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| Paper No |
| which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment): |
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| United States Patent Number 6,5 49,130, column, line, |
| WIPO₃⊋ub. No, page, tine |
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| | (iv) to the application file record of the above-identified ABANDONED a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and imed, in the following document (as shown in the attachment): |
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(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2004/0160319 A1

(43) Pub. Date:

Aug. 19, 2004

CONTROL, MONITORING AND/OR (54) SECURITY APPARATUS AND METHOD

(76) Inventor: Raymond Anthony Joao, Yonkers, NY

Correspondence Address: RAYMOND A. JOAO, ESQ. 122 BELLEVUE PLACE YONKERS, NY 10703 (US)

(21) Appl. No.:

10/781,751

(22) Filed:

Feb. 20, 2004

Related U.S. Application Data

Continuation-in-part of application No. 10/244,334, filed on Sep. 16, 2002, which is a continuation-in-part of application No. 09/551,365, filed on Apr. 17, 2000, now Pat. No. 6,542,076, which is a continuation-inpart of application No. 09/277,935, filed on Mar. 29, 1999, now Pat. No. 6,549,130, which is a continuation of application No. 08/683,828, filed on Jul. 18, 1996, now Pat. No. 5,917,405, which is a continuation-in-part of application No. 08/587,628, filed on Jan. 17, 1996, now abandoned, which is a continuation of application No. 08/489,238, filed on Jun. 12, 1995, now Pat. No. 5,513,244, which is a continuation of application No. 08/073,755, filed on Jun. 8, 1993, now abandoned.

Said application No. 08/683,828 is a continuation-inpart of application No. 08/622,749, filed on Mar. 27, 1996, now abandoned.

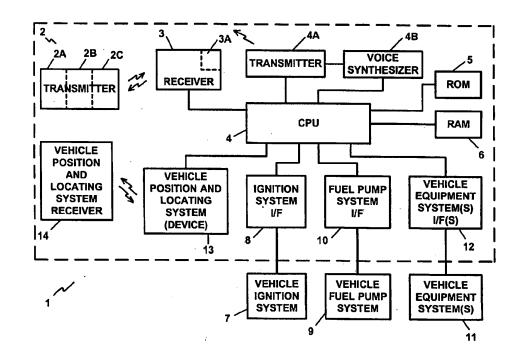
Provisional application No. 60/187,735, filed on Mar. 8, 2000. Provisional application No. 60/190,379, filed on Mar. 17, 2000.

Publication Classification

(51) Int. Cl.⁷ G08B 1/08 U.S. Cl. 340/539.1; 340/426.1; 340/825.72

(57)**ABSTRACT**

A control apparatus, including a first control device, located at a vehicle or premises, capable of at least one of controlling, enabling, disabling, activating, and deactivating, one or more of at least one of a system, equipment system, component, device, equipment, and appliance, of a vehicle or premises, with a first signal. The first control device generates and/or transmits the first signal in response to a second signal generated by and/or transmitted from a second control device located remote from the vehicle or premises. The second signal is automatically received by the first control device. The second control device generates and/or transmits the second signal in response to a third signal generated by and/or transmitted from a third control device located remote from the vehicle or premises and the second control device. The third signal is automatically received by the second control device.





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United States Patent [19]

[11] Patent Number:

5,917,405

Joao

[45] Date of Patent:

*Jun. 29, 1999

[54] CONTROL APPARATUS AND METHODS FOR VEHICLES

[76] Inventor: Raymond Anthony Joao, 122 Bellevue

Pl., Yonkers, N.Y. 10703

[*] Notice: This patent issued on a continued pros-

ecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C.

154(a)(2).

[21] Appl. No.: 08/683,828

[22] Filed: Jul. 18, 1996

Related U.S. Application Data

[63] Continuation-in-part of application No. 08/622,749, Mar. 27, 1995, and application No. 08/587,628, Jan. 17, 1996, abandoned, which is a continuation of application No. 08/489,238, Jun. 12, 1995, Pat. No. 5,513,244, which is a continuation of application No. 08/073,755, Jun. 8, 1993, abandoned.

| [51] | Int. Cl.6 | | B60R 25/10 |
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| [[[] | ELC CI | 240/426 240/4255 | 240/005 22 |

425.5; 370/352, 389; 307/10.2; 455/404; 180/287; 701/33, 36

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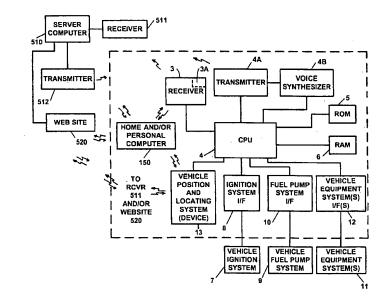
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| 5,682,133 | 10/1997 | Johnson et al 340/426 |

Primary Examiner—Michael Horabik Assistant Examiner—Timothy Edwards, Jr. Attorney, Agent, or Firm—Raymond A. Joao

[57] ABSTRACT

A control apparatus for a vehicle, which comprises a first control device. The first control device one of generates and transmits a first signal for one of activating, deactivating, enabling, and disabling, one of a vehicle component, a vehicle device, a vehicle system, and a vehicle subsystem. The first control device is located at the vehicle. The first control device is responsive to a second signal, wherein the second signal is one of generated by and transmitted from a second control device. The second control device is located at a location which is remote from the vehicle. The second control device is responsive to a third signal, wherein the third signal is one of generated by and transmitted from a third control device. The third control device is located at a location which is remote from the vehicle and remote from the second control device.

20 Claims, 20 Drawing Sheets



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United States Patent [19]

Joao

[11] Patent Number:

5,917,405

[45] Date of Patent:

*Jun. 29, 1999

[54] CONTROL APPARATUS AND METHODS FOR VEHICLES

[76] Inventor: Raymond Anthony Joao, 122 Bellevue

Pl., Yonkers, N.Y. 10703

[*] Notice:

This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

..... B60R 25/10

[21] Appl. No.: 08/683,828

[51] Int. Cl.⁶

[56]

[22] Filed: Jul. 18, 1996

Related U.S. Application Data

[63] Continuation-in-part of application No. 08/622,749, Mar. 27, 1996, and application No. 08/587,628, Jan. 17, 1996, abandoned, which is a continuation of application No. 08/489,238, Jun. 12, 1995, Pat. No. 5,513,244, which is a continuation of application No. 08/073,755, Jun. 8, 1993, abandoned.

| [52] | U.S. Cl 340/426; 340/425.5; 340/825 | .32; |
|------|---|------|
| | 701/36; 307/10.2; 342/457; 455/ | 404 |
| [58] | Field of Search 342/457; 340/4 | 426, |
| | 340/825.34, 825.32, 825.36, 825.37, 825 | .49, |
| | 425.5; 370/352, 389; 307/10.2; 455/4 | 404; |

180/287; 701/33, 36

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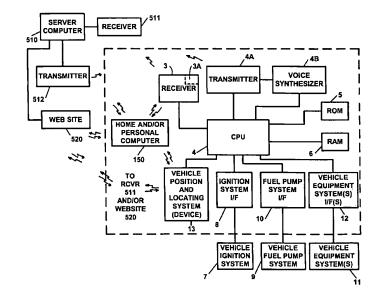
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Primary Examiner—Michael Horabik Assistant Examiner—Timothy Edwards, Jr. Attorney, Agent, or Firm—Raymond A. Joao

[7] ABSTRACT

A control apparatus for a vehicle, which comprises a first control device. The first control device one of generates and transmits a first signal for one of activating, deactivating, enabling, and disabling, one of a vehicle component, a vehicle device, a vehicle system, and a vehicle subsystem. The first control device is located at the vehicle. The first control device is responsive to a second signal, wherein the second signal is one of generated by and transmitted from a second control device. The second control device is located at a location which is remote from the vehicle. The second control device is responsive to a third signal, wherein the third signal is one of generated by and transmitted from a third control device. The third control device is located at a location which is remote from the vehicle and remote from the second control device.

20 Claims, 20 Drawing Sheets



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(12) United States Patent

(10) Patent No.:

US 6,542,076 B1

(45) Date of Patent:

*Apr. 1, 2003

(54) CONTROL, MONITORING AND/OR SECURITY APPARATUS AND METHOD

(76) Inventor: Raymond Anthony Joao, 122 Bellevue

Pl., Yonkers, NY (US) 10703

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35

U.S.C. 154(b) by 0 days.

This patent is subject to a terminal dis-

claimer.

(21) Appl. No.: 09/551,365

(22) Filed: Apr. 17, 2000

Related U.S. Application Data

(63) Continuation-in-part of application No. 09/277,935, filed on Mar. 29, 1999, which is a continuation of application No. 08/683,828, filed on Jul. 18, 1996, now Pat. No. 5,917,405, and a continuation-in-part of application No. 08/622,749, filed on Mar. 27, 1996, now abandoned, and a continuation-in-part of application No. 08/587,628, filed on Jan. 17, 1996, now abandoned, which is a continuation of application No. 08/489,238, filed on Jun. 12, 1995, now Pat. No. 5,513,244, which is a continuation of application No. 08/073,755, filed on Jun. 8, 1993, now abandoned.

(60) Provisional application No. 60/187,735, filed on Mar. 8, 2000, and provisional application No. 60/190,379, filed on Mar. 17, 2000.

(51) Int. Cl.⁷ G08B 1/08

(52) U.S. Cl. 340/539; 340/425.5; 340/426; 340/540; 307/10.2

340/428, 429, 430, 539, 825.2, 825.32, 825.34, 825.37, 825.69; 307/10.2, 10.3; 342/357.03, 357.07, 357.09, 457; 701/1,

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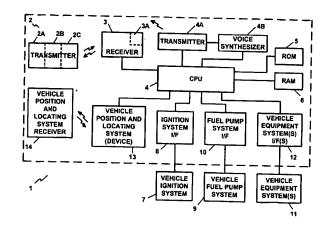
Primary Examiner—Van T. Trieu

(74) Attorney, Agent, or Firm-Raymong A. Joao, Esq.

57) ABSTRACT

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.

218 Claims, 20 Drawing Sheets



36, 49

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United States Patent [19]

[11] Patent Number:

5,917,405

Joao

[45] Date of Patent:

*Jun. 29, 1999

| [54] | CONTROL APPARATUS AND METHODS |
|------|-------------------------------|
| | FOR VEHICLES |

[76] Inventor: Raymond Anthony Joao, 122 Bellevue Pl., Yonkers, N.Y. 10703

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year

patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: 08/683,828

[22] Filed: Jul. 18, 1996

Related U.S. Application Data

[63] Continuation-in-part of application No. 08/622,749, Mar. 27, 1996, and application No. 08/587,628, Jan. 17, 1996, abandoned, which is a continuation of application No. 08/489,238, Jun. 12, 1995, Pat. No. 5,513,244, which is a continuation of application No. 08/073,755, Jun. 8, 1993, abandoned.

| [51] | Int. | CI.6 | | B60R 25/10 |
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[52] **U.S. Cl.** **340/426**; 340/425.5; 340/825.32; 701/36; 307/10.2; 342/457; 455/404

425.5; 370/352, 389, 307/10.2; 455/404; 180/287; 701/33, 36

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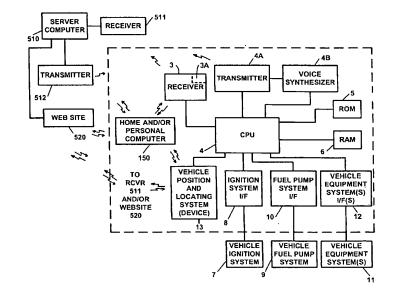
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| 5,682,133 | 10/1997 | Johnson et al 340/426 |

Primary Examiner—Michael Horabik Assistant Examiner—Timothy Edwards, Jr. Attorney, Agent, or Firm—Raymond A. Joao

[57] ABSTRACT

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20 Claims, 20 Drawing Sheets



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United States Patent [19]

Patent Number:

5,917,405

Date of Patent:

*Jun. 29, 1999

[54] CONTROL APPARATUS AND METHODS FOR VEHICLES

[76] Inventor: Raymond Anthony Joao, 122 Bellevue Pl., Yonkers, N.Y. 10703

[*] Notice: This patent issued on a continued prosecution application filed under 37 CFR

1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C.

154(a)(2).

[21] Appl. No.: 08/683,828

Joao

[22] Filed: Jul. 18, 1996

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[51] Int. Cl.6 B60R 25/10 340/426; 340/425.5; 340/825.32; [52] U.S. Cl. 701/36; 307/10.2; 342/457; 455/404

340/825.34, 825.32, 825.36, 825.37, 825.49, 425.5; 370/352, 389; 307/10.2; 455/404; 180/287; 701/33, 36

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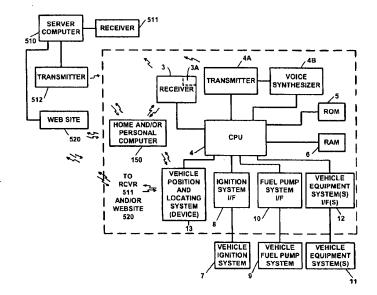
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| 5,513,244 | 4/1996 | Joao et al 379/58 |
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| 5,557,254 | 9/1996 | Johnson et al 340/825.34 |
| 5,563,453 | 10/1996 | Nyfelt 340/426 |
| 5,682,133 | 10/1997 | Johnson et al 340/426 |

Primary Examiner-Michael Horabik Assistant Examiner-Timothy Edwards, Jr. Attorney, Agent, or Firm-Raymond A. Joao

ABSTRACT

A control apparatus for a vehicle, which comprises a first control device. The first control device one of generates and transmits a first signal for one of activating, deactivating, enabling, and disabling, one of a vehicle component, a vehicle device, a vehicle system, and a vehicle subsystem. The first control device is located at the vehicle. The first control device is responsive to a second signal, wherein the second signal is one of generated by and transmitted from a second control device. The second control device is located at a location which is remote from the vehicle. The second control device is responsive to a third signal, wherein the third signal is one of generated by and transmitted from a third control device. The third control device is located at a location which is remote from the vehicle and remote from the second control device.

20 Claims, 20 Drawing Sheets







9-11-06

PTO/SB/68 (11-04)
Approved for use through 7/31/2006, OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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| REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14 |
|--|
| Bring completed form to: File Information Unit, Room 2E04 2900 Crystal Drive Arlington, VA 22202-3514 In re Application of Application Number Filed I J J J |
| Telephone: (703) 308 2785 D |
| I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment): File Fi |
| Related Information About Access to Applications Maintained in the Image File Wrapper System (IFW) and Access to Pending Applications in General A member of the public, acting without a power to inspect, cannot order applications maintained in the IFW system through the FIU. If the member of the public is entitled to a copy of the application file, then the file is made available through the Public Patent Application Information Retrieval system (Public PAIR) on the USPTO internet web site (www.uspto.gov). Terminals that allow access to Public PAIR are available in the Public Search Room. The member of the public may also be entitled to obtain a copy of all or part of the application file upon payment of the appropriate fee. Such copies must be purchased through the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)). For published applications that are still pending, a member of the public may obtain a copy of: the file contents; the pending application as originally filed; or any document in the file of the pending application. For unpublished applications that are still pending: (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application, or an international patent application in accordance with PCT Article 21(2), a member of the public may obtain a copy of the file contents; the pending application as originally filed; or any document in the file of the pending application. (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of the pending application as originally filed. |
| Signature FOR TO USE ONLY Stop 1 1 1986 Approved by: |
| Registration Number, if applicable File Information it applicable Unit: |
| Telephone Number |

This collection of information is required by 37 CFR 1.11 and 1.14. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. BRING TO: File Information Unit, Room 2E04, 2900 Crystal Drive, Arlington, Virginia.

U.S. Patent and Tracemark Office: U.S. DEPART Month For Controllars are required to rescond to a collection of information upless it displays a valid OMS control number. i abandoned application i)ER 37 CFR 1.14 REQUEST FOR ACCESS TO in re Application of Application Number Bring completed form to: 1/17/96 File Information Unit 08/587 62B Crystal Plaza Three, Room 1001 EEB 0 3 5002 2021 South Clark Place Arlington, VA Telephone: (703) 308-2733 I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment): United States Patent Application Publication No. 654 130 , page, _____line__ _____, column _____, line, _____or United States Patent Number _____ WIPO Pub. No.______, page ______, line _____. Related Information about Access to Pending Applications (37 CFR 1.14): Direct access to pending applications is not available to the public but copies may be available and may be purchased from the Office of Public Records upon payment of the appropriate fee (37 CFR 1.19(b)), as follows: For published applications that are still pending, a member of the public may obtain a copy of: the file contents; the pending application as originally filed; or any document in the file of the pending application. For unpublished applications that are still pending: (1) If the benefit of the pending application is claimed under 35 U.S.C. 119(a), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of: the file contents; the pending application as originally filed; or any document in the file of the pending application. (2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain a copy of: the pending application as originally filed. 02/03/05 Date FOR PTO USE ONLY NISIMEN Typed or printed name Approved by: Fr. Registration Number, if applicable Unit (703) 916 -1560 Telephone Number

This collection of information is required by 37 CFR 1.14. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO This exitaction of information is required by 37 CFR 1.14. The information is required to obtain or retain a denent cy the public which is one (and by the Cart of the Cart of



| REQUEST FOR ACCESS OF ABAND | ONED APPLICATION UNDER 37 CFR 1.14(a) |
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| | Application Number Filed |
| DEC 0 7 2000 | 08/587,628 01-17-96 |
| File Information Unit | Group Art Unit Examiner |
| | • |
| Assistant Commissioner for Patents Washington, DC 20231 | Paper No. #121 |
| Identified ARANDONED application which is | (a)(3)(iv) to the application file record of the above- s: (CHECK ONE) |
| (B) referred to in an application that is on Application No, paper number, | pen to public inspection as set forth in 37 CFR 1.11, i.e.,, filed of of |
| inspection, i.e., Application No (D) an application in which the applicant | t has filed an authorization to lay open the complete |
| application to the public. Please direct any correspondence concerni | ing this request to the following address: |
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| and Trademark Office, Washington, DC 2023 Assistant Commissioner for Patents, Washington, DC 2023 | File Information Unit |





United States Patent [19]

Joao

[11] Patent Number:

5,917,405

[45] Date of Patent:

*Jun. 29, 1999

| [54] | CONTROL APPARATUS AND METHODS |
|------|-------------------------------|
| | FOR VEHICLES |

[76] Inventor: Raymond Anthony Joao, 122 Bellevue Pl., Yonkers, N.Y. 10703

[*] Notice:

This patent issued on a continued prosecution application filed under 37 CFR 1.53(d), and is subject to the twenty year patent term provisions of 35 U.S.C. 154(a)(2).

[21] Appl. No.: 08/683,828

[22] Filed: Jul. 18, 1996

Related U.S. Application Data

[63] Continuation-in-part of application No. 08/622,749, Mar. 27, 1996, and application No. 08/587,628. Jan. 17. 1996, abandoned, which is a continuation of application No. 08/489,238, Jun. 12, 1995, Pat. No. 5,513,244, which is a continuation of application No. 08/073,755, Jun. 8, 1993, abandoned.

| [51] | Int. Cl | BOOK 25/10 |
|------|---------------------|---------------------------|
| [52] | U.S. Cl 340/426 | ; 340/425.5; 340/825.32; |
| | 701/36; 303 | 7/10.2; 342/457; 455/404 |
| [58] | Field of Search | 342/457; 340/426, |
| | 340/825.34, 825.32, | , 825.36, 825.37, 825.49, |

425.5; 370/352, 389; 307/10.2; 455/404; 180/287; 701/33, 36

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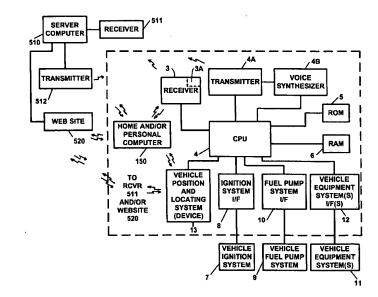
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| 5,563,453 | 10/1996 | Nyfelt 340/426 |
| 5,682,133 | 10/1997 | Johnson et al 340/426 |

Primary Examiner—Michael Horabik Assistant Examiner—Timothy Edwards, Jr. Attorney, Agent, or Firm—Raymond A. Joao

[57] ABSTRACT

A control apparatus for a vehicle, which comprises a first control device. The first control device one of generates and transmits a first signal for one of activating, deactivating, enabling, and disabling, one of a vehicle component, a vehicle device, a vehicle system, and a vehicle subsystem. The first control device is located at the vehicle. The first control device is responsive to a second signal, wherein the second signal is one of generated by and transmitted from a second control device. The second control device is located at a location which is remote from the vehicle. The second control device is responsive to a third signal, wherein the third signal is one of generated by and transmitted from a third control device. The third control device is located at a location which is remote from the vehicle and remote from the second control device.

20 Claims, 20 Drawing Sheets





UNITED STATES PARTMENT 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.

08/587,628 01/17/96 JOAO R RJ-003

RAYMOND A JOAO 122 BELLEVUE PLACE YONKERS NY 10703 LM01/1208 TROST IV, W

ART UNIT PAPER NUMBER
2744

DATE MAILED: 12/08/98

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

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95) *U.S. GPO: 1998-437-638/80022





Notice of Abandonment

Application No. 08/587,628 Applicant(s)

Examiner

William Trost

Group Art Unit 2744

Joao et al.



| A response (with a Certificate of Mailing or Transmission of) was received on, which is after the expiration of the period for response (including a total extension of time of) which expired on, but it does not constitute a proper response to the final |
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| , which is after the expiration of the period for response (including a total extension of time of month(s)) which expired on |
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| A proposed response was received on but it does not constitute a proper response to the final |
| rejection. |
| (A proper response to a final rejection consists only of: a timely filed amendment which places the application in condition for allowance; a Notice of Appeal; or the filing of a continuing application under 37 CFR 1.62 (FWC)). |
| X No response has been received. |
| applicant's failure to timely pay the required issue fee within the statutory period of three months from the mailing date of the Notice of Allowance. |
| The issue fee (with a Certificate of Mailing or Transmission of) was received on |
| ☐ The submitted issue fee of \$ is insufficient. The issue fee required by 37 CFR 1.18 is \$ |
| ☐ The issue fee has not been received. |
| applicant's failure to timely file new formal drawings as required in the Notice of Allowability. |
| Proposed new formal drawings (with a Certificate of Mailing or Transmission of) were received on |
| ☐ The proposed new formal drawings filed are not acceptable. |
| ☐ No proposed new formal drawings have been received. |
| the express abandonment under 37 CFR 1.62(g) in favor of the FWC application filed on |
| the letter of express abandonment which is signed by the attorney or agent of record, the assignee of the entire interest, or all of the applicants. |
| the letter of express abandonment which is signed by an attorney or agent (acting in a representative capacity under 37 CFR 1.34(a)) upon the filing of a continuing application. |
| the decision by the Board of Patent Appeals and Interferences rendered on and because the period for seeking court review of the decision has expired and there are no allowed claims. |
| the reason(s) below: |
| White the state of |
| DWAYNE D. BOST SUPERVISORY PATENT EXAMINER GROUP 2700 |
| (70))308-5318 |

U. S. Patent and Trademark Office PTO-1432 (Rev. 5-95)

Notice of Abandonment

Part of Paper No. ____20



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Patent and Trademark Office

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Washington, D.C. 20231

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DATE MAILED:

02/19/98

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Commissioner of Patents and Trademarks



Application No. 08/587,628 Applicant(s)

Joao et al.

Examiner William Trost Group Art Unit 2744



| Responsive to communication(s) filed on Nov 10, 1997 | |
|---|--|
| This action is FINAL . | |
| Since this application is in condition for allowance exce | ept for formal matters, prosecution as to the merits is closed , 1935 C.D. 11; 453 O.G. 213. |
| A shortened statutory period for response to this action is | set to expire3month(s), or thirty days, whichever allure to respond within the period for response will cause the extensions of time may be obtained under the provisions of |
| isposition of Claims | is lower application |
| X Claim(s) 41-60 | is/are pending in the application. |
| Of the above, claim(s) | Is/are withdrawn from scholastan |
| Claim(s) | is/are allowed. |
| | is/are rejected. |
| | is/are objected to. |
| Claim(s) | are subject to restriction or election requirement. |
| Claims | |
| □ See the attached Notice of Draftsperson's Patent II □ The drawing(s) filed on | is approved disapproved. iner. priority under 35 U.S.C. § 119(a)-(d). popies of the priority documents have been |
| Acknowledgement is made of a claim for domesti | c priority under 35 U.S.C. § 119(e). |
| Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, Notice of Informal Patent Application, PTO-152 | |
| SEE OFFICE ACT | ION ON THE FOLLOWING PAGES |

U. S. Patent and Trademark Office PTO-326 (Rev. 9-95)

Office Action Summary

Part of Paper No. ____18

Art Unit: 2744

1. Claim 59 is objected to because of the following informalities: Although applicant's claim 59 meets the requirement of 112/2nd, i.e. - the metes and bounds are determinable, the syntax could be improved. Examples are: the use of 'a signal' to denote both the transmission of a signal to the vehicle and a signal which disables the vehicle. The examiner suggests that applicant amend line 3 to read "said signal to the vehicle" and line 6 to read "a control signal", and the addition in line 8 "in response to said control signal" after 'the vehicle'. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. 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 --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 49-54, 56-57 are rejected under 35 U.S.C. 102(b) as being anticipated by Gray et al (hereinafter Gray):

Regarding claims 49-50, Gray discloses a security system for a motor vehicle (28) comprising a transmitter (52) for transmitting a signal which is at a first location remote from the motor vehicle, a first receiver (27, police vehicles with mobile trackers) for receiving said signal at a second location remote from the motor vehicle (note Col. 8;51-68), and a control device (Fig.

Art Unit: 2744

5) for processing signals received by the first receiver, which provide an indication of the vehicle identity and theft of a vehicle (Col. 6;1-35).

Regarding claim 51, Gray discloses that the location (mobile units) are part of a central security service (22).

Regarding claims 52-53, Gray further discloses that the transmitter is a telephone and the first receivers being telephone signal receiving devices (use of cellular telephone in system, Col. 10;6-37, as well as dialing up central station or triangulation using cellular network).

Regarding claims 54, 56, Gray discloses that the control devices include microcomputers (use of mapping and display computer 50 or control circuit 122) and that the vehicle device is a vehicle recovery system.

Regarding claim 57, Gray also discloses that the signal comprises the accessing of data or control data (inclusion of vehicle id, and other codes, Col. 3;10-20).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 2744

5. Claims 41-48, 58-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gray et al (hereinafter Gray) in view of Song.

Regarding claim 41, Gray discloses a security system for a motor vehicle (28) comprising a transmitter (52) for transmitting a signal, a first receiver (60) for receiving a signal at a first location, a second receiver (27, police vehicles with mobile trackers) at a second location, a first control device (30) for processing the signal received by the first receiver and issuing a control signal to the vehicle (Col. 4;47-60), and a second control device (Fig. 5) for processing signals received by the second receiver, which provide an indication of the vehicle identity and theft of a vehicle (Col. 6;1-35). Gray fails to explicitly disclose that the transmitter is located at a third location which is remote from the first location and the second location, though Gray discloses that the receiver can be remotely activated (Col. 2;16-18).

On the other hand, Song teaches a security system for a vehicle which comprises a first receiver (Fig. 2), where a transmitter which is located at a third location, remote from a first and second location (dedicated phone station remote from vehicle or central station, Col. 8;3-22). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include a transmitter at a third remote location in order to provide remote activation of the security system.

Regarding claim 42, Gray discloses that the second location is at a motor vehicle (mobile tracking device located within the police cruiser).

Regarding claim 43, Gray discloses that the first location is a central security service (22).

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Regarding claims 44-45, Gray further discloses that the transmitter is a telephone and the first receivers being telephone signal receiving devices (use of cellular telephone in system, Col. 10;6-37, as well as dialing up central station or triangulation using cellular network).

Regarding claims 46-47, Gray discloses that the control devices include microcomputers (use of mapping and display computer 50 or control circuit 122) and that the vehicle device is a vehicle recovery system.

Regarding claim 48, Gray also discloses that the signal comprises the accessing of data or control data (inclusion of vehicle id, and other codes, Col. 3;10-20).

Regarding claim 58, Gray discloses a method for providing security to a motor vehicle (28) comprising the steps of registering the vehicle (Col. 4;10-18) with a security service (22), transmitting a signal to the security service (Col. 3;8-15), receiving the signal (via receivers 44, 46, 48), and processing the signal at the security service (central station which includes control and mapping/display computer 40, 50). Gray also discloses generating or issuing a signal which denotes the vehicle identity or theft indication (vehicle transmission signals indicating id and theft, Col. 3;10-20 as well as verification of theft transmitted by security service, Col. 5;50-65). Gray fails to disclose transmitting a signal from a location which is remote from the motor vehicle to the security service.

On the other hand, Song teaches a system in which a signal is transmitted from a location remote from the motor vehicle (Col. 8;3-22), where upon receiving the activation signal, the vehicle is commanded to transmit a signal to a security service (Col. 10;13-36). Therefore, it

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Page 6

Art Unit: 2744

would have been obvious to one of ordinary skill in the art at the time of the invention to include a remote location from the motor vehicle in order to provide remote activation of a security system.

Regarding claim 59, Gray further discloses transmitting a signal to the vehicle, where the signal is received (60), processed (64), and the generation of a signal which disables or deactivates devices within the vehicle (Col. 4;50-60).

6. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray and Song as applied to claim 50 above, and further in view of Drori et al.

Regarding claim 55, the combination discloses all the particulars of the claim except to specifically teach that the first control means will prevent deactivation of the vehicle's operating system if it is determined that the vehicle's engine is running.

Drori et al. disclose a remote controlled theft-deterrent system for motor vehicles and specifically in col. 2, lines 28-36 that the execution of a remote control command is delayed until a predetermined condition of the vehicle is satisfied, i.e. when the engine's rpm or vehicle speed is at or below a preset level (e.g. zero).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include this feature such that the driver of the vehicle is not put in a life threatening situation due to the deactivation of one of the vehicle's components.

Serial Number: 08/587,628

Art Unit: 2744

7. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray and Song as applied to claim 58 above, and further in view of Carrier et al.

Regarding claim 60, the combination discloses all the particulars of the claim except the simultaneous transmission of a signal to the motor vehicle and the law enforcement authorities (police). Gray discloses that upon verifying that a vehicle is stolen, a verification change signal is sent to the motor vehicle, and the police are notified (Col. 5;55-65).

In addition, Carrier et al. disclose, in an emergency/security apparatus, to provide notification of an emergency situation to at least two remote locations <u>simultaneously</u> in response to a single action performed by a user, i.e. the user dialing a "911" command.

Therefore, since Gray and Song disclose to contact the police when an owner of a vehicle discovers that his vehicle has been stolen and since Carrier et al. teach to transmit messages to two remote locations at the same time, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Gray and Song to automatically transmit a message to the police, in addition to the stolen vehicle, simultaneously by the owner in order for the user to more quickly notify the police of the stolen vehicle as opposed to the slower notification process of calling the police in order to increase the chance of vehicle recovery.

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Page 8

Art Unit: 2744

8. Applicant's arguments with respect to claims 41-48, 58-60 have been considered but are moot in view of the new ground(s) of rejection.

With respect to claims 49-57, it is noted that Gray still meets the claimed limitations, since the transmitter (52) is located remote from the motor vehicle, as well as a receiver (mobile tracker) which receives the signal (from central station), and processes the signal.

The examiner also notes that the 'signal' which is received at both the vehicle and security service could be better referred to as a --disabling signal-- at the vehicle and a --identification signal-- at the security service. As stated in the previous interview, the examiner considers the simultaneous reception aspect to be a pertinent part of the invention. Further, the examiner suggests additional limitations which limit the receivers to be in a motor vehicle and a security system, respectively.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for response to this final action is set to expire THREE MONTHS from the date of this action. In the event a first response is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2744

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event will the statutory period for response expire later than SIX MONTHS from the date of this final action.

10. Any response to this action should be mailed to:

Box AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 305-9508 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Trost whose telephone number is (703) 308-5318. The examiner can normally be reached on Tuesday-Friday from 7:00 a.m to 4:30 p.m. The examiner can also be reached on alternate Mondays.

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.

William Trost February 5, 1998 DWAYNE D. BOST SUPERVISORY PATENT EXAMINER GROUP 2700

| | | | | | | | | | | | | | | Sneet | | | |
|---------------|----------|-----|-----------|--------------------------------------|-----|-----|--------|----------|-------------|----------|---------------|------------------------|---------|-------------------|-------------|-------|--|
| Form PTO-1449 | | | | | | | | | | | Docket No.: | Serial No.:08/587,628 | | | | | |
| ! | | | | | | | | | ART CANT | | Applicant: F | CAYMOND . | A. JOAO | ET AL. | | | |
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND

RAYMOND A. JOAO, ET AL.

SERIAL NO.:

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER :

W. TROST

GROUP :

2744

Hon. Commissioner of Patents and Trademarks 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 Form PTO 1449 be made of record and be considered in connection with the examination of this application. Copies of the listed documents are enclosed.

U.S. Patent No. 5,682,133 to Johnson et al. teaches a programmable vehicle monitoring and security system having multiple access verification devices. It is submitted that this reference is not available as prior art as against the above-identified application.

U,S. Patent No. 5,432,841 to Rimer teaches a system for locating and communicating with mobile vehicles.

Entry of this Information Disclosure Statement is respectfully requested.

A Certification pursuant to 37 C.F.R. §1.97(e) is submitted herewith.

Respectfully submitted,

Raymond A. Joao Reg. No. 35,907

Encls.:

PTO Form 1449

2 references

Certification Pursuant to 37 C.F.R. §1.97(e)

Date:

January 9, 1998

122 Bellevue Place Yonkers, New York 10703

(914) 969-2992

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on January 9, 1998.

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RJ003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT :

RAYMOND A. JOAO, ET AL.

SERIAL NO.:

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

W. TROST

GROUP

2744

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

CERTIFICATION PURSUANT TO 37 C.F.R. §1.97(e)

Sir:

Applicant hereby certifies that no item of information contained in the accompanying Information Disclosure Statement, to the knowledge of the undersigned, after making a reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing of this statement and the filing of the accompanying Information Disclosure Statement.

Respectfully submitted,

Raywond A. Soao Reg. No. 35,907

Date: January 9, 1998

Raymond A. Joao 122 Bellevue Place

Yonkers, New York 10703

969-2992

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on January 9, 1998.

Raymond A. Joa



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RJ003

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

W. TROST

GROUP

2744

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

APPLICANT'S RESPONSE TO INTERVIEW SUMMARY

Sir:

This is in response to the Interview Summary mailed November 6, 1997. Applicant wishes to enter the following comments, in response to the Examiner's comments, in order to clarify the substance of the interview.

It is correctly noted that agreement was reached concerning claims 41-60. Applicant, however, wishes to comment as follows. In explaining the inventive concept, Applicant indicated that the inventive concept includes the transmission of a signal from a location which is remote from a vehicle as well as remote from a central location. In this regard, Applicant disagrees with the Examiner's comments regarding the explanation of the inventive concept.

With regards to the Examiner's suggestion for amending the claim language by including subject matter such as "the

simultaneous transmission to multiple sites based upon the one signal", Applicant respectfully submits that no agreement was reached regarding this suggestion.

Entry of this response is respectfully requested.

Respectfully Submitted:

Date: November 13, 1997

Raymond A. Joao 122 Bellevue Place

Yonkers, New York (H) (914) 969-2992

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on November 13, 1997.

TRADE PPLICANT

STATES PATENT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

W. TROST

GROUP

2608

Hon. Commissioner of Patents and Trademarks 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 Form PTO 1449 be made of record and be considered in connection with the examination of this application. A copy of the listed document is enclosed.

U.S. Patent No. 5,557,254 to Johnson et al. teaches a programmable vehicle monitoring system having multiple access verification devices. It is submitted that this reference is not available as prior art as against the above-identified application.

Entry of this Information Disclosure Statement is respectfully requested.

A Certification pursuant to 37 C.F.R. §1.97(e) is submitted herewith.

Respectfully submitted,

Reg. No. 35,907

PTO Form 1449 Encls.:

1 reference

Certification Pursuant to 37 C.F.R. §1.97(e)

Date: November 7, 1997

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

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on November 7, 1997

I hereby certical that this correspondence being deposited with the United tates Postal Service as an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on November 7, 1997.



Raymond A Joac

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT : RAYMOND A. JOAO, ET Al.

SERIAL NO. : 08/587,628

FILED: January 17, 1996

FOR : REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER: W. TROST GROUP: 2608

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

CERTIFICATION PURSUANT TO 37 C.F.R. §1.97(e)

Sir:

Applicant hereby certifies that no item of information contained in the accompanying Information Disclosure Statement, to the knowledge of the undersigned, after making a reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing date of this statement and the filing of the accompanying Information Disclosure Statement.

Respectfully Submitted,

By:

Reg. No. 35,907

Date:

November 7, 1997

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

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER _

W. TROST

GROUP

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Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

AMENDMENT AND RESPONSE TO OFFICE ACTION

Sir:

This is in response to the Office Action, dated July 18, 1997, wherein the Examiner rejected claims 41-60 in view of prior art.

Applicant gratefully acknowledges the Examiner's time and courtesy extended during the interview with Applicant on November 4, 1997.

Based on 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 amend claims 41, 43, 49, 51, 58 and 60 as follows:

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- 41. (Thrice Amended) A security system for a motor vehicle, comprising:
 - a transmitter for transmitting a signal;
- a first receiver for receiving said signal at a first location;
- a second receiver for receiving said signal at a second location;
- a first control device for processing said signal received by said first receiver, wherein said first control device issues a control signal to one of a vehicle, a vehicle ignition system, a vehicle fuel system and a vehicle device; and
- a second control device for processing said signal received by said second receiver, wherein said second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by said system[.];

wherein said transmitter is located at a third location which is remote from said first location and said second location.

43. (Thrice Amended) The system of claim 41, wherein at least one of said first location and said second location is at at least one of a central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.

49. (Thrice Amended) A security system for a motor vehicle, comprising:

a transmitter for transmitting a signal, wherein said transmitter is located at a first location which is remote from the motor vehicle;

a receiver for receiving said signal at a second location which is remote from the motor vehicle; and

a control device for processing said signal[, wherein said control device is located at a location which is not at the motor vehicle,] at said second location, and further wherein said control device at least one of generates and issues a signal indicative of at least one of motor vehicle identification, a theft of the motor vehicle and a function to be one of controlled and performed one of on, by and at the motor vehicle.

51. (Thrice Amended) The system of claim 49, wherein said receiver is located at at least one of a central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.

58. (Twice Amended) A method for providing security for a motor vehicle, comprising the steps of:

registering a motor vehicle with at least one of a central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

transmitting a signal <u>from a location which is remote</u> <u>from the motor vehicle</u> to at least one of <u>a central computer</u> <u>system</u>, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

receiving said signal at at least one of <u>a central</u> <u>computer system</u>, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

processing said signal at at least one of <u>a central</u> <u>computer system</u>, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

one of generating and issuing a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be performed one of on, [and] by and at the vehicle.

60. (Twice Amended) The method of claim 59, wherein said signal is transmitted simultaneously to each of the motor vehicle and to at least one of a central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.

IN THE ABSTRACT OF THE DISCLOSURE

Please delete the Abstract of the Disclosure and substitute therefor the new Abstract of the Disclosure which is attached hereto on a separate sheet.

NY1-179434.1 4

and

REMARKS

Claims 41-60 are pending in the present application. Applicant has amended claims 41, 43, 49, 51, 58 and 60. Applicant has amended the claims so as to more clearly distinguish the present invention, as defined by the claims, over the prior art.

Based on 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 and §103 REJECTIONS

The Examiner asserts that claims 41-54 and 56-59 are rejected under 35 U.S.C. §102(b) as being anticipated by Gray et al., U.S. Patent No. 5,003,317 (Gray). The Examiner also asserts that claim 55 is rejected under 35 U.S.C. §103(a) as being unpatentable over Gray in view of Drori et al., U.S. Patent No. 5,081,667 (Drori). The Examiner further asserts that claim 60 is rejected under 35 U.S.C. §103(a) as being unpatentable over Gray in view of Carrier et al., U.S. Patent No. 5,195,126 (Carrier). As noted above, Applicant has amended claims 41, 43, 49, 51, 58 and 60. Applicant has amended the claims so as to more clearly distinguish the present invention, as defined by the claims, over the prior art. Applicant respectfully submits that the present invention, as defined by the claims, is patentable over the prior art.

IA. CLAIMS 41-48 ARE PATENTABLE OVER GRAY

Applicant respectfully submits that the present invention, as defined by claims 41-48, is patentable over Gray.

Applicant respectfully submits that the present intention, as defined by independent claim 41, is patentable over Gray.

Applicant submits that Gray does not disclose or suggest a security system for a motor vehicle which comprises a transmitter for transmitting a signal, wherein said transmitter is located at a third location which is remote from said first location and said second location, which are specifically recited features of independent claim 41.

Applicant further submits that Gray does not disclose or suggest the first receiver, the second receiver, the first control device and the second control device, which have the claimed features of independent claim 41, which are still other specifically recited features of said claim.

In view of the above, Applicant respectfully submits that Gray fails to disclose or suggest many of the specifically recited elements and features of independent claim 41. Since Gray fails to disclose each and every feature of independent claim 41, Gray, as a matter of law, does not anticipate the present invention, as defined by independent claim 41. Further, since Gray fails to disclose or suggest many of the elements and features of independent claim 41, Applicant respectfully submits that the present invention, as defined by independent claim 41, is patentable over Gray.

In view of the above, Applicant submits that the present invention, as defined by independent claim 41, is patentable over Gray. Applicant further submits that claims 42-48, which depend directly from independent claim 41, so as to include all of the limitations of claim 41 and which further serve to narrow the scope

of claim 41, are also patentable because said claims depend from allowable subject matter.

Allowance of pending claims 41-48 is, therefore, respectfully requested.

IB. CLAIMS 49-57 ARE PATENTABLE OVER GRAY

Applicant respectfully submits that the present invention, as defined by claims 49-57, is patentable over Gray. Applicant respectfully submits that the present invention, as defined by independent claim 49, is patentable over Gray.

Applicant submits that Gray does not disclose or suggest a security system for a motor vehicle, which comprises a transmitter for transmitting a signal, wherein said transmitter is located at a first location which is remote from the motor vehicle, which are specifically recited features of independent claim 49.

Applicant further submits that Gray does not disclose or suggest the receiver and the control device, which have the claimed features of independent claim 49, which are still other specifically recited features of said claim.

In view of the above, Applicant respectfully submits that Gray fails to disclose or suggest many of the specifically recited elements and features of independent claim 49. Since Gray fails to disclose each and every feature of independent claim 49, Gray, as a matter of law, does not anticipate the present invention, as defined by independent claim 49. Further, since Gray fails to disclose or suggest many of the elements and features of independent claim 49, Applicant respectfully submits that the present

invention, as defined by independent claim 49, is patentable over Gray.

In view of the above, Applicant submits that the present invention, as defined by independent claim 49, is patentable over Gray. Applicant further submits that claims 50-57, which depend either directly or indirectly from independent claim 49, so as to include all of the limitations of claim 49 and which further serve to narrow the scope of claim 49, are also patentable because said claims depend from allowable subject matter.

Allowance of pending claims 49-57 is, therefore, respectfully requested.

IC. CLAIMS 58-60 ARE PATENTABLE OVER GRAY

Applicant respectfully submits that the present invention, as defined by claims 58-60, is patentable over Gray.

Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Gray.

Applicant respectfully submits that Gray does not disclose or suggest a method for providing security for a motor vehicle, which comprises the step of transmitting a signal from a location which is remote from the motor vehicle to at least one of a central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency, which has the claimed features of independent claim 58, which are specifically recited features of said claim.

Applicant further submits that Gray does not disclose or suggest the steps of receiving said signal at at least one of a NYI-179434.1

central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency, and processing said signal at at least one of a central computer system, a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency, which have the claimed features of independent claim 58, which are still other specifically recited features of said claim.

Applicant further submits that Gray does not disclose or suggest a method which comprises the step of one of generating and issuing a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be performed one of on, by and at the vehicle, which has the claimed features of independent claim 58, which are still other specifically recited features of said claim.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Gray. Applicant further submits that claims 59-60, which depend either directly or indirectly from independent claim 58, so as to include all of the limitations of claim 58 and which further serve to narrow the scope of claim 58, are also patentable because said claims depend from allowable subject matter.

Allowance of the pending claims 58-60 is, therefore, respectfully requested.

II. CONCLUSION

In view of the above, Applicant respectfully submits that the application is in condition for allowance and action to that end is respectfully requested.

Respectfully submitted,

Encl. Petition For One-Month Extension of Time
 Check in the amount of \$55.00

Date: November 7, 1997

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

10703

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 2023l, on November 7, 1997.

ABSTRACT OF THE DISCLOSURE

A security system for a motor vehicle, comprising a transmitter for transmitting a signal, a first receiver for receiving said signal at a first location, a second receiver for receiving said signal at a second location, a first control device for processing said signal received by said first receiver, wherein said first control device issues a control signal to one of a vehicle, a vehicle ignition system, a vehicle fuel system and a vehicle device, and a second control device for processing said signal received by said second receiver, wherein said second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by said system. The transmitter is located at a third location which is remote from said first location and said second location.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

.JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

W. TROST

GROUP

2608

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

PETITION FOR ONE-MONTH EXTENSION OF TIME

Sir:

The Applicant petitions for a one-month extension of time with regard to the Office Action dated July 18, 1997.

It is respectfully requested that a one-month extension of time be granted so that a response can be made to the Office Action.

A check, made payable to the Commissioner of Patents & Trademarks, in the amount of \$55.00, for the required fee, is enclosed herewith.

Respectfully submitted,

00000035 08587628 55.00 OP 11/20/1997 SDAVIS 01 FC:215

Reg. No.

Dated: November 7, 1997

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

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on November 7, 1997

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JNITED STATE DEPARTMENT OF COMMERCE

Patent and Trademark Office

dress: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

| . APPLICATION NO | . FILING DATE | FIRST NAMED INVENTOR | ATT | FORNEY DOCKET NO. |
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| Г | | 26M1/1106 7 | EX | AMINER |
| | ND A JOAO | | TROS | T,W |
| | ELLEVUE PLACE RS NY 10703 | | ART UNIT | PAPER NUMBER |
| | | | 2608 | |
| | | | DATE MAILED: | 11/06/97 |

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

Commissioner of Patents and Trademarks



| Interview | Summary | Exan |
|-----------|---------|------|

Applicant(s) Application No. 08/587,628

Examiner

Joao et al.



| | William Trost | 2608 | |
|---|---|-------------------------------|--------------------------------------|
| All participants (applicant, applicant's representative, PT | O personnel): | | |
| (1) William Trost | (3) | | |
| (2) Ray Joao | | | |
| Date of Interview | | | |
| Type: X Telephonic Personal (copy is given to | ☐ applicant ☐ applicant's rep | resentative). | |
| Exhibit shown or demonstration conducted: | No. If yes, brief description: ■ | | |
| Agreement X was reached. | | 41 | |
| Claim(s) discussed: 41-60 | | | |
| Identification of prior art discussed: Gray et al, Pagliaroli et al. | | | |
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| (A fuller description, if necessary, and a copy of the am the claims allowable must be attached. Also, where no is available, a summary thereof must be attached.) | copy of the amendents which wo | uld render the | ed would render' claims allowable |
| 1. $oxed{\boxtimes}$ It is not necessary for applicant to provide a sep | | | |
| Unless the paragraph above has been checked to indica LAST OFFICE ACTION IS NOT WAIVED AND MUST IN Section 713.04). If a response to the last Office action FROM THIS INTERVIEW DATE TO FILE A STATEMENT | clude the Substance of the has already been filed, APPLICAN OF THE SUBSTANCE OF THE INT | IT IS GIVEN O ERVIEW. | NE MONTH |
| Since the Examiner's interview summary above each of the objections, rejections and requiremental claims are now allowable, this completed form Office action. Applicant is not relieved from projection is also checked. | ents that may be present in the las is considered to fulfill the response | t Office actions requirements | of the last |
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U. S. Patent and Trademark Office PTO-413 (Rev. 10-95)

Interview Summary



UNITED STATES > EPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | AT | TORNEY DOCKET NO. |
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| | LE VUEL PLACE NY 10703 | - | ART UNIT 2608 | PAPER NUMBER |
| | | | DATE MAILED: | 07/18/97 |

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

Commissioner of Patents and Trademarks

PTO-90C (Rev. 2/95)

☆U.S.GOVERNMENT PRINTING OFFICE 1998-411-518/40275

2-File Copy





Application No. 08/587,628 Office Action Summary

Applicant(s)

Joao et al.

Examiner

William Trost

Group Art Unit 2608



| X Responsive to communication(s) filed on Apr 21, 1997 | |
|--|---|
| This action is FINAL . | |
| ☐ Since this application is in condition for allowance except for in accordance with the practice under <i>Ex parte Quayle</i> , 1935 | formal matters, prosecution as to the merits is closed C.D. 11; 453 O.G. 213. |
| A shortened statutory period for response to this action is set to is longer, from the mailing date of this communication. Failure to application to become abandoned. (35 U.S.C. § 133). Extension 37 CFR 1.136(a). | respond within the period for response will cause the |
| Disposition of Claims | |
| | is/are pending in the application. |
| Of the above, claim(s) | is/are withdrawn from consideration. |
| ☐ Claim(s) | is/are allowed. |
| | is/are rejected. |
| Claim(s) | |
| Claims | |
| Application Papers See the attached Notice of Draftsperson's Patent Drawing The drawing(s) filed on is/are objected | |
| ☐ The proposed drawing correction, filed on | |
| ☐ The specification is objected to by the Examiner. | |
| $\hfill\Box$ The oath or declaration is objected to by the Examiner. | |
| Priority under 35 U.S.C. § 119 Acknowledgement is made of a claim for foreign priority to a c | the priority documents have been |
| received in Application No. (Series Code/Serial Num | |
| received in this national stage application from the I *Certified copies not received: | |
| Acknowledgement is made of a claim for domestic priority | |
| Attachment(s) Notice of References Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No. Interview Summary, PTO-413 Notice of Draftsperson's Patent Drawing Review, PTO-940 Notice of Informal Patent Application, PTO-152 | (s)8 |
| SEE OFFICE ACTION ON T | HE FOLLOWING PAGES |

U. S. Patent and Trademark Office PTO-326 (Rev. 9-95)

Office Action Summary

Part of Paper No. 11

Page 2

Art Unit: 2608

Claim Rejections - 35 USC § 102

1. 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 --

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 2. Claims 41-54, 56-59 are rejected under 35 U.S.C. 102(b) as being anticipated by Gray et al (hereinafter Gray).

Regarding claims 41, 49-50, Gray discloses a security system for a motor vehicle (28) comprising a transmitter (30) for transmitting a signal, a first receiver (44, 48) for receiving a signal at a first location, a second receiver (27, police vehicles with mobile trackers) at a second location, a first control device (40) for processing the signal received by the first receiver and issuing a control signal to the vehicle (Col. 4;50-60), and a second control device (Fig. 5) for processing signals received by the second receiver, which provide an indication of the vehicle identity and theft of a vehicle (Col. 6;1-35).

Regarding claim 42, Gray discloses that the second location is at a motor vehicle (mobile tracking device located within the police cruiser).

Regarding claims 43, 51, Gray discloses that the first location is a central security service (22).

Serial Number: 08/587,628

Page 3

Art Unit:

Regarding claims 44-45, 52-53, Gray further discloses that the transmitter is a telephone and the first receivers being telephone signal receiving devices (use of cellular telephone in system, Col. 10;6-37, as well as dialing up central station or triangulation using cellular network).

Regarding claims 46-47, 54, 56, Gray discloses that the control devices include microcomputers (use of mapping and display computer 50 or control circuit 122) and that the vehicle device is a vehicle recovery system.

Regarding claims 48 and 57, Gray also discloses that the signal comprises the accessing of data or control data (inclusion of vehicle id, and other codes, Col. 3;10-20).

Regarding claim 58, Gray discloses a method for providing security to a motor vehicle (28) comprising the steps of registering the vehicle (Col. 4;10-18) with a security service (22), transmitting a signal to the security service (Col. 3;8-15), receiving the signal (via receivers 44, 46, 48), and processing the signal at the security service (central station which includes control and mapping/display computer 40, 50). Gray also discloses generating or issuing a signal which denotes the vehicle identity or theft indication (vehicle transmission signals indicating id and theft, Col. 3;10-20 as well as verification of theft transmitted by security service, Col. 5;50-65).

Regarding claim 59, Gray further discloses transmitting a signal to the vehicle, where the signal is received (60), processed (64), and the generation of a signal which disables or deactivates devices within the vehicle (Col. 4;50-60).

Serial Number: 08/587,628 Page 4

Art Unit:

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Drori et al.

Regarding claim 55, Gray discloses all the particulars of the claim except to specifically teach that the first control means will prevent deactivation of the vehicle's operating system if it is determined that the vehicle's engine is running.

Drori et al. disclose a remote controlled theft-deterrent system for motor vehicles and specifically in col. 2, lines 28-36 that the execution of a remote control command is delayed until a predetermined condition of the vehicle is satisfied, i.e. when the engine's rpm or vehicle speed is at or below a preset level (e.g. zero).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include this feature taught by Drori et al. to the system of Gray such that the driver of the vehicle is not put in a life threatening situation due to the deactivation of one of the vehicle's components.

Serial Number: 08/587,628

Art Unit:

5. Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gray in view of Carrier et al.

Regarding claim 60, Gray discloses all the particulars of the claim except the simultaneous transmission of a signal to the motor vehicle and the law enforcement authorities (police). Gray discloses that upon verifying that a vehicle is stolen, a verification change signal is sent to the motor vehicle, and the police are notified (Col. 5;55-65).

In addition, Carrier et al. disclose, in an emergency/security apparatus, to provide notification of an emergency situation to at least two remote locations <u>simultaneously</u> in response to a single action performed by a user, i.e. the user dialing a "911" command.

Therefore, since Gray discloses to contact the police when an owner of a vehicle discovers that his vehicle has been stolen and since Carrier et al. teach to transmit messages to two remote locations at the same time, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Gray to automatically transmit a message to the police, in addition to the stolen vehicle, simultaneously by the owner in order for the user to more quickly notify the police of the stolen vehicle as opposed to the slower notification process of calling the police in order to increase the chance of vehicle recovery.

6. Applicant's arguments with respect to claims 41-60 have been considered but are moot in view of the new ground(s) of rejection.

Page 5

Serial Number: 08/587,628

Page 6

Art Unit:

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Song disclose the use of a vehicle location system where a user telephones in an activation signal.

8. Any response to this action should be mailed to:

Commissioner of Patents and Trademarks Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

Or:

(703) 305-9508 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Trost whose telephone number is (703) 308-5318. The examiner can normally be reached on Monday-Friday from 7 a.m to 3:30 p.m. The fax phone number for this Group is (703) 305-9508.

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.

William Trost July 8, 1997 SUPERVISORY PATENT EXAMINER
GROUP 2600





| | | | | Application No. 08/587,628 | | Applicant(s) | Joao e | tal. | |
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U. S. Patent and Trademark Office PTO-892 (Rev. 9-95)

Notice of References Cited

Part of Paper No. 11

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- L21 ANSWER 1 OF 1 COMPENDEX COPYRIGHT 1997 EI DUPLICATE 1
- AN 91(5):54631 COMPENDEX DN 910560954
- TI Validating and applying a model for locating emergency medical vehicles in Tucson, AZ.
- AU Goldberg, Jeffery (Univ of Arizona, Tucson, AZ, USA); Dietrich, Robert; Chen, Jen Ming; Mitwasi, M.George; Valenzuela, Terry; Criss, Elizabeth
- SO Eur J Oper Res v 49 n 3 Dec 14 1990 p 308-324 CODEN: EJORDT ISSN: 0377-2217
- PY 1990
- DT Journal
- TC Theoretical; Experimental
- LA English
- AB This paper deals with the problem of locating emergency medical vehicles in Tucson, AZ. The model is based on a general service time approximation model for spatially distributed queueing systems. Provisions for unequal vehicle utilizations, stochastic travel times, and ***multiple*** ***call*** classes are included. The model is tailored for ***emergency*** medical systems that experience low ***vehicle*** utilizations. Validation of the model using the Tucson system is discussed in detail. The predictive ability of the model is demonstrated by comparing model output with actual system data. The model has been used to evaluate potential changes in the paramedic services provided by the Tucson Emergency Medical System and two cases are discussed. (Author abstract) 31 Refs.
- CC 931 Applied Physics; 461 Biotechnology; 462 Medical Engineering & Equipment; 662 Automotive Design & Manufacture; 914 Safety Engineering
- CT *VEHICLE LOCATING SYSTEMS; HEALTH CARE; AMBULANCES; OPERATIONS RESEARCH; PROBABILITY: Queueing Theory
- ST LOCATING EMERGENCY MEDICAL VEHICLES; SPATIALLY DISTRIBUTED QUEUEING SYSTEMS; TUCSON EMERGENCY MEDICAL SYSTEM; STOCHASTIC TRAVEL TIMES; VEHICLE UTILIZATION
- L25 ANSWER 1 OF 1 JAPIO COPYRIGHT 1997 JPO and Japio
- AN 91-210829 JAPIO
- TI CALL EQUIPMENT
- IN YAGI MASAAKI
- PA OMRON CORP, JP (CO 000294)
- PI JP 03210829 A 19910913 Heisei
- AI JP 90-5679 (JP02005679 Heisei) 19900112
- SO PATENT ABSTRACTS OF JAPAN, Unexamined Applications, Section: E, Sect. No. 1142, Vol. 15, No. 482, P. 167 (19911206)
- AB PURPOSE: To recognize a recipient immediately wherever he resides by giving each person receiving a call a receiver receiving a code signal from a transmitter and raising an alarm when the code signal is coincident with an own code signal stored in advance on the card. CONSTITUTION: For example, a patient ***call*** device consists of ***plural*** ***alarm*** cards 1, a ***card*** reader 11, a personal computer 12 and an ID code oscillator 13. The card reader 11, the personal computer 12 and the ID code oscillator 13 are installed in a medical diagnostic room and an office, and every time a patient comes to the hospital, the alarm card 1 provided with





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- L2 20670 FILE NTIS
- L3 17071 FILE COMPENDEX
- L4 23928 FILE INSPEC

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- => s (vehicle or auto or automobile# or car#) (8a) 15
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- L7 1526 FILE NTIS
- L8 389 FILE COMPENDEX
- L9 475 FILE INSPEC

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- L12 454 FILE NTIS
- L13 1578 FILE COMPENDEX
- L14 2360 FILE INSPEC

TOTAL FOR ALL FILES

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- L17 0 FILE NTIS
- L18 1 FILE COMPENDEX
- L19 1 FILE INSPEC

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- L22 0 FILE WPIDS
- L23 1 FILE JAPIO
- L24 0 FILE INPADOC

TOTAL FOR ALL FILES

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I hereby certif that this correspondence being deposited with the United tates Postal Service as fast class mail in proan envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231 on June 16, 1997.

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IN THE UNITED STATES PATENT

APPLICANT.

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

January 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-DETERRENT APPARATUS AND METHOD FOR

MOTOR VEHICLES

EXAMINER

G. OEHLING

GROUP: 2608

Hon. Commissioner of Patents and Trademarks 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 Form PTO 1449 be made of record and be considered in connection with the examination of this application. A copy of the listed document is enclosed.

U.S. Patent No. 5,515,043 to Berard et al. discloses a cellular/GPS system for vehicle tracking.

Entry of this Information Disclosure Statement is respectfully requested.

Respectfully Submitted,

Reg. No. 35,907

Encls.: Form PTO 1449

1 reference

Date:

June 16, 1997

122 Bellevue Place Yonkers, New York 10703 (914) 969-2992 (H) (212) 278-1857 (0)

NY2-106517.1



#10/armott E R.Morgan 5/13/97

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

G. OEHLING

GROUP :

2608

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

AMENDMENT AND RESPONSE TO OFFICE ACTION

Sir:

This is in response to the Office Action, dated December 23, 1996, wherein the Examiner rejected claims 41-57 for formal reasons, and further wherein the Examiner rejected claims 41-60 in view of prior art.

Based on 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 amend the following claims as follows:

41. (Twice Amended) A security [apparatus] system for a motor vehicle, comprising:

a transmitter for transmitting a signal;

a first receiver for receiving said signal at a first location;

a second receiver for receiving said signal at a second location;

a first control device for processing said signal received by said first receiver, wherein said first control device issues a control signal to one of a vehicle, a vehicle ignition system, a vehicle fuel system and a vehicle device; and

a second control device for processing said signal received by said second receiver, wherein said second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by said [apparatus] system.

42. (Twice Amended) The [apparatus] system of claim 41, wherein at least one of said first location and said second location is at a motor vehicle.

wherein at least one of said first location and said second location is at at least one of a central security computer system, a central security service, a security station, a security office,

a security location, a law enforcement office and a law enforcement agency.

- 44. (Twice Amended) The [apparatus] system of claim 41, wherein said transmitter is a telephone.
- 45. (Twice Amended) The [apparatus] system of claim 41, wherein at least one of said first receiver and said second receiver one of is and comprises a telephone signal receiving device.
- 46. (Twice Amended) The [apparatus] system of claim 41, wherein said at least one of said first control device and said second control device comprises one of a microprocessor, a microcomputer and a mini-computer.
- 47. (Twice Amended) The [apparatus] system of claim 41, wherein said vehicle device is one of an alarm system, a theft deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.
- 48. (Twice Amended) The [apparatus] system of claim 41, wherein said signal comprises at least one of accessing data and control data.

49. (Twice Amended) A security [apparatus] system for a motor vehicle, comprising:

a transmitter for transmitting a signal;

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a receiver for receiving said signal; and

a control device for processing said signal, wherein said control device is located at a location which is not at the motor vehicle, and further wherein said control device at least one of generates and issues a signal indicative of at least one of motor vehicle identification, a theft of the motor vehicle and a function to be one of controlled and performed one of on and at the motor vehicle [by said apparatus].

 $\,$ 50. (Twice Amended) The [apparatus] $\,\underline{system}$ of claim 49, further comprising:

a second receiver for receiving said signal at the motor vehicle; and

a second control device for processing the signal received by said second receiver, wherein said second control device one of generates and issues a control signal to at least one of a vehicle, a vehicle ignition system, a vehicle fuel system, a vehicle system and a vehicle device.

51. (Twice Amended) The [apparatus] system of claim 49, wherein said receiver is located at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.

52. (Twice Amended) The [apparatus] system of claim 49, wherein said transmitter is a telephone.

NY1-179434.1

- 53. (Twice Amended) The [apparatus] system of claim 49, wherein said receiver one of is and comprises a telephone signal receiving device.
- 54. (Twice Amended) The [apparatus] system of claim 49, wherein said control device comprises one of a microprocessor, a micro-computer and a mini-computer.

E, concl.

- 55. (Twice Amended) The [apparatus] system of claim 50, wherein said second control device delays an issuance of said control signal until the motor vehicle ignition system is determined to be one of off and de-activated.
- 56. (Twice Amended) The [apparatus] <u>system</u> of claim [49] <u>50</u>, wherein said vehicle device is one of an alarm system, a theft_deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.
- 57. (Twice Amended) The [apparatus] system of claim 49, wherein said signal comprises at least one of accessing data and control data.

REMARKS

Claims 41-60 are pending in the present application. Applicant has amended claims 41-57. Applicant has amended claims 41-57 so as to overcome the formal matter objections thereto and, further, so as to more clearly distinguish the present invention, as defined by the claims, over the prior art.

Based on 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. §112 OBJECTIONS AND 'FORMAL' MATTERS

The Examiner objects to claims 41-57 "because the preamble of claims 41, 49 and 50 claim 'a security apparatus for a motor vehicle, comprising', yet the body of said claims include a 'second receiver' and a 'second control device'". In response to the Examiner's objection, Applicant has amended claims 41-57 so that the claims, as amended, and in particular, claims 41, 49 and 50, are directed to a "security system". In view of the above amendments to the claims, Applicant respectfully requests that the objection to claims 41-57 be withdrawn.

The Examiner also objects to claim 56. In particular, the Examiner asserts that "[t]here is no proper antecedent basis for 'said vehicle device'". In response to the Examiner's objection, Applicant has amended claim 56 so that said claim depends from claim 50 which claim provides antecedent basis for the term "vehicle device". In view of the above, Applicant respectfully

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submits that claim 56 is in compliance with 35 U.S.C. §112. Withdrawal of the objection to claim 56 is, therefore, respectfully requested.

III. The 35 U.S.C. §102 and §103 REJECTIONS

The Examiner asserts that claims 49, 52, 54, 56 and 57 are rejected under 35 U.S.C. §102(e) as being anticipated by Pagliaroli et al., U.S. Patent No. 5,276,728 (Pagliaroli). The Examiner also asserts that Claims 41-48, 50, 51, 53 and 58-60 are rejected under 35 U.S.C. §103(a) as being unpatentable over Pagliaroli in view of Carrier et al., U.S. Patent No. 5,195,126 (Carrier). The Examiner also asserts that claim 55 is rejected under 35 U.S.C. §103(a) as being unpatentable over Pagliaroli in view of Carrier, and further in view of Drori et al., U.S. Patent No. 5,081,667 (Drori). Applicant respectfully submits that the present invention, as defined by the claims, is patentable over the prior art.

IIA. CLAIMS 49, 52, 54, 56 AND 57 ARE PATENTABLE OVER PAGLIAROLI

Applicant respectfully submits that the present invention, as defined by claims 49, 52, 54, 56 and 57, is patentable over Pagliaroli. Applicant respectfully submits that the present intention, as defined by independent claim 49, is patentable over Pagliaroli.

Applicant submits that Pagliaroli does not disclose or suggest a system which comprises a control device, which control device is located at a location which is not at the motor vehicle,

which are specifically recited features of independent claim 49. Further, Pagliaroli does not disclose or suggest a control device, which has the above-claimed features, which at least one of generates and issues a signal indicative of at least one of motor vehicle identification, a theft of the motor vehicle and a function to be one of controlled and performed one of on and at the motor vehicle, which are still other specifically recited features of independent claim 49.

In view of the above, Applicant respectfully submits that Pagliaroli fails to disclose or suggest many of the specifically recited elements and features of independent claim 49. Since Pagliaroli fails to disclose each and every feature of independent claim 49, Pagliaroli, as a matter of law, does not anticipate the present invention, as defined by independent claim 49. Further, since Pagliaroli fails to disclose or suggest many of the elements and features of independent claim 49, Applicant respectfully submits that the present invention, as defined by independent claim 49, is patentable over Pagliaroli.

In view of the above, Applicant submits that the present invention, as defined by independent claim 49, is patentable over Pagliaroli. Applicant further submits that claims 50-57, which depend either directly or indirectly from independent claim 49, so as to include all of the limitations of claim 49 and which further serve to narrow the scope of claim 49, are also patentable because said claims depend from allowable subject matter.

Allowance of pending claims 49-57 is, therefore, respectfully requested.

IIB. CLAIMS 41-48, 50, 51, 53 AND 58-60 ARE PATENTABLE OVER PAGLIAROLI IN VIEW OF CARRIER

Applicant respectfully submits that the present invention, as defined by claims 41-48, 50, 51, 53 and 58-60, is patentable over Pagliaroli in view of Carrier. Applicant respectfully submits that neither Pagliaroli, nor Carrier, nor their combination, disclose or suggest a security system which comprises a second receiver for receiving a signal at a second location, which are important and recited features of independent claim 41. Applicant further submits that neither Pagliaroli, nor Carrier, nor their combination, disclose or suggest a security system which comprises a second control device for processing the signal received by the second receiver, wherein the second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by the system, which are still other important and recited features of independent Claim 41.

Assuming arguendo, that Pagliaroli and Carrier could be combined, the resulting combination would fail to disclose or suggest the second receiver, and the second control device, having the elements and features of independent claim 41.

Since all claim limitations must be considered in an obviousness determination, and since Pagliaroli, Carrier, and any combination of Pagliaroli and Carrier, fail to disclose or suggest the subject matter of independent claim 41, Applicant respectfully submits that the present invention, as defined by independent claim 41, is not rendered obvious by Pagliaroli in view of Carrier.

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Applicant, further, respectfully submits that the Examiner's rejection of claims 41-48 over Pagliaroli in view of Carrier is untenable because there is no motivation or suggestion, in either Pagliaroli or Carrier, to combine their respective teachings in the manner relied upon by the Examiner. <u>In re Fritch</u>, 23 U.S.P.Q. 2d 1780 (Fed. Cir. 1992).

Applicant submits that neither Pagliaroli nor Carrier provide any motivation or suggestion for combining their respective teachings in the manner relied upon by the Examiner. Pagliaroli discloses a remotely activated automobile disabling system. Carrier discloses an emergency alert and security apparatus and method.

Since there is no motivation or suggestion in the teachings of Pagliaroli or Carrier to combine their respective teachings, Applicant submits that the rejection of the present invention, as defined by independent claim 41, is untenable.

The Court of Appeals for the Federal Circuit has stated:

"'Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so.' Although couched in terms of combining teachings found in the prior art, the same inquiry must be carried out in the context of a purported obvious 'modification' of the prior art. The mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification."

In re Fritch, 23 U.S.P.Q. 2d 1780, 1784 (Fed. Cir.
1992) (footnotes omitted, emphasis in original).

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Applicant submits that Pagliaroli and Carrier fail to suggest any motivation for, or the desirability of, the combination espoused by the Examiner. Applicant respectfully submits that the Examiner's reasoning in support of his obviousness rejection fails to provide any sufficient impetus which would allow one of ordinary skill in the art to combine the teachings of Pagliaroli and Carrier to make the claimed invention, as defined by claims 41-48. In the absence of any such motivation or suggestion, in either Pagliaroli or Carrier, that their teachings may be combined, or in the absence of any discussion of advantages that may be achieved by such a combination, the Examiner's reasoning is untenable.

Applicant further submits that the Examiner relied upon hindsight in order to arrive at his asserted determination of obviousness with regards to claims 41-48, 50, 51, and 53, a practice which is impermissible. <u>In re Fine</u>, 5 U.S.P.Q. 2d 1596 (Fed. Cir. 1988). ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."). See also <u>In re Fritch</u>, 23 U.S.P.Q. 2d 1780 (Fed. Cir. 1992) ("It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious."). Applicant respectfully submits that Pagliaroli, which discloses a remotely activated automobile disabling system, and Carrier, which discloses an emergency alert and security apparatus and method, are isolated disclosures which cannot be combined in the manner espoused by the Examiner.

Moreover, Applicant respectfully submits that the Examiner improperly utilized hindsight in order to pick and choose

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features from Pagliaroli and from Carrier, using Applicant's invention, as defined by claims 41-48, as a template, in order to arrive at his asserted obviousness determination with regard to claims 41-48, 50, 51 and 53.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 41, is patentable over Pagliaroli in view of Carrier. Applicant further submits that claims 42-48, which claims depend directly from independent claim 41, so as to include all of the limitations of claim 41 and which further serve to narrow the scope of claim 41, are also patentable because said claims depend from allowable subject matter.

As noted above, Applicant further submits that claims 50, 51 and 53 are patentable over the prior art.

Allowance of claims 41-48, 50, 51 and 53 is, therefore, respectfully requested.

Applicant respectfully submits that the present invention, as defined by claims 58-60, is patentable over the prior art. Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli, nor Carrier, nor their combination, disclose or suggest a method for providing security for a motor vehicle which has the steps

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set forth in independent claim 58, which steps are important and recited features of said independent claim.

Applicant respectfully submits that neither Pagliaroli, nor Carrier, nor their combination, disclose or suggest a method for providing security for a motor vehicle which comprises the steps of claim 58, namely, registering a motor vehicle with at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency; transmitting a signal to at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency; receiving said signal at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency; processing said signal at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency; and one of generating and issuing a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be performed one of on and by the vehicle, all of which are important and recited steps and features of independent claim 58.

Assuming arguendo, that Pagliaroli and Carrier could be combined, the resulting combination would fail to disclose or suggest a method having the steps and features of independent claim 58.

Since all claim limitations must be considered in an obviousness determination, and since Pagliaroli, Carrier, and any combination of Pagliaroli and Carrier, fail to disclose or suggest the subject matter of independent claim 58, Applicant respectfully submits that the present invention, as defined by independent claim 58, is not rendered obvious by Pagliaroli in view of Carrier.

Applicant, further, respectfully submits that the Examiner's rejection of claims 58-60 over Pagliaroli in view of Carrier is untenable because there is no motivation or suggestion in either Pagliaroli or Carrier to combine their respective teachings.

Applicant submits that neither Pagliaroli nor Carrier provide any motivation or suggestion for combining their respective teachings in the manner relied upon by the Examiner. As noted above, Pagliaroli discloses a remotely activated automobile disabling system while Carrier discloses an emergency alert and security apparatus and method.

Since there is no motivation or suggestion in the teachings of Pagliaroli or Carrier to combine their respective teachings, Applicant submits that the rejection of the present invention, as defined by independent claim 58, is untenable. <u>In refritch</u>, 23 U.S.P.Q. 2d 1780 (Fed. Cir. 1992).

Applicant submits that Pagliaroli and Carrier fail to suggest any motivation for, or the desirability of, the combination espoused by the Examiner. Applicant respectfully submits that the Examiner's reasoning in support of his obviousness rejection fails

NY1-179434.1

to provide any sufficient impetus which would allow one of ordinary skill in the art to combine the teachings of Pagliaroli and Carrier to make the claimed invention, as defined by independent claim 58. In the absence of any such motivation or suggestion, in either Pagliaroli or Carrier, that their teachings may be combined, or in the absence of any discussion of advantages that may be achieved by such a combination, the Examiner's reasoning is untenable.

Applicant further submits that the Examiner relied upon hindsight in order to arrive at his asserted determination of obviousness with regard to claims 58-60, a practice which is impermissible. In re Fine, 5 U.S.P.A. 2d 1596 (Fed. Cir. 1988). ("One cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention."). See also In re Fritch, 23 U.S.P.Q. 2d 1780 (Fed. Cir. 1992) ("It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious."). As noted above, Applicant submits that Pagliaroli and Carrier are isolated disclosures.

Applicant respectfully submits that the Examiner improperly utilized hindsight in order to pick and choose features from Pagliaroli and from Carrier, using Applicant's invention as a template, in order to arrive at his asserted obviousness determination with regard to claim 58.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Pagliaroli in view of Carrier. Applicant further

NY1-179434.1

submits that claims 59-60, which depend either directly or indirectly from independent claim 58, so as to include all of the limitations of claim 58 and which further serve to narrow the scope of claim 58, are also patentable because said claims depend from allowable subject matter.

Allowance of pending claims 58-60 is, therefore, respectfully requested.

IIC. CLAIM 55 IS PATENTABLE OVER PAGLIAROLI IN VIEW OF CARRIER AND FURTHER IN VIEW OF DRORI

Applicant respectfully submits that claim 55 is patentable over Pagliaroli in view of Carrier and further in view of Drori as claim 55 depends from independent claim 49 which, as noted above, is patentable over the prior art.

Allowance of pending claim 55 is, therefore, respectfully requested.

1.6

III. CONCLUSION

In view of the above, Applicant respectfully submits that the application is in condition for allowance and action to that end is respectfully requested.

Respectfully submitted,

Reg. No. 35,907

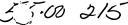
Encl. Petition For One-Month Extension of Time Check in the amount of \$55.00

Date: April 17, 1997

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

(O) (212) 278-1857

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on April 17, 1997.





IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

G. OEHLING

GROUP

2608

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

PETITION FOR ONE-MONTH EXTENSION OF TIME

Sir:

The Applicant petitions for a one-month extension of time with regard to the Office Action dated December 23, 1996.

It is respectfully requested that a one-month extension of time be granted so that a response can be made to the Office Action.

Enclosed is a check in the amount of \$55.00 made payable to the Commissioner of Patents and Trademarks. A duplicate copy of this sheet is attached.

Respectfully submitted,

Reg. No. 35,907 Raymond A.

Dated: April 17, 1997

Raymond A. Joao 122 Bellevue Place Yonkers, New York 10703

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington,

D.C. 20231 on April 17, 1997.

M 127 085 020

NY2-100343.1

I hereby certing that this correspondence with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Mademarks, Washington, D.C. 20231 on March 31, 1997.

4-12-1997

Raymond A. Joac

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR

THEFT-DETERRENT APPARATUS AND METHOD FOR

MOTOR VEHICLES

EXAMINER

G. OEHLING

GROUP 2608

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Hon. Commissioner of Patents and Trademarks 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 Form PTO 1449 be made of record and be considered in connection with the examination of this application. Copies of the listed documents are enclosed.

- U.S. Patent No. 5,287,398 to Briault discloses a remotely accessible security controlled audio link.
- U.S. Patent No. 5,173,932 to Johansson et al. discloses a security system comprising a signal transmitter.
- U.S. Patent No. 5,223,844 to Mansell et al. discloses a vehicle tracking and security system.
- U.S. Patent No. 5,334,974 to Simms et al. discloses a personal security system.

NY2-42495.2

- U.S. Patent No. 5,563,453 to Nyfelt discloses a method and arrangement for remotely controlling one or more functions of a motor-driven vehicle.
- $\hbox{U.S. Patent No. 5,418,537 to Bird discloses location of missing vehicles.} \\$

Entry of this Information Disclosure Statement is respectfully requested.

A Certification Pursuant to 37 C.F.R $\S1.97(e)$ is submitted herewith.

Respectfully Submitted,

By:

Raymond A. Joao Reg. No. 35, 907

Encls.: Form PTO 1449

6 references

Certification Pursuant to 37 C.F.R §1.97(e)

Date: March 31, 1997

122 Bellevue Place Yonkers, New York 10703 (914) 969-2992 (H) (212) 278-1857 (O)

NY2-42495.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR

THEFT-DETERRENT APPARATUS AND METHOD FOR

MOTOR VEHICLES

EXAMINER

G. OEHLING

GROUP: 2608

Hon. Commissioner of Patents and Trademarks Washington, D.C. 2023l

CERTIFICATION PURSUANT TO 37 C.F.R. §1.97(e)

Sir:

Applicant hereby certifies that no item of information contained in the accompanying Information Disclosure

Statement, to the knowledge of the undersigned, after making a reasonable inquiry, was known to any individual designated in 37 C.F.R. §1.56(c) more than three months prior to the filing date of this statement and the filing of the accompanying Information Disclosure Statement.

Respectfully Submitted,

By:

Raywond A. João Reg. No. 35,907

Date: March 31, 1997

122 Bellevue Place

Yonkers, New York 10703

(914) 969-2992 (H) (212) 278-1857 (O)



UNITED STATE DEPARTMENT OF COMMERCE Patent and Tracemark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

ATTY, DOCKET NO. 01/17/96 RJ-003 EXAMINER 26M271223 RAYMOND A JORG 122 BELLEVUS PLACE PAPER NUMBER YONKERS NY 10703 2608 DATE MAILED: 12/23/96 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS **OFFICE ACTION SUMMARY** Responsive to communication(s) filed on 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 D.C. 11; 453 O.G. 213. A shortened statutory period for response to this action is set to expire ______ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR **Disposition of Claims** Claim(s) is/are pending in the application. Of the above, claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) Claim(s) is/are objected to. Claim(s) **Application Papers.** See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948. The drawing(s) filed on _ is/are objected to by the Examiner. The proposed drawing correction, filed on ____ _is 🔲 approved 🔲 disapproved. The specification is objected to by the Examiner. The oath or declaration is objected to by the Examiner. Priority under 35 U.S.C. § 119 Acknowledgment is made of a claim for foreign priority under 35 U.S.C. §-119(a)-(d). ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received in Application No. (Series Code/Serial Number) _ received in this national stage application from the International Bureau (PCT Rule 17.2(a)). *Certified copies not received: Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e). Attachment(s) ■ Notice of Reference Cited, PTO-892 Information Disclosure Statement(s), PTO-1449, Paper No(s). ☐ Interview Summary, PTO-413 Notice of Draftperson's Patent Drawing Review, PTO-948 Notice of Informal Patent Application, PTO-152 -- SEE OFFICE ACTION ON THE FOLLOWING PAGES--PTOL-326 (Rev. 9/95)

Serial Number: 08/587,628

Art Unit: 2608

DETAILED ACTION

Claim Objections

1. Claims 41-57 are objected to because the preamble of claims 41, 49, and 50 claim "a

security apparatus for a motor vehicle, comprising", yet the body of said claims include a

"second receiver" and a "second control device". In accordance with figure 3 of the present

invention, the second receiver (300) and the second control device (400) are of a separate entity,

i.e. a part of the police station, and are certainly not a part of the security apparatus (1) for the

motor vehicle. Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. Claim 56 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for

failing to particularly point out and distinctly claim the subject matter which applicant regards as

the invention.

Consider claim 56. There is no proper antecedent basis for "said vehicle device".

Claim Rejections - 35 USC § 102

3. 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 --

Page 2



Page 3

Serial Number: 08/587,628

Art Unit: 2608

(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.

4. Claims 49, 52, 54, 56, and 57 are rejected under 35 U.S.C. 102(e) as being anticipated by Paglioroli et al..

Consider claims 49 and 57. Pagliaroli et al. disclose a security apparatus for a motor vehicle comprising a transmitter (48 & 46) for transmitting data signals to a remote location; a receiver (14) for receiving the data signals; and a control device (16), associated with the receiver, for processing the data signals and issues either a disable or re-enable signal to the vehicle's ignition system (22). Note figure 2 of Pagliaroli et al.

Consider claim 52. The transmitting means of Pagliaroli et al. is a touch-tone telephone (48).

Consider claim 54. Note figure 1, item 16 of Pagliaroli et al.

Consider claims 56. Pagliaroli et al. disclose in col. 6, lines 23-25, that the alarm system of the vehicle can be remotely controlled.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person



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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 41-48 and 50, 51, 53, and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pagliaroli et al. in view of Carrier et al..

Consider claims 41-43, 48, 50, 51, 58-60. Pagliaroli et al. disclose a remote controlled security apparatus for a motor vehicle comprising a means for transmitting (48 & 46) data signals to a remote location; a first receiving means (14) for receiving the data signals; and a first control means (16), associated with the first receiving means, for processing the data signals and issues either a disable or re-enable signal to the vehicle's ignition system (22). Note figure 2 of Pagliaroli et al.

Pagliaroli et al. differ from the aforementioned claims of the present invention in that they fail to transmit data signals to a second remote location (i.e. the police department) in addition to the first remote location (i.e. the vehicle).

However, Pagliaroli et al. further disclose in col. 1, lines 28-36 that the owner of a vehicle will usually report his vehicle stolen to the police department and, yet further states in col. 1, lines 53-61, that the police (in addition to the vehicle owner) have the ability to control the vehicle remotely.

In addition, Carrier et al. disclose, in an emergency/security apparatus, to provide notification of an emergency situation to at least two remote locations <u>simultaneously</u> in response to a single action performed by the user, i.e. the user dialing a "911" command.

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Therefore, since Pagliaroli et al. disclose to contact the police when an owner of a vehicle discovers that his vehicle has been stolen and since Carrier et al. teach to transmit messages to two remote locations at the same time, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Pagliaroli et al. to automatically transmit a message to the police, in addition to the stolen vehicle, simultaneously by the owner in order for the user to more quickly notify the police of the stolen vehicle as opposed to the slower notification process of calling the police subsequently to issuing a disable command to the vehicle.

Further consider claims 49, 50, and 58. Pagliaroli et al. disclose in col. 1, lines 28-31 that the identification of the vehicle (i.e. license plate number) is registered with the police department.

Consider claim 44. The transmitting means of Pagliaroli et al. is a touch-tone telephone (48).

Consider claims 45 and 53. The receiving means at the second remote location (i.e. the police department) is a telephone receiving means.

Consider claim 46. Note figure 1, item 16 of Pagliaroli et al.

Consider claims 47. Pagliaroli et al. disclose in col. 6, lines 23-25, that the alarm system of the vehicle can be remotely controlled.



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7. Claim 55 is rejected under 35 U.S.C. 103(a) as being unpatentable over Paglioroli et al. In

view of Carrier et al. as applied to claim 50 above, and further in view of Drori et al.

Consider claim 55. The combination of Pagliaroli et al. and Carrier et al. fail to

specifically teach that the first control means will prevent deactivation of the vehicle's operating

system if it is determined that the vehicle's engine is running.

Drori et al. disclose a remote controlled theft-deterrent system for motor vehicles and

specifically in col. 2, lines 28-36 that the execution of a remote control command is delayed until

a predetermined condition of the vehicle is satisfied, i.e. when the engine's rpm or vehicle speed

is at or below a preset level (e.g. zero).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the

invention, to include this feature taught by Drori et al. in the combination such that the driver of

the vehicle is not put in a life threatening situation due to the deactivation of one of the vehicle's

components.

Response to Arguments

Applicant's arguments filed 10/21/96 have been fully considered but they are not

persuasive.

The applicant argues that neither Pagliaroli nor Carrier disclose a second receiver for

receiving a signal at a second location and further fail to disclose a second control device for

processing the signal received by the second receiver.

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Art Unit: 2608

The examiner disagrees. Pagliaroli et al. disclose in col. 1, lines 28-36 that the owner of a vehicle will usually report his vehicle stolen to the police department and, yet further states in col. 1, lines 53-61, that the police (in addition to the vehicle owner) have the ability to control the vehicle remotely. That is, when the vehicle's owner discovers his vehicle was stolen, he places a telephone call to the police department. The "second receiver" is read on the police department's telephone whereby a police station operator receives the incoming call from the stolen vehicle's owner. Subsequent to receiving the owner's stolen vehicle report, the operator will input this data into a computer (i.e. the second control device) at the police station. Inherently, the vehicle's owner will provide an identification of the vehicle (i.e. a license plate number) to the police operator such that the police will be able to distinguish the stolen vehicle from other vehicles.

In the case of Carrier, the individual places a single "911" call. The call is received by a 911 operator via a telephone receiver and the operator inputs the received information into a computer (i.e. a control device). At the same time that this 911 processing event is taking place, another location is also called. These two separate calls occur *simultaneously* as a result of the single 911 call placed by the user.

The examiner is merely using the teaching of Carrier, i.e. to automatically place two separate calls as a result of a single call from an individual reporting an event, to modify Pagliaroli. Paglioroli already discloses that the individual calls the police department when his vehicle is stolen, where the police department has a telephone receiver and a control device to

Page 7





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respond to the individual's call. Pagliroli further disclose that the individual can place a call to his vehicle, which has a receiver and control device, in order to control various components of the vehicle. What Paglioroli does not disclose is to call both locations (i.e. the vehicle and the police department) simultaneously as a result of the placement of a single call by the individual, and this deficiency of Paglioroli is taught by Carrier.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Oehling whose telephone number is (703) 305-4835.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-4700.

GEORGE OEHLING PATENT EXAMINER

GROUP 2600

G. Oehling December 20, 1996

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RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

G. OEHLING

GROUP

2608 PF

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

AMENDMENT AND RESPONSE TO OFFICE ACTION

Sir:

This is in response to the Office Action, dated July 9, 1996, wherein the Examiner rejected claims 41-60 under the judicially created doctrine of double patenting, and wherein the Examiner objected to the Abstract of the Disclosure for formal reasons, and further wherein the Examiner rejected claims 41-60 in view of prior art references.

Based on 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 TITLE OF THE INVENTION:

Please delete the Title of the Invention and substitute therefor the following new Title of the Invention:

-- SECURITY APPARATUS AND METHOD FOR A MOTOR VEHICLE --

IN THE ABSTRACT OF THE DISCLOSURE:

Please delete the Abstract of the Disclosure and please substitute therefor the new Abstract of the Disclosure which is attached hereto on a separate sheet.

IN THE CLAIMS:

Please amend the following claims as follows:

- 41. (Amended) A <u>security apparatus</u> [remote-controlled anti-theft and/or recovery system] for a motor vehicle, comprising:
 - a transmitter for transmitting a signal;
- a first receiver for receiving said signal
 at a first [of at least two remote] location[s];
- a second receiver for receiving said signal at a second [of said at least two remote] location[s];
- a first control device for processing said signal received by said first receiver, wherein said first control device issues a control signal to one of a vehicle, a vehicle ignition system, a vehicle fuel system and a vehicle device; and

- a second control device for processing said signal received by said second receiver, wherein said second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by said [system] apparatus.
- 42. (Amended) The [system] <u>apparatus</u> of claim 41, wherein at least one of said <u>first location and said second location</u> [at least two remote locations] is at a motor vehicle.
- 43. (Amended) The [system] apparatus of claim 41, wherein at least one of said first location and said second location [at least two remote locations] is at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.
- 44. (Amended) The [system] apparatus of claim 41, wherein said transmitter is a telephone.
- 45. (Amended) The [system] <u>apparatus</u> of claim 41, wherein at least one of said first receiver and said second receiver <u>one of</u> is <u>and comprises</u> a telephone signal receiving device.
- 46. (Amended) The [system] <u>apparatus</u> of claim 41, wherein said at least one of said first control device and said second control device comprises one of a microprocessor, a microcomputer and a mini-computer.
- 47. (Amended) The [system] <u>apparatus</u> of claim 41, wherein said vehicle device is one of an alarm system, a theft

deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.

- 48. (Amended) The [system] apparatus of claim 41, wherein said signal comprises at least one of accessing data and control data.
- 49. (Amended) A <u>security apparatus</u> [remote-controlled anti-theft and/or recovery system] for a motor vehicle, comprising:
 - a transmitter for transmitting a signal;
 - a receiver for receiving said signal; and
- a control device for processing said signal [received by said receiver], wherein said control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by said [system] apparatus.
- 50. (Amended) The [system] <u>apparatus</u> of claim 49, further comprising:
- a second receiver for receiving said signal at the motor vehicle; and
- a second control device for processing the signal received by said second receiver, wherein said second control device one of generates and issues a control signal to at least one of a vehicle, a vehicle ignition system, a vehicle fuel system, a vehicle system and a vehicle device.

- 51. (Amended) The [system] apparatus of claim 49, wherein said receiver is located at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.
- 52. (Amended) The [system] apparatus of claim 49, wherein said transmitter is a telephone.
- 53. (Amended) The [system] <u>apparatus</u> of claim 49, wherein said receiver <u>one of</u> is <u>and comprises</u> a telephone signal receiving device.
- 54. (Amended) The [system] <u>apparatus</u> of claim 49, wherein said control device comprises one of a microprocessor, a micro-computer and a mini-computer.
- 55. (Amended) The [system] <u>apparatus</u> of claim 50, wherein said second control device delays an issuance of said control signal until the motor vehicle ignition system is determined to be <u>one of</u> off <u>and de-activated</u>.
- 56. (Amended) The [system] <u>apparatus</u> of claim 49, wherein said vehicle device is one of an alarm system, a theft deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.
- 57. (Amended) The [system] <u>apparatus</u> of claim 49, wherein said signal comprises at least one of accessing data and control data.

58. (Amended) A method for <u>providing security for a motor vehicle</u> [remote-controlled motor vehicle anti-theft and/or motor vehicle recovery], comprising the steps of:

registering a motor vehicle with <u>at least</u> one of <u>a</u> <u>central security computer system, a central security service, a <u>security station</u>, a security office, a security location, a law enforcement office and a law enforcement agency;</u>

transmitting a signal [to the motor vehicle and] to at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

receiving said signal at [the motor vehicle and at] at least one of <u>a central security computer system</u>, <u>a central security service</u>, <u>a security station</u>, a security office, a security location, a law enforcement office and a law enforcement agency;

processing said signal at [each of the motor vehicle and at] at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency; and

one of generating and issuing [at least one] a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be performed one of on and by the vehicle [at least one of the motor vehicle and at least one of a security office, a security location, a law enforcement office and law enforcement agency, in response to said signal processing, wherein said at least one signal at least one of identifies the

motor vehicle and provides control over one of the motor vehicle and a motor vehicle one of system and device].

 $\,$ 59. (Amended) The method of claim 58, further comprising the steps of:

transmitting a signal to the vehicle;

receiving said signal at the vehicle;

processing said signal at the vehicle;

generating a signal at the vehicle; and

one of disabling, enabling, activating and de-activating at least one of the vehicle, the vehicle ignition system, the vehicle fuel system, a vehicle system and a vehicle device.

60. (Amended) The method of claim [58] <u>59</u>, wherein said signal is transmitted simultaneously to each of the motor vehicle and to at least one of <u>a central security computer system</u>, <u>a central security service</u>, <u>a security station</u>, a security office, a security location, a law enforcement office and a law enforcement agency.

REMARKS

Claims 41-60 are pending in the present application. Applicant has amended claims 41-60. Applicant has also amended the Title of the Invention so that the Title of the Invention is clearly indicative of the present invention to which the claims are directed. Applicant has also amended the Abstract of the Disclosure so as to overcome the Examiner's objections thereto.

Based on 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. 'FORMAL' MATTERS

The Examiner objects to the Abstract of the Disclosure for formal reasons. As noted above, Applicant has deleted the Abstract of the Disclosure and has substituted therefor a new Abstract of the Disclosure which is attached hereto on a separate sheet. In view of the above, withdrawal of the objection to the Abstract of the Disclosure is respectfully requested.

II. THE DOUBLE PATENTING REJECTION

The Examiner asserts that claims 41-60 are rejected under the judicially created doctrine of double patenting over claims 1-18 of U.S. Patent No. 5,513,214. Applicant respectfully submits that the above double patenting rejection is untenable.

Applicant respectfully submits that the present application is a continuation of U.S. Patent Application Serial No. 08/489,238, filed June 12, 1995, now U.S. Patent No. 5,513,244,

which is a continuation of U.S. Patent Application Serial No. 08/073,755, filed June 8, 1993, and which is now abandoned. Applicant submits that, under 35 U.S.C. § 154, the patent term begins on the date on which the patent issues and ends 20 years from the date on which the patent application was filed. In the case of an application which contains a specific reference to an earlier filed application under 35 U.S.C. § 120, 121, or 365(c), as is the case in the present application, the term of the patent ends 20 years from the date from which the earliest application was filed, which date, in the case of the present application, is June 8, 1993.

Applicant respectfully submits that, since any patent which issues from the present application will have a term which expires on June 8, 2013, which is twenty years from the filing date of the earliest filed application (June 8, 1993), any patent granted from the present application will not unjustifiably or improperly extend the "right to exclude" granted by U.S. Patent No. 5,513,244, which patent also expires on June 8, 2013.

In view of the above, Applicant respectfully submits that the double patenting rejection is untenable. In view of the above, Applicant respectfully requests that the double patenting rejection be withdrawn.

III. The 35 U.S.C. §103 REJECTIONS

The Examiner asserts that claims 41-54 and 56-60 are rejected as being unpatentable over Pagliaroli et al, U.S. Patent No. 5,276,728 (Pagliaroli) in view of Carrier et al, U.S. Patent No. 5,195,126 (Carrier). The Examiner also asserts that claim 55 is rejected under 35 U.S.C. § 103 as being unpatentable over

Pagliaroli in view of Carrier, and further in view of Drori et al, U.S. Patent No. 5,081,667 (Drori). Applicant respectfully submits that the present invention, as defined by the claims, is patentable over the prior art.

IIIA. CLAIMS 41-48 ARE PATENTABLE OVER THE PRIOR ART

Applicant respectfully submits that the present invention, as defined by claims 41-48, is patentable over the prior art. Applicant respectfully submits that the present, as defined by independent claim 41, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a security apparatus which comprises a second receiver for receiving the signal at a second location, which are important and recited features of independent claim 41. Applicant further respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a security apparatus which comprises a second control device for processing the signal received by the second receiver, wherein the second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by the apparatus, which are still other important and recited features of independent Claim 41.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 41, is not rendered obvious by Pagliaroli in view of Carrier. Applicant, therefore, respectfully submits that the present invention, as defined by independent claim 41, is patentable over Pagliaroli in

view of Carrier. Applicant further submits that claims 42-48, which depend directly from independent claim 41, so as to include all of the limitations of claim 41 and which further serve to narrow the scope of claim 41, are also patentable because said claims depend from allowable subject matter. Allowance of claims 41-48 is, therefore, respectfully requested.

IIIB. CLAIMS 49-57 ARE PATENTABLE OVER THE PRIOR ART

Applicant respectfully submits that the present invention, as defined by claims 49-57, is patentable over the prior art. Applicant respectfully submits that the present invention, as defined by independent claim 49, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a security apparatus which comprises a control device for processing the signal, wherein the control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by the apparatus.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 49, is not rendered obvious by Pagliaroli in view of Carrier. Applicant respectfully submits that the present invention, as defined by independent claim 49, is patentable over Pagliaroli in view of Carrier. Applicant further submits that claims 50-57, which depend either directly or indirectly from independent claim 49, so as to include all of the limitations of claim 41 and which further serve to narrow the scope of claim 49, are also patentable because said

claims depend from allowable subject matter. Allowance of pending claims 49-57 is, therefore, respectfully requested.

IIIC. CLAIMS 58-60 ARE PATENTABLE OVER THE PRIOR ART

Applicant respectfully submits that the present invention, as defined by claims 58-60, is patentable over the prior art. Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a method for providing security for a motor vehicle which has the steps enumerated in independent claim 58, which 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 58, is not rendered obvious by Pagliaroli in view of Carrier. Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Pagliaroli in view of Carrier. Applicant further submits that claims 59-60, which depend directly or indirectly from independent claim 58, so as to include all of the limitations of claim 58 and which further serve to narrow the scope of claim 58, are also patentable because said claims depend from allowable subject matter. Allowance of pending claims 58-60 is, therefore, respectfully requested.

IV. CONCLUSION

In view of the above, Applicant respectfully submits that the application is in condition for allowance and action to that end is respectfully requested.

Respectfully submitted,

Encl: Abstract of the Disclosure

Date: October 2, 1996

Raymond A. Joao

10703

122 Bellevue Place Yonkers, New York (H) (914) 969-2992 (O) (212) 278-1857

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on October 2, 1996.

ABSTRACT OF THE DISCLOSURE

A security apparatus and method for a motor vehicle comprising a transmitter for transmitting a signal, a receiver for receiving said signal, and a control device for processing said signal, wherein said control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by said apparatus.

RJ003

IN THE UNITED STATES PATENT

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

G. OEHLING

GROUP

2608

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

AMENDMENT AND RESPONSE TO OFFICE ACTION

Sir:

This is in response to the Office Action, dated July 9, 1996, wherein the Examiner rejected claims 41-60 under the judicially created doctrine of double patenting, and wherein the Examiner objected to the Abstract of the Disclosure for formal reasons, and further wherein the Examiner rejected claims 41-60 in view of prior art references.

Based on 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:

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OCT 2 1996

GROUP 2600

IN THE TITLE OF THE INVENTION:

Please delete the Title of the Invention and substitute therefor the following new Title of the Invention:

-- SECURITY APPARATUS AND METHOD FOR A MOTOR VEHICLE --

IN THE ABSTRACT OF THE DISCLOSURE:

Please delete the Abstract of the Disclosure and please substitute therefor the new Abstract of the Disclosure which is attached hereto on a separate sheet.

IN THE CLAIMS:

Please amend the following claims as follows:

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- 41. (Amended) A <u>security apparatus</u> [remote-controlled anti-theft and/or recovery system] for a motor vehicle, comprising:
 - a transmitter for transmitting a signal;
- a first receiver for receiving said signal at a first [of at least two remote] location[s];

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- a second receiver for receiving said signal at a second [of said at least two remote] location[s];
- a first control device for processing said signal received by said first receiver, wherein said first control device issues a control signal to one of a vehicle, a vehicle ignition system, a vehicle fuel system and a vehicle device; and

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- a second control device for processing said signal received by said second receiver, wherein said second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by said [system] apparatus.
- 42 (Amended) The [system] apparatus of claim 41, wherein at least one of said first location and said second location [at least two remote locations] is at a motor vehicle.
- 43. (Amended) The [system] apparatus of claim 41, wherein at least one of said first location and said second location [at least two remote locations] is at at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.

cont.

- 44. (Amended) The [system] apparatus of claim 41, wherein said transmitter is a telephone.
- 45. (Amended) The [system] apparatus of claim 41, wherein at least one of said first receiver and said second receiver one of is and comprises a telephone signal receiving device.
- 46. (Amended) The [system] apparatus of claim 41, wherein said at least one of said first control device and said second control device comprises one of a microprocessor, a microcomputer and a mini-computer.
- 47. (Amended) The [system] <u>apparatus</u> of claim 41, wherein said vehicle device is one of an alarm system, a theft

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deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.

- 48. (Amended) The [system] apparatus of claim 41, wherein said signal comprises at least one of accessing data and control data.
- 49. (Amended) A security apparatus [remote-controlled anti-theft and/or recovery system] for a motor vehicle, comprising:
 - a transmitter for transmitting a signal;
 - a receiver for receiving said signal; and
- a control device for processing said signal [received by said receiver], wherein said control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by said [system] apparatus.
- 50. (Amended) The [system] apparatus of claim 49, further comprising:
- a second receiver for receiving said signal at the motor vehicle; and
- a second control device for processing the signal received by said second receiver, wherein said second control device one of generates and issues a control signal to at least one of a vehicle, a vehicle ignition system, a vehicle fuel system, a vehicle system and a vehicle device.

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sub >

51. (Amended) The [system] apparatus of claim 49, wherein said receiver is located at at least one of a central security computer system, a central security service, a security station a security office, a security location, a law enforcement office and a law enforcement agency.

52. (Amended) The [system] apparatus of claim 49, wherein said transmitter is a telephone.

- 53. (Amended) The [system] apparatus of claim 49, wherein said receiver one of is and comprises a telephone signal receiving device.
- 54. (Amended) The [system] apparatus of claim 49, wherein said control device comprises one of a micro-computer and a mini-computer.

cont.

- 55. (Amended) The [system] apparatus of claim 50, wherein said second control device delays an issuance of said control signal until the motor vahicle ignition system is determined to be one of off and de-activated.
- 56. (Amended) The [system] apparatus of claim 49, wherein said vehicle device is one of an alarm system, a theft deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.
- 57. (Amended) The [system] apparatus of claim 49, wherein said signal comprises at least one of accessing data and control data.

58. (Amended) A method for providing security for a motor vehicle [remote-controlled motor vehicle anti-theft and/or motor vehicle recovery], comprising the steps of:

registering a motor vehicle with at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

transmitting a signal [to the motor vehicle and] to at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

receiving said signal at [the motor vehicle and at] at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency;

processing said signal at [each of the motor vehicle and at] at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency; and

one of generating and issuing [at least one] a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be performed one of on and by the vehicle [at least one of the motor vehicle and at least one of a security office, a security location, a law enforcement office and law enforcement agency, in response to said signal processing, wherein said at least one signal at least one of identifies the

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motor vehicle and provides control over one of the motor vehicle and a motor vehicle one of system and device).

59. (Amended) The method of claim 58, further comprising the steps of:

transmitting a signal to the vehicle;

receiving said signal at the vehicle;

processing said signal at the vehicle;

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generating a signal at the vehicle; and

one of disabling, enabling, activating and de-activating at least one of the vehicle, the vehicle ignition system, the vehicle fuel system a vehicle system and a vehicle device.

60. (Amended) The method of claim [58] 59, wherein said signal is transmitted simultaneously to each of the motor vehicle and to at least one of a central security computer system, a central security service, a security station, a security office, a security location, a law enforcement office and a law enforcement agency.

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REMARKS

Claims 41-60 are pending in the present application. Applicant has amended claims 41-60. Applicant has also amended the Title of the Invention so that the Title of the Invention is clearly indicative of the present invention to which the claims are directed. Applicant has also amended the Abstract of the Disclosure so as to overcome the Examiner's objections thereto.

Based on 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. 'FORMAL' MATTERS

The Examiner objects to the Abstract of the Disclosure for formal reasons. As noted above, Applicant has deleted the Abstract of the Disclosure and has substituted therefor a new Abstract of the Disclosure which is attached hereto on a separate sheet. In view of the above, withdrawal of the objection to the Abstract of the Disclosure is respectfully requested.

II. THE DOUBLE PATENTING REJECTION

The Examiner asserts that claims 41-60 are rejected under the judicially created doctrine of double patenting over claims 1-18 of U.S. Patent No. 5,513,214. Applicant respectfully submits that the above double patenting rejection is untenable.

Applicant respectfully submits that the present application is a continuation of U.S. Patent Application Serial No. 08/489,238, filed June 12, 1995, now U.S. Patent No. 5,513,244,

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OCT. 2.1996 2:23PM **ANDERSON KILL & OLICK, P. C.

which is a continuation of U.S. Patent Application Serial No. 08/073,755, filed June 8, 1993, and which is now abandoned. Applicant submits that, under 35 U.S.C. § 154, the patent term begins on the date on which the patent issues and ends 20 years from the date on which the patent application was filed. In the case of an application which contains a specific reference to an earlier filed application under 35 U.S.C. § 120, 121, or 365(c), as is the case in the present application, the term of the patent ends 20 years from the date from which the earliest application was filed, which date, in the case of the present application, is June 8, 1993.

Applicant respectfully submits that, since any patent which issues from the present application will have a term which expires on June 8, 2013, which is twenty years from the filing date of the earliest filed application (June 8, 1993), any patent granted from the present application will not unjustifiably or improperly extend the "right to exclude" granted by U.S. Patent No. 5,513,244, which patent also expires on June 8, 2013.

In view of the above, Applicant respectfully submits that the double patenting rejection is untenable. In view of the above, Applicant respectfully requests that the double patenting rejection be withdrawn.

III. The 35 U.S.C. \$103 REJECTIONS

The Examiner asserts that claims 41-54 and 56-60 are rejected as being unpatentable over Pagliaroli et al, U.S. Patent No. 5,276,728 (Pagliaroli) in view of Carrier et al, U.S. Patent No. 5,195,126 (Carrier). The Examiner also asserts that claim 55 is rejected under 35 U.S.C. § 103 as being unpatentable over

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Pagliaroli in view of Carrier, and further in view of Drori et al, U.S. Patent No. 5,081,667 (Drori). Applicant respectfully submits that the present invention, as defined by the claims, is patentable over the prior art.

IIIA. CLAIMS 41-48 ARE PATENTABLE OVER THE PRIOR ART

Applicant respectfully submits that the present invention, as defined by claims 41-48, is patentable over the prior art. Applicant respectfully submits that the present, as defined by independent claim 41, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a security apparatus which comprises a second receiver for receiving the signal at a second location, which are important and recited features of independent claim 41. Applicant further respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a security apparatus which comprises a second control device for processing the signal received by the second receiver, wherein the second control device provides information indicative of at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by the apparatus, which are still other important and recited features of independent Claim 41.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 41, is not rendered obvious by Pagliaroli in view of Carrier. Applicant, therefore, respectfully submits that the present invention, as defined by independent claim 41, is patentable over Pagliaroli in

view of Carrier. Applicant further submits that claims 42-48, which depend directly from independent claim 41, so as to include all of the limitations of claim 41 and which further serve to narrow the scope of claim 41, are also patentable because said claims depend from allowable subject matter. Allowance of claims 41-48 is, therefore, respectfully requested.

IIIB. CLAIMS 49-57 ARE PATENTABLE OVER THE PRIOR ART

Applicant respectfully submits that the present invention, as defined by claims 49-57, is patentable over the prior art. Applicant respectfully submits that the present invention, as defined by independent claim 49, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a security apparatus which comprises a control device for processing the signal, wherein the control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by the apparatus.

In view of the above, Applicant respectfully submits that the present invention, as defined by independent claim 49, is not rendered obvious by Pagliaroli in view of Carrier. Applicant respectfully submits that the present invention, as defined by independent claim 49, is patentable over Pagliaroli in view of Carrier. Applicant further submits that claims 50-57, which depend either directly or indirectly from independent claim 49, so as to include all of the limitations of claim 41 and which further serve to narrow the scope of claim 49, are also patentable because said

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claims depend from allowable subject matter. Allowance of pending claims 49-57 is, therefore, respectfully requested.

IIIC. CLAIMS 58-60 ARE PATENTABLE OVER THE PRIOR ART

Applicant respectfully submits that the present invention, as defined by claims 58-60, is patentable over the prior art. Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Pagliaroli in view of Carrier.

Applicant respectfully submits that neither Pagliaroli nor Carrier, nor their combination, disclose or suggest a method for providing security for a motor vehicle which has the steps enumerated in independent claim 58, which 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 58, is not rendered obvious by Pagliaroli in view of Carrier. Applicant respectfully submits that the present invention, as defined by independent claim 58, is patentable over Pagliaroli in view of Carrier. Applicant further submits that claims 59-60, which depend directly or indirectly from independent claim 58, so as to include all of the limitations of claim 58 and which further serve to narrow the scope of claim 58, are also patentable because said claims depend from allowable subject matter. Allowance of pending claims 58-60 is, therefore, respectfully requested.

IV. CONCLUSION

In view of the above, Applicant respectfully submits that the application is in condition for allowance and action to that end is respectfully requested.

Respectfully submitted,

Abstract of the Disclosure

Date: October 2, 1996

> Raymond A. Joao 122 Bellevus Place Yonkers, New York

10703

(H) (914) 969-2992 (O) (212) 278-1857

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231, on October 2, 1996.

A security apparatus and method for a motor vehicle comprising a transmitter for transmitting a signal, a receiver for receiving said signal, and a control device for processing said signal, wherein said control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by said apparatus.



UNITED STATES DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

SERIAL NUMBER FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. 08/587,628 01/17/96 JOAO RJ-003 **OEHLINGEXAMINER** 26M2/0709 RAYMOND A JOAO ART UNIT PAPER NUMBER 122 BELLEVUE PLACE YONKERS NY 10703 2608 DATE MAILED: 07/09/96 This is a communication from the examiner in charge of your application. COMMISSIONER OF PATENTS AND TRADEMARKS Responsive to communication filed on 6/3/96 This action is made final. This application has been examined A shortened statutory period for response to this action is set to expire ______ month(s), _ days from the date of this letter. Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133 Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION: Notice of Draftsman's Patent Drawing Review, PTO-948.
 Notice of Informal Patent Application, PTO-152. 1. Notice of References Cited by Examiner, PTO-892. Notice of Art Cited by Applicant, PTO-1449. 5. Information on How to Effect Drawing Changes, PTO-1474. Part II SUMMARY OF ACTION 1. 2 Claims 4-60 are pending in the application. ___ are withdrawn from consideration. 2. Claims 4. 1-60 5. Claims 6. Claims are subject to restriction or election requirement. 7. This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes. 8. Formal drawings are required in response to this Office action. 9. The corrected or substitute drawings have been received on _ _. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948). 10. The proposed additional or substitute sheet(s) of drawings, filed on _ . has (have) been approved by the examiner; disapproved by the examiner (see explanation). 11. The proposed drawing correction, filed ____ ____, has been approved; disapproved (see explanation). 12. Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has been received not been received been filed in parent application, serial no. ______; filed on _ 13. Since this application apppears to be 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. 14. Other

EXAMINER'S ACTION

PTOL-326 (Rev. 2/93)



Art Unit: 2608

/. The non-statutory double patenting rejection, whether of the obvious-type or non-obvious-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Van Ornam, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and In re Goodman, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321 (b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78 (d).

Effective January 1, 1994, a registered attorney or agent of record may sign a Terminal Disclaimer. A Terminal Disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 41-60 are rejected under the judicially created doctrine of double patenting over claims 1-18 of U. S. Patent No. 5,513,214 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows: A remote-controlled anti-theft system for motor vehicles wherein a signal is transmitted from a transmitting means to at least two remote locations. One location being a vehicle and the other location being a law enforcement agency. Each remote location having a corresponding control means to act accordingly to the transmitted signal.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

The Abstract of the Disclosure is objected to because applicant is requested to refrain from the use of legal phraseology (i.e. the use of "means"). Correction is required. See M.P.E.P. § 608.01(b). Śerial Number: 08/587,628 -3-

Art Unit: 2608

3. The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

4. Claims 41-54 and 56-60 are rejected under 35 U.S.C. § 103 as being unpatentable over Pagliaroli et al in view of Carrier et al.

Consider claims 41-43, 48, 49-51, and 57-59.

Pagliaroli et al disclose a remote controlled theftdeterrent system for a vehicle comprising a means for
transmitting (48 & 46) data signals to a remote location; a first
receiving means (14) for receiving the data signals; and a first
control means (16), associated with the first receiving means,
for processing the data signals and issues either a disable or
re-enable signal to the vehicle's ignition system (22). Note
figure 2 of Pagliaroli et al.

-4-

Serial Number: 08/587,628

Art Unit: 2608

Pagliaroli et al differ from the aforementioned claims of the present invention in that they fail to transmit data signals to a second remote location (i.e. the police department) in addition to the first remote location (i.e. the vehicle).

However, Pagliaroli et al further disclose in col. 1, lines 28-36 that the owner of a vehicle will usually report his vehicle stolen to the police department and, yet further states in col. 1, lines 53-61, that the police (in addition to the vehicle owner) have the ability to control the vehicle remotely.

In addition, Carrier et al. disclose, in an emergency/security apparatus, to provide notification of an emergency situation to at least two remote locations simultaneously in response to a user dialing a "911" command.

Therefore, since Pagliaroli et al disclose to contact the police when an owner of a vehicle discovers that his vehicles has been stolen and since Carrier et al teach to transmit messages to two remote locations at the same time, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Pagliaroli et al to automatically transmit a message simultaneously by the owner in order for the user to more quickly notify the police of the stolen vehicle as opposed to the slower notification process of calling the police subsequently to issuing a disable command to the vehicle.

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Art Unit: 2608

Further consider claims 49, 50, and 58. Pagliaroli et al disclose in col. 1, lines 28-31 that the identification of the vehicle (i.e. license plate number) is registered with the police department.

Consider claims 44 and 52. The transmitting means of Pagliaroli et al is a touch-tone telephone (48).

Consider claims 45 and 53. The receiving means at the second remote location (i.e. the police department) is a telephone receiving means.

Consider claims 46 and 54. Note figure 1, item 16 of Pagliaroli et al.

Consider claims 47 and 56. Pagliaroli et al disclose in col. 6, lines 23-25, that the alarm system of the vehicle can be remotely controlled.

Claim 55 is rejected under 35 U.S.C. § 103 as being unpatentable over Pagliaroli et al in view of Carrier et al as applied to claim 50 above, and further in view of Drori et al.

Consider claim 55. The combination of Pagliaroli et al and Carrier et al fail to specifically teach that the first control means will prevent deactivation of the vehicle's operating system if it is determined that the vehicle's engine is running.

Drori et al disclose a remote controlled theft-deterrent system for motor vehicles and specifically in col. 2, lines 28-36 that the execution of a remote control command is delayed until a

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Art Unit: 2608

predetermined condition of the vehicle is satisfied, i.e. when the engine's rpm or vehicle speed is at or below a preset level (e.g. zero).

Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to include this feature taught by Drori et al in the combination such that the driver of the vehicle is not put in a life threatening situation due to the deactivation of one of the vehicle's components.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to G. Oehling whose telephone number is (703) 305-4835. The examiner can normally be reached on Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curt Kuntz, can be reached on (703) 305-4708. The fax phone number for this Group is (703) 305-9508.

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.

GEORGE OEHLING PATENT EXAMINER GROUP 2800

G. Oehling/skf June 25, 1996

| FORM PTO-892 U.S. DEPARTMENT OF COMMERCE (REV. 2-92) PATENT AND TRADEMARK OFFICE | | | | | | | | | 58 /5° | 587,628 26 | | | SOS PA | | CHMENT TO PER | 4 | | |
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| | * A copy of this reference is not being furnished with this office action. (See Manual of Patent Examining Procedure, section 707.05 (a).) | | | | | | | | | | | | | | | | | |

NOTICE OF DRAFTSPERSON'S PATENT DRAWING REVIEW

PTO Draftpersons review all originally filed drawings regardless of whether they are designated as formal or informal. Additionally, patent Examiners will review the drawings for compliance with the regulations. Direct telephone inquiries concerning this review to the Drawing Review Branch, 703-305-8404.

| 1/17/00 | |
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| The drawings filed (insert date), are | View and enlarged view not labled separatly or properly. |
| Anot objected to by the Draftsperson under 37 CFR 1.84 or 1.152. | Fig(s) |
| B objected to by the Draftsperson under 37 CFR 1.84 or 1.152 as | Sectional views. 37 CFR 1.84 (h) 3 |
| indicated below. The Examiner will require submission of new, corrected | Hatching not indicated for sectional portions of an object. |
| drawings when necessary. Corrected drawings must be submitted | Fig(s) |
| according to the instructions on the back of this Notice. | Cross section not drawn same as view with parts in cross section |
| | with regularly spaced parallel oblique strokes. Fig(s) |
| 1. DRAWINGS. 37 CFR 1.84(a): Acceptable categories of drawings: | |
| Black ink. Color. | 8. ARRANGEMENT OF VIEWS. 37 CFR 1.84(i) |
| Not black solid lines. Fig(s) | Words do not appear on a horizontal, left-to-right fashion when |
| Color drawings are not acceptable until petition is granted. | page is either upright or turned so that the top becomes the right |
| Fig(s) | side, except for graphs. Fig(s) |
| | 9. SCALE. 37.CFR 1.84(k) |
| 2. PHOTOGRAPHS. 37 CFR 1.84(b) | Cools and love and the state of |
| — Photographs are not acceptable until petition is granted. | Scale not large enough to show mechanism with crowding |
| Fig(s) | when drawing is reduced in size to two-thirds in reproduction. |
| Photographs not properly mounted (must use brystol board or | Fig(s) |
| photographic double-weight paper). Fig(s) | Indication such as "actual size" or scale 1/2" not permitted. |
| Poor quality (half-tone). Fig(s) | Fig(s) |
| 3. GRAPHIC FORMS. 37 CFR 1.84 (d) | CHARACTER OF LINES, NUMBERS, & LETTERS. 37 CFR |
| Chemical or mathematical formula not labeled as separate figure. | 1.64(I) |
| Fig(s) | Kines numbers & letters not uniformly shirts and and a f |
| Group of waveforms not presented as a single figure, using | Lines, numbers & letters not uniformly thick and well defined, |
| common vertical axis with time extending along horizontal axis. | clean, durable, and black (except for color drawings). |
| Fig(s) | Fig(s) |
| | 11. SHADING. 37 CFR 1:84(m) |
| Individuals waveform not identified with a separate letter | Solid black shading areas not permitted. |
| designation adjacent to the vertical axis. Fig(s) | Fig(s) |
| 4. TYPE OF PAPER. 37 CFR 1.84(c) | Shade lines, pale, rough and blurred. Fig(s) |
| Paper not flexible, strong, white, smooth, nonshiny, and durable. | |
| Sheet(s) | 12. NUMBERS, LETTERS, & REFERENCE CHARACTERS. 37 CFR |
| Erasures, alterations, overwritings, interlineations, cracks, creases, | 1.84(p) |
| and folds copy machine marks not accepted, Fig(s) | Numbers and reference characters not plain and legible. 37 CFR |
| Mylar, velum paper is not acceptable (too thin). Fig(s) | 1.84(p)(i) Fig(s) |
| 5. SIZE OF PAPER. 37 CFR 1.84(f): Acceptable sizes: | Numbers and reference characters not oriented in same direction |
| 21.6 cm. by 35.6 cm. (8 V2 by 14 inches) | as the view. 37 CFR 1.84(p)(l) Fig(s) |
| 21.6 cm. by 33.1 cm. (8 1/2 by 13 inches) | English alphabet not used. 37 CFR 1.84(p)(2) |
| | Γig(s) |
| 21.6 cm. by 27.9 cm. (8 1/2 by 11 inches) | Numbers, letters, and reference characters do not measure at least |
| 21.0 cm. by 29.7 cm. (DIN size A4) | A rounders, letters, and reference characters do not measure at least |
| All drawing sheets not the same size. Sheet(s) | 32 cm. (1/8 inch) in height. 37 CFR(p)(3) |
| Drawing sheet not an acceptable size. Sheet(s) | Fig(s) |
| 6. MARGINS. 37 CFR 1.84(g): Acceptable margins: | 13. LEAD LINES. 37 CFR 1.84(q) |
| | Lead lines cross each other. Fig(s) |
| Paper size | Lead lines missing. Fig(s) |
| 21.6 cm. X 35.6 cm. 21.6 cm X 33.1 cm. 21.6 cm. X 27.9 cm. 21.0 cm. X 29.7 cm. | |
| (8 V2 X 14 inches) (8 V2 X 13 inches) (8 V2 X 11 inches) (DIN Size A4) | 14. NUMBERING OF SHEETS OF DRAWINGS, 37 CFR 1.84(t) |
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| L .64 cm. (1/4") .64 cm. (1/4") .64 cm. (1/4") 2.5 cm. | beginning with number 1. Sheet(s) |
| R .64 cm. (1/4") .64 cm. (1/4") 1.5 cm. B .64 cm. (1/4") .64 cm. (1/4") 1.0 cm. | 15. NUMBER OF VIEWS. 37 CFR 1.84(u) |
| B .64 cm. (1/4") .64 cm. (1/4") 1.0 cm. | Views not numbered consecutively, and in Arabic numerals, |
| Margins do not conform to chart above. | beginning with number 1. Fig(s) |
| State(s) | View numbers not preceded by the abbreviation Fig. |
| Top (T) Left (L) Right (R) Bottom (B) | Fig(s) |
| V \ | |
| 7. VIEWS. 37 CFR 1.84(h) | 16. CORRECTIONS: 37 CFR 1.84(w) |
| REMINDER: Specification may require revision to correspond to | Corrections not made from prior PTO-948, |
| drawing changes. | Fig(s) |
| All views not grouped together. Fig(s) | 17. DESIGN DRAWING. 37 CFR 1.152 |
| Views connected by projection lines or lead lines. | Surface shading shown not appropriate. Fig(s) |
| Fig(s) | Solid black shading not used for color contrast. |
| Partial views. 37 CFR 1.84(h) 2 | Fig(s) |
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ATTACHMENT TO PAPER NO. _______ PTO Copy

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 Drawings, must likewise be changed. Please make such changes by 37 CFR 1:312 Amendment at the time of submitting drawing changes.

INFORMATION ON HOW TO EFFECT DRAWING CHANGES

1. Correction of Informalities-37 CFR 1.85

File new drawings with the changes incorporated therein. The application number or the title of the invention, inventor's name, docket number (if any), and the name and telephone number of a person to call if the Office is unable to match the drawings to the proper application, should be placed on the back of each sheet of drawings in accordance with 37 CFR 1.84(c). Applicant may delay filing of the new drawings until receipt of the Notice of Allowability (PTOL-37). Extensions of time may be obtained under the provisions of 37 CFR 1.136. The drawing should be filed as a separate paper with a transmittal letter addressed to the Drawing Review Branch.

2. Timing of Corrections

Applicant is required to submit **acceptable** corrected drawings within the three-month shortened statutory period set in the Notice of Allowability (PTOL-37). If a correction is determined to be unacceptable by the Office, applicant must arrange to have acceptable correction resubmitted within the original three-month period to avoid the necessity of obtaining as extension of time and paying the extension fee. Therefore, applicant should file corrected drawings as soon as possible.

Failure to take corrective action within set (or extended) period will result in **ABANDONMENT** of the Application.

3. Corrections other than Informalities Noted by the Drawing Review Branch on the Form PTO 948

All changes to the drawings, other than informalities noted by the Drawing Review Branch, MUST be approved by the examiner before the application will be allowed. No changes will be permitted to be made, other than correction of informalities, unless the examiner has approved the proposed changes.



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT

RAYMOND A. JOAO, ET AL.

SERIAL NO.

08/587,628

FILED

JANUARY 17, 1996

FOR

REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER

G. OEHLING

GROUP

2608

2438 V

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

SECOND PRELIMINARY AMENDMENT

Sir:

This is a Second Preliminary Amendment in the above-identified application.

Please enter this Second Preliminary Amendment before any Official Action is taken in this case.

Please amend the application as follows:

IN THE CLAIMS:

Please cancel claims 21-40, without prejudice, and please add the following new claims 44-60:

Sub. Di -- 41. A remote-controlled anti-theft and/or recovery-system for a motor vehicle, comprising:

- a transmitter for transmitting a signal;
- a first receiver for receiving said signal at a first of at least two remote locations;
- a second receiver for receiving said signal at a second of said at least two remote locations;
- a first control device for processing said signal received by said first receiver, wherein said first control device issues a control signal to one of a vehicle, a vehicle ignition system, a vehicle fuel system and a vehicle device; and
- a second control device for processing said signal received by said second receiver, wherein said second control device provides information indicative at least one of vehicle identification, a theft of a vehicle and a function to be one of controlled and performed by said system.
- 42. The system of claim 41, wherein at least one of said at least two remote locations is at a motor vehicle.
- 43. The system of claim 41, wherein at least one of said at least two remote locations is at at least one of a security office, a security location, a law enforcement office and a law enforcement agency.

- -44. The system of claim 41, wherein said transmitter is a telephone.
- 45. The system of claim 41, wherein at least one of said first receiver and said second receiver is a telephone signal receiving device.
- 46. The system of claim 41, wherein said at least one of said first control device and said second control device comprises one of a microprocessor, a micro-computer and a minicomputer.
- 47. The system of claim 41, wherein said vehicle device is one of an alarm system, a theft deterrent system, a horn, a door locking system, a hood locking system and a vehicle recovery system.

CI Cont.

- 48. The system of claim 41, wherein said signal comprises at least one of accessing data and control data.
- 49. A remote-controlled anti-theft and/or recovery system for a motor vehicle, comprising:
 - a transmitter for transmitting a signal;
 - a receiver for receiving said signal; and

a control device for processing said signal received by said receiver, wherein said control device at least one of generates and issues a signal indicative of at least one of vehicle identification, a theft of the vehicle and a function to be one of controlled and performed by said system.

-50. The system of claim-49, further comprising:

a second receiver for receiving said signal at the motor vehicle; and

a second control device for processing the signal received by said second receiver, wherein said second control device one of generates and issues a control signal to at least one of a vehicle, a vehicle ignition system, a vehicle fuel system, and a vehicle device.

- 51. The system of claim 49, wherein said receiver is located at at least one of a security office, a security location, a law enforcement office and a law enforcement agency.
- 52. The system of claim 49, wherein said transmitter is a telephone.
- 53. The system of claim 49, wherein said receiver is a telephone signal receiving device.
- 54. The system of claim 49, wherein said control device comprises one of a microprocessor, a micro-computer and a minicomputer.
- 55. The system of claim 50, wherein said second control device delays an issuance of said control signal until the motor vehicle ignition system is determined to be off.
- 56. The system of claim 49, wherein said vehicle device is-one-of-an-alarm-system, a theft deterrent system, a horn, a door

NY2-69539.2

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-locking system, a hood locking system and a vehicle recovery system.

- 57. The system of claim 49, wherein said signal comprises at least one of accessing data and control data
- 58. A method for remote-controlled motor vehicle antitheft and/or motor vehicle recovery, comprising the steps of:

registering a motor vehicle with one of a security office, a security location, a law enforcement office and a law enforcement agency;

transmitting a signal to the motor vehicle and to at least one of a security office, a security location, a law enforcement office and a law enforcement agency;

Cont.

receiving said signal at the motor vehicle and at at least one of a security office, a security location, a law enforcement office and a law enforcement agency;

processing said signal at each of the motor vehicle and at at least one of a security office, a security location, a law enforcement office and a law enforcement agency; and

issuing at least one signal at at least one of the motor vehicle and at at least one of a security office, a security location, a law enforcement office and law enforcement agency, in response to said signal processing, wherein said at least one signal at least one of identifies the motor vehicle and provides control over one of the motor vehicle and a motor vehicle one of system—and—device.

-59. The method of claim 58, further comprising the step

of:

one of disabling, enabling, activating and de-activating at least one of the vehicle, the vehicle ignition system, the vehicle fuel system and a vehicle device.

conld.

60. The method of claim 58, wherein said signal is transmitted simultaneously to each of the motor vehicle and to at least one of a security office, a security location, a law enforcement office and a law-enforcement agency.

REMARKS

This is a Second Preliminary Amendment in the aboveidentified application. By this Second Preliminary Amendment, Applicant has cancelled claims 21-40, without prejudice, and Applicant has added new claims 41-60.

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

Respectfully submitted,

By

Raymond A. Jao Reg. No. 35,907

Date: May 31, 1996

Raymond A. Joao 122 Bellevue Place

Yonkers, New York 10703

(H) (914) 969-2992 (O) (212) 278-1857

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner of Patents and Trademarks, Washington, D.C. 2023l, on May 31, 1996.

Paymond A Topo

"Express Mail" No. 179883696US Date: Januar 17, 1996 16 587628
I hereby certify the this correspondence is being deposited with #2 the United States Postal Service "Express Mail Fost Office to Addressee" service under 37 CFR 1.10 on the date indicated above from and is addressed to the Commissioner of Patents and Trademarks, 4-3-96
Washington, D.C. 20231.

EST FORM FOR RULE 1.60 CONTINUATION APPLICATION HE UNITED STATES PATENT AND TRADEMARK OFFICE

DOCKET NO: RJ-003 Cont. of: RJ-002

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

Sir:

This is a request for filing a continuation application under 37 CFR 1.60 of pending prior application Serial No. 08/489,238, filed June 12, 1995, in the names of Raymond Anthony Joao, Raymond Delfim Joao and Thomas Garben entitled REMOTE CONTROLLED ANTI-THEFT AND/OR THEFT-DETERRENT APPARTUS AND METHOD FOR MOTOR VEHICLES.

Please DO NOT ABANDON the parent application.

A Preliminary Amendment is enclosed herewith.

NY2-56043.1

The filing fee is calculated on the basis of the claims existing in the prior application as amended above.

| • | CLAIMS | AS | FILE | Ο, | LESS | ANY | CLAIMS | CANC | ELLED | BY | AMENDMENT | |
|-------|--------|------|--------|----|-----------|-----|-------------------|------|--------|----|-----------------------|--|
| For | | , | | | ber ed | _ | Number extra | | Rate | | Basic Fee \$375.00 | |
| | | | | | | | ** ** | | | | | |
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| First | preser | ntat | cion o | of | Mult: | | pendent Claims | \$: | 125.00 |) | 0 | |
| | | | | | | | Total filing fee | | | | \$375.00 | |

A check made payable to the Commissioner of Patents and Trademarks in the amount of \$375.00, for the required filing fee, is enclosed. A duplicate copy of this sheet is enclosed.

A true copy of the specification and drawings, as originally filed, is submitted herewith.

Please amend the specification by inserting before the first line: Mr This is a continuation application of Serial No. 08/489,238, filed June 12, 1995, which in turn is a continuation application of Serial No. 08/073,755, filed June 8, 1993.

NY2-56043.1

The power of attorney in the prior application is to Raymond A. Joao, Reg. No. 35,907, of 122 Bellevue Place, Yonkers, New York 10703. The power appears in the original papers of the prior application.

Direct all future correspondence to:

Raymond A. Joao 122 Bellevue Place Yonkers, New York 10703 H (914) 969-2992 O (212) 278-1857

Respectfully Submitted,

D.r.

Raymond A. Joan Reg. No. 35,907

RAJ:ea

Dated: January 17, 1996

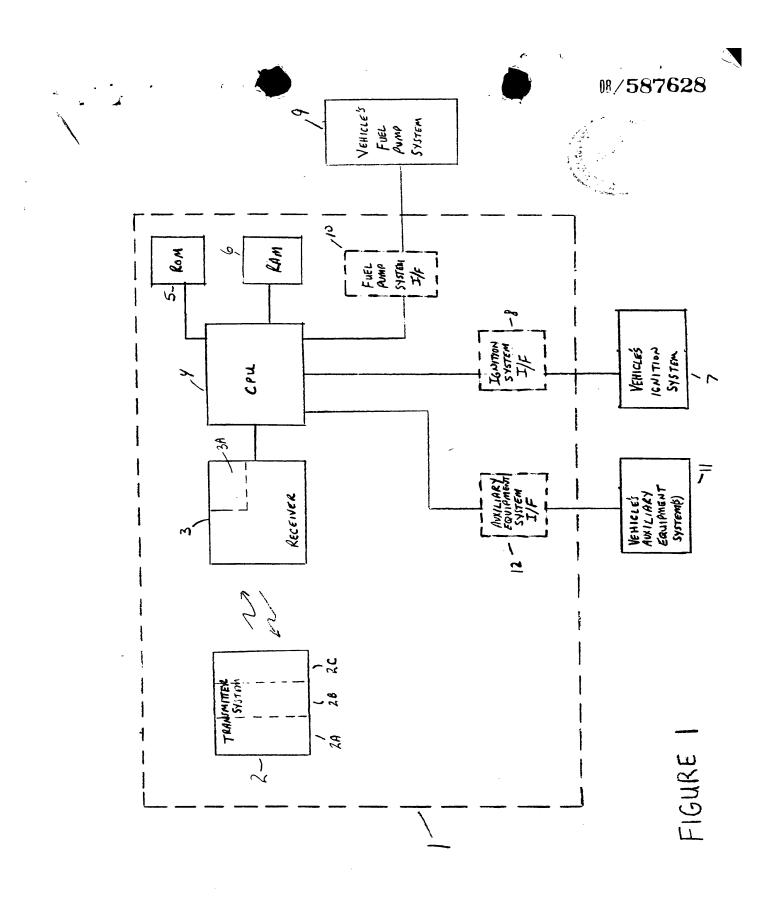
Enclosure: Preliminary Amendment

Check in the amount of \$375.00 Copies of originally filed:

Specification
3 Drawings
Declaration

3 Small Entity Status Forms

NY2-56043.1



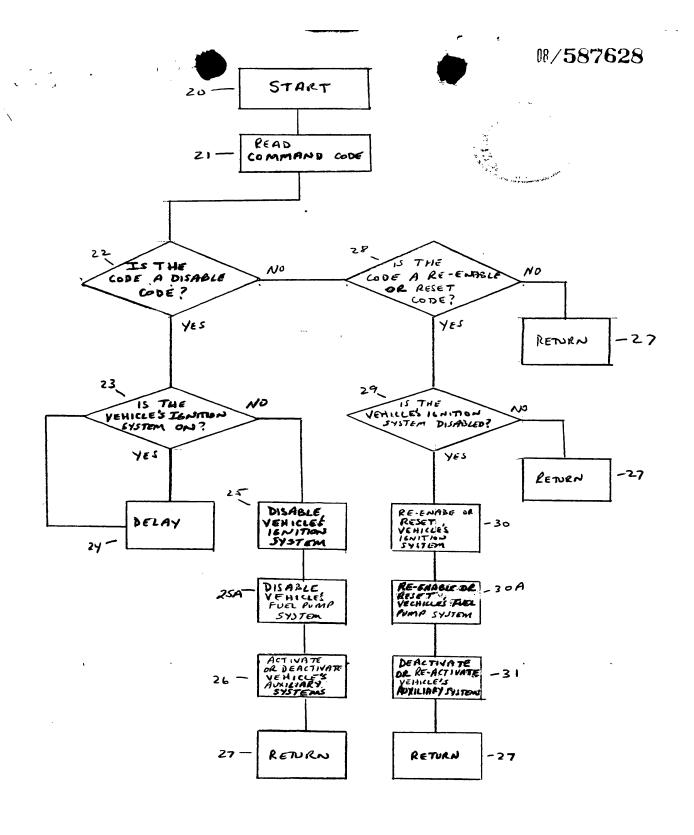
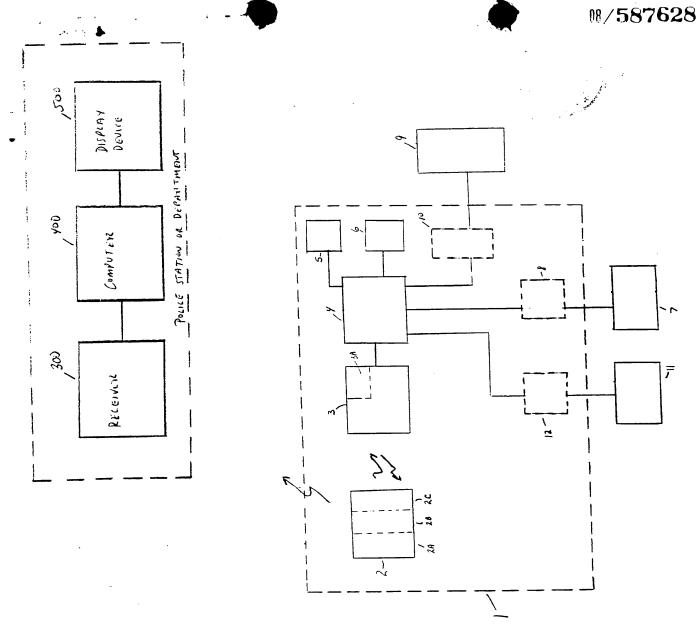


FIGURE 2





REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-DETERRENT

APPARATUS AND METHOD FOR MOTOR VEHICLES



FIELD OF THE INVENTION

INS A1

The present invention pertains to a remote-controlled anti-theft and/or theft-deterrent apparatus and method, for motor vehicles, which provides for an instantaneous, as well as for a deferred, anti-theft and/or theft deterrent response to a motor vehicle theft, or for the prevention thereof.

BACKGROUND OF THE INVENTION

Anti-theft and/or theft-deterrent devices for motor vehicles are known, in the prior art, for preventing or thwarting the theft of motor vehicles. These known 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, etc.). In some cases, these devices may be of a very simple design, while in other cases, they may be of a more sophisticated design. However, as is well known, these known anti-theft and/or theft-deterrent devices and systems may be easily defeated by car thieves, and especially, by professional car thieves. Experience has shown that even the most sophisticated of anti-theft and/or theft-deterrent devices may be defeated by an experienced, and determined, vehicle thief.

In recent times, an even more disturbing criminal practice involving the theft of motor vehicles has rendered most

of these anti-theft and/or theft-deterrent devices virtually useless. This criminal practice has gained widespread attention and is known as car-jacking. 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 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.

The above-described recent car-jacking practices have also given rise to the introduction and/or to the suggestion of anti-theft and/or theft-deterrent devices which attempt to defeat the ultimate vehicle theft, such as caused by car-jacking, by causing the motor vehicle to become disabled during the "getaway" such as by shutting off the power to the motor vehicle's engine. However, these devices have major disadvantages and drawbacks in that they could shut-off the vehicle's engine power at an inopportune instant in time, thereby causing a dangerous condition to exist, which could lead to an accident which may cause injuries to individuals as well as damage to property. These accidents may arise when the motor vehicle's power is suddenly shut-off when the vehicle is in motion, which condition could cause the vehicle to suddenly, or even gradual-

ly, lose power on a roadway or highway, while traveling at a moderate or at a high rate of speed and/or when a power steering and/or a power braking system, which derives its power from the vehicle's 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 the damages sustained as a result of the above described accidents.

The present invention provides an apparatus and a method for overcoming the disadvantages and drawbacks which are associated with the known prior art anti-theft and/or theft-deterrent devices.

SUMMARY OF THE INVENTION

The present invention is directed to a remote-controlled anti-theft and/or theft-deterrent apparatus and method which overcomes the disadvantages and drawbacks of the prior art anti-theft and/or theft-deterrent devices. The present invention also provides for a remote-controlled anti-

theft and/or theft-deterrent apparatus and method which can provide for an instantaneous, as well as for a deferred, antitheft and/or theft-deterrent system response to a motor vehicle theft, or for the prevention thereof. Further, the present invention may be utilized in conjunction with local law enforcement offices and agencies so as to provide a means by which a motor vehicle theft may be reported so as to enable a rapid response thereto by the office or agency.

The apparatus of the present invention comprises a transmitter system, for transmitting an electrical, an electronic, or an electro-magnetic, signal upon the activation of the transmitter by a motor vehicle owner or authorized operator. The transmitter system consists of a user interface device and a transmitting device. The user interface device provides the means by which the motor vehicle owner or authorized operator may access or activate the apparatus and/or provide control over the apparatus. The transmitting device transmits a signal, in response to the owner or authorized operator's accessing and/or activation of the transmitter system and the apparatus. transmitter system is typically a remote-control system, which is separate from, and which is not electrically connected with, the remainder of the apparatus. In this manner, the transmitter system is not located within the motor vehicle. The transmitter system should also be capable of transmitting signals over long distances and should also be capable of transmitting a multitude of signals.

The apparatus also comprises a receiver for receiving the signals which are transmitted by the transmitter system. The receiver may be any receiver or receiving device which is capable of receiving remote electrical, electronic and/or electro-magnetic signals, which may be transmitted by the transmitter system, as well as being capable of receiving any of the multitude of signals which may be transmitted thereby or therefrom. The transmitter system/receiver combination, of the apparatus of the present invention, may be implemented by using a telephone/telephone beeper system, which systems are well known in today's telecommunication industry and practices. should be noted, however, that any transmitter system/receiver combination, which allows for a transmission of remote signals and, in addition, a multitude of remote signals, to a receiver, over long distances, may be utilized with the apparatus of the present invention.

The receiver should also be capable of generating distinct digital signals, i.e. electrical, electronic, and/or electro-magnetic signals, which may be indicative of the transmitted signal, or a portion thereof. At least a portion of the transmitted signal should include a valid access code or signal which accesses the apparatus, and in particular, the receiver, and a valid command code, by which code a vehicle owner or authorized operator may exercise control over the apparatus.

The apparatus further comprises a controller, which is electrically connected with the receiver and which receives the digital signals, or portions thereof, which are generated by the receiver. The controller may be any type of digital processing device, or computer, such as a microprocessor. The controller also has associated therewith a read only memory device (ROM), for storing operational program data, and a random access memory device (RAM), for storing the data which is to be processed by the apparatus. The use of a microprocessor as the controller provides for versatility in programmability, as well as provides for an apparatus which can be made as small in size as possible. By providing for an apparatus which is as small in size as possible, a more concealed installation of the apparatus in the motor vehicle can be achieved. It is also envisioned that the apparatus of the present invention may be installed in the motor vehicle during the vehicle's manufacture and/or assembly so as to enhance its concealment from a thief or thieves.

The controller is electrically connected to the motor vehicle's ignition system and may, or may not, be connected to the vehicle's ignition system via an ignition system interface. The controller transmits signals to, and may receive signals from, the vehicle's ignition system. Digital command signals and/or codes are utilized, in order to disable and/or to reenable or reset the vehicle's ignition system.

The apparatus may also comprise, and the controller may also be electrically connected either directly, or indirect-

ly via an interface device, to a motor vehicle fuel pump system, which may be de-activated so as to cut-off the flow of fuel to the vehicle's engine.

The apparatus may also comprise, and the controller may also be electrically connected, either directly, or indirectly via an interface device, to one or more of a vehicle auxiliary equipment system or systems, which may include a loud siren or alarm, which may be located in the passenger compartment of the motor vehicle and which may be activated so as to make it unbearable for an intruder to remain inside the motor vehicle passenger compartment, an external siren or alarm, which is capable of producing a loud sound, which may be activated so as to draw attention to the motor vehicle, a horn or horns, which may be activated so as to blare continuously or intermittently so as to also draw attention to the motor vehicle, and/or the vehicle's external light systems, which may include the vehicle's head lights, tail lights, or flashers, which may be activated so as to be constantly illuminated or which may be activated to flash on and off repeatedly.

The vehicle auxiliary equipment system or systems, to which the controller may be connected to, either directly or indirectly via an interface device, may also include a power door locking system, which may be activated so as to secure the vehicle's passenger compartment thereby preventing an entry thereto, or an exit therefrom, and/or a hood locking system, which may be a mechanical hood locking system, which may be

activated so as to lock the vehicle's hood so as to prevent an entry into the vehicle's engine compartment. The apparatus may also comprise any necessary vehicle auxiliary equipment system interface devices which may be needed in order to facilitate the required interfacing between the controller and the particular vehicle auxiliary equipment system(s). The vehicle auxiliary equipment system or systems, which may include other systems or devices, located within, or utilized with, the motor vehicle, are optional and may be utilized as desired.

Upon the occurrence, or the discovery thereof, of a motor vehicle theft, the owner or authorized operator of the motor vehicle may activate the apparatus by entering a valid access code into the transmitter interface, thereby activating a transmission from the transmitting device. The entry of a valid access code, and the resulting transmission of an access signal corresponding thereto, to the receiver of the apparatus, results in the apparatus being accessed. Upon receiving the transmitted access signal, the receiver will typically generate a signal which is indicative of the receiver's receipt of the signal. The controller is activated upon the accessing of the receiver and the apparatus.

The receiver, or the communication system which services the receiver, may also transmit a signal back to the transmitter system which is indicative of the fact that the receiver and the apparatus have been accessed. For this, the receiver may also be equipped with a transmitting device of its

own, while the transmitter system may be correspondingly equipped with its own receiver device. The above sequence of events are analogous to those which occur in a telephone/telephone beeper system, wherein, when the beeper has "answered the call" and has been activated or accessed, it awaits the entry of a telephone code or number. This indication by the receiver may then typically be followed by a period of silence, during which period, the owner or authorized operator may enter a command code, such as a vehicle disable code, a vehicle re-enable or reset code, or a cancel code, into the transmitter interface.

The command code is then transmitted by the transmitter system or transmitting device, and is received by the receiver. A command code received signal may then be transmitted back to the transmitter system by the receiver or beeper, or by the communication system which services the beeper, so as to provide an indication that an authorized command code has been received by the receiver and the apparatus. The command code data, or signals corresponding thereto, are then transmitted to the controller for identification thereof and for further processing, if necessary.

In a situation when the motor vehicle has been stolen and the owner or authorized operator wants to prevent or thwart the theft, the command code would be a vehicle disable code. Similarly, if the owner or authorized operator wants to reenable or reset the apparatus, such as when the motor vehicle has been recovered or found, the command code would be a vehicle

re-enable or reset code. If the owner or authorized operator wishes to cancel the accessing of the apparatus, a code other than the disable or the re-enable or reset code may be entered. Once the command code has been entered, the receiver may transmit a signal to the transmitter, which is indicative of the receipt of the command code. As noted above, the command code or the data representative thereof, if valid, will be transmitted to, or read by, the controller for command code identification and for subsequent processing, if necessary.

The receiver, upon receipt of the access code, may generate an interrupt in the controller, which interrupt will activate an interrupt service routine. The command code data is then transmitted to, or read by, the controller and a processing routine is performed in order to identify the command code or the command code data. Once the command code or command code data has been identified, the controller will control the operation of the apparatus so that the appropriate processing routines, and apparatus functioning, will be performed.

If a valid disable code has been identified, the controller will determine whether the vehicle's ignition system is on. This will require the controller to monitor the vehicle's ignition system. If the vehicle's ignition system is on, the controller will enter into a delay loop routine so as to repeatedly test the ignition system after a predetermined delay period. This delay loop routine serves to prevent the vehicle's ignition system from being shut down while the vehicle's engine

is running. Such a design feature serves to prevent an accident, such as when a moving vehicle suddenly looses engine power or the power assist means in safety systems such the power steering and/or power brake systems. The controller will interrogate the vehicle's ignition system after a pre-determined delay period and will continue to do so until it is determined that the vehicle's ignition system is shut-off or is inactive. It is important to note that the delay period which is chosen should be capable of detecting even the shortest duration of a vehicle's ignition system shut-down.

Once it has been determined that the vehicle's ignition system is shut-off, the controller will issue a disable signal to the vehicle's ignition system. This disable signal will disable the vehicle's ignition system, thereby preventing the re-activation of the vehicle's ignition system and the restarting of the vehicle's engine. If utilized in conjunction with the apparatus of the present invention, the controller may also issue a disable signal so as to disable the vehicle's fuel pump system, thereby preventing fuel from being supplied to the vehicle's engine.

Once the vehicle's ignition system and the vehicle's fuel pump system, if utilized, have been disabled, only a valid re-enable or reset command code signal may be employed to re-enable or to reset these vital vehicle systems thereby enabling the vehicle's engine to be restarted. As will be readily appreciated, a careful placement and installation of the appara-

tus, within the motor vehicle, will provide for a concealed and/or undetectable apparatus and, therefore, will result in a completely disabled vehicle, until such time as a valid access code, followed by a valid re-enable or reset code, is transmitted, by the owner or authorized operator, in the manner described above.

Upon the disabling of the vehicle's ignition system, and the vehicle's fuel pump system, if utilized, the controller may then issue control signals to activate or to de-activate, whichever the case may be, the various vehicle auxiliary equipment systems, which may be utilized in conjunction with the apparatus. Upon completion of the above operations, the controller will then exit the operational program, which in this case, is an interrupt service routine, and will then await the next accessing and activation of the apparatus by the owner or authorized operator, via an entry of a valid access code into the transmitter system or transmitter interface.

It is possible to provide disable command codes which may selectively disable the vehicle's ignition system, the vehicle's fuel pump system, and/or activate or de-activate any of the vehicle equipment auxiliary systems, as well as to provide different disable command codes which may provide selective control over any one or any combination of the above systems.

Upon the motor vehicle being found or recovered, the owner or authorized operator may once again access the apparatus by entering the valid access code, into the transmitter interface, 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 interrupt service routine described above. The command code data will once again be transmitted to, or read by, the controller and the controller will determine whether the command code is a valid disable command code. If the command code is not a valid disable command code the controller will perform a test to determine if a valid re-enable or reset command code has been entered. the command code is not a valid re-enable or reset code, the controller will exit the operational program, or the interrupt service routine, and will await the next valid accessing of the receiver and the apparatus. This processing scheme may be indicative of a cancel code transmission or a false alarm in the accessing of the apparatus.

If the entered command code is identified as a valid re-enable or reset command code, the controller, subsequent to this identification, but prior to actually re-enabling or resetting the vehicle's ignition system, the vehicle's fuel pump system, if utilized, and de-activating or re-activating the vehicle's auxiliary systems, whichever the case may be, will perform a test in order to verify that the vehicle's ignition system is still disabled. This feature ensures that no re-enabling or resetting signal will be issued to the vehicle's

ignition system or fuel pump system, if utilized, when these systems are not disabled, which signals may cause an interruption in the operation of these systems. This is an added safety feature in the present invention.

If the vehicle's ignition system and/or the vehicle's fuel pump system are disabled, the controller will issue the necessary signals which will re-enable or reset these systems. Shortly thereafter, the controller, if necessary, will issue the necessary signal or signals which may de-activate or reactivate, whichever the case may be, the vehicle's auxiliary equipment systems which are utilized.

It should be noted that it is also possible to provide re-enable or reset command codes which may selectively re-enable or reset the vehicle's ignition system, the vehicle's fuel pump system, and/or deactivate or re-activate any of the vehicle's auxiliary equipment systems, as well as to provide different re-enable or reset command codes which may provide selective control over any one or any combination of the above systems.

Upon the re-enabling or resetting of the vehicle's ignition system and the vehicle's fuel pump system, if utilized, the vehicle will then be ready for operation, barring any need for service and/or for repairs. The controller will then exit the operational program, or the interrupt service routine, and will await the next valid accessing and activation of the apparatus.

If the re-enable or reset command code is not a valid re-enable or reset code, the controller, upon identification thereof, will ignore the received code or data, will exit the operational program, and will await the next valid accessing and activation of the apparatus.

The present invention provides a means by which to prevent an unwanted accessing of, or an unauthorized tampering with, the apparatus by an unauthorized person, as well as, serves to guard against a mistaken accessing of the apparatus such as by a mistakenly transmitted access code and/or command code.

The apparatus and the method of the present invention provide for an apparatus and a method for allowing a motor vehicle owner or authorized operator to safely surrender the motor vehicle under force, or the threat of force, while affording the motor vehicle owner or authorized operator the means by which to take steps to prevent or thwart the theft of the motor vehicle from a safe location or vantage point.

By utilizing command codes which only disable or reenable or reset the vehicle's ignition system and the vehicle's fuel pump system, if utilized, the motor vehicle owner or authorized operator may also utilize the present invention in order to disable or to re-enable or reset these systems, at any time, such as at night or while at work, and from a remote location. The present invention also provides a means by which an owner or authorized operator may activate or deactivate any one or any combination of the vehicle's auxiliary equipment systems, which may be utilized, in order to prevent a vehicle's theft.

It is also envisioned that the present invention may be utilized in conjunction with local law enforcement offices or agencies in order to report the vehicle theft. In such a system, a receiver, which may be capable of receiving registered vehicle access codes and command codes, may be located at a local law enforcement office or agency such as a local police department. A computer, for processing the codes or data, is utilized in conjunction with the receiver. A display device is also utilized in conjunction with the computer.

It is envisioned that motor vehicle owners or authorized operators may register their vehicle information with their local police department, along with the valid access code and command codes for their apparatus. The receiver may be programmed to receive the access code and the command codes for the apparatus of a given registered vehicle.

The local police department may have a data base of vehicle information which could be correlated with the valid access codes and command codes. In this manner, when a theft of a motor vehicle occurs, or has been discovered, the owner or authorized operator, upon accessing the receiver and the apparatus of his or her motor vehicle, will also access the

receiver which is located in the police department. Upon receiving this access code, the receiver at the police department will receive the command code data, which is transmitted. The computer, which is located at the police department, independently of the processing which may be taking place in the vehicle apparatus, will process the received data so as to identify the motor vehicle which is being accessed, as well as to identify the nature of the command code which was transmitted. If a valid disable command code has been transmitted, the computer will alert the police, via the display device, that the motor vehicle has been stolen.

If a re-enable or a reset command code is received, the police would also be alerted so that they may verify the situation with the motor vehicle owner or authorized operator. Invalid codes may also be checked out by the police.

Upon the completion of the above processing, the police could then issue a bulletin or a dispatch thereby reporting the theft of the motor vehicle to its patrol personnel along with information which identifies the motor vehicle.

The use of the present invention in conjunction with a local law enforcement office or agency provides a means by which a motor vehicle owner or authorized operator may take the necessary steps in order to prevent or thwart the vehicle theft, from a safe location and/or vantage point, while also reporting the theft to the police immediately. This may provide the

police department with a headstart in trying to recover the motor vehicle and/or to apprehend the thief or thieves as soon as possible after the theft occurs or is discovered.

Accordingly, it is an object of the present invention to provide an apparatus and a method for a remote-controlled, instantaneous or deferred response, anti-theft and/or theft-deterrent system whereby a motor vehicle owner or authorized operator may, from a safe location remote from the location of the motor vehicle theft, disable or re-enable or reset a vehicle's ignition system, a vehicle's fuel pump system, and/or activate or de-activate a motor vehicle's auxiliary equipment system or systems.

It is another object of the present invention to provide an apparatus and a method for a remote-controlled antitheft and/or theft-deterrent system whereby a multitude of signals may be transmitted to the apparatus so as to allow for a versatile and a selective control of the apparatus and the motor vehicle's systems used in conjunction therewith.

It is another object of the present invention to provide an apparatus and a method for a remote-controlled antitheft and/or theft-deterrent system which dispenses with the need for a separate remote control unit which is associated with the apparatus.

It is still another object of the present invention to provide an apparatus and a method for a remote-controlled antitheft and/or theft-deterrent system which provides for the disabling or the re-enabling or resetting of a motor vehicle's ignition system or a motor vehicle's fuel pump system or the activation or de-activation of vehicle auxiliary equipment systems by utilizing conventional touch tone telephone and telephone beeper equipment.

It is another object of the present invention to provide an apparatus and a method for a remote-controlled anti-theft and/or theft-deterrent system which prevents an interruption of a vehicle's ignition system or a vehicle's fuel pump system or vehicle auxiliary equipment systems while the vehicle is operating or is in motion.

It is yet another object of the present invention to provide a remote-controlled anti-theft and/or theft-deterrent system which provides a means by which the motor vehicle owner or authorized operator may access the system while simultaneously alerting a local law enforcement office or agency of the motor vehicle theft.

Other objects and advantages of the present invention will be made apparent to those skilled in the art upon a review of the Detailed 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 a flow diagram of the operation of, or method utilized in conjunction with, the apparatus of Figure 1; and

Figure 3 illustrates an alternate embodiment of the present invention wherein the present invention may be utilized in conjunction with a local law enforcement office or agency.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Figure 1 illustrates a block diagram of the apparatus, which is the subject of the present invention and which is denoted by the reference numeral 1. As illustrated in Figure 1, the apparatus 1 comprises a transmitter system 2, for transmitting an electrical, an electronic, or an electro-magnetic signal upon an activation by a motor vehicle owner or authorized operator, hereinafter referred to collectively as the "authorized operator".

The transmitter system 2 consists of a user interface device 2a and a transmitting device or transmitter 2b. The

transmitter also has a receiver 2c for receiving signals as will be described below. The user interface device 2a provides the means by which the authorized operator may access or activate the apparatus 1, as well as the means by which the authorized operator may enter command codes into the transmitter system 2. The transmitter 2b transmits a signal, in response to the authorized operator's accessing or activation of the apparatus 1.

The transmitter system 2 is a remote system, which is not electrically 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 external from, and separate and apart from, the motor vehicle. In the preferred embodiment, the transmitter system 2, is designed to be capable of transmitting signals over long distances, i.e. tens or even hundreds of miles or farther. The transmitter system 2, in the preferred embodiment, is also capable of transmitting a multitude of signals. As will be explained below, this capability to transmit a multitude of signals allows for the transmission of multiple command codes to the apparatus 1, which in turn, provides for an apparatus which may provide a multitude of responses in the control and operation thereof.

Referring once again to Figure 1, the apparatus 1 also comprises 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 electri-

cal, electronic and/or electro-magnetic signals, which may be transmitted by the transmitter system 2. In the preferred embodiment, the receiver is also capable of receiving any of the 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 system which systems are well known in today's telecommunication industry and practices. In such a telephone/telephone beeper system, the transmitter 2 can be any touch-tone telephone which serves as a means for a user interface, in the form of pushbuttons, 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 a receiver device which is typically a telephone beeper.

The receiver 3 or beeper, or the communication system servicing same, in turn, provides an indication, in the form of a signal transmission, back to the receiver, which signifies that a signal has been received. The receiver 3 also generates data which is indicative of the signal, or a portion thereof, which has been received. In this regard, the receiver 3 may be provided with its own transmitter 3a, or the communication system which services the receiver may provide a transmitter (not shown), for transmitting signals back to the transmitter system 2.

It should be noted that the telephone/telephone beeper system may be replaced with any other type of transmitter/receiver combination which provides for the transmission of a multitude of remote signals over long distances.

In the preferred embodiment, upon receiving the signal, the receiver 3, generates a distinct digital signal, which is indicative of the receiver 3 receiving the transmitted signal, and which is transmitted from the receiver transmitter 3a to the transmitter system 2, and in particular, to the transmitter receiver 2c.

At least a portion of the signal transmitted from the transmitter system 2 to the receiver 3 includes a valid access code signal, which accesses the receiver 3, and the apparatus 1, which access code serves to provide security measures which must be taken in conjunction with the use of the apparatus 1.

The apparatus also comprises a controller or a central processing unit CPU 4, which is electrically connected with the receiver 3 and which receives, or reads, the digital signal or signals, or portions thereof, which are generated by the receiver 3. 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, for storing operational program data, and a random access memory device (RAM) 6, for storing processing data, which is received by the receiver 3 and which

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. is important to note, that the CPU 4 may also be implemented by a micro-computer, a mini-computer or any other digital computer system, along with the requisite associated memory devices. However, it should be noted that, the provision of an apparatus which is as small as possible allows for an apparatus which may be more easily installed and concealed, 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 or assembly so as to insure that it is not easily detectable or accessible by a car thief. The more concealable 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 is electrically connected to the motor vehicle's ignition system 7, which is located externally from the apparatus 1. The CPU 4 may or may not be connected with the vehicle's ignition system 7 through an ignition system interface 8 which is shown in dotted lines. The CPU 4 may transmit signals to, as well as receive signals from, the vehicle's ignition system 7. In this manner, the CPU 4 and the vehicle's

ignition system 7 can exchange information back and forth 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, can issue a digital command signal to the vehicle's ignition system 7. This digital command signal may be one which will disable the vehicle's ignition system 7 or one which will re-enable or reset the vehicle's ignition system 7.

In the preferred embodiment, the CPU 4 is also electrically connected to the motor vehicle's 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's fuel pump system 9 through a fuel pump system interface 10 which is also shown in dotted lines. In the case of an electrical or an electronic fuel pump system, the CPU 4 may provide an electrical signal which will disable or re-enable the vehicle's fuel pump system 9. In the case of a mechanical fuel pump system, the CPU 4 may provide an electrical signal which will disable or re-enable an electrical valve system, which may be used to control the mechanical fuel pump system. Whichever the case may be, the CPU 4 will be capable of issuing an electrical signal to disable or to re-enable the vehicle's fuel pump system 9.

The CPU is also electrically connected to a vehicle's auxiliary equipment system or systems 11, which are optional. The vehicle's auxiliary equipment system or systems 11 are located externally from the apparatus 1 and may or may not be

connected with the CPU 4, via a vehicle's auxiliary equipment system or systems interface 12, which is shown in dotted lines in Figure 1.

The vehicle's auxiliary 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 produce a loud piercing sound so as to make it unbearable for an intruder to remain inside the motor vehicle passenger compartment. The vehicle's auxiliary 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 auxiliary 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's external light system(s), which may include the vehicle's head lights, tail lights or flashers, which may be constantly illuminated or which may blink on and off repeatedly to draw attention to the motor vehicle, may also be utilized as a vehicle auxiliary equipment system 11. The vehicle auxiliary equipment system 11 may also include a power door lock system, for securing the vehicle's passenger compartment so as to prevent an entry thereto or an exit therefrom. In addition, the vehicle auxiliary equipment system 11 may include a hood locking system, such as a mechanical hood locking system, for locking the vehicle's hood so as to prevent an unauthorized access into the vehicle's engine compartment.

The hood locking system, may prevent any tampering with the apparatus 1 or with other systems and/or components of the motor vehicle.

As noted above, the vehicle's auxiliary equipment system or systems 11 and their associated interface devices 12, are optional. The vehicle's auxiliary equipment system or systems 11 receives signals from the CPU 4, which signals serve to activate or de-activate, or vice versa, as the case may be, the vehicle's auxiliary equipment systems which are utilized in conjunction with the apparatus 1. The vehicle's auxiliary equipment systems 11 may also include any other vehicle system or equipment feature which may be utilized to draw attention to the motor vehicle or in some other way impede the vehicle's 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.

The operation of the apparatus 1 of the present invention is described below with reference to the flow diagram illustrated in Figure 2, which flow diagram illustrates the method of the present invention which is utilized in conjunction with the apparatus 1. The method of the present invention may be implemented as a computer program or software program which is used in conjunction with the CPU 4.

Upon the occurrence, or the discovery thereof, of the theft of a motor vehicle, the authorized operator of the motor vehicle may activate the apparatus 1 by entering an access code into the transmitter interface 2a which 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 the preferred embodiment, the above sequence of events may occur by the authorized operator simply going to a touch-tone telephone, which may be a public pay phone or a private phone, and by punching or entering in the pre-determined access code which is assigned to the apparatus 1.

In the case of a touch-tone telephone/telephone beeper system, wherein the beeper is the receiver, this access code would typically be a code which would comprise a given telephone area code and telephone number for the beeper (receiver 3).

Upon receiving the transmitted signal, the receiver 3, or beeper, or the communication system servicing the beeper, will typically generate, via transmitter 3a, which may or may not be an integral part of the receiver 3, an electrical signal 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 which services the beeper, the transmitter 3a may be located externally from the apparatus 1. This signal is also typically sent to the CPU 4 so as to alert the CPU 4 that the receiver 3 has been accessed. The receiver 3, or the communica-

tion system servicing the receiver (beeper), will transmit a signal, via its transmitter 3a, to the transmitter receiver 2c which is indicative of the fact that receiver 3 has been accessed. This signal to the transmitter receiver 2c usually takes the form of an audible tone at the telephone headset.

The above sequence is analogous to the operation of a telephone/telephone beeper system wherein, when the beeper, or the communication system servicing the beeper, 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 operator may enter the desired data command code or command code, which may include a vehicle disable command code, a vehicle re-enable or reset command code, or a cancel code, etc. The authorized operator then enters 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 will be a vehicle disable command code. It should also be noted that a vehicle re-enable or reset command code, or any other code, which would represent an apparatus function or operation, 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. In the preferred embodiment, a command code receive signal is then transmitted

back to the transmitter system 2, via the receiver or, communication system, transmitter 3a, which provides an indication, to the authorized 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 operator, upon learning of the theft of the motor vehicle, can easily access or activate the apparatus 1 by simply going to the nearest touch-tone telephone and "calling up" the anti-theft or theft-deterrent apparatus 1. It is important to note that 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 has a user interface feature and which can remotely transmit a multitude of signals over long distances to an associated receiver.

By utilizing a telephone/telephone beeper system, 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 which are also very reliable. By using a telephone/telephone beeper system, the authorized operator does not have to keep track of a separate remote control unit. In this manner, a reliable apparatus communication system is achieved. Further, if the authorized operator should leave the remote control unit in the

vehicle, or should lose it, the apparatus 1 will still be accessible by the authorized operator. Still further, some telephone/telephone beeper systems may have effective ranges on the order of hundreds of miles, which may be more economical and reliable for long range signal transmission than other conventional remote transmitter/receiver systems.

In the case where the motor vehicle has been stolen, and the authorized operator wants to prevent or thwart the theft, the command code 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 operator wants to re-enable or reset the apparatus 1, such as when the motor vehicle has been recovered or found, so as to render the motor vehicle re-enabled, the command code to be entered will be a vehicle re-enable or reset command code (reenable or reset code). Once the command code has been entered, the receiver 3, via its transmitter 3a, will provide a signal indication to the transmitter system 2, which may take the form of audible tones to a headset, as is known in beeper systems, which will 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.

With reference to Figure 2, the receiver 2,

upon receipt of the access code, will generate an interrupt in the CPU 4 which will activate an operational program routine or an interrupt service routine, at step 20, of the flow diagram. At step 21, the command code data, upon receipt by the receiver 2, is then transmitted to, or read by, the CPU 4. The CPU 4 will then, at step 22, begin to perform a processing routine in order to identify the command code.

The command code should be of a pre-determined length and should be chosen to be one of three types of codes. command code may be a valid disable code, a valid re-enable or reset code, or any other code which is not recognized as being valid by the CPU 4 and which may be utilized to indicate a cancel operation, or a false alarm. An incomplete code, an invalid code, or the absence of a command code after the apparatus has been accessed, will be deemed to be a false alarm. The cancel and false alarm categories are utilized in order to enable an authorized operator to cancel apparatus access or activation or to prevent an unauthorized access or unauthorized attempt to enter a command code. Such an identification processing routine may be performed in a very simple manner, such as by testing the command code or code data against the pre-determined codes or code data which are stored in program memory. Such testing may be performed by any one of the known software testing routines.

Once the command code, if entered, is identified, the CPU 4, under the control of the operational program, will

perform the appropriate apparatus control functions. If a valid disable code is identified as being received by the receiver 3, at step 22, the CPU 4, which is connected with the vehicle's ignition system 7, so as to send and receive data to and from the vehicle's ignition system 7, will perform a software test, at step 23, in order to determine whether the vehicle's ignition system 7 is activated or on. This will require a monitoring of the vehicle's 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 monitoring function and the controlling of the vehicle's ignition system 7 by the CPU 4.

If the vehicle's ignition system 7 is activated or on, the CPU 4 will enter into a delay loop, at step 24. The purpose of the delay loop, at step 24, is to prevent the vehicle's ignition system 7 from being shut down while the vehicle's engine is on or running. Such a test and delay loop routine serves to prevent accidents, such as those caused when a vehicle suddenly looses power while traveling at a moderate, or at a high, rate of speed or when the loss of engine power results in the failure of the vehicle's power steering and/or power brake systems. In this manner, the CPU 4 will interrogate the vehicle's ignition system 7 after a pre-determined delay period, and will continue to do so until the vehicle's ignition system 7 is determined to be shut-off and inactive.

While any delay period may be used, at step 24, 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 second is selected. This of course may be changed in the program software, as desired.

After the delay, at step 24, the CPU 4 will again interrogate the ignition system 7, at step 23, and will continue to do so in the above described delay loop routine until the ignition system 7 is determined to be shut-off or inactive. Once it has been determined that the vehicle's ignition system 7 is shut-off or inactive, the CPU 4, at step 25, will issue a disable signal to the vehicle's ignition system 7.

The disable signal issued by the CPU 4, at step 25, will disable the vehicle's ignition system 7, thereby preventing a restarting of the vehicle's engine. The disabling function may be performed by the CPU 4 by issuing a data signal, which causes the vehicle's ignition system circuitry to be shut-off or be "opened", such as by opening a series switching device i.e. a switch or relay (not shown) or by issuing a disabling signal to the digital or logic devices, which may be utilized in connection with the vehicle's ignition system's electronic command computer 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's

ignition system 7. The CPU 4 can be utilized to provide controlling signals, to disable or re-enable, the vehicle's ignition system 7 just as any microprocessor-based digital system provides control over peripheral devices. The techniques utilized, in order to provide such control over the motor vehicle's ignition system 7, may be determined on a vehicle-by-vehicle basis.

Once the vehicle's ignition system 7 has been disabled, only the issuance of a valid re-enable or reset command code signal, to the apparatus 1, may re-enable or reset the vehicle's ignition system 7. In this manner, a carefully concealed and installed placement of the apparatus 1, within the motor 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 operator in the manner described above. 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 defeat the apparatus 1.

The CPU 4, at step 25A, will then issue a disabling signal to the vehicle's fuel pump system 9 thereby de-activating the vehicle's fuel pump system 9 and prohibiting the supply of fuel to the vehicle's engine. The disabling signal from the CPU 4 can disable the vehicle's fuel pump system by any one of the 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 the power to the fuel pump system, such as by a cut-off switch or relay, which methods may also be the same methods which are utilized in connection with disabling the vehicle's 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 of a mechanical fuel pump, an electric valve assembly, which may provide a fuel pump cut-off, may 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. 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 to provide controlling signals, to disable or re-enable, the vehicle's fuel pump system 9 just as a microprocessor-based digital system provides control over peripheral devices. It should be noted that the techniques utilized, in order to provide control over (disable or reenable) the vehicle's fuel pump system 9, may be determined on a vehicle-by-vehicle basis.

Upon the disabling of the vehicle's ignition system 7, at step 25, and the vehicle's fuel pump system 9, at step 25A, the CPU 4, at step 26, will then issue control signals to

activate or de-activate, whichever the case may be, the various vehicle auxiliary equipment systems 11, which are utilized in conjunction with the apparatus 1. As noted above, the vehicle's auxiliary equipment systems 11, if employed, may include an alarm or siren, which has a piercing sound and which is placed in the interior of the passenger compartment. The alarm or siren would serve to make it unbearable for the thief or thieves to remain inside the vehicle. External alarms or sirens may also be used in order to draw attention to the vehicle. A horn or horns, which could blare continuously or intermittently, could also be used to draw attention to the vehicle.

A vehicle's light systems, i.e. head lights, tail lights, parking lights, etc. may also be activated so as to illuminate continuously or intermittently, such as by blinking, in order to draw attention to the motor vehicle. Other vehicle auxiliary equipment systems, such as a power door locking system, may be activated, immediately or after a delay, for securing the vehicle's passenger compartment so as to prevent an entry thereto or an exit therefrom. As noted above, there may be a delay between the disabling of the vehicle's ignition system 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's engine

compartment. Such a vehicle hood locking feature could prevent tampering with the apparatus 1 or with other systems and/or components of the motor vehicle.

The CPU 4 can be utilized to provide controlling signals to activate or de-activate any of the vehicle's auxiliary equipment systems 11 just as a microprocessor-based digital system provides control over peripheral devices. Such techniques may be similar to how the CPU 4 provides control over the vehicle's ignition system 7 and the vehicle's fuel pump system 9. It should be noted that the techniques utilized, in order to provide control over the vehicle's auxiliary equipment systems 11, may be determined on a vehicle-by-vehicle basis.

Once disabled the vehicle's ignition system 7, and the vehicle's fuel pump system 9, will remain disabled even if the vehicle's power supply should be drained. This is due to the fact that the digital circuitry, which is utilized in the apparatus 1, and in the vehicle's ignition system 7 and the vehicle's fuel pump system 9, may include digital devices such as logic gates, flip-flops, etc. and/or electro-magnetic devices, such as switches or relays, which may be chosen so as to remain in their state unless altered electrically or electronically or under the power of an electrical signal or stimulus. Further, even if the vehicle's power is completely drained, these above mentioned devices, which may be chosen to require electrical power in order to change their state, or their operating mode or position, would not be activated and

thus, the vehicle's ignition system 7, and the vehicle's fuel pump system 9, will remain in a disabled state.

Supplemental power supplies, such as batteries, etc, may also be utilized with the apparatus 1 so as to prolong the continued activation or de-activation of the vehicle's auxiliary equipment systems 11 which are utilized. Supplemental power systems are optional and may also be employed with the apparatus 1 so as to provide any unusual power requirements which may be required by the motor vehicle in which the apparatus 1 may be installed.

Upon the completion, at step 26, the CPU 4 will then exit the operational program routine at step 27. This signifies the completion of the interrupt service routine. The CPU 4 will then await the next apparatus accessing and activation by the authorized 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 code, is entered into the transmitter interface 2a, the vehicle's ignition system 7, and the vehicle's fuel pump system 9, will remain disabled and the vehicle's auxiliary equipment systems 11, will remain in their activated or de-activated states.

Upon the motor vehicle being found or recovered, the authorized operator can 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, which is described above. The valid re-enable or reset command code will be received by the receiver 3, in the manner described above.

The command code data will then be transmitted to, or read by, the CPU 4, at step 21. The CPU 4, at step 22, will then determine whether the command code, which was entered, is a valid disable code. If it is determined that the command code is not a disable code, the CPU 4 will, at step 28, 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 program, at step 27, and will await the next accessing and activation of the apparatus 1. If however, the entered command code is identified as a valid re-enable or reset code, the CPU 4, subsequent to this identification, but prior to actually re-enabling or resetting the vehicle's ignition system 7, re-enabling the vehicle's fuel pump system 9, and de-activating or re-activating, whichever the case may be, the vehicle's auxiliary equipment systems 11, will perform a test, at step 29, in order to verify that the vehicle's ignition system 7 is, in fact, still disabled. This test, at step 29, 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's ignition system 7 is not disabled.

In this manner, the operation of the vehicle's ignition system 7 will not be interrupted, which interruption may be unsafe.

It should be noted that neither the vehicle's fuel pump system 9 nor any of the vehicle's auxiliary equipment systems 11, if utilized, are checked, as their interruption during normal vehicle operation may also be unsafe. vehicle's ignition system 7 is determined to be disabled, at step 29, the CPU 4 will, at step 30, issue a control signal which will re-enable or reset the vehicle's ignition system 7. This may be accomplished by any method which would re-enable or re-activate the vehicle's ignition system circuitry. 4, at step 30A, will then issue a control signal to re-enable or reset the vehicle's fuel pump system 9 which may also be accomplished by re-enabling or re-activating the vehicle's fuel pump system circuitry. The CPU 4, will then, at step 31, issue control signals to the vehicle's auxiliary equipment systems 11 so as to de-activate or re-activate those systems which were activated or de-activated, respectively, earlier at step 25. 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 31, will then exit the operational program or interrupt service routine, at step 27, and will await the next valid accessing and activation of the apparatus 1.

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 27, and will await the next valid accessing and activation of the apparatus 1. If an invalid command code is entered into the transmitter interface 2a, such as by an authorized 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 will receive, or read in, the code, at step 21, of Figure 2, will identify 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 27. The CPU 4 will then await the next valid accessing and activation of the apparatus 1. In this manner, the apparatus 1 serves to prevent an unauthorized or unwanted disabling or re-enabling or resetting of the vehicle's ignition system 7 and the vehicle's fuel pump system 9 along with the activation or the de-activation of the vehicle's auxiliary equipment systems 11.

The above safeguards will also prevent a wrong or misdialed number from accidently accessing and activating the apparatus 1 which may result in the disabling or re-enabling, or the activating or de-activating, of the respective vehicle systems. These safeguards may be provided at the access code level of transmission and/or at the command code level of transmission.

In the above described manner, the apparatus and the method of the present invention provide for an apparatus and a method for allowing an authorized operator of a motor vehicle to safely surrender the motor vehicle under force, or threat of force, while affording the authorized operator the opportunity to prevent or seriously thwart the motor vehicle theft from a safe location or vantage point. In this regard, a safe and effective anti-theft and/or theft-deterrent device is provided by the present invention.

While, in the above description, the operation of the present invention has been described 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 a number of valid disable command codes and/or a 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's systems, such as the vehicle's ignition system 7, the vehicle's fuel pump system 9, or any one or more of the vehicle's auxiliary equipment systems 11. In this manner, the authorized operator may utilize the present invention to selectively disable, re-enable, de-activate or re-activate any one of the systems, or a combination thereof, at his or her discretion. In this case, however, the operational program or interrupt service routine would have to be modified so as to provide for the identification of each of these valid codes, and the operational program or interrupt service routine would also have to be modified so as to provide for the appropriate CPU 4 and apparatus 1 response to each of these valid codes. By utilizing a multitude of disable codes and/or re-enable or reset codes, each affecting different vehicle's systems, or combinations thereof, it is possible to selectively control the vehicle's 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 operator may utilize the apparatus 1 of the present invention so as to disable or re-enable or reset the vehicle's ignition system 7 and the vehicle's fuel pump system 9, at any time, so as to disable the vehicle without activating or de-activating any of the vehicle's auxiliary equipment systems 11, and therefore, without drawing attention to the motor vehicle.

This feature would enable an authorized operator to disable or re-enable or reset the vehicle's ignition system 7, the vehicle's fuel pump system 9, and/or activate or de-activate any one or more of the vehicle's auxiliary equipment systems 11, so as to disable the motor vehicle at any time. In this manner, the authorized operator can disable the vehicle nightly, while at work, or at any other time, simply by accessing and activating the apparatus 1 by using a touch tone telephone. Since the vehicle's ignition system is usually off at these times, the disabling, and subsequent re-enabling of these systems will occur as described above with regards to Figure 2. In this

manner, the present invention may provide an effective means by which to "lock-up" a motor vehicle, at any time, and even when the vehicle is in the rightful possession of the owner or authorized operator.

It is also envisioned that the apparatus and method of the present invention may be utilized in conjunction with local law enforcement offices or agencies in order to provide a prompt means by which to report a vehicle theft and to allow for a prompt law enforcement response thereto. Figure 3 illustrates a system whereby the present invention may be utilized in conjunction with local law enforcement offices or agencies. In Figure 3, a receiver 300 is utilized in conjunction with the apparatus 1. The receiver 300, however, is located at a local law enforcement office or agency, which in the preferred embodiment, can be a local police station or police department.

The receiver 300 may, but need not, be identical to the receiver 3 which is utilized in the apparatus 1. The receiver 300 may be capable of receiving transmissions i.e. access codes and command codes, for any one or for any number of vehicles which may be registered with the police station or department. The receiver 300 must be capable of receiving the access code and command codes for a given registered apparatus. In the embodiment of Figure 3, a computer 400, which is also located at the police station, is connected to the receiver 300. A display device or interface device 500 is also connected to, and used in conjunction with, the computer 400.

It is envisioned that motor vehicle owners or authorized operators will register their vehicle identification information with their local police station or department along with the access code and command codes for their apparatus 1. The receiver 300 could then be programmed to receive the access code and the command codes for each registered vehicle. The computer 400 could store the vehicle identification information so that the identification information can be correlated with the access code and command code information. In this manner, the police station or department would have a data base of vehicle information which would correspond with the valid access codes and command codes which may be received.

The embodiment illustrated in Figure 3 operates in the following manner. When a theft of a motor vehicle has occurred, or has been discovered, the authorized operator can access and activate the apparatus 1 in the manner described above. In this embodiment, however, the signal transmitted from the transmitting device 2b, will be received by both the receiver 3, in the vehicle apparatus 1, and by the receiver 300 at the police station or department. Upon being given the opportunity to enter the command code, the authorized operator will then enter the disable command code. Again, the transmitting device 2b will transmit signals corresponding to the disable command code. These signals will also be received by both the receiver 3, in the vehicle apparatus 1, and by the receiver 300 at the police station or department.

The signals, which are received by the receiver 300, will be transmitted to, or read by, the computer 400. The computer 400 will process this data independently of the processing which takes place in the apparatus 1. The computer 400 will perform its processing routines in order to identify the vehicle in which the apparatus 1 is installed. The computer 400 will also identify the command code.

If a valid disable command code has been entered, the computer 400 will alert the police, via the display device 500, of the car theft. If a re-enable or a reset command code, or any code for that matter, is received, the police could also be alerted so as to verify the situation with the authorized operator of the motor vehicle. Invalid codes may also be checked out by the police.

The above-described alternate embodiment, wherein the present invention is utilized in conjunction with local law enforcement efforts, allows for a prompt and immediate reporting of a motor vehicle theft while also allowing the authorized operator to take any of the possible steps by which to prevent the vehicle theft from a safe location and/or vantage point. Law enforcement efforts could be greatly assisted and enhanced as information which identifies the motor vehicle would be immediately available to the local police. This in turn, would provide the police with a head start in apprehending the thief or thieves and recovering the stolen motor vehicle.

It is also envisioned that the apparatus and method of the present invention may find application in areas other than in motor vehicle anti-theft and/or theft deterrent systems. For example, the present invention may also find application in home security systems, and the like, wherein a long-range remotecontrolled system may be utilized in order to provide an immediate, or a deferred, response to a theft situation and/or to provide control over desired items or devices.

While the present invention has been described in a preferred embodiment, such description is merely illustrative of the present invention and is not to be construed as a limitation thereof. In this regard, the present invention encompasses all modifications, variations and/or alternate embodiments with the scope of the present invention limited only by the claims which follow.

CLAIMS

WHAT IS CLAIMED IS:

1. A remote-controlled anti-theft or theft-deterrent apparatus, for motor vehicles, comprising:

a transmitter system which comprises a transmitter system interface and a transmitting device, wherein said transmitter system is capable of transmitting a multitude of data signars.

a receiver for receiving said multitude of data signals which are transmitted by said transmitter system; and

a controller for processing the data representative of said data signals, wherein said controller processes said data representative of said data signals, and issues one of a disable signal and a re-enable signal to one of a vehicle's ignition system, a vehicle's fuel pump system and a vehicle's auxiliary equipment system, and further wherein said controller may one of provide, said one of a disable and a re-enable signal, instantaneously and after a time delay period.

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- 2. The apparatus of claim 1, wherein said transmitter system further comprises a transmitter receiver.
- 3. The apparatus of claim 1, wherein said receiver has one of integral therewith and associated therewith a receiver transmitting device.
- 4. The apparatus of claim 1, wherein said transmitter system is a touch-tone telephone.
- 5. The apparatus of claim 1, wherein said receiver is a telephone beeper.
- 6. The apparatus of claim 1, wherein said controller is one of a microprocessor, a micro-computer and a mini-computer.
- 7. A remote-controlled anti-theft or theft-deterrent apparatus, for motor vehicles, comprising:
- a transmitter system, wherein said transmitter system comprises a transmitter system interface and a transmitting device, wherein said transmitter system may accept a multitude of data code inputs, and further wherein said transmitter system is capable of transmitting a multitude of data signals which correspond, respectively, to said multitude of data code inputs:

a receiver for receiving said multitude of data signals which are transmitted by said transmitting system; and

a controller for processing the data representative of said multitude of data signals which are received by said receiver, wherein said controller identifies said multitude of data signals and provides at least one control signal, to one of a vehicle's ignition system, a vehicle's fuel pump system and a vehicle's auxiliary equipment systems, one of instantaneously and after a time delay period, and further wherein said controller will prevent a de-activation of one of a vehicle's ignition system, a vehicle's fuel pump system and a vehicle's auxiliary equipment system when one of said vehicle's ignition system is on and said motor vehicle's engine is running.

- 8. The apparatus of claim 8, wherein said transmitting system is a touch-tone telephone.
- 9. The apparatus of claim 8, wherein said receiver is a telephone beeper.
- 10. The apparatus of claim 8, wherein said controller is one of a microprocessor, a micro-computer and a mini-computer.
- 11. The apparatus of claim 8, wherein said transmitting system further comprises a transmitter receiver.

- 12. The apparatus of claim 8, wherein said receiver has one of integral therewith and associated therewith a receiver transmitting device.
- 13. The apparatus of claim 8, wherein said controller will delay an issuance of said one of a disable and a re-enable signal until such time as said motor vehicle's ignition system is determined to be off.
- 14. The apparatus of claim 1, wherein said vehicle's auxiliary equipment system is one of an alarm located one of inside and external from a vehicle's passenger compartment, a horn, a door locking system and a hood locking system.
- 15. The apparatus of claim 8, wherein said vehicle's auxiliary equipment system is one of an alarm located inside a vehicle's passenger compartment, a horn, a door locking system and a hood locking system.
- 16. The apparatus of claim 1, wherein said multitude of data signals comprise data signals for accessing said apparatus and data signals for controlling a selected operation of said apparatus.
- 17. The apparatus of claim 8, wherein said multitude of data signals comprise data signals for accessing said apparatus and data signals for controlling a selected operation of said apparatus.

18. A method for a remote-controlled anti-theft or theft-deterrent apparatus, for motor vehicles, comprising the steps of:

transmitting a multitude of data signals upon one of an occurrence and a discovery of a motor vehicle theft;

receiving the data representative of said multitude of data signals;

processing said data representative of said multitude of data signals;

providing a control signal upon a determination that a motor vehicle's engine is shut-off, to one of a motor vehicle's ignition system, a motor vehicle's fuel pump system and a motor vehicle's auxiliary equipment system, in order to one of disable, re-enable, activate, and de-activate at least one of said motor vehicle's ignition system, said motor vehicle's fuel pump system and said motor vehicle's auxiliary equipment system.

19. The method of claim 18, wherein said multitude of signals comprise data signals for accessing one of said antitheft and theft-deterrent apparatus and data signals for controlling a selected operation of said anti-theft and theft-deterrent apparatus.

20. The method of claim 18, wherein said determination that a motor vehicle's ignition system is shut-off, further comprises the step of:

determining whether a motor vehicle's ignition system is on and delaying the providing of said control signal until said vehicle's ignition system is shut-off.

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ABSTRACT OF THE DISCLOSURE

An apparatus and method for an anti-theft and/or theft-deterrent device is disclosed which comprises a transmitter system, which is capable of transmitting a multitude of signals, a receiver, for receiving the multitude of signals from the transmitter system, a controller for identifying the received signals and for disabling or re-enabling or resetting a vehicle's ignition system along with a vehicle's fuel pump system, along with other vehicle equipment auxiliary systems, if utilized, which serve to prevent or to thwart the theft of a motor vehicle. The present intention provides a means by which to provide an immediate/ as well as a deferred, response to a motor vehicle theft. The present invention may also provide a means by which to easily disable or re-enable or reset the vehicle's ignition system and the vehicle's fuel pump system, if utilized, along with any of the vehicle's auxiliary systems, which may be utilized, in order to guard against a motor vehicle theft. The present invention may also be unilized in conjunction with a local law enforcement office or agency so as to provide a means by which to report a vehicle's theft at the same time that the apparatus is accessed and/or actlvated by an authorized operator of the motor vehicle.



My residence, post office address and citizenship are as stated below next to my name,

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

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I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations \$1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, \$119 of any foreign application(s) for patent or inventor's certificate or of any PCT international application(s) designating at least one country other than the United States of America listed below and have also identified below any foreign application(s) for patent or inventor's certificate or any PCT international application(s) designating at least one country other than the United States of America filed by me on the same subject matter having a filing date before that of the application(s) of which priority is claimed:

COUNTRY (if PCT, indicate "PCT") DATE OF FILING (day, month, year) PRIORITY CLAIMED UNDER 35 USC 119 YES □ NO YES □ NO YES □ NO YES □ NO

APPLICATION NUMBER

PRIOR FOREIGN/PCT APPLICATION(S) AND ANY PRIORITY CLAIMS UNDER 35 U.S.C. 119:

YES □ NO □ NO YES YES □ NO YES □ NO □ NO YES

I hereby claim the benefit under Title 35, United States Code, \$120 of any United States application(s) or PCT international application(s) designating the United States of America that is/are listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in that/those prior application(s) in the manner provided by the first paragraph of title 35, United States Code, \$112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, \$1.56(a) which occurred between the filing date of the prior application(s) and the national or PCT international filing date of this application:

PRIOR U.S. APPLICATIONS OR PCT INTERNATIONAL APPLICATIONS DESIGNATING THE U.S. FOR BENEFIT UNDER 35 U.S.C. 120:

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POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith. (List name and registration number)

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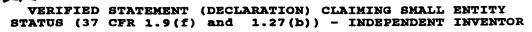
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I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements 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 issuing thereon.

| SIGNATURE OF INVENTOR 201 | SIGNATURE OF INVENTOR 202 Raymond D. Joan | SIGNATURE OF INVENTOR 203 |
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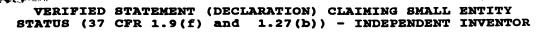
VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS (37 CFR 1.9(f) and 1.27(b)) - INDEPENDENT INVENTOR

| | RAYMOND A. J | To 40 |
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| grant convey or license, inventor under 37 CFR 1 as a small business con | , any rights in the invented. (a) if that person had cern under 37 CFR 1.9(d) | nsed and am under no obligation under contract or law to assign, ention to any person who could not be classied as an independent d made the invention, or to any concern which would not qualify or a nonprofit organization under CFR 1.9(e). I have assigned, granted, conveyed, or licensed or am under an |
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| | | concern, or organization s or organizations listed below* |
| having | rights to the invention | are required from each named person, concern or organization n averring to their status as small entities. (37 CFR 1.27) |
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BAR CODE LABEL U.S. PATENT APPLICATION SERIAL NUMBER FILING DATE CLASS GROUP ART UNIT 08/587,628 01/17/96 379 2608 RULE 60 RAYMOND A. JOAO, YONKERS, NY; RAYMOND D. JOAO, YONKERS, NY; THOMAS GARBEN, ROOSEVELT ISLAN, NY. **CONTINUING DATA***** THIS APPLN IS A CON OF 08/489,238 06/12/95 PAT 5,513,244 WHICH IS A CON OF 08/073,755 06/08/93 **FOREIGN/PCT APPLICATIONS** FOREIGN FILING LICENSE GRANTED 03/18/96 ***** SMALL ENTITY **** STATE OR COUNTRY TOTAL CLAIMS INDEPENDENT CLAIMS FILING FEE RECEIVED ATTORNEY DOCKET NO. DRAWING NY 20 3 \$375.00 RJ-003 RAYMOND A JOAO 122 BELLEVUE PLACE YONKERS NY 10703 REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-DETERRENT APPARATUS AND METHOD FOR MOTOR VEHICLES This is to certify that annexed hereto is a true copy from the records of the United States Patent and Trademark Office of the application which is identified above. By authority of the COMMISSIONER OF PATENTS AND TRADEMARKS **Certifying Officer**

PATENT APPLICATION SERIAL NO. 08/587628

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE FEE RECORD SHEET

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Page 214 of 225

PETITIONERS' EXHIBIT 1013



PATENT APPLICATION FEE DETERMINATION RECORD

Effective October 1, 1995

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

"Express Mail" 8868981US Dated: Janua I hereby certify that this correspondence is eing deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above #3 and is addressed to the Commissioner of Patents and Trademarks, Washington, D.C. 20231.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT RAYMOND A. JOAO, ET AL.

SERIAL NO. CONT. OF 08/489,238

FILED CONCURRENTLY HEREWITH

FOR REMOTE-CONTROLLED ANTI-THEFT AND/OR THEFT-

DETERRENT APPARATUS AND METHOD FOR MOTOR

VEHICLES

EXAMINER G. OEHLING GROUP : 2608

Hon. Commissioner of Patents and Trademarks Washington, D.C. 20231

PRELIMINARY AMENDMENT

Sir:

This is a Preliminary Amendment in the above-identified application.

Please enter this Preliminary Amendment before any Official Action is taken in this case.

Please amend the application as follows:

IN THE CLAIMS:

Please cancel claims 1-20, without prejudice, and please add the following new claims 21-40:



-- 21. A remote controlled anti-theft and/or recovery- system for motor vehicles, comprising:

a means for transmitting a signal to at least two remote locations;

a first receiving means for receiving said signal at a first of said at least two remote locations;

a second receiving means for receiving said signal at a second of said at least two remote locations;

a first control means for processing said signal received by said first receiving means, wherein said first control means issues a control signal to one of a vehicle, a vehicle's ignition system, a vehicle's fuel pump system and a vehicle's auxiliary equipment system; and

a second control means for processing said signal received by said second receiving means, wherein said second control means provides information indicative at least one of the identification of a vehicle, a theft of a vehicle and a function to be one of controlled and performed by said system.

22. The system of claim 21, wherein at least one of said at least two remote locations is in a motor vehicle.

23. The system of claim 21, wherein at least one of said at least two remote locations is at at least one of a security office, a law enforcement office and a law enforcement agency.

-24. The system of claim 21, wherein said transmitting means is a telephone.

25. The system of claim 21, wherein at least one of said first receiving means and said second receiving means is a telephone signal receiving device.

26. The apparatus of claim 21, wherein said at least one of said first control means and said second control means comprises one of a microprocessor, a micro-computer and a minicomputer.

27. The system of claim 21, wherein said vehicle's auxiliary equipment system is one of an alarm, a horn, a door locking system, a hood locking system and a vehicle recovery system.

28. The system of claim 21, wherein said signal comprises at least one of system accessing data and system control data.

29. A remote-controlled anti-theft and/or recovery system for motor vehicles, comprising:

a means for registering a motor vehicle with at least one of a security office, a law enforcement office and a law enforcement agency;

a means for transmitting a signal to at least two remote-locations;—

-a first receiving-means-for-receiving-said-signal-ata first of said at least two remote locations;

a second receiving means for receiving said signal at a second of said at least two remote locations;

a first control means for processing said signal received by said first receiving means, wherein said first control means issues a first control signal to at least one of a vehicle, a vehicle's ignition system, a vehicle's fuel pump system, and a vehicle's auxiliary equipment system; and

a second control means for processing said signal received by said second receiving means, wherein said second control means issues a second control signal, wherein said second control signal comprises information indicative of at least one of vehicle identification, that of the vehicle and a function to be one of controlled and performed by said system.

- 30. The system of claim 29, wherein at least one of said at least two remote locations is in a motor vehicle.
- 31. The system of claim 29, wherein at least one of said at least two remote locations is at one of a security office, a law enforcement office and a law enforcement agency.
- 32. The system of claim 29, wherein said transmitting means is a telephone.

- 33. The system of claim 29, wherein at least one of said first receiving means and said second receiving means is a telephone signal receiving device.
- 34. The system of claim 29, wherein at least one of said first control means and said second control means comprises one of a microprocessor, a micro-computer and a mini-computer.
- 35. The system of claim 29, wherein said first control means delays an issuance of said first control signal until the motor vehicle's ignition system is determined to be off.
- 36. The system of claim 29, wherein said vehicle's auxiliary equipment system is one of an alarm, a horn, a door locking system, a hood locking system and a vehicle recovery system.
- 37. The system of claim 29, wherein said signal comprises at least one of system accessing data and system control data.
- 38. A method for remote-controlled motor vehicle antitheft and/or motor vehicle recovery, comprising the steps of:

registering a motor vehicle with one of a security office a law enforcement office and a law enforcement agency;

transmitting a signal, in response to at least one of an occurrence of and a discovery of a vehicle theft, to each of the

-vehicle and at least one of a security office, a law enforcement office and a law enforcement agency;

receiving said signal at each of the vehicle and at at least one of a security office, a law enforcement office and a law enforcement agency;

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processing said signal at each of the vehicle and at at least one of a security office, a law enforcement office and a law enforcement agency; and

issuing at least one control signal at at least one of the vehicle and at at least one of a security office, law enforcement office and law enforcement agency in response to said signal processing, wherein said at least one control signal at least one of identifies the vehicle and provides control over one of the vehicle and said system.

39. The method of claim 38, further comprising the step of:

one of disabling, enabling, activating and de-activating at least one of the vehicle, the vehicle's ignition system, fuel system and auxiliary equipment system.

40. The method of claim 38, wherein said signal is transmitted simultaneously to each of said at least two remote locations. --



This is a Preliminary Amendment in the above-identified By this Preliminary Amendment, Applicant has cancelled claims 1-20, without prejudice, and Applicant has added new claims 21-40.

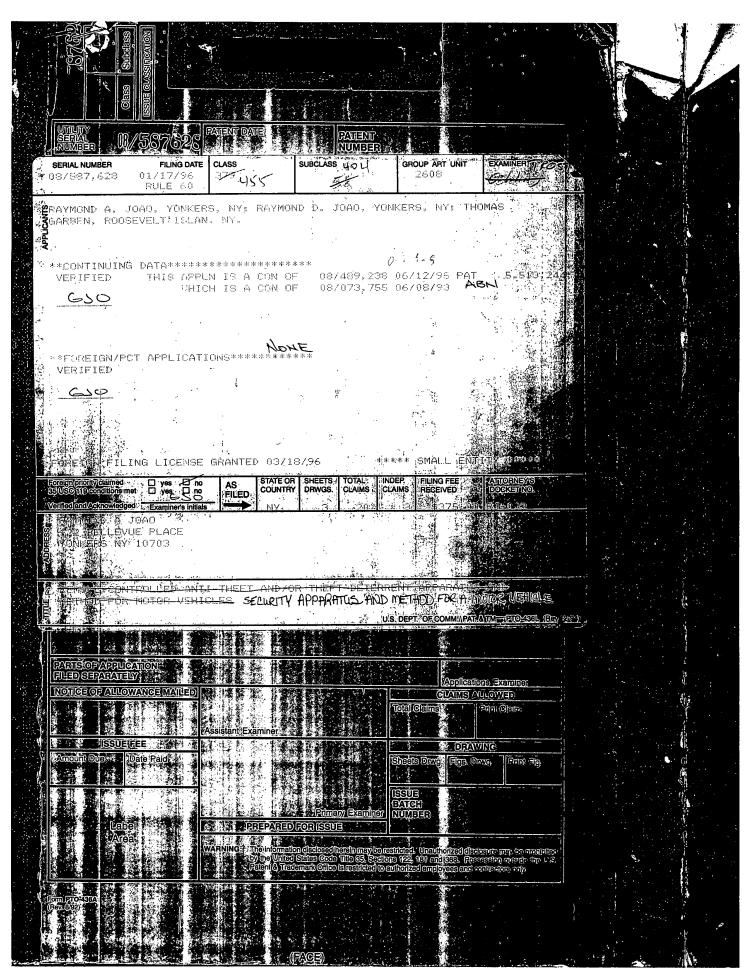
Entry of this Preliminary Amendment, before any Official Action is taken in this case, is respectfully requested.

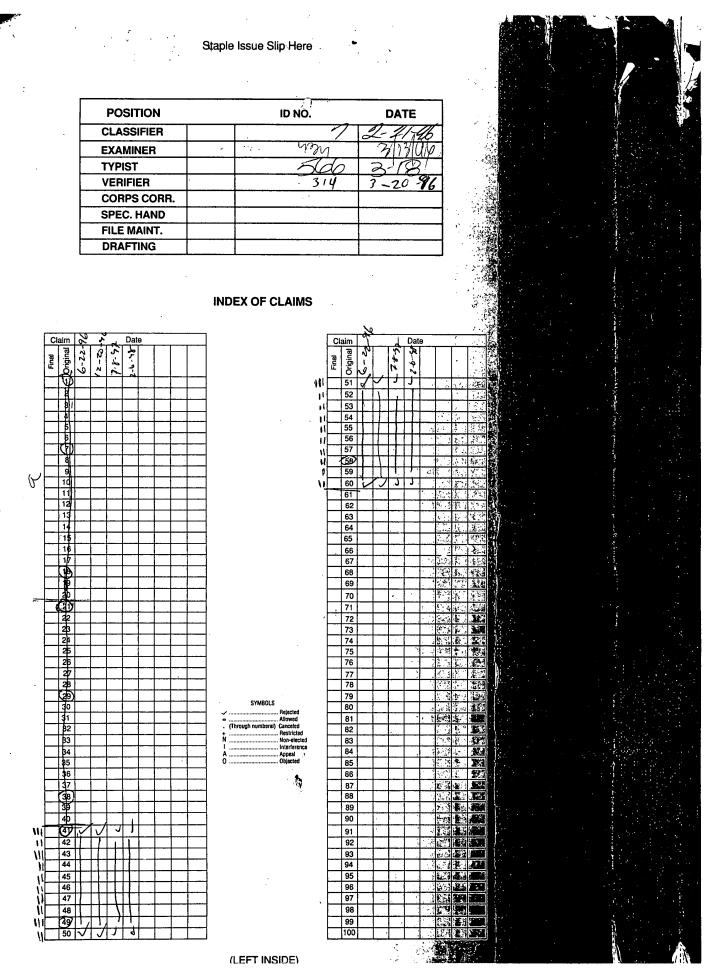
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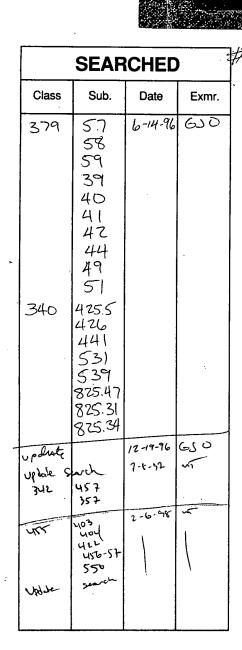
Date: January 17, 1996

Raymond A. Joao 122 Bellevue Place Yonkers, New York (H) (914) 969-2992 (O) (212) 378-1857

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