loud piercing sound so as to make it unbearable for an intruder to remain inside the home, an exterior siren or alarm, which may produce a loud piercing sound, which may be utilized to draw attention to the commercial office and/or premises and exterior lighting system(s) and/or the interior lighting system(s), which lighting systems may be turned on or turned off at the user's or operator's discretion and which may be controlled to blink on and off to draw attention to the commercial office and/or premises. The premises equipment system(s) 1615 can also include "smart" windows which turn opaque and/or darker depending upon interior lighting.

The commercial office and/or premises equipment system(s) 1615 may also include electrical and/or electronically controlled locking devices for doors and/or windows, including electric or electronic dead-bolt locking

002740" 0027550

devices or systems, electrical systems for controlling electrical circuits or systems room-by-room, device-by-device, and/or appliance-by-appliance.

The commercial office and/or premises equipment system(s) 1615 may also include devices for controlling any one or more of the electrical circuits, such as circuits controlled by fuses, circuit breakers or equivalent devices. The commercial office and/or premises equipment system(s) 1615 may also include devices for controlling and/or monitoring hot water heaters, garage door openers, lawn sprinkler systems, electric fences and/or fencing, in-ground or above-ground pool equipment, fountain equipment, filters and/or heaters, commercial office and/or premises fire detector equipment and commercial office and/or premises fire extinguishment equipment. Commercial office and/or premises equipment system(s) 1615 may also include power door and window closing, locking and opening equipment.

The commercial office and/or premises equipment system(s) 1615 may also include any and all office equipment and/or premises appliances such as televisions, telephones, telephone answering machines, alarm systems, VCRs, stoves, ovens, microwave ovens, door bells, individual lights or

00440 542550



video recording device(s) or camera(s).

The video recording device(s) or camera(s) may be located at any location on the interior of the commercial office and/or premises such as, for example, in any room or rooms of the commercial office and/or premises so that the owner or occupant, or any other authorized individual, may observe and/or photograph any portions and/or rooms in the interior of the commercial office and/or premises, or the occupants and/or anything which may be located and/or stored in the commercial office and/or premises. The video recording device(s) or camera(s) may also be located on the exterior of the commercial office and/or premises so that the owner or occupant, or any other authorized individual, may observe and/or photograph the exterior of the commercial office and/or premises, or portion thereof, or the individuals or objects and/or anything which may be present, located and/or stored on the premises of commercial office and/or premises.

The video recording device(s) or camera(s) may have wide angles for maximum angular viewing and may also be pivotable and/or movable. The video device(s) or camera(s) can be moveable along a track or other guiding device or

element so that the respective video recording device or camera can be moved along the commercial premises interior or exterior. The video recording device(s) or camera(s) may record and/or transmit the recorded video and/or the picture(s) in real time and/or live. The video recording device(s) or camera(s) may also be equipped with a storage medium, for storing the recorded video and/or picture(s), and a transmitter or transceiver for transmitting the stored video and/or picture(s) to the owner or occupant at a later time. In this manner, real-time, as well as deferred, video and/or picture(s) transmissions may be provided.

The commercial office and/or premises equipment system(s) 1615 may also include audio recording equipment, which may include audio recording device(s) such as microphones and/or tape recorders, such as those utilized in conjunction with personal computers, televisions, digital televisions, interactive televisions, telephones, cellular telephones, display telephones, video telephones, and/or other communication devices, including personal communication devices. The audio recording device(s) may be digital audio recording devices or other suitable audio devices including typical audio recording devices. The audio recording device(s), in a preferred embodiment, has

004740-591550

associated therewith a transceiver or transmitter/receiver system for transmitting the recorded audio to the owner or occupant and for receiving signals such as, for example, control signals, by which the owner or occupant may exercise control over the audio recording device(s).

The audio recording device(s) may be located at any location on the interior and/or exterior of the commercial office and/or premises so that the owner or occupant, or any other authorized individual, may hear what is transpiring, and/or what has transpired, inside and/or outside the commercial office and/or premises.

The audio recording device(s) may also be pivotable and/or movable. The audio device(s) or camera(s) can be moveable along a track or other guiding device or element so that the respective video recording device or camera can be moved along the commercial premises interior or exterior. The audio recording device(s) may record and/or transmit the recorded audio in real time and/or live. The audio recording device(s) may also be equipped with a storage medium, for storing the recorded audio, and a transmitter or transceiver for transmitting the stored audio at a later time. In this manner, real-time as well as

deferred audio transmissions may be provided.

The commercial office and/or premises equipment system(s) 1615 may also include an intercom system or device or telephone, cellular, digital or otherwise, for providing a means by which to allow the user or operator, or other authorized individual, to communicate with the persons present in the, or occupants of the, commercial office and/or premises. The vehicle equipment system 1615 can also include video conferencing devices and/or equipment for enabling the vehicle occupants and/or individuals inside the vehicle, outside the vehicle, and/or in the vicinity of the vehicle, to engage in and/or partake in video conferences and/or video conferencing with others via a communication network.

The premises equipment system(s) 1615 can also include the premises battery or batteries, premises fuel cell or fuel cells, battery monitoring equipment, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell temperature measuring device, fuel cell by-product (i.e. water or other by-product, heat, etc.) measuring device, fuel cell output measuring device (i.e. voltmeter, ammeter, current measure, power meter, etc.).



002140 2975560

The commercial office and/or premises equipment system(s) 1615 may also include monitoring device(s) for reading and/or monitoring the status and/or condition of any of the commercial office and/or premises fuel supply, water supply, electrical generator and/or alternator operation, water usage, heat and/or air conditioning usage, electricity usage, gas and/or oil or other fuel usage, battery charge level, electrical system charge level, fuel cell electrical power output, fuel cell fuel supply level, fuel cell operating temperature, fuel cell by-product output level, telephone usage and charges, commercial office and/or premises equipment and/or appliance usage, etc, a commercial office and/or premises control system and/or any other commercial office and/or premises operation and/or system function and/or commercial premises equipment system(s) operating status and/or condition. The monitoring device(s), in a preferred embodiment, may have associated therewith a transceiver or transmitter/receiver system for transmitting data and/or information recorded and/or read by the monitoring device(s) to the user or operator and for receiving signals such as, for example, control signals, by which the user or operator may exercise control, monitoring and/or security over the monitoring device(s).

The commercial premises equipment system(s) 1615 may also include communication devices, such as two-way radios, radios, televisions, fire extinguishing equipment, emergency and/or distress signal equipment, and any electrical, electronic and/or otherwise activated appliances and/or equipment which may be utilized in a commercial. Appliances may include household appliances such as refrigerators, stoves, air conditioners, ovens, microwave ovens, lighting systems, etc. The commercial premises equipment system(s) 1615 may also include electrical and/or electronically controlled dead bolt locking devices for use on doors, windows, and/or in conjunction with any other opening components and/or components for gaining access to various locations on and/or in, and/or any systems, devices, and/or components of, the commercial premises.

The commercial premises equipment system(s) 1615 may also include hydraulic and/or pneumatic equipment and/or other equipment, assembly equipment, drilling equipment, mining equipment, construction equipment, excavation equipment, robotic equipment, electrical equipment of any kind, mechanical equipment of any kind, electro-mechanical equipment of any kind, including winches, etc, which may be

002170" 0021550

remotely activated as described herein. The premises equipment system(s) 1615 may also include premises communication devices including, but not limited to radios, televisions and entertainment devices, two-way radios, cellular telephones and equipment, etc. The premises equipment system(s) 1615 may also include systems for detecting failures in any of the herein-described equipment systems and report such failure(s) to the user or operator whether he or she is in the premises or not in the premises and/or for reporting such failures to a central office.

The commercial premises equipment system(s) 1615 can also include the commercial premises command computer which is utilized to control and/or to the various electronic, electrical, mechanical, and/or electromechanical systems, components, devices, of the commercial premises. The command computer can control and monitor any of the herein-described systems, components, and/or devices, of the commercial premises which can be controlled and/or monitored by the command computer.

The command computer can transmit control signals and/or status request signals to any of the herein-described commercial premises systems, components, and/or devices, so

as to respectively control and/or monitor the operating status and/or condition of the respective system, component, and/or device. The command computer can also receive signals from the respective systems, devices, and/or components, with said signals containing data and/or information concerning the operating status, operating state, and/or condition, of the respective systems, devices, and/or components. The command computer can be utilized so as to control, monitor, and/or provide diagnostic information for any of the commercial premises systems, components, and/or devices, which are controlled and/or monitored with the command computer.

The premises equipment system(s) 1615 can also include wear and/or usage indicators and/or detection devices which can be connected with either the command computer and/or the central processing computer and which can be utilized so as to monitor the wear and/or usage of any of the herein-described electronic, electrical, mechanical, and/or electro-mechanical, systems, devices, and/or components.

The commercial premises equipment system(s) 1615 can also include automatic control devices for controlling

and/or monitoring commercial premises systems, devices, and/or components, for commercial premises maintenance and/or upkeep.

In the case of commercial, industrial, and/or farm and/or construction equipment, drilling equipment, mining equipment, excavating equipment, and/or other commercial equipment, the premises equipment system(s) 1615 may also include loading and/or unloading mechanisms, cutting mechanisms, bailing mechanisms, winches and any and all of the various systems and devices utilized in conjunction with these premises and/or equipment.

As noted above, the use of any one or more of the commercial office and/or premises equipment systems and/or appliances or devices 1615 and their associated interface devices 1616, may be optional. The interface devices 1616 may be wireless devices or modules which need not be directly connected to the CPU 4 or to its respective equipment system. In this regard, wired connections are not necessary. In the case of wireless interface devices or modules 1616, corresponding wireless technology and/or systems must be utilized to provide for the wireless control and operation of the respective equipment(s).

00240:591560

The commercial office and/or premises equipment system or system(s) 1615 receives signals from the CPU 4, which signals serve to activate or de-activate, or vice versa, whichever the case may be, the respective commercial office and/or premises equipment system(s) which are utilized in conjunction with the apparatus 1600. The commercial office and/or premises equipment system(s) 1615 may also include any other suitable commercial office and/or premises system or equipment feature which may be utilized to draw attention to the commercial office and/or premises and/or in some other way impede commercial office and/or premises theft. It should be noted that any of the interface devices may include any of the requisite interfacing circuitry which may be necessary to facilitate CPU 4 control over the respective systems, equipment, devices and/or appliances which may be utilized.

The apparatus and method of the preferred embodiment of Figure 16 is utilized and operates in the manner described above in conjunction with the vehicle and/or the home embodiments so as to provide for a system for controlling, monitoring and/or providing security functions for and over a commercial office and/or premises.

The apparatus and method of the preferred embodiment of Figure 16 may be utilized and/or operates in the same or in a similar and/or analogous manner consistent with the description of the various embodiments and features of the present invention as described herein so as to provide control, monitoring and/or security functions over and with respect to the commercial office and/or premises with which the apparatus is utilized in conjunction with.

In the case of mobile commercial office and/or premises, the apparatus 1600 may also comprise a commercial office and/or premises position and locating device 13 which can be utilized in order to determine the position and/or the location of the commercial office and/or premises. The position and locating device 13 can be utilized so as to determine the position of the commercial office and/or premises anywhere in the world and provide for the transmission of position and/or location data to any appropriate system receiver so that the commercial office and/or premises may be located and/or tracked and recovered. In the preferred embodiment, the position and locating device 13 includes and utilizes a global positioning device and an associated transmitter for transmitting position and/or location data to the authorized user, operator,

and/or authorized individual.

The apparatus 1600 also includes a commercial offices and/or premises position and locating system receiver 14, which may be employed by the authorized user, operator, and/or authorized individual, for receiving and/or processing the data which is transmitted from the position and locating device 13 as described above. The apparatus 1 may also comprise a user interface device (not shown).

The apparatus and method of the preferred embodiment of Figure 16 is utilized and operates in the manner described above in conjunction with the vehicle and/or the home premises embodiments so as to provide for a system for controlling, monitoring and/or providing security functions for, and over, a commercial office and/or premises. The apparatus and method of the preferred embodiment of Figure 16 may be utilized and/or operates in the same or in a similar and/or analogous manner as described in conjunction with the various embodiments described herein and/or consistent with the description of the various embodiments and features of the present invention as described herein, so as to provide control, monitoring and/or security functions for, and over, a



commercial office and/or premises.

In this manner, an owner, occupant, and/or authorized individual, may access a commercial office and/or premises system at any time and from any location and thereby exercise and/or perform control, monitoring and/or security functions over any commercial office and/or premises system, equipment, device and/or appliance. The owner, occupant, and/or authorized individual, may also monitor the status, state or operation of any commercial office and/or premises system, equipment, device and/or appliance. Lastly, the owner or authorized individual may perform security related functions or operations on and over the commercial office and/or premises system, equipment, device and/or appliance.

The apparatus and method of Figure 16 can provide for an immediate, as well as for a deferred, control, activation, de-activation, programming, monitoring and/or security functions and/or responses thereto, of, and for, any one or more of the commercial office and/or premises systems, equipment, devices, appliances, etc., in the same, similar and/or analogous manner as described above with in conjunction with the various embodiments.

00240\*391560

002440 5945500

As described above in conjunction with use of the apparatus and method of the present invention with vehicles and residential premises, the present invention may, if desired, perform a test in order to determine the state or status of any particular system, equipment, device and/or appliance before exercising and/or performing a given control, monitoring and/or security function. Depending upon the outcome of the test, the apparatus and method of the present invention may execute, alter, and/or defer, the performance and/or the execution of the control, monitoring and/or security function. For example, a command to shut-off a central electrical system may be deferred until after the operation of a security system, which security system may be deemed to have priority in performing a monitoring and shut-down procedure for the entire commercial office and/or premises, has been successfully completed.

As noted above, the present invention, in any of the herein described embodiments, as well as modifications, variations and/or alternate embodiments thereof, may be utilized in conjunction with a telephone, including analog and digital telephones, a touch-tone telephone, a cordless telephone and/or a cellular or mobile telephone, a home

and/or a personal computer having associated telecommunication devices or other suitable peripheral device(s) such as a modem and/or a fax/modem, or other personal communication devices, which can operate over an appropriate telecommunications system, and/or other suitable communications systems, including radio signal, optical, satellite and/or other communications systems.

The communications system(s) utilized in any of the embodiments described herein may operate anywhere in the electromagnetic and/or the radio spectrum. In this regard, personal communication service (PCS) systems and devices, including stationary, portable and/or hand-held devices, may also be utilized. Digital signal communications devices and/or systems, including digital satellite systems, may also be utilized. Interactive and/or digital televisions, personal communication devices, personal communications services (PCS) devices, telephones, including telephones which utilize analog or digital technology, personal digital assistants, cellular telephones, display telephones, video telephones, display cellular telephones and electronically equipped watches, beepers, pagers or paging systems, and/or other devices and/or personal effects and/or accessories may also be utilized for interactive use and/or for the display

00240 52456



individuals and to provide for a means by which to communicate with them.

The apparatus and method of the present invention may be utilized in conjunction with appropriate security devices for preventing access by unauthorized individuals. In this regard, the apparatus and method of the present invention may be utilized in conjunction with appropriate security access devices, secured and/or encrypted communication signals, linkups and mediums. Security measures may include utilization and processing of access codes, encrypted codes, personal identification codes and/or data, software-based security measures and/or devices, hardware-based security measures and/or devices, and/or any combination of software-based and hardware-based measures and/or devices. The security measures and/or methods utilized may also include the use of signal scramblers and associated de-scramblers, and/or any one or more of the widely known devices and/or methods for providing a secured communication system and/or link.

The present invention provides for an apparatus and method for exercising and/or performing remote-controlled control, monitoring and/or security functions

and/or operations for any type and variety of vehicles, motor vehicles, marine vessels and vehicles, aircraft, recreational vehicles, residential premises and/or commercial premises.

The apparatus and method of the present invention may also be programmable for programmed and/or automatic activation, self-activation, programmed and/or automatic operation and/or self-operation. The apparatus and method of the present invention may provide for an immediate, as well as for a deferred, control, monitoring and/or security function, and/or response thereto, so as to provide for the immediate and/or for the deferred control, activation, de-activation, programming, monitoring and/or security, etc., of any one or more of the respective systems, equipment, devices, appliances, etc., which may be utilized in any of the above described embodiments and/or in any modifications, variations and/or alternate embodiments thereof.

The present invention may also be equipped with, and be utilized with, hardware and software necessary for providing self-monitoring functions, automatic control and/or responses to occurrences, providing automatic notice of an occurrence and/or a situation to an owner, user and/or

00440-992560

authorized individual. In this regard, any and all of the embodiments described above may comprise a monitoring device, a triggering device and/or any other suitable device for detecting an occurrence and/or a situation which may warrant providing notice to an owner, user and/or authorized operator. In this regard, the apparatus may provide a transmission of any appropriate signal from a transmitter and, if desired, from a voice synthesizer to the owner, user and/or authorized individual, or to the location of the individual. The signal utilized could be in the form of a communication transmission, depending upon the communication medium utilized, a telephone call, a voice message, a beeper and/or pager message, an Electronic mail message, a fax transmission, and/or any other mode of communication which may be utilized with any of the apparatuses, devices and/or components described herein.

Any of the above-described embodiments may be utilized in conjunction with a central security office and/or agency for providing use in conjunction with such a central office and/or agency as described hereinabove. In this manner, each and every embodiment of the present invention may be utilized with a central security office and/or agency. The present invention may also provide a

means for occupants of the vehicle, motor vehicle, marine vessel, aircraft, recreational vehicle, residential premises and/or commercial premises to contact a central security office and/or agency and/or any other individual having corresponding communication equipment and/or who is authorized and/or equipped to receive such transmissions.

The present invention can be utilized to access, monitor, and/or record or store, operation data and/or information for any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles, at a location remote from the respective vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or recreational vehicles, as well as for any of the herein-described residential premises and/or commercial premises. Any of the respective operation data and/or information can be obtained at, and/or stored at, any of the transmitters, home and/or personal computers, computers, and/or server computers, described herein.

The present invention can provide for the remote accessing, obtaining, or storage, of operation data for any one or more of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, and/or



recreational vehicles. In addition, the present invention can provide for the remote accessing, obtaining, or storage, of operation data for any one or more of the herein-described residential premises and/or commercial premises, by accessing, controlling, and/or monitoring, respective premises operation data recorder and/or monitoring devices.

The present invention enables an owner, user and/or authorized individual, to exercise and/or perform convenient control, monitoring and/or security functions, as and/or operations, over any of the above described or similar objects, vehicles, vessels and/or premises, from a remote location. For example, an individual may conveniently provide control over and monitor, the state and/or status of a vehicle parked at a location distant from his present location, and provide control over and monitor, a boat, an airplane, a vacation home which may be located in another locale, and/or to provide control over and monitor, a business office after hours or while absent therefrom.

In another preferred embodiment of the present invention, the present invention can be utilized in conjunction with intelligent agents, software agents and/or mobile agents. In such embodiments, the agent can be

002140-594560

programmed to perform any and all of the control, monitoring, and/or security functions described herein on behalf on any of the herein described and/or respective owners, users, operators of the vehicles, premises, equipment, systems, devices, and/or components, described herein. Applicant hereby incorporates by reference herein the subject matter of the Agent Sourcebook, A Complete Guide to Desktop, Internet and Intranet Agents, by Alper Caglayan and Colin Harrison, Wiley Computer Publishing, 1997. Applicant also incorporates by reference herein the subject matter of Cool Intelligent Agents For The Net, by Leslie L. Lesnick with Ralph E. Moore, IDG Books Worldwide, Inc. 1997.

The present invention, in any of the embodiments described herein, may be designed to be user-friendly. In this regard, the present invention may be menu-driven, and/or its operation may be menu-selected, from audio menus, visual menus, or both audio and visual menus.

Applicant hereby incorporates by reference herein the subject matter and the teachings of the following U.S. Patents: 4,882,579, 4,882,746, 5,003,317, 5,031,103, 5,081,667, 5,113,427, 5,138,649, 5,173,932, 5,208,756, 5,223,844, 5,247,564, 5,276,728, 5,287,398, 5,334,974,

5,389,935, 5,418,537, 5,432,841, 5,513,244, 5,515,043,  
5,557,254, 5,563,453, 5,682,133, 6,014,447, 6,009,363,  
6,007,095, 6,006,159, 5,973,619, 5,949,345, 5,898,392,  
5,844,473, 5,835,871, 5,835,376, 5,809,161, 5,729,452,  
5,715,905, 5,660,246, and 5,550,738.

The present invention, in any and/or all of the embodiments described herein, hereby incorporates the teachings of, and can utilize the teachings of, the above-identified U.S. Patents as well as improve upon the teachings of the above-identified U.S. Patents.

In any and/or all of the embodiments described herein, any of the fuel cells which are or can be utilized can be hydrogen fuel cells, zinc fuel cells, alkaline fuel cells, phosphoric acid fuel cells, proton exchange membrane fuel cells, methanol fuel cells, direct methanol fuel cells, natural gas fuel cells, molten carbonate fuel cells, solid oxide fuel cells, and/or any other fuel cell type, and/or any combination thereof.

In any and/or all of the embodiments described herein, the respective CPU 4, server computer 510, computer 970, or other central processing computer, and/or the server

00444959560

computer 952, and/or any other central processing computers and/or devices, can maintain maintenance records and/or service records for any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, recreational vehicles, residential premises, and/or any of the commercial premises described herein, and/or for any of the respective systems, subsystems, devices, and/or components of same.

The respective CPU 4 or computers can monitor maintenance and/or servicing activities, store information regarding maintenance and/or servicing performed thereon and/or thereto, and/or provide notification, via e-mail message, fax transmission, beeper and/or pager message, telephone message, and/or notification via any other appropriate means, for and/or regarding any of the herein-described vehicles and/or premises and/or systems, subsystems, devices and/or components, of same. In this manner, maintenance and/or service records can be accessed and/or obtained via the apparatus and method of the present invention by accessing the respective CPU 4 and/or any of the other computers described herein. The CPU 4 and/or any of the other computers described herein can also be programmed to provide notification to the respective



In any and/or all of the embodiments described herein, any of the systems, subsystems, equipment systems, devices, and/or components, of any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, recreational vehicles, residential premises, and/or commercial premises, can be controlled, monitored, and/or secured, via the CPU 4 and/or via any other computer, server computer, communication device, and/or any other devices, described herein.

In any and/or all of the embodiments described herein, the movement, propulsion, direction of travel, and/or the operation, of any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, recreational vehicles, and/or any of their respective systems, equipment systems, subsystems, devices, components and/or appliances, can be controlled via any of the herein-described transmitters, home and/or personal computers, and/or other suitable communication devices or computers, via any of the herein-described server computers, computers, central processing computers and/or similarly utilized computers and/or computer systems.

002740 0027560

CONFIDENTIAL

In another preferred embodiment of the present invention, the CPU 4 can be the dedicated control device for, and/or can be an integrated control device and/or component of, any of the respective systems, subsystems, equipment systems, devices, and/or components, of any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, recreational vehicles, residential premises, and/or commercial premises. In this manner, for example, the CPU 4 and/or the respective apparatus can be utilized to provide for the direct control, monitoring, and/or security, of and/or for any one of the specific systems, subsystems, equipment systems, devices and/or components, of any of the herein-described vehicles, motor vehicles, boats, marine vessels, airplanes, aircraft, recreational vehicles, residential premises, and/or commercial premises.

In the same manner, any specific system, equipment system, subsystem, device and/or component, can be directly controlled, monitored, and/or secured, directly by, from, and/or via, the dedicated CPU 4 and/or by, from, and/or via, the CPU 4 which can be an internal and/or an integrated control device and/or component of the respective

system, equipment system, subsystem, device and/or component.

In any of the embodiments described herein which provide centralized processing functionality such as those embodiments of Figure 5B, Figure 11A, and Figure 11B, any of the respective server computers 510, computers 970, server computers 952 and computers 970 can be any computers and/or computer systems, central processing computers, sever computers, network computers, and/or any other computers and/or communication devices, depending upon the specific application and/or the communication networks which are utilized in conjunction therewith. Any of the respective server computers 510, computers 970, server computers 952 and computers 970, can also be implemented by any number any/or type of computers and/or computer systems.

In any and/or all of the embodiments described herein, any of the respective transmitters 2, central processing units CPU 4, home and/or personal computers 150, server computers 510, computers 970, server computers 952, can transmit signals, data and/or information, to, as well as receive signals, data and/or information, from, any one or more of the respective transmitters 2, central processing



units CPU 4, home and/or personal computers 150, server computers 510, computers 970, server computers 952. Any of the respective transmitters 2, central processing units CPU 4, home and/or personal computers 150, server computers 510, computers 970, server computers 952, can communicate with each other in a bi-directional manner and/or fashion.

In any and/or all of the embodiments described herein, the CPU 4 can generate and transmit an appropriate message and/or signal, which can contain any appropriate data and/or information, and transmit said signal to a respective transmitter 2, home and/or personal computer 150, server computer 510, computer 970, and/or server computer 952, depending upon the embodiment utilized. In turn, any of the server computers 510, computers 970, and/or server computers 952, can process and/or transmit either the signal and/or a signal generated in response to the signal transmitted from the CPU 4 to the transmitter 2, the home and/or personal computer, and/or any other communication device associated with the respective individual, owner, user, and/or occupant, to be provided with such notification.







remote from said first control device and remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

2. The apparatus of claim 1, further comprising:

a monitoring device for monitoring at least one of the vehicle, the premises, the vehicle operational status, the vehicle operation, the premises operational status, the premises operation, a one of vehicle and premises one of system, equipment system, subsystem, device, component, and appliance, one of a vehicle and a premises one of fuel supply, water supply, coolant supply, one of electrical generator and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, engine temperature level, one of an electrical circuit and an electrical device, activity inside the one of vehicle and premises, and activity outside the one of vehicle and premises.

3. The apparatus of claim 1, further comprising:

a positioning device for determining location of the one of vehicle and premises, wherein said positioning device provides the location of the one of vehicle and premises on a digitized map.

4. The apparatus of claim 1, further comprising:

one of a camera and a video recording device for providing video conferencing with an individual located one of inside, outside, and at, the one of vehicle and premises.

5. The apparatus of claim 1, wherein said first control device detects at least one of a vehicle use, an unauthorized use of the vehicle, and a theft of the vehicle, a premises use, an unauthorized use of the premises, and a theft of the premises.

6. The apparatus of claim 1, wherein the communication device is one of a stationary device, a hand-held device, a mobile device, a telephone, a digital telephone, a cordless telephone, a cellular telephone, a wireless telephone, a computer, a personal computer, a personal digital assistant, a television, an interactive television, a digital television, a personal communications

device, a personal communications services device, a display telephone, a video telephone, a watch, a beeper, and a pager.

7. The apparatus of claim 1, further comprising:

one of a microphone and an audio recording device for providing conferencing with an individual located one of inside, outside, and at, the one of vehicle and premises.

8. The apparatus of claim 4, wherein said one of a camera and a video recording device is at least one of mounted on and moveable along a guiding device.

9. The apparatus of claim 7, wherein said one of a microphone and an audio recording device is at least one of mounted on and moveable along a guiding device.

10. The apparatus of claim 1, wherein said first control device one of receives and processes diagnostic one of data and information one of from and regarding said at least one of a vehicle, a premises, the vehicle one of system, equipment system, subsystem, device, component and

appliance, and the premises one of system, equipment system, subsystem, device, component and appliance.

11. The apparatus of claim 10, wherein said first control device transmits a first diagnostic signal to the second control device.

12. The apparatus of claim 11, wherein the second control device processes said first diagnostic signal and at least one of generates and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis one of for and regarding said at least one of a vehicle, a premises, the vehicle one of system, equipment system, subsystem, device, component and appliance, and the premises one of system, equipment system, subsystem, device, component and appliance.

13. A control method, comprising:

at least one of monitoring and detecting an event regarding at least one of a vehicle, a premises, the vehicle one of system, equipment system, subsystem, device, component and appliance, and the premises one of system,





14. The method of claim 13, further comprising:

monitoring at least one of the vehicle, the premises, the vehicle operational status, the vehicle operation, the premises operational status, the premises operation, a one of vehicle and premises one of system, equipment system, subsystem, device, component, and appliance, one of a vehicle and a premises one of fuel supply, water supply, coolant supply, one of electrical generator and alternator operation, battery charge level, fuel cell output, fuel cell fuel supply, fuel cell operation, engine temperature level, one of an electrical circuit and an electrical device, activity inside the one of vehicle and premises, and activity outside the one of vehicle and premises.

15. The method of claim 13, further comprising:

determining a location of the one of vehicle and premises; and

providing the location of the one of vehicle and premises on a digitized map.

00440-53E1560

00240597560

16. The apparatus of claim 1, wherein the one of vehicle and premises one of system, equipment system, subsystem, device, component, and appliance, is at least one of a vehicle ignition system, a vehicle fuel system, a vehicle exhaust system, a vehicle one of electrical, mechanical, and electro-mechanical one of system and component, a vehicle light system, a vehicle alarm system, a vehicle anti-theft system, a vehicle recovery system, a vehicle door lock system, a vehicle hood lock system, a horn, a vehicle surveillance system, a video device, a video recording device, an audio device, and an audio recording device, a vehicle battery, a vehicle fuel cell, a "smart" window, a premises fuel system, a premises exhaust system, a premises one of electrical, mechanical, and electro-mechanical one of system and component, a premises light system, a premises alarm system, a premises anti-theft system, a premises door lock system, a vehicle surveillance system, a video device, a video recording device, an audio device, and an audio recording device, a premises battery, a premises fuel cell, and a premises "smart" window.

17. The apparatus of claim 1, wherein the vehicle is one of a motor vehicle, an automobile, a truck, a tractor trailer, a marine vehicle, a marine vessel, a boat, an

aircraft, a jet, a plane, construction equipment, farm equipment, a commercial vehicle, a recreational vehicle, a motorcycle, a snowmobile, a motor home, a mobile home, a water submersible vehicle, and an unmanned one of vehicle and equipment, and wherein said premises is one of a residential premises, an industrial structure, a drilling structure, a mining structure, industrial equipment, construction equipment, a commercial building, and a commercial premises.

18. A control apparatus, comprising:

a first control device for processing information regarding an event regarding at least one of a vehicle, a premises, the vehicle one of system, equipment system, subsystem, device, component and appliance, and the premises one of system, equipment system, subsystem, device, component and appliance, wherein said first control device is located at the one of vehicle and premises;

wherein said first control device receives a first first notification signal one of generated by and transmitted from a second control device in response to an event regarding at least one of the vehicle, the premises,

the vehicle one of system, equipment system, subsystem,  
device, component and appliance, and the premises one of  
system, equipment system, subsystem, device, component and  
appliance, wherein the second control device is located at  
the one of vehicle and premises, wherein said first  
notification signal contains information regarding the  
event,

and further wherein said first control device one of  
generates and transmits a second notification signal to a  
communication device associated with an individual, wherein  
the communication device is located at a location which is  
remote from said first control device and remote from the  
second control device, and further wherein the communication  
device generates a third notification signal which provides  
notification to an individual of the occurrence of the  
event.

19. The apparatus of claim 18, wherein the second  
control device one of receives and processes diagnostic one  
of data and information one of from and regarding said at  
least one of a vehicle, a premises, the vehicle one of  
system, equipment system, subsystem, device, component and  
appliance, and the premises one of system, equipment system,

subsystem, device, component and appliance, wherein the second control device transmits a first diagnostic signal to said first control device, and further wherein said first control device processes said first diagnostic signal and at least one of generates and transmits a second diagnostic signal to the communication device, wherein the communication device provides notification to an individual of a diagnosis one of for and regarding said at least one of a vehicle, a premises, the vehicle one of system, equipment system, subsystem, device, component and appliance, and the premises one of system, equipment system, subsystem, device, component and appliance.

20. The apparatus of claim 18, wherein the one of vehicle and premises one of system, equipment system, subsystem, device, component, and appliance, is at least one of a vehicle ignition system, a vehicle fuel system, a vehicle exhaust system, a vehicle one of electrical, mechanical, and electro-mechanical one of system and component, a vehicle light system, a vehicle alarm system, a vehicle anti-theft system, a vehicle recovery system, a vehicle door lock system, a vehicle hood lock system, a horn, a vehicle surveillance system, a video device, a video recording device, an audio device, and an audio recording

00440-544560

device, a vehicle battery, a vehicle fuel cell, a "smart" window, a premises fuel system, a premises exhaust system, a premises one of electrical, mechanical, and electro-mechanical one of system and component, a premises light system, a premises alarm system, a premises anti-theft system, a premises door lock system, a vehicle surveillance system, a video device, a video recording device, an audio device, and an audio recording device, a premises battery, a premises fuel cell, and a premises "smart" window.

002740" 59E F550

ABSTRACT OF THE DISCLOSURE

A control apparatus and method, including a first control device for monitoring and for detecting an event regarding at least one of a vehicle, a premises, the vehicle one of system, equipment system, subsystem, device, component and appliance, and the premises one of system, equipment system, subsystem, device, component and appliance, wherein the first control device is located at the one of vehicle and premises. The first control device one of generates and transmits a first notification signal to a second control device, wherein the first notification signal contains information regarding the event, and wherein the second control device is located at a location which is remote from the one of vehicle and premises, and further wherein the second control device one of generates and transmits a second notification signal to a communication device associated with an individual. The communication device is located at a location which is remote from the first control device and remote from the second control device, and further wherein the communication device generates a third notification signal which provides notification to an individual of the occurrence of the event.

004740 0307560