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		POWER OF ATTORNEY	
	The specification	on of the above-identified patent application:	
	is attached here was filed on Fe	to bruary 13, 2006 as U.S. Application Serial No. 10/568,207.	
attorney	I hereby revoke s to prosecute sai	all previously granted powers of attorney in the above-identified patent application and appoint the following id patent application and to transact all business in the Patent and Trademark Office connected therewith:	3
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the unde	be taken in the I	d hereby authorizes the U.S. attorneys named herein to accept and follow instructions from <u>Martin Friedgut</u> as Patent and Trademark Office regarding this application without direct communication between the U.S. attorney event of a change in the persons from whom instructions may be taken, the U.S. attorneys named herein will be ed.	ney and
		37 CFR 3.73(b)(1) and shown below, the documentary evidence of the chain of title from the original ssignee was, or concurrently is being, submitted for recordation pursuant to 37 CFR 3.11.	
applicati		<u>W) Pty Ltd.,</u> an Australian company, certifies that it is the assignee of the entire right, title and interest in the paye by virtue of either:	patent
Ø	An assignment from the inventor(s) of the patent application identified above, which is being recorded concurrently herewith pursuant to 37 CFR 3.11, a copy of which is attached hereto. OR		
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Title:

Remote Entry System

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Description

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation patent application of U.S. Non-Provisional Application No. 10/568,207 for REMOTE ENTRY SYSTEM, filed June 04, 2008, the disclosure of which is incorporated by reference in its entirety.

FIELD OF THE INVENTION

[0001] The present invention relates to secure access systems and, in particular, to systems using wireless transmission of security code information.

BACKGROUND

[0002] FIG. 1 shows a prior art arrangement for providing secure access. A user 401 makes a request, as depicted by an arrow 402, directed to a code entry module 403. The module 403 is typically mounted on the external jamb of a secure door. The request 402 is typically a secure code of some type which is compatible with the code entry module 403. Thus, for example, the request 402 can be a sequence of secret numbers directed to a keypad 403. Alternately, the request 402 can be a biometric signal from the user 401 directed to a corresponding biometric sensor 403. One example of a biometric signal is a fingerprint. Other physical attributes that can be used to provide biometric signals include voice, retinal or iris pattern, face pattern, palm configuration and so on.

[0003] The code entry module 403 conveys the request 402 by sending a corresponding

signal, as depicted by an arrow 404, to a controller 405 which is typically situated in a remote or inaccessible place. The controller 405 authenticates the security information provided by the user 401 by interrogating a database 407 as depicted by an arrow 406. If the user 401 is authenticated, and has the appropriate access privileges, then the controller 405 sends an access signal, as depicted by an arrow 408, to a device 409 in order to provide the desired access. The device 409 can, for example, be the locking mechanism of a secure door, or can be an electronic lock on a personal computer (PC) which the user 401 desires to access.

[0004] A proximity card can also be used to emit the request 402, in which case the code entry module 403 has appropriate functionality.

[0005] Although the request 402 can be made secure, either by increasing the number of secret digits or by using a biometric system, the communication infrastructure in FIG. 1 is typically less secure. The infrastructure 400 is generally hardwired, with the code entry module 403 generally being mounted on the outside jamb of a secured door. In such a situation, the signal path 404 can be over a significant distance in order to reach the controller 405. The path 404 represents one weak point in the security system 400, providing an unauthorised person with relatively easy access to the information being transmitted between the code entry module 403 and the controller 405. Such an unauthorised person can, given this physical access, decipher the communicated information between the code entry module 403 and the controller 405. This captured information can be deciphered, replayed in order to gain the access which rightfully belongs to the user 401, or to enable modification for other subversive purposes. [0006] Current systems as depicted in FIG. 1 utilise a communication protocol called "Wiegand" for communication between the code entry module 403 and the controller 405. The Wiegand protocol is a simple one-way data protocol that can be modified by increasing or decreasing the bit count to ensure uniqueness of the protocol among different security companies. The Wiegand protocol does not secure the information being sent between the code entry module 403 and the controller 405. [0007] More advanced protocols such as RS 485 have been used in order to overcome the vulnerability of the Wiegand protocol over the long distance route 404. RS 485 is a

duplex protocol offering encryption capabilities at both the transmitting and receiving

ends, i.e. the code entry module 403 and the controller 405 respectively in the present case. The length of the path 404 nonetheless provides an attack point for the unauthorised person.

[0008] Due to the cost and complexity of re-wiring buildings and facilities, security companies often make use of existing communication cabling when installing and/or upgraded security systems, thereby maintaining the vulnerability described above.

SUMMARY

[0009] It is an object of the present invention to substantially overcome, or at least ameliorate, one or more disadvantages of existing arrangements.

[0010] According to a first aspect of the present invention, there is provided a system for providing secure access to a controlled item, the system comprising:

[0011] a database of biometric signatures;

[0012] a transmitter subsystem comprising: [0013] a biometric sensor for receiving a biometric signal; [0014] means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; and [0015] means for emitting a secure access signal conveying information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol; and [0016] a receiver sub-system comprising; [0017] means for receiving the transmitted secure access signal; and [0018] means for providing conditional access to the controlled item dependent upon said information.

[0019] According to another aspect of the present invention, there is provided a transmitter sub-system for operating in a system for providing secure access to a controlled item, the system comprising a database of biometric signatures, a receiver sub-system comprising means for receiving a secure access signal transmitted by the transmitter sub-system, and means for providing conditional access to the controlled item dependent upon information conveyed in the secure access signal; wherein the transmitter subsystem comprises: [0020] a biometric sensor for receiving a biometric signal; [0021] means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; and [0022]

means for emitting the secure access signal conveying said information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol. [0023] According to another aspect of the present invention, there is provided receiver sub-system for operating in a system for providing secure access to a controlled item, the system comprising a database of biometric signatures, a transmitter subsystem comprising a biometric sensor for receiving a biometric signal, means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute, and means for emitting a secure access signal conveying information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol; wherein the receiver sub-system comprises; [0024] means for receiving the transmitted secure access signal; and [0025] means for providing conditional access to the controlled item dependent upon said information. [0026] According to another aspect of the present invention, there is provided a method for providing secure access to a controlled item, the method comprising the steps of: [0027] receiving a biometric signal;

[0028] matching the biometric signal against members of a database of biometric signatures to thereby output an accessibility attribute;

[0029] emitting a secure access signal conveying information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol; and [0030] providing conditional access to the controlled item dependent upon said information.

[0031] According to another aspect of the present invention, there is provided a method for populating a database of biometric signatures in a system for providing secure access to a controlled item, the system comprising said database of biometric signatures, a transmitter subsystem comprising a biometric sensor for receiving a biometric signal, and means for emitting a secure access signal, and a receiver subsystem comprising means for receiving the transmitted secure access signal, and means for providing conditional access to the controlled item dependent upon

information in said secure access signal, said method comprising the steps of:

[0032] receiving a series of entries of the biometric signal;

[0033] determining at least one of the number of said entries and a duration of each said entry;

[0034] mapping said series into an instruction; and

[0035] populating the database according to the instruction.

[0036] According to another aspect of the present invention, there is provided a method for transmitting a secure access signal in a system for providing secure access to a controlled item, the system comprising a database of biometric signatures, a receiver sub-system comprising means for receiving the secure access signal transmitted by a transmitter sub-system, and means for providing conditional access to the controlled item dependent upon information conveyed in the secure access signal, said method comprising the steps of: [0037] receiving a biometric sensor by biometric signal; [0038] matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; and [0039] emitting the secure access signal conveying said information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol.

[0040] According to another aspect of the present invention, there is provided a method for receiving a secure access signal in a system for providing secure access to a controlled item, the system comprising a database of biometric signatures, a transmitter subsystem comprising a biometric sensor for receiving a biometric signal, means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute, and means for emitting a secure access signal conveying information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol, said method comprising the steps of: [0041] receiving the transmitted secure access signal; and [0042] providing conditional access to the controlled item dependent upon said information.

[0043] According to another aspect of the present invention, there is provided a computer program product having a computer readable medium having a computer

program recorded therein for directing a processor to provide secure access to a controlled item, said computer program product comprising:

[0044] code for receiving a biometric signal;

[0045] code for matching the biometric signal against members of a database of biometric signatures to thereby output an accessibility attribute;

[0046] code for emitting a secure access signal conveying information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol; and [0047] code for providing conditional access to the controlled item dependent upon said information.

[0048] According to another aspect of the present invention, there is provided a computer program product having a computer readable medium having a computer program recorded therein for directing a processor to populate a database of biometric signatures in a system for providing secure access to a controlled item, said computer program product comprising:

[0049] code for receiving a series of entries of the biometric signal;

[0050] code for determining at least one of the number of said entries and a duration of each said entry;

[0051] code for mapping said series into an instruction; and

[0052] code for populating the database according to the instruction.

[0053] According to another aspect of the present invention, there is provided a computer program product having a computer readable medium having a computer program recorded therein for directing a processor to transmit a secure access signal in a system for providing secure access to a controlled item, said computer program product comprising:

[0054] code for receiving a biometric sensor by biometric signal;

[0055] code for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; and [0056] code for emitting the secure access signal conveying said information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol.

[0057] According to another aspect of the present invention, there is provided a computer program product having a computer readable medium having a computer program recorded therein for directing a processor to receive a secure access signal in a system for providing secure access to a controlled item, said computer program product comprising:

[0058] code for receiving the transmitted secure access signal; and

[0059] code for providing conditional access to the controlled item dependent upon said information.

[0060] According to another aspect of the present invention, there is provided a system for providing secure access, the system comprising:

[0061] a biometric sensor for authenticating the identity of a user;

[0062] a transmitter for transmitting information using a secure wireless signal dependent upon a request from the user and the authentication of the user identity; and [0063] a control panel for receiving the information and for providing the secure access requested.

[0064] Other aspects of the invention are also disclosed.

BRIEF DESCRIPTION OF THE DRAWINGS

[0065] Some aspects of the prior art and one or more embodiments of the present invention are described with reference to the drawings, in which:

[0066] FIG. 1 shows a prior art arrangement for providing secure access;

[0067] FIG. 2 is a functional block diagram of an arrangement for providing secure access according to the present disclosure;

[0068] FIG. 3 shows an example of a method of operation of the remote control module of FIG. 2:

[0069] FIG. 4 shows an example of a method of operation of the (fixed) control device of FIG. 2:

[0070] FIG. 5 shows incorporation of a protocol converter into the arrangement of FIG. 2; and

[0071] FIG. 6 shows another example of how the remote access system operates;

[0072] FIG. 7 shows an access process relating to the example of FIG. 6;

[0073] FIG. 8 shows one enrolment process relating to the example of FIG. 6; [0074] FIG. 9 shows another enrolment process relating to the example of FIG. 6; and [0075] FIG. 10 is a schematic block diagram of the system in FIG. 2.

DETAILED DESCRIPTION INCLUDING BEST MODE

[0076] It is to be noted that the discussions contained in the "Background" section relating to prior art arrangements relate to discussions of documents or devices which form public knowledge through their respective publication and/or use. Such should not be interpreted as a representation by the present inventor(s) or patent applicant that such documents or devices in any way form part of the common general knowledge in the art.

[0077] Where reference is made in any one or more of the accompanying drawings to steps and/or features, which have the same reference numerals, those steps and/or features have for the purposes of this description the same function(s) or operation(s), unless the contrary intention appears.

[0078] FIG. 2 is a functional block diagram of an arrangement for providing secure access according to the present disclosure. A user 101 makes a request, as depicted by an arrow 102, to a code entry module 103. The code entry module 103 includes a biometric sensor 121 and the request 102 takes a form which corresponds to the nature of the sensor 121 in the module 103. Thus, for example, if the biometric sensor 121 in the code entry module 103 is a fingerprint sensor, then the request 102 typically takes the form of a thumb press on a sensor panel (not shown) on the code entry module 103. [0079] The code entry module 103 interrogates, as depicted by an arrow 104, a user identity database 105. Thus for example if the request 102 is the thumb press on the biometric sensor panel 121 then the user database 105 contains biometric signatures for authorised users against which the request 102 can be authenticated. If the identity of the user 101 is authenticated successfully, then the code entry module 103 sends a signal 106 to a controller/transmitter 107. The controller/transmitter 107 checks, as depicted by an arrow 112, the current rolling code in a database 113. The controller 107 then updates the code and sends the updated code, this being referred to as an access signal, as depicted by an arrow 108 to a controller 109. The rolling code protocol offers

non-replay encrypted communication.

[0080] The controller 109 tests the rolling code received in the access signal 108 against the most recent rolling code which has been stored in a database 115, this testing being depicted by an arrow 114. If the incoming rolling code forming the access signal 108 is found to be legitimate, then the controller 109 sends a command, as depicted by an arrow 110, to a controlled item 111. The controlled item 111 can be a door locking mechanism on a secure door, or an electronic key circuit in a personal computer (PC) that is to be accessed by the user 101. It is noted that the controller 109 contains a receiver 118 that receives the transmitted access signal 108 and converts it into a form that is provided, as depicted by an arrow 120, into a form that the controller 109 can use.

[0081] The code entry module 103 also incorporates at least one mechanism for providing feedback to the user 101. This mechanism can, for example, take the form or one or more Light Emitting Diodes (LEDs) 122 which can provide visual feedback, depicted by an arrow 123 to the user 101. Alternately or in addition the mechanism can take the form of an audio signal provided by an audio transducer 124 providing audio feedback 125.

[0082] The arrangement in FIG. 2 has been described for the case in which the secure code in the access signal 108 used between the sub-systems 116 and 117 is based upon the rolling code. It is noted that this is merely one arrangement, and other secure codes can equally be used. Thus, for example, either of the Bluetooth.TM. protocol, or the Wi Fi.TM. protocols can be used.

[0083] Rolling codes provide a substantially non-replayable non-repeatable and encrypted radio frequency data communications scheme for secure messaging. These codes use inherently secure protocols and serial number ciphering techniques which in the present disclosure hide the clear text values required for authentication between the key fob (transmitter) sub-system 116 and the receiver/controller 118/109.

[0084] Rolling codes use a different code variant each time the transmission of the access signal 108 occurs. This is achieved by encrypting the data from the controller 107 with a mathematical algorithm, and ensuring that successive transmissions of the access signal 108 are modified using a code and/or a look-up table known to both the

transmitter sub-system 116 and the receiver sub-system 117. Using this approach successive transmissions are modified, resulting in a non-repeatable data transfer, even if the information from the controller 107 remains the same. The modification of the code in the access signal 108 for each transmission significantly reduces the likelihood that an intruder can access the information replay the information to thereby gain entry at some later time.

[0085] The sub-system in FIG. 2 falling to the left hand side, as depicted by an arrow 116, of a dashed line 119 can be implemented in a number of different forms. The subsystem 116 can for example be incorporated into a remote fob (which is a small portable device carried by the user 101), or alternately can be mounted in a protected enclosure on the outside jamb of a secured door. The sub-system 116 communicates with the sub-system 117 on the right hand side of the dashed line 119 via the wireless communication channel used by the access signal 108. The sub-system 117 is typically located in an inaccessible area such as a hidden roof space or alternately in a suitable protected area such as an armoured cupboard. The location of the sub-system 117 must of course be consistent with reliable reception of the wireless access signal 108. [0086] Although typically the communication channel uses a wireless transmission medium, there are instances where the channel used by the access signal 108 can use a wired medium. This is particularly the case when the transmitter sub-system 116 is mounted in an enclosure on the door jamb rather than in a portable key fob. [0087] The biometric signature database 105 is shown in FIG. 2 to be part of the transmitter sub-system 116. However, in an alternate arrangement, the biometric signature database 105 can be located in the receiver sub-system 117, in which case the communication 104 between the code entry module 103 and the signature database 105 can also be performed over a secure wireless communication channel such as the one used by the access signal 108. In the event that the secure access system is being applied to providing secure access to a PC, then the secured PC can store the biometric signature of the authorised user in internal memory, and the PC can be integrated into the receiver sub-system 117 of FIG. 1.

[0088] In the event that the sub-system 116 is implemented as a remote fob, the combination of the biometric verification and the strongly encrypted wireless

communication provides a particularly significant advantage over current systems. The remote key fob arrangement allows easy installation, since the wired communication path 404 (see FIG. 1) is avoided. Other existing wiring elements of the present systems 400 can be used where appropriate. When the sub-system 116 is implemented as a remote fob, the fob incorporates the biometric (eg fingerprint) authentication arrangement, in which case only one biometric signature is stored in the fob. This arrangement reduces the requirements on the central database 115. Once the key fob authenticates the user through biometric signature (eg fingerprint) verification, the rolling code in the access signal 108 is transmitted to the controller 109 for authorisation of the user for that location at that time.

[0089] In addition to authenticating the user 101 the biometric sensor 121 in the code entry module 103 in conjunction with the controller 107 can also check other access privileges of the user 101. These access privileges can be contained in the database 105 which can be located either locally in the remote key fob, or in the receiver subsystem 117 as previously described. In one example, Tom Smith can firstly be authenticated as Tom Smith using the thumb press by Tom on the biometric sensor panel (not shown). After Tom's personal biometric identity is authenticated, the transmitter sub-system 116 can check if Tom Smith is in fact allowed to use the particular door secured by the device 111 on weekends. Thus the security screening offered by the described arrangement can range from simple authentication of the user's identity, to more comprehensive access privilege screening.

[0090] The incorporation of the biometric sensor 121 into the code entry module 103 in the form of a remote key fob also means that if the user 101 loses the remote key fob, the user need not be concerned that someone else can use it. Since the finder of the lost key fob will not be able to have his or her biometric signal authenticated by the biometric sensor 121 in the code entry module 103, the lost key fob is useless to anyone apart from the rightful user 101.

[0091] The transmitter sub-system 116 is preferably fabricated in the form of a single integrated circuit (IC) to reduce the possibility of an authorised person bypassing the biometric sensor 121 in the code entry module 103 and directly forcing the controller 107 to emit the rolling code access signal 108.

[0092] FIG. 3 shows the method of operation of the remote control module (i.e. the subsystem 116) of FIG. 2. The method 200 commences with a testing step 201 in which the biometric sensor 121 in the code entry module 103 checks whether a biometric signal 102 is being received. If this is not the case, then the method 200 is directed in accordance with an NO arrow back to the step 201 in a loop. If, on the other hand, the biometric signal 102 has been received, then the method 200 is directed in accordance with a YES arrow to a step 202. The step 202 compares the received biometric signal 102 with information in the biometric signature database 105 in order to ensure that the biometric signal received 102 is that of the rightful user 101 of the sub-system 116. [0093] A subsequent testing step 203 checks whether the comparison in the step 202 yields the desired authentication. If the biometric signature matching is authenticated, then the process 200 is directed in accordance with a YES arrow to a step 204. The authentication of the biometric signature matching produces an accessibility attribute for the biometric signal 102 in question. The accessibility attribute establishes whether and under which conditions access to the controlled item 111 should be granted to a user. Thus, for example, the accessibility attribute may comprise one or more of an access attribute (granting unconditional access), a duress attribute (granting access but with activation of an alert tone to advise authorities of the duress situation), an alert attribute (sounding a chime indicating that an unauthorised, but not necessarily hostile, person is seeking access, and a telemetry attribute, which represents a communication channel for communicating state information for the transmitter sub-system to the receiver subsystem such as a "low battery" condition. The step 204 enables the user 101 to select a control option by providing one or more additional signals (not shown) to the controller 107. Thus for example the control option could enable the user 101 to access one of a number of secure doors after his or her identity has been authenticated in the step 203. In the subsequent step 205 the controller 107 sends the appropriate access signal 108 to the controller 109. The process 200 is then directed in accordance with an arrow 206 back to the step 201.

[0094] Thus for example the sub-system 116 can be provided with a single biometric sensor 121 in the code entry module 103 which enables the user 101 to select one of four door entry control signals by means of separate buttons on the controller 107 (not

shown). This would enable the user 101, after authentication by the biometric sensor 121 in the code entry module 103 and the controller 107 to obtain access to any one of the aforementioned for secure doors.

[0095] Returning to the testing step 203, if the signature comparison indicates that the biometric signal 102 is not authentic, and has thus not been received from the proper user, then the process 200 is directed in accordance with a NO arrow back to the step 201. In an alternate arrangement, the NO arrow from the step 203 could lead to a disabling step which would disable further operation of the sub-system 116, either immediately upon receipt of the incorrect biometric signal 102, or after a number of attempts to provide the correct biometric signal 102.

[0096] FIG. 4 shows the method of operation of the control sub-system 117 of FIG. 2. The method 300 commences with a testing step 301 which continuously checks whether the access signal 108 has been received from 107. The step 301 is performed by the controller 109. As long as the access signal 108 is not received the process 300 is directed in accordance with a NO arrow in a looping manner back to the step 301. When the access signal 108 is received, the process 300 is directed from the step 301 by means of a YES arrow to a step 302. In the step 302, the controller 109 compares the rolling code received by means of the access signal 108 with a reference code in the database 115. A subsequent testing step 303 is performed by the controller 109. In the step 303 if the code received on the access signal 108 is successfully matched against the reference code in the database 115 then the process 300 is directed in accordance with a YES arrow to a step 304.

[0097] In the step 304 the controller 109 sends the control signal 110 to the controlled item 111 (for example opening the secured door). The process 300 is then directed from the step 304 as depicted by an arrow 305 back to the step 301. Returning to the testing step 303 if the code received on the access signal 108 is not successfully matched against the reference code in the database 115 by the controller 109 then the process 300 is directed from the step 303 in accordance with a NO arrow back to the step 301. [0098] As was described in regard to FIG. 3, in an alternate arrangement, the process 300 could be directed, if the code match is negative, from the step 303 to a disabling step which would disable the sub-system 117 if the incorrect code where received once

or a number of times.

[0099] FIG. 5 shows incorporation of a protocol converter into the arrangement of FIG. 2. In the arrangement of FIG. 2 the receiver 118 in the controller 109 is able to directly receive and process the rolling code in the access signal 108 in a manner as to provide, as depicted by the arrow 120, the necessary information to the controller 109. FIG. 5 shows how an existing controller depicted by a reference numeral 109' that uses. Wiegand input signalling can be used in the disclosed arrangement when alarm systems are upgraded. FIG. 5 shows how the incoming access signal 108 is received by a receiver 118' as is the case in FIG. 2. In FIG. 5 however the receiver 118' provides, as depicted by an arrow 503, the received rolling code from the access signal 108 to a rolling code/Wiegand protocol converter 501. The converter 501 converts, as depicted by an arrow 504, the incoming rolling code 503 to a form that can be used by the controller 109' that is designed to handle Wiegand protocol incoming signals. Therefore, the converted incoming signal 504 is in the Wiegand format.

[0100] The converter 501 uses a microprocessor-based arrangement running software code to process the incoming rolling code information 503 and decode this information 503 to clear text form. The converter 501 converts this clear text to a Wiegand variable bit-length data stream. In FIG. 2, the receiver 118 performs the conversion of the incoming rolling code access signal 108 to clear text which enables the controller 109 to identify the serial number of the originating key fob sub-system 116 to enable the access rights of the user to be verified.

[0101] Further to the Wiegand conversion arrangement, the protocol converter 501 approach can be adapted to convert between the incoming rolling code 503 (or any other appropriate secure code) to any other convenient protocol used by the controller 169'.

[0102] The advantage of the rolling code/Wiegand converter 501 is that security system upgrades can be made without replacing Wiegand compatible controller 109'. Accordingly, existing systems as are described in FIG. 1 can be upgraded by replacing the code entry module 403 and the transmission path 404, leaving the other components of the system 400 (i.e., the controller 405, the code database 407, and the controlled item 409, together with existing wiring 408 and 406), largely intact. Minor

modifications might however be necessary. When upgrading systems in this manner, the sub-system 116 can either be used in a remote fob configuration, or can be placed in a secure housing on an external door jamb.

[0103] From a practical perspective, incorporating the protocol converter 501 into an existing controller 109' would require direct wiring of the converter 501 into the housing of the secure controller 109'.

[0104] FIG. 6 shows another process 700 of operation of the remote access system. The process 700 commences with a step 701 that determines if a biometric signal has been received by the biometric sensor 121 in the code entry module in FIG. 2. If not, then the process 700 follows a NO arrow back to the step 701. If however a biometric signal has been received, then the process 700 follows a YES arrow to a step 702 that determines if the user ID database 105 in FIG. 2 is empty. This would be the case, for example, if the code entry module is new and has never been used, or if the user 101 has erased all the information in the database 105.

[0105] If the database 105 is empty, then the process 700 is directed by an arrow 703 to 706 in FIG. 8 which depicts a process 800 dealing with the enrolment or the administration function for loading relevant signatures into the database 105. If on the other hand the database 105 is not empty, then the process 700 is directed to a step 704 that determines if the biometric signal that has been received is an administrator's biometric signal.

[0106] The disclosed remote entry system can accommodate at least three classes of user, namely administrators, (ordinary) users, and duress users. The administrators have the ability to amend data stored, for example, in the database 105, while the ordinary users do not have this capability. The first user of the code entry module 103, whether this is the user who purchases the module, or the user who programs the module 103 after all data has been erased from the database 105, is automatically categorised as an administrator. This first administrator can direct the system 100 to either accept further administrators, or alternately to only accept further ordinary users. [0107] Although the present description refers to "Users", in fact it is "fingers" which are the operative entities in system operation when the biometric sensor 121 (see FIG. 2) is a fingerprint sensor. In this event, a single user can enrol two or more of his or her own

fingers as separate administrators or (ordinary) users of the system, by storing corresponding fingerprints for corresponding fingers in the database 105 via the enrolment process 800 (see FIG. 8).

[0108] Some class overlap is possible. Thus a stored signature can belong to an administrator in the duress class.

[0109] The first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121, providing that these successive presses are of the appropriate duration, the appropriate quantity, and are input within a predetermined time. In one arrangement, the control information is encoded by either or both (a) the number of finger presses and (b) the relative duration of the finger presses. If the successive finger presses are provided within this predetermined time, then the controller 107 accepts the presses as potential control information and checks the input information against a stored set of legal control signals.

[0110] One example of a legal control signal can be expressed as follows:

[0111] "Enrol an ordinary user"->dit, dit, dit, dah

where "dit" is a finger press of one second's duration (provided by the user 101 in response to the feedback provided by the Amber LED as described below), and "dah" is a finger press of two second's duration.

[0112] In the event that a legitimate sequence of finger presses are not delivered within the predetermined time, then the presses are considered not to be control information and merely to be presses intended to provide access to the controlled item 111. Legitimate control sequences are defined in Read Only Memory (ROM) in the controller 107.

[0113] The code entry module 103 has feedback signalling mechanisms 122, implemented for example by a number of LEDs, and 124, implemented by an audio transducer. The LEDs 122 and the audio transducer 124 are used by the controller to signal the state of the code entry module 103 to the user 101, and to direct the administration process. Thus, in one example, three LEDs, being Red, Amber and Green are provided.

[0114] When the Amber LED is flashing, it means "Press the sensor". When the Amber

LED is steady ON, it means "Maintain finger pressure". When the Amber LED is OFF, it means "Remove finger pressure". When the system enters the enrolment state (depicted by the process 800 in FIG. 8), then the audio transducer 124 emits the "begin enrolment" signal (dit dit dit) and the Red LED flashes. Enrolment of a normal user (according to the step 807 in FIG. 8) is signalled by the OK audio signal (dit dit) and a single blink of the Green LED.

[0115] Returning to the step 704, if the step determines that the biometric signal received is an administrator's signal, then the process 700 is directed by a YES arrow to 706 in FIG. 8 as depicted by the arrow 703. If on the other hand, the step 704 indicates that the received biometric signal does not belong to an administrator then the process 700 is directed by a NO arrow to 707 in FIG. 7.

[0116] FIG. 7 shows the access process 600 by which a biometric signal 102 (see FIG. 2) is processed in order to provide access to the controlled item 111, or to take other action. Entering the process at 707 from FIG. 6, the process 600 proceeds to a step 602 that compares the received biometric signature to signatures stored in the database 105. A following step 603 determines if the received signal falls into the "duress" category. Signatures in this category indicate that the user 101 is in a coercive situation where, for example, an armed criminal is forcing the user 101 to access the secure facility (such as a bank door). If the step 603 determines that the signature is in the duress class, then a following step 604 prepares a "duress" bit for incorporation into the code access signal 108. The aforementioned duress bit is an access attribute of the biometric signal 102. Thereafter the process 600 proceeds to a step 605.

[0117] Modules used in the code entry module for producing the rolling code enable a number of user defined bits to be inserted into the access signal 108, and these bits can be used to effect desired control functions in the receiver sub-system 117. The disclosed system 100 utilises four such user bits, namely (a) to indicate that the user belongs to the duress category, (b) to indicate a "battery low" condition, or other desired system state or "telemetry" variable, for the code entry module 103, (c) to indicate that the biometric signal represents a legitimate user in which case the secure access to the controlled item 111 is to be granted, or (d) to indicate that the biometric signal is unknown, in which case the controller 109 in the receiver sub-system 117 sounds an

alert tone using a bell (not shown) or the like.

[0118] Returning to FIG. 7, if the step 603 determines that the biometric signal is not in the duress class, then the process 600 proceeds according to a NO arrow to the step 605. The step 605 determines if the code entry module 103 has a low battery condition, in which event the process 600 proceeds according to a YES arrow to a step 606 that prepares a telemetry bit for insertion into the access signal 108. The aforementioned telemetry bit is an access attribute of the biometric signal 102. Thereafter, the process proceeds to a step 607.

[0119] If the step 605 determines that telemetry signalling is not required, then the process 600 proceeds according to a NO arrow to the step 607. The step 607 checks the biometric signal against the signatures in the database 105. If the received biometric signal matches a legitimate signature in the database 105, then the process is directed to a step 608 that prepares an "access" bit for insertion into the access signal 108. This access bit directs the controller 109 in the receiver sub-system 117 to provide access to the controlled item 111. The aforementioned access bit is an access attribute of the biometric signal 102. The process 600 then proceeds to a step 610.

[0120] If the step 607 determines that the biometric input signal does not match any legitimate signatures in the database 105, then the process 600 proceeds according to a NO arrow to a step 609 that prepares an "alert" bit for insertion into the access signal 108. The aforementioned alert bit is an access attribute of the biometric signal 102. This alert bit directs the controller 109 (a) not to provide access to the controlled item 111, and (b) to provide an alert tone, like ringing a chime or a bell (not shown), to alert personnel in the vicinity of the receiver sub-system 117 that an unauthorised user is attempting to gain access to the controlled item 111. The alert bit can also cause a camera mounted near the controlled item 111 to photograph the unauthorised user for later identification of that person. The camera can be activated if the person attempting to gain access is unauthorised, and also if the person attempting to gain access is authorised but uses a duress signature.

[0121] An optional additional step (not shown) can prepare an identification field for insertion into the access signal 108. This sends, to the receiver sub-system 117, ID information that the receiver sub-system can use to construct an audit trail listing which

users, having signatures in the database 105, have been provided with access to the controlled item 111.

[0122] The process 600 is then directed to the step 610 which inserts the various user defined bits into the access signal 108 and sends the signal 108 to the receiver subsystem 117. Thereafter, the process 600 is directed by an arrow 611 to 705 in FIG. 6. [0123] FIG. 8 shows a process 800 for implementing various enrolment procedures. The process 800 commences at 706 from FIG. 6 after which a step 801 determines if the biometric signal is a first administrators input (which is the case if the database 105 is empty). If this is the case, then the process 800 is directed to a step 802 that stores the administrator's signature in the database 105. From a terminology perspective, this first administrator, or rather the first administrator's first finger (in the event that the biometric sensor 121 in FIG. 2 is a fingerprint sensor), is referred to as the "superfinger". Further administrator's fingers are referred to as admin-fingers, and ordinary users fingers are referred to merely as "fingers". The reason that someone would enrol more than one of their own fingers into the system is to ensure that even in the event that one of their enrolled fingers is injured, the person can still operate the system using another enrolled finger.

[0124] It is noted that the step 802, as well as the steps 805, 807 and 809 involve sequences of finger presses on the biometric sensor 121 in conjunction with feedback signals from the LEDs 122 and/or the audio speaker 124. The process 800 then proceeds to a step 810 that determines if further enrolment procedures are required. If this is the case, then the process 800 proceeds by a YES arrow back to the step 801. If no further enrolment procedures are required, then the process 800 proceeds by a NO arrow to 705 in FIG. 6.

[0125] Returning to the step 801, if the biometric signal is not a first administrator's signal, then the process 800 proceeds by a NO arrow to a step 803. The step 803 determines if a further administrator signature is to be stored. It is noted that all signatures stored in the database are tagged as belonging to one or more of the classes of administrator, ordinary user, and duress users. If a further administrator signature is to be stored, then the process 800 proceeds by a YES arrow to the step 802 that stores the biometric signal as a further administrator's signature.

[0126] If a further administrator's signature is not required, then the process 800 proceeds according to a NO arrow to a step 804 that determines if a duress signature is to be stored. If this is the case then the process 800 follows a YES arrow to a step 805 that stores a duress signature. The process 800 then proceeds to the step 810. If however the step 804 determines that a duress signature is not required, then the process 800 proceeds by a NO arrow to s step 806.

[0127] The step 806 determines if a further simple signature (i.e. belonging to an ordinary user) is to be stored. If a further simple signature is to be stored, then the process 800 proceeds by a YES arrow to the step 807 that stores the biometric signal as a further ordinary signature.

[0128] If a further simple signature is not required, then the process 800 proceeds according to a NO arrow to a step 808 that determines if any or all signatures are to be erased from the database 105. If this is the case then the process 800 follows a YES arrow to a step 809 that erases the desired signatures. The process 800 then proceeds to the step 810. If however the step 804 determines that no signatures are to be erased, then the process 800 proceeds by a NO arrow to the step 810.

[0129] FIG. 9 shows another enrolment process relating to the example of FIG. 6. The process 900 commences at 706 from FIG. 6 after which a step 901 determines if the received biometric signal comes from the first administrator. If this is the case, then the process 900 proceeds according to a YES arrow to a step 902. The step 902 emits an "Enrolment" tone and flashes the green LED once only. Thereafter, a step 905 reads the incoming biometric signal which is provided by the user as directed by the Amber LED. When the Amber LED flashes continuously, this directs the user to "Apply Finger". When the Amber LED is in a steady illuminated state, this directs the user to "Maintain Finger Pressure". Finally, when the amber LED is off, this directs the user to "Remove Finger".

[0130] Returning to the step 901, if the incoming biometric signal does not belong to the first administrator, then the process 900 proceeds according to a NO arrow to a step 903. The step 903 emits an "Enrolment" tone, and flashes the Red LED in an on-going fashion. Thereafter, the process 900 proceeds according to an arrow 904 to the step 905.

[0131] Following the step 905, a step 906 determines whether the incoming biometric signal is legible. If this is not the case, then the process 900 proceeds according to a NO arrow to a step 907. The step 907 emits a "Rejection" tone, after which the process 900 is directed, according to an arrow 908 to 705 in FIG. 6. Returning to the step 906, if the incoming biometric signal is legible, then the process 900 follows a YES arrow to a step 909. The step 909 determines whether the finger press exceeds a predetermined time. If this is not the case, then the process 900 follows a NO arrow to a step 910 which stores the biometric signal, which in the present case is a fingerprint signature. Thereafter the process 900 follows an arrow 911 to 705 in FIG. 6. [0132] Returning to the step 909 if the finger press does exceed the predetermined period, then the process follows a YES arrow to a step 912. The step 912 erases relevant signatures depending upon the attributes of the incoming biometric signal. Thus, for example, if the incoming biometric signal belongs to an ordinary user, then the ordinary user's signature in the database 105 is erased by the step 912. If, on the other hand, the incoming biometric signal belongs to the first administrator, then all the signatures in the database 105 are erased. Administrators who are not the first administrator can be granted either the same powers as the first administrator in regard to erasure of signatures, or can be granted the same powers as ordinary user in this respect.

[0133] Once the step 912 has completed erasure of the relevant signatures, then the process 900 follows an arrow 913 to 705 in FIG. 6.

[0134] FIG. 10 is a schematic block diagram of the system in. FIG. 2. The disclosed secure access methods are preferably practiced using a computer system arrangement 100', such as that shown in FIG. 10 wherein the processes of FIGS. 3-4, and 6-9 may be implemented as software, such as application program modules executing within the computer system 100'. In particular, the method steps for providing secure access are effected by instructions in the software that are carried out under direction of the respective processor modules 107 and 109 in the transmitter and receiver sub-systems 116 and 117. The instructions may be formed as one or more code modules, each for performing one or more particular tasks. The software may also be divided into two separate parts, in which a first part performs the provision of secure access methods

and a second part manages a user interface between the first part and the user. The software may be stored in a computer readable medium, including the storage devices described below, for example. The software is loaded into the transmitter and receiver sub-systems 116 and 117 from the computer readable medium, and then executed under direction of the respective processor modules 107 and 109. A computer readable medium having such software or computer program recorded on it is a computer program product. The use of the computer program product in the computer preferably effects an advantageous apparatus for provision of secure access.

[0135] The following description is directed primarily to the transmitter sub-system 116, however the description applies in general to the operation of the receiver sub-system 117. The computer system 100' is formed, having regard to the transmitter sub-system 116, by the controller module 107, input devices such as the bio sensor 121, output devices including the LED display 122 and the audio device 124. A communication interface/transceiver 1008 is used by the controller module 107 for communicating to and from a communications network 1020. Although FIG. 2 shows the transmitter subsystem 116 communicating with the receiver sub-system 117 using a direct wireless link for the access signal 108, this link used by the access signal 108 can be effected over the network 1020 forming a tandem link comprising 108-1020-108'. The aforementioned communications capability can be used to effect communications between the transmitter sub-system 116 and the receiver sub-system 117 either directly or via the Internet, and other network systems, such as a Local Area Network (LAN) or a Wide Area Network (WAN).

[0136] The controller module 107 typically includes at least one processor unit 1005, and a memory unit 1006, for example formed from semiconductor random access memory (RAM) and read only memory (ROM). The controller module 107 also includes an number of input/output (I/O) interfaces including an audio-video interface 1007 that couples to the LED display 122 and audio speaker 124, an I/O interface 1013 for the bio-sensor 121, and the interface 1008 for communications. The components 1007, 1008, 1005, 1013 and 1006 the controller module 107 typically communicate via an interconnected bus 1004 and in a manner which results in a conventional mode of operation of the controller 107 known to those in the relevant art.

[0137] Typically, the application program modules for the transmitter sub-system 116 are resident in the memory 1006 iROM, and are read and controlled in their execution by the processor 1005. Intermediate storage of the program and any data fetched from the bio sensor 121 and the network 1020 may be accomplished using the RAM in the semiconductor memory 1006. In some instances, the application program modules may be supplied to the user encoded into the ROM in the memory 1006. Still further, the software modules can also be loaded into the transmitter sub-system 116 from other computer readable media, say over the network 1020. The term "computer readable medium" as used herein refers to any storage or transmission medium that participates in providing instructions and/or data to the transmitter sub-system 116 for execution and/or processing. Examples of storage media include floppy disks, magnetic tape, CD-ROM, a hard disk drive, a ROM or integrated circuit, a magneto-optical disk, or a computer readable card such as a PCMCIA card and the like, whether or not such devices are internal or external of the transmitter sub-system 116. Examples of transmission media include radio or infra-red transmission channels as well as a network connection to another computer or networked device, and the Internet or Intranets including e-mail transmissions and information recorded on Websites and the like.

INDUSTRIAL APPLICABILITY

[0138] It is apparent from the above that the arrangements described are applicable to the security industry.

[0139] The foregoing describes only some embodiments of the present invention, and modifications and/or changes can be made thereto without departing from the scope and spirit of the invention, the embodiments being illustrative and not restrictive.

[0140] The system 100 can also be used to provide authorised access to lighting systems, building control devices, exterior or remote devices such as air compressors and so on. The concept of "secure access" is thus extendible beyond mere access to restricted physical areas.

Claims

Claims

- 1. A system for providing secure access to a controlled item, the system comprising:
 - a database of biometric signatures;
 - a transmitter subsystem comprising:
 - a biometric sensor for receiving a biometric signal;
- means for enrolling relevant signatures into the database using the biometric sensor; wherein the means for enrolling relevant signatures into the database of biometric signatures comprises:
- means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;
- means for mapping said series into an instruction; and means for enrolling relevant signatures into the database according to the instruction;
- means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and
- means for emitting a secure access signal conveying information dependent upon said accessibility attribute; said system further comprising:
 - a receiver sub-system comprising;
- means for receiving the transmitted secure access signal; and means for providing conditional access to the controlled item dependent upon said information.

- 2. A system according to claim 1, wherein the biometric sensor and the transmitter are located in a remote portable key fob.
- A system according to claim 1 further comprising: means for providing a signal for directing input of the series of entries of the biometric signal;

means for incorporating into the secure access signal an identification field identifying the biometric signal if the signal matches a member of the database; and means for constructing an audit trail of biometric signals provided to the biometric sensor for the purpose of accessing the controlled item.

- 4. A system according to claim 3, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class, a system user class, and a duress class.
- 5. A system according to claim 4, wherein the accessibility attribute comprises: an access attribute if the biometric signal matches a member of the database of biometric signatures;

a duress attribute if the biometric signal matches a member of the database of biometric signatures and said member belongs to the duress class; and an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

- 6. A system according to claim 5, wherein the controlled item is one of: a locking mechanism of a door; and an electronic lock on a Personal Computer (PC).
- 7. A system according to claim 5, wherein the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver sub-system.

8. A system according to claim 5, wherein said conditional access comprises one of:

provision of access to the controlled item if the accessibility attribute comprises an access attribute;

provision of access to the controlled item and sounding of an alert if the accessibility attribute comprises a duress attribute; and

denial of access to the controlled item and sounding of an alert if the accessibility attribute comprises an alert attribute.

- 9. A system according to claim 1, further comprising a control panel for receiving the information and for providing the secure access requested.
- 10. A system according to claim 9 wherein the control panel includes a converter for receiving the secure wireless signal and for outputting the information.
- 11. A system according to claim 9, wherein the biometric sensor authenticates the identity of the user by comparing a biometric input from the user with a biometric signature for the user in the biometric database.
- 12. A system according to claim 9, wherein the secure wireless signal comprises an RF carrier and a rolling code.
- 13. A system according to claim 10, wherein the secure wireless signal comprises an RF carrier and a rolling code, and the converter converts the rolling code to the Wiegand protocol.
- 14. A transmitter sub-system for operating in a system for providing secure access to a controlled item, the system comprising:
- a database of biometric signatures;
- a receiver sub-system comprising means for receiving a secure access signal transmitted by the transmitter sub-system, and means for providing conditional access

to the controlled item dependent upon information conveyed in the secure access signal; wherein the transmitter subsystem comprises:

a biometric sensor for receiving a biometric signal;

means for enrolling relevant signatures into the database using the biometric sensor; wherein the means for enrolling relevant signatures into the database of biometric signatures comprises:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and means for enrolling relevant signatures into the database according to the instruction;

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting the secure access signal conveying said information dependent upon said accessibility attribute.

- 15. A transmitter sub-system according to claim 14, wherein the biometric sensor and the transmitter are located in a remote portable key fob.
- 16. A transmitter sub-system according to claim 14 further comprising: means for providing a signal for directing input of the series of entries of the biometric signal; and

means for incorporating into the secure access signal an identification field identifying the biometric signal if the signal matches a member of the database, said identification field for use in constructing an audit trail of biometric signals provided to the biometric sensor for the purpose of accessing the controlled item.

- 17. A transmitter sub-system according to claim 16, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class, a system user class, and a duress class.
- 18. A transmitter sub-system according to claim 17, wherein the accessibility attribute comprises:

an access attribute if the biometric signal matches a member of the database of biometric signatures;

a duress attribute if the biometric signal matches a member of the database of biometric signatures and said member belongs to the duress class; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

- 19. A transmitter sub-system according to claim 18, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class and a system user class.
- 20. A transmitter sub-system according to claim 18, wherein the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver sub-system.
- 21. A receiver sub-system for operating in a system for providing secure access to a controlled item, the system comprising:
 - a database of biometric signatures;
 - a transmitter subsystem comprising:
 - a biometric sensor for receiving a biometric signal;
- means for enrolling relevant signatures into the database using the biometric sensor; wherein the means for enrolling relevant signatures into the database of biometric signatures comprises:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and
means for enrolling relevant signatures into the database
according to the instruction, the transmitter sub-system further comprising:

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute;

upon said information.

wherein the receiver sub-system comprises;
means for receiving the transmitted secure access signal; and
means for providing conditional access to the controlled item dependent

- 22. A receiver sub-system according to claim 21 wherein the biometric sensor and the transmitter are located in a remote portable key fob.
- 23. A receiver sub-system according to claim 21, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class and a system user class.
- 24. A receiver sub-system according to claim 23, wherein the accessibility attribute comprises:

an access attribute if the biometric signal matches a member of the database of biometric signatures;

a duress attribute if the biometric signal matches a member of the database of biometric signatures and said member belongs to the duress class; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

25. A receiver sub-system according to claim 24, wherein said conditional access comprises one of:

provision of access to the controlled item if the accessibility attribute comprises an access attribute;

provision of access to the controlled item and sounding of an alert if the accessibility attribute comprises a duress attribute; and

denial of access to the controlled item and sounding of an alert if the accessibility attribute comprises an alert attribute.

- 26. A receiver sub-system according to claim 25, wherein the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver subsystem.
- 27. A method for providing secure access to a controlled item, the method comprising the steps of:

enrolling, by a transmitter sub-system, relevant signatures into a database using a biometric sensor, by receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry, mapping said series into an instruction, and enrolling relevant signatures into the database according to the instruction;

receiving, by the transmitter sub-system, a biometric signal;

matching, by the transmitter sub-system, the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated;

emitting, by the transmitter sub-system, a secure access signal conveying information dependent upon said accessibility attribute; and

providing conditional access to the controlled item dependent upon said information.

- 28. A method according to claim 27, wherein the transmitter sub-system and the biometric sensor are located in a remote portable key fob.
- 29. A method according to claim 27, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class, a system user class, and a duress class.
- 30. A method according to claim 29, wherein the accessibility attribute comprises: an access attribute if the biometric signal matches a member of the database of biometric signatures;

a duress attribute if the biometric signal matches a member of the database of biometric signatures and said member belongs to the duress class; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures, and wherein the step of providing said conditional access comprises the steps of:

providing access to the controlled item if the accessibility attribute comprises an access attribute;

providing access to the controlled item and sounding an alert if the accessibility attribute comprises a duress attribute; and

denying access to the controlled item and sounding an alert if the accessibility attribute comprises an alert attribute.

31. A method for enrolling, by a transmitter subsystem, relevant signatures into a database of biometric signatures in a system for providing secure access to a controlled item, the system comprising:

said database of biometric signatures;

the transmitter sub-system comprising:

a biometric sensor configured for receiving a biometric signal;

means for enrolling relevant signatures into the database using the biometric sensor;

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute; and

a receiver sub-system comprising:

means for receiving the transmitted secure access signal; and means for providing conditional access to the controlled item dependent upon information in said secure access signal; said method comprising the steps of:

receiving, by the transmitter sub-system, a series of entries of the biometric signal characterised according to at least one of the number of said entries and a duration of each said entry;

determining, by the transmitter sub-system, at least one of the number of said entries and a duration of each said entry;

mapping, by the transmitter sub-system, said series into an instruction; and enrolling, by the transmitter sub-system, said relevant signatures into the database according to the instruction.

- 32. A method according to claim 31, wherein the transmitter subsystem is located in a remote portable key fob.
- 33. A method for transmitting a secure access signal in a system for providing secure access to a controlled item, the system comprising:
 - a database of biometric signatures;
 - a receiver sub-system comprising:

means for receiving the secure access signal transmitted by a transmitter sub-system, the transmitter sub-system comprising a biometric sensor and being configured for enrolling relevant signatures into the database using the biometric sensor by receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of

each said entry, mapping said series into an instruction, and enrolling relevant signatures into the database according to the instruction;

means for providing conditional access to the controlled item dependent upon information conveyed in the secure access signal; said method comprising the steps of:

receiving, by the transmitter sub-system, a biometric signal by the biometric sensor;

matching, by the transmitter sub-system, the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

emitting, by the transmitter sub-system, the secure access signal conveying said information dependent upon said accessibility attribute.

- 34. A method according to claim 33, wherein the transmitter sub-system is located in a remote portable key fob.
- 35. A method for receiving a secure access signal in a system for providing secure access to a controlled item, the system comprising:
 - a database of biometric signatures;
 - a transmitter subsystem, comprising:

a biometric sensor for receiving a biometric signal;

means for enrolling relevant signatures into the database using the biometric sensor by receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry, mapping said series into an instruction, and enrolling relevant signatures into the database according to the instruction;

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute, said method comprising the steps of:

receiving the transmitted secure access signal; and providing conditional access to the controlled item dependent upon said information.

- 36. A method according to claim 35, wherein the transmitter sub-system is located in a remote portable key fob.
- 37. An apparatus for providing secure access to a controlled item, said apparatus comprising:

a transmitter sub-system comprising:

a biometric sensor for receiving a biometric signal;

means for enrolling relevant signatures into a database using the biometric sensor; wherein the means for enrolling relevant signatures into the database of biometric signatures comprises:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and means for enrolling relevant signatures into the database according to the instruction; the transmitter sub-system further comprising:

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute; and wherein conditional access is provided to the controlled item dependent upon said information.

38. A method according to claim 37, wherein the transmitter sub-system is located in a remote portable key fob.

39. An apparatus, in a transmitter sub-system, for enrolling relevant signatures into a database of biometric signatures in a system for providing secure access to a controlled item, the system comprising:

said database of biometric signatures;

the transmitter subsystem, comprising:

a biometric sensor for receiving a biometric signal;

means for enrolling relevant signatures into the database using the biometric sensor:

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute; the system further comprising:

a receiver sub-system comprising:

means for receiving the transmitted secure access signal; and means for providing conditional access to the controlled item dependent upon information in said secure access signal; said apparatus comprising:

means for receiving a series of entries of the biometric signal;

means for determining at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and means for enrolling relevant signatures into the database according to the instruction.

- 40. An apparatus according to claim 39, wherein the transmitter sub-system is located in a remote portable key fob.
- 41. A method of enrolling a biometric signature into a database of biometric signatures in a system for providing secure access to a controlled item, the system comprising:

said database of biometric signatures;

a transmitter subsystem for receiving a biometric signal, the transmitter subsystem comprising:

a biometric sensor;

receiving a biometric signal; and

means for enrolling relevant signatures into the database using the biometric sensor; wherein the means for enrolling relevant signatures into the database of biometric signatures comprises:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and means for enrolling relevant signatures into the database according to the instruction;

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute; the system further comprising: a receiver sub-system comprising:

means for receiving the transmitted secure access signal; and means for providing conditional access to the controlled item dependent upon information in said secure access signal; said method comprising the steps of:

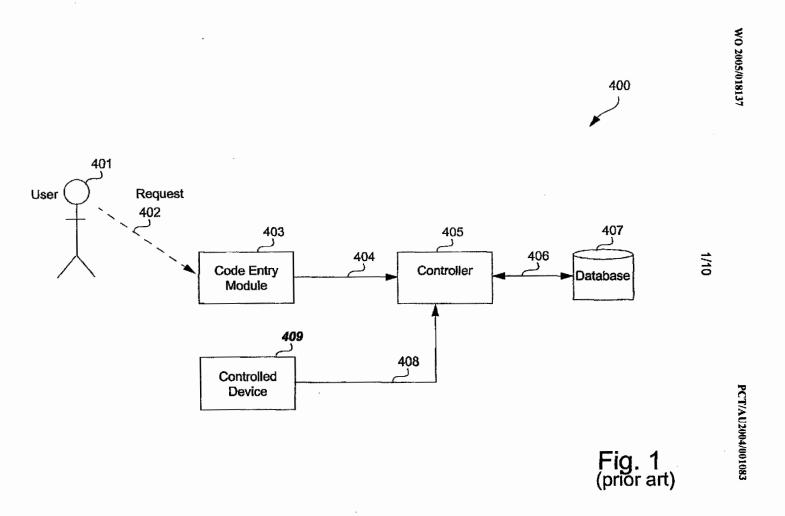
enrolling the relevant signatures into the database using the biometric sensor as an administrator if the database of biometric signatures is empty.

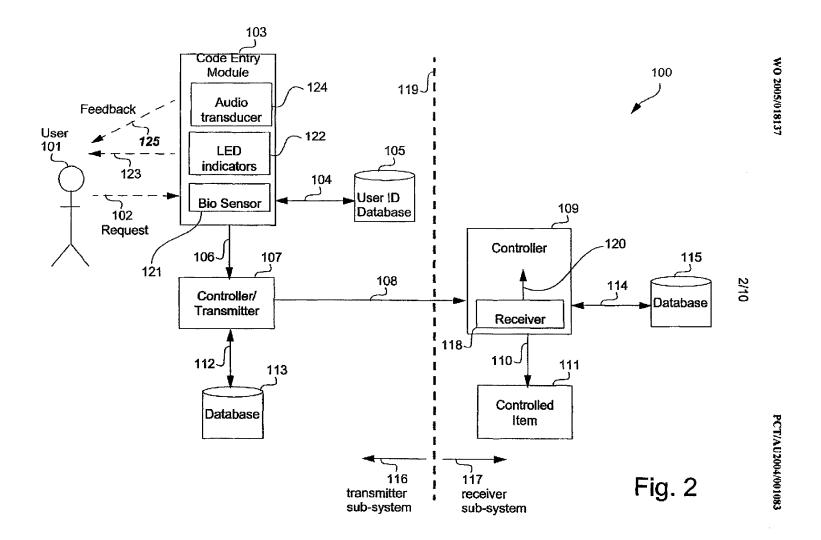
- 42. A method according to claim 41, wherein the transmitter sub-system is located in a remote key fob.
- 43. A method according to claim 41 wherein the enrolling step comprises receiving another biometric signal to confirm the enrolling of the biometric as an administrator.

44. A method according to claim 43 wherein the enrolling step is performed dependent upon generation of a feedback signal adapted to direct provision of at least one of the biometric signal and the other biometric signal.

Abstract

A system is disclosed for providing secure access to a controlled item, the system comprising a database of biometric signatures, a transmitter subsystem comprising a biometric sensor for receiving a biometric signal, means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute, and means for emitting a secure access signal conveying information dependent upon said accessibility attribute, wherein the secure access signal comprises one of at least a rolling code, an encrypted Bluetooth.TM. protocol, and a WiFi.TM. protocol, and a receiver sub-system comprising means for receiving the transmitted secure access signal and means for providing conditional access to the controlled item dependent upon said information.





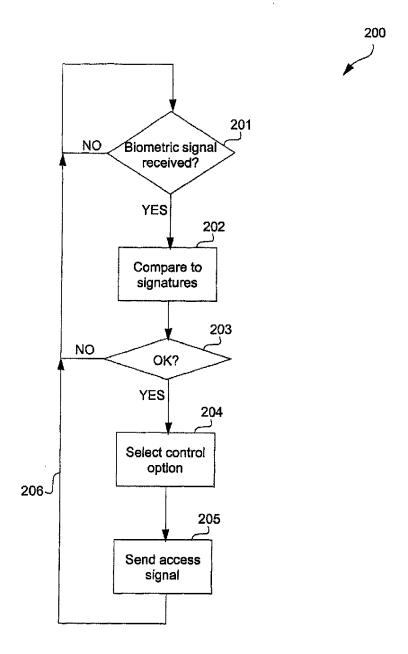


Fig. 3

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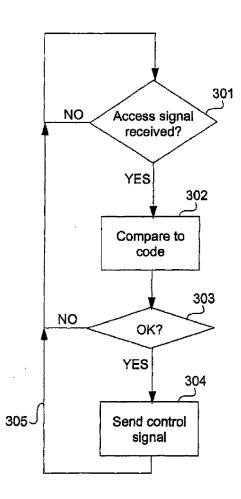
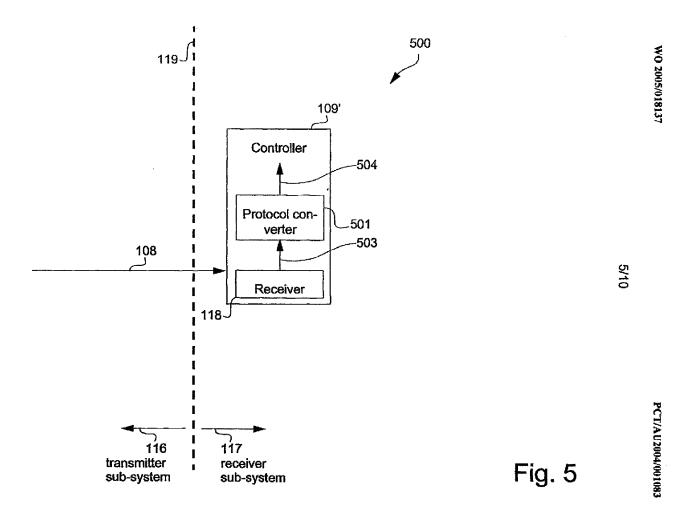


Fig. 4



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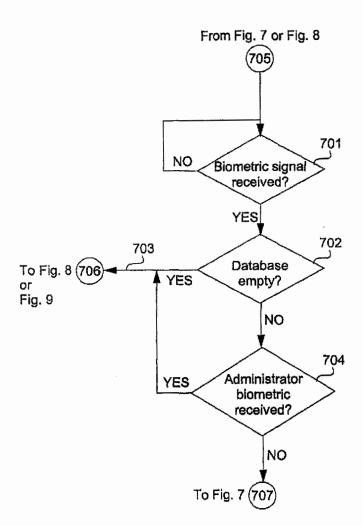


Fig. 6

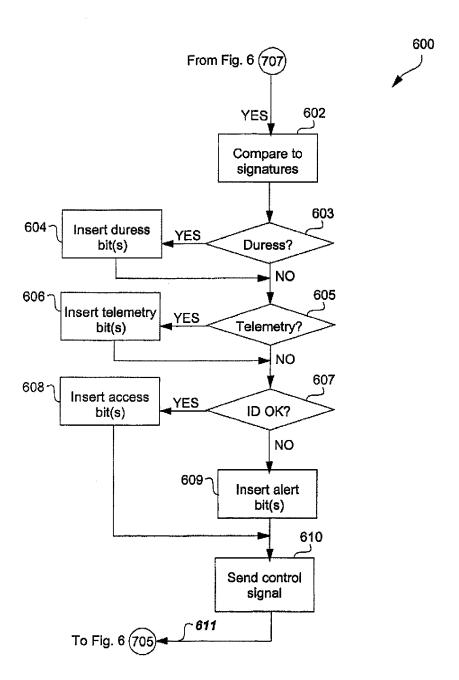
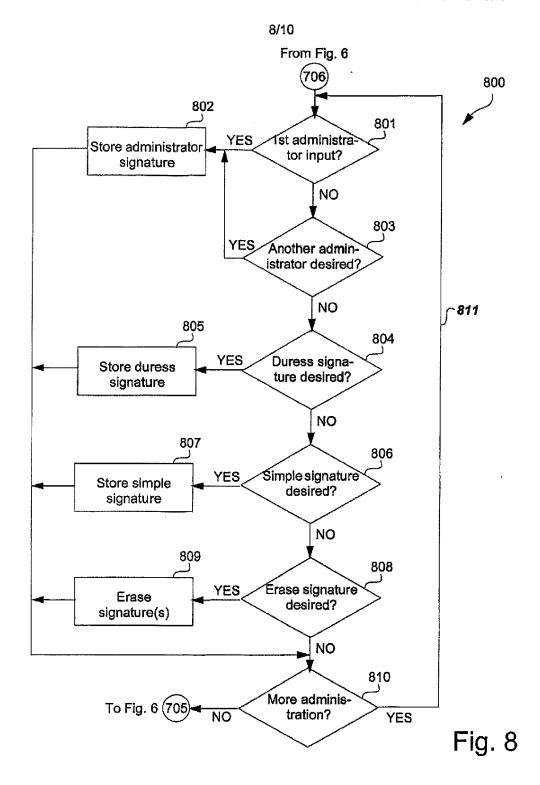


Fig. 7



WO 2005/018137 PCT/AU2004/001083

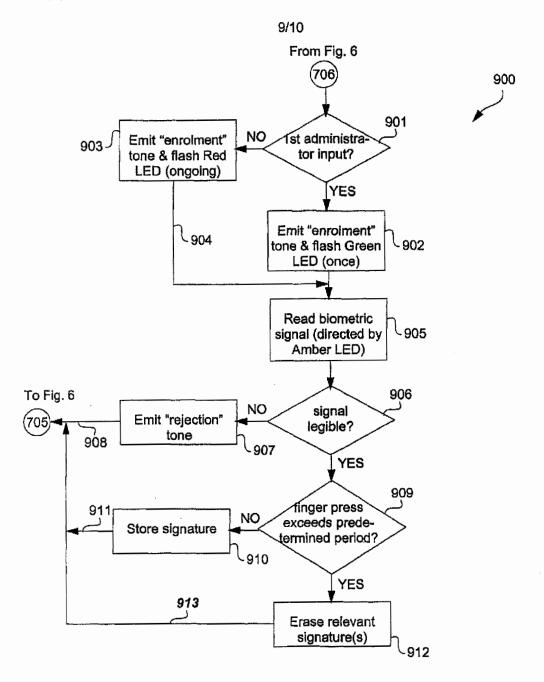


Fig. 9

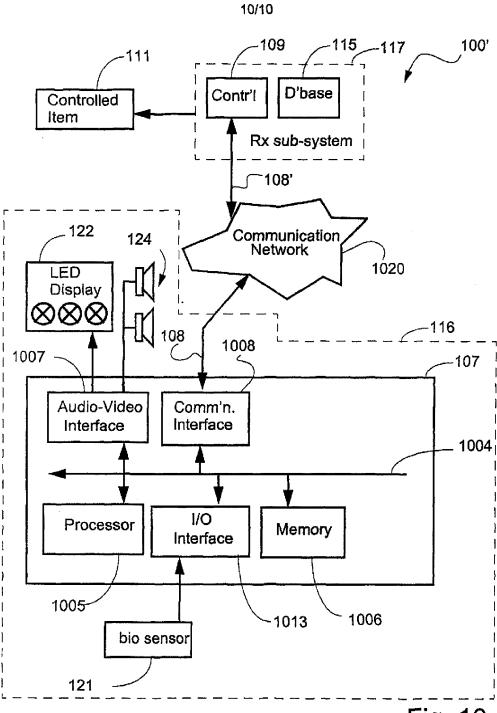


Fig. 10

Electronic Patent Application Fee Transmittal					
Application Number:					
Filing Date:					
Title of Invention:	REA	MOTE ENTRY SYSTE	M		
First Named Inventor/Applicant Name:	Christopher John Burke				
Filer:	Robert Dalton Summers/Lori Peterson				
Attorney Docket Number:	128	338/8			
Filed as Small Entity					
Utility under 35 USC 111(a) Filing Fees					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Utility filing Fee (Electronic filing)		4011	1	95	95
Utility Search Fee		2111	1	310	310
Utility Examination Fee		2311	1	125	125
Pages:					
Claims:					
Claims in excess of 20 2202 24 30 720					720
Independent claims in excess of 3		2201	7	125	875
Miscellaneous-Filing:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
	Tot	al in USD	(\$)	2125

Electronic Acknowledgement Receipt					
EFS ID:	13470510				
Application Number:	13572166				
International Application Number:					
Confirmation Number:	9752				
Title of Invention:	REMOTE ENTRY SYSTEM				
First Named Inventor/Applicant Name:	Christopher John Burke				
Customer Number:	757				
Filer:	Robert Dalton Summers/Nkosi Harvey				
Filer Authorized By:	Robert Dalton Summers				
Attorney Docket Number:	12838/8				
Receipt Date:	10-AUG-2012				
Filing Date:					
Time Stamp:	16:26:37				
Application Type:	Utility under 35 USC 111(a)				

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$2125
RAM confirmation Number	3328
Deposit Account	231925
Authorized User	

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part ∕₊zip	Pages (if appl.)
1	Transmittal of New Application	128388at.pdf	99676 fea881 a64594ef519ed0c57be3447e152ee4	no	2
 			fef3		
Information:					
	Oath or Declaration filed	120206 1 16	137784		,
2	Oath or Declaration filed	128386dec.pdf	fd4b06278e332f25730ba24a2a462a30d8e ef629	no	2
Warnings:			1		<u> </u>
Information:					
3	Power of Attorney	120206 no.2 ndf	71577	9	1
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Warnings:					
Information:					
4		128388conapp.pdf	1744460	yes	38
7		1203000011app.pd1	e692c948ae2e0d36a8f175b0b6fc62311e62 5778	yes	50
	Multip	art Description/PDF files in	.zip description		
	Document Des	scription	Start	E	nd
	Specificati	ion	1 23		23
	Claims		24	37	
	Abstrac	t	38	38	
Warnings:					
Information:					
5	Drawings-only black and white line	128388figs.pdf	114681		10
3	drawings	12030011gs.pu1	faff02b1f3d1348c3ae0947f6161a20db1a6c b00	no	10
Warnings:				l	<u> </u>
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	37866	no	2
	rec worksheer (Juvo)	ree mo.pai	66801513cefb51302e0d1749626d52467d3 52e3d		<u> </u>
Warnings:					

Information:	
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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Electronic Acknowledgement Receipt					
EFS ID:	13470510				
Application Number:	13572166				
International Application Number:					
Confirmation Number:	9752				
Title of Invention:	REMOTE ENTRY SYSTEM				
First Named Inventor/Applicant Name:	Christopher John Burke				
Customer Number:	757				
Filer:	Robert Dalton Summers/Nkosi Harvey				
Filer Authorized By:	Robert Dalton Summers				
Attorney Docket Number:	12838/8				
Receipt Date:	10-AUG-2012				
Filing Date:					
Time Stamp:	16:26:37				
Application Type:	Utility under 35 USC 111(a)				

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$2125
RAM confirmation Number	3328
Deposit Account	231925
Authorized User	

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	128388at.pdf	99676	no	2
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Warnings:					
Information:					
2	Oath or Declaration filed	128386dec.pdf	137784	no	2
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Warnings:					
Information:					
3	Power of Attorney	128386poa.pdf	71577	no	1
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Warnings:					
Information:			<u> </u>		
4		128388conapp.pdf	1744460	yes	38
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	Multip	art Description/PDF files in	.zip description		
	Document Des	scription	Start	E	nd
	Specificat	ion	1	2	23
	Claims		24 3		37
	Abstrac	t	38	38	
Warnings:					
Information:					
5	Drawings-only black and white line	128388figs.pdf	114681	no	10
,	drawings	12030011gs.pu1	faff02b1f3d1348c3ae0947f6161a20db1a6c b00	110	10
Warnings:				•	
Information:					
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Information:	
Total Files Size (in bytes):	2206044

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New International Application Filed with the USPTO as a Receiving Office

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I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS on the below date:

Date: August 10, 2012 Name: Robert D. Summers, Jr., Reg. No. 57,844 Signature: /Robert D. Summers, Jr./



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: BURKE, Christopher John For: REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Commissioner for Patents

UTILITY PATENT APPLICATION TRANSMITTAL

PO Box 1450 Alexandria, VA 22313-1450 1. TRANSMITTED HEREWITH: New application under 37 CFR §1.53(b), which is a: □ Continuation, ☐ Divisional, or ☐ Continuation-in-Part (CIP) Under 37 CFR §1.53(b) of prior application no. __ Prior application information: Examiner: Rahman, Mohammad L. Art Unit: 2438 ☐ Maintenance of copendency of prior application: A request for extension of time and the appropriate fee have been filed in the pending prior application (or are being filed in the prior application concurrently herewith) to extend the period for response until Certified copy of priority document(s) has been filed in prior application no. For Continuation or Divisional Applications only: The entire disclosure of the prior application, from which an oath or declaration is supplied as indicated below, is considered a part of the disclosure of the accompanying continuation or divisional application and is hereby incorporated by reference. 2. ATTACHMENTS: The following application elements and other papers are attached: ☐ Application Data Sheet. See 37 CFR § 1.76. ☐ Title page Specification, including claims and Abstract (38 pages) □ Drawings (ten (10) sheets) ☐ Appendices: _ □ Declaration (2 pages): newly-executed (original or copy) copy from a prior application (37 CFR §1.63(d)) This application is filed by fewer than all the inventors named in the prior application, 37 CFR §1.53(d)(4). Please DELETE the following inventors(s) named in prior nonprovisional application no. _____: ___ ☐ English Translation Document: is attached or ☐ has been filed in prior application no. Preliminary Amendment (Note: Related application data required under 37 CFR §1.78, if any, appears in the Amendments to the Specification section of the Preliminary Amendment, including incorporations by reference.) Petition to Suspend Prosecution for the Time Necessary to File an Amendment (New Application Filed Concurrently). ☐ Information Disclosure Statement, including Form PTO-1449 (_____ sheets) and copies of references cited, if required. Assignment to: Securicom (NSW) Pty Ltd: was previously recorded on June 4, 2008 at Reel 021038, Frame 0721.

BRINKS HOFER GILSON &LIONE Page 1 of 2

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Basic Fee Total Claims	44-20	24	24 x \$30=	\$ 95 \$720	or	x\$60=	\$ 380 \$
Independent Claims	10-3	7	7 x \$125=	\$875	or or	x\$250=	\$
Multiple Dependent Claims		1	+\$225=	\$	or	+\$450=	**************************************
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August 10, 2012 Date			/Robert D. Sumn Robert D. Summ		g. No	. 57,844	



DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION(37 C.F.R. §1.63)								
As a below named inventor,	As a below named inventor, I hereby declare:							
My residence, mailing addre	ss, and citizenship are a	s stated below next to my name;						
I believe I am the original, first and sole inventor or an original, first and joint inventor of the subject matter that is claimed and for which a patent is sought on the invention entitled:								
REMOTE ENTRY SYSTEM								
the specification of which (check one)								
is attached hereto.								
	was filed on <u>February</u> , 13 2006 as United States Application No. <u>10/568207</u> and was amended on <u>February</u> 13, 2006 (if applicable).							
I hereby state that I have re including the claims, as ame		the contents of the above identifit referred to above.	ied specification,					
I acknowledge my duty to o that I know to be material to part applications, material	I acknowledge my duty to disclose to the United States Patent and Trademark Office all information that I know to be material to patentability as defined in 37 C.F.R. §1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.							
I hereby claim foreign priority benefits under 35 U.S.C. §119(a)-(d) or (f), or §365(b) of any foreign application(s) for patent or inventor's or plant breeder's rights certificate(s), or §365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's or plant breeder's rights certificate(s) or PCT International application having a filing date before that of the application on which priority is claimed.								
Prior Foreign Application:			Priority Not Claimed					
2003904317 (Number)	Australia (Country)	08/13/2003 (Filing Date, MM/DD/YYYY)						
(Number)	(Country)	(Filing Date, MM/DD/YYYY)						
I hereby claim the benefit listed below:	I hereby claim the benefit under 35 U.S.C. §119(e) of any United States provisional application(s)							
iisted below.								
(Application Serial No.)	(Filing Date, MM/DD/YY	YY) (Status: pending, or aband	loned)					
(Application Serial No.)	(Application Serial No.) (Filing Date, MM/DD/YYYY) (Status: pending, or abandoned)							

1238768 (DECLARATION) 9mc

I have by a poles the handly	Under 95 U.S.C. S130 of any U.	nited States applications(s), or §365(c) of any						
PCT International Applicat	tion designating the United Sta	ites. Itsted below and, insofar as the subject I						
matter of each of the claims of this application is not disclosed in the prior United States or PC1								
international application in the manner provided by the first paragraph of 35 U.S.C. 9112, 11								
acknowledge the duty to disclose to the United States Patent and Trademark Office all Information								
known to me to be material to patentability as defined in 37 C.F.R. \$1,56 which became available between the filing date of the prior application and the national or PCT International filing date of this								
application.								
	0.014.0.000.4	Pending						
PCT/AU2004/001083 (Application Serial No.)	(Filing Date, MM/DD/YYYY)	(Status: patented, pending, abandoned)						
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statements made on infor were made with the know fine or imprisonment, or	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 18 U.S.C. §1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.							
Full name of sole inventor								
BURKE, Christopher	ío hn	19.5.2008						
Sole inventors signature		Sale (DD/MM/YY)						
	ente							
Residence (City, Signer-Programme) Remagate NSW, Aust	nby) ralia							
Citzenship Australia								
Mailing Address	Manufa Maur Caully Mortal Age	7. 6						
40 Mendara pricer LS	magate, New South Wales 221	f, Australia						

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PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					А	Application or Docket Number 13/572,166		Fil	ling Date 10/2012	To be Mailed		
	AF	PPLICATION A	AS FILE			Column 2)		SMALL	ENTITY 🛛	OR		HER THAN
	FOR	N	JMBER FIL	.ED	NUN	MBER EXTRA		RATE (\$)	FEE (\$)		RATE (\$)	FEE (\$)
Ø	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A			N/A	1	N/A	95	1	N/A	, , ,
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\boxtimes	EXAMINATION FE (37 CFR 1.16(o), (p),	E	N/A			N/A		N/A	125	1	N/A	
	ΓAL CLAIMS CFR 1.16(i))		44 min	us 20 =	* 24			X \$30 =	720	OR	X \$ =	
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	MULTIPLE DEPEN	IDENT CLAIM PR	ESENT (3	7 CFR 1.16	S(j))					ļ		
* If 1	he difference in colu	umn 1 is less than	zero, ente	r "0" in col	umn 2.			TOTAL	2125]	TOTAL	
	APPI	(Column 1)	AMEND	ED – P. (Colur		(Column 3)		OTHER THAN SMALL ENTITY OR SMALL ENTITY				
∃NT		CLAIMS REMAINING AFTER AMENDMENT		HIGHES NUMBE PREVIO PAID FO	R DUSLY	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
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AMENDMENT	Independent (37 CFR 1.16(h))	*	Minus	***		=		X \$ =		OR	X \$ =	
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_	FIRST PRESEN	NTATION OF MULTIF	LE DEPEN	DENT CLAI	M (37 CFF	국 1.16(j))				OR		
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		(Column 1)		(Colur	mn 2)	(Column 3)						
		CLAIMS REMAINING AFTER AMENDMENT		HIGH NUM PREVIO PAID	BER DUSLY	PRESENT EXTRA		RATE (\$)	ADDITIONAL FEE (\$)		RATE (\$)	ADDITIONAL FEE (\$)
ENT	Total (37 CFR 1.16(i))	*	Minus	**		=		X \$ =		OR	X \$ =	
DM	Independent (37 CFR 1.16(h))	*	Minus	***		=		X \$ =		OR	X \$ =	
EN	Application Si	ize Fee (37 CFR 1	.16(s))									
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** If	the entry in column the "Highest Numbe f the "Highest Numb "Highest Number P	er Previously Paid per Previously Paid	For" IN TH I For" IN T	IIS SPACI HIS SPAC	E is less E is less	than 20, enter "20" than 3, enter "3".		/EVA G			er:	

This collection of information is required by 37 CFR 1.16. 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 1.14. 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

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	PAT	ENT APPLI		ON FEE DE titute for Form		ΙΤΙ	ON RECORI	ס	Applica 13/57	tion or Docket Nun 2,166	nber
	APP	LICATION A			umn 2)		SMALL	ENITITY	OR	OTHEF SMALL	R THAN
	FOR	NUMBE		· · · · ·	R EXTRA	1 1	RATE(\$)	FEE(\$)	1	RATE(\$)	FEE(\$)
BAS	IC FEE					┨	, , ,	,	-	,,,,	1 ΕΕ(Φ)
(37 C	FR 1.16(a), (b), or (c))		/ A		J/A	┨	N/A	95	_	N/A	
(37 C	RCH FEE FR 1.16(k), (i), or (m))	N	/ A	١	I/A	╽	N/A	310		N/A	
	MINATION FEE FR 1.16(o), (p), or (q))	N	/ A	N	J/A		N/A	125		N/A	
	AL CLAIMS FR 1.16(i))	44	minus	20= *	24		x 30 =	720	OR		
	EPENDENT CLAII FR 1.16(h))	^{MS} 10	minus	3 = *	7	1	x 125 =	875			
FEE	PLICATION SIZ E CFR 1.16(s))	E sheets of p \$310 (\$15 50 sheets	oaper, th 5 for sm or fraction	and drawings e e application siz all entity) for eacon thereof. See CFR 1.16(s).	ze fee due is ch additional			0.00			
MUI	TIPLE DEPENDE	ENT CLAIM PRE	SENT (3	7 CFR 1.16(j))		1		0.00			
* If t	he difference in co	olumn 1 is less th	an zero,	enter "0" in colur	nn 2.	- ,	TOTAL	2125	1	TOTAL	
	APPLIC	(Column 1)	AMEND	ED - PART I	(Column 3)		SMALL	ENTITY	OR	OTHEF SMALL	
ΥL		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
ME	Total (37 CFR 1.16(i))	*	Minus	**	=	1	x =		OR	x =	
AMENDMENT	Independent (37 CFR 1.16(h))	*	Minus	***	=	11	x =		OR	x =	
AM	Application Size Fe	ee (37 CFR 1.16(s))				11			1		
	FIRST PRESENTA	ATION OF MULTIPE	E DEPEN	DENT CLAIM (37 C	FR 1.16(j))	1			OR		
							TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
L		(Column 1)		(Column 2)	(Column 3)				-		
A F		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA		RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
ME	Total (37 CFR 1.16(i))	*	Minus	**	=	1	x =		OR	х =	
AMENDMENT	Independent (37 CFR 1.16(h))	*	Minus	***	=	1	x =		OR	x =	
₽		ee (37 CFR 1.16(s))				11			1		
	FIRST PRESENTA	ATION OF MULTIPL	E DEPEN	DENT CLAIM (37 C	FR 1.16(j))	11			OR		
						ו נ	TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
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United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspho.gov

APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./IITLE

13/572,166 08/10/2012 Christopher John Burke

12838/8 **CONFIRMATION NO. 9752**

757 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610 IMPROPER CPOA LETTER

Date Mailed: 08/27/2012

NOTICE REGARDING POWER OF ATTORNEY

This is in response to the Power of Attorney filed 08/10/2012. The Power of Attorney in this application is not accepted for the reason(s) listed below:

 The Power received. 	of Attorney is from an assignee and the Certificate required by 37 CFR 3.73(b) has not been	
	/dnguyen/	

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

١	APPLICATION	FILING or	GRP ART				
	NUMBER	371(c) DATE	UNIT	FIL FEE REC'D	ATTY.DOCKET.NO	TOT CLAIMS	IND CLAIMS
•	13/572,166	08/10/2012	3685	2125	12838/8	44	10

CONFIRMATION NO. 9752 FILING RECEIPT

757 BRINKS HOFER GILSON & LIONE P.O. BOX 10395 CHICAGO, IL 60610

CC00000056141238

Date Mailed: 08/27/2012

Receipt is acknowledged of this non-provisional patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a Filing Receipt Correction. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections

Applicant(s)

Christopher John Burke, Ramsgate, AUSTRALIA;

Assignment For Published Patent Application

Securicom (NSW) Pty Ltd.

Power of Attorney: None

Domestic Priority data as claimed by applicant

This application is a CON of 10/568,207 06/04/2008 PAT 8266442 which is a 371 of PCT/AU2004/001083 08/13/2004

Foreign Applications (You may be eligible to benefit from the Patent Prosecution Highway program at the USPTO. Please see http://www.uspto.gov for more information.)
AUSTRALIA 2003904317 08/13/2003

Request to Retrieve - This application either claims priority to one or more applications filed in an intellectual property Office that participates in the Priority Document Exchange (PDX) program or contains a proper **Request to Retrieve Electronic Priority Application(s)** (PTO/SB/38 or its equivalent). Consequently, the USPTO will attempt to electronically retrieve these priority documents.

If Required, Foreign Filing License Granted: 08/22/2012

The country code and number of your priority application, to be used for filing abroad under the Paris Convention,

is US 13/572,166

Projected Publication Date: 12/06/2012

Non-Publication Request: No Early Publication Request: No

page 1 of 3

** SMALL ENTITY **
Title

REMOTE ENTRY SYSTEM

Preliminary Class

705

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at http://www.uspto.gov/web/offices/pac/doc/general/index.html.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, http://www.stopfakes.gov. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4158).

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Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where page 2 of 3

the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign AssetsControl, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

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The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage, facilitate, and accelerate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit <u>SelectUSA.gov</u>.

CERTIFICATE OF EFS FILING UNDER 37 CFR §1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: October 01, 2012 Name: Robert D. Summers, Jr., Reg. No. 57,844 Signature:

BRINKS HOFER GILSON &LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

MI

In re	Appln. of:	BUR	KE, Christophe	er John	[
Appl	application No.: 13/572,166 Examiner: Not Yet Assigned									
Filed	Filed: August 10, 2012						24	38		
For:	For: REMOTE ENTRY SYSTEM						atio	n No.:	9752	
Attor	ney Docket No:	1283	8/8							
			TRAN	ISMITT						
PO Bo	nissioner for Patents ox 1450 ndria, VA 22313-1450									
Sir:										
\boxtimes	Fee calculation: No additional fee is required. Small Entity. An extension fee in an amount of \$ for amonth extension of time under 37 CFR § 1.17(). A petition or processing fee in an amount of \$ under 37 CFR § 1.17().									
	Claims Remaining		Highest No.	Present		all Entity			mall Entity	
Total	After Amendment	Minus	Previously Paid For	Extra	Rate x \$30=	Add'l Fee	OR	Rate x \$60=	Add'l Fee \$	
Indep.		Minus			x 125=			x \$250=		
First P	resentation of Multiple De	p. Claim			+\$225=			+ \$450=		
					Total	\$		Total	\$	
Fee p	Fee payment: Please charge Deposit Account No. 23-1925 in the amount of \$ for the filing fee. Payment by credit card in the amount of \$ (Form PTO-2038 is attached).								r (including an	
Octob	er 01, 2012			1	W. +-					
Date	,			Robert I	D. Summe	rs, Jr. (Reg	. No.	57,844)		

			Attorney Docket No. 12838/8		
		STATEMENT UND	DER 37 CFR §3.73(b)		
Applica	ant/Patent Owner:	BURKE, Christopher Jo	hn		
Application/Patent No.: 13/572,166 Filed/Issue Date: August 10, 2012					
Title:		REMOTE ENTRY SYST	TEM		
Securi	icom (NSW) Pty Ltd		a corporation		
	(Name o	f Assignee)	(Type of Assignee, e.g., corporation, partnership,		
states	that it is:		university, government agency, etc.)		
1	the assignee	of the entire right, title, and	d interest; or		
2.		of less than the entire right by percentage) of its owne	;, title and interest rship interest is %); or		
3.		nt inventors was made) in	the entirety of (a complete assignment from the patent application/patent identified above		
A.	The assignme	ent was recorded in the U.	he patent application/patent identified above. S. Patent and Trademark Office at a copy thereof is attached.		
OR	1 (00) <u>02 (000</u> ,	7 74.110 <u>072 1</u> , 01 101 11111011	a copy moreon is analysis.		
В.		e from the inventor(s), of the assignee as follows::	ne patent application/patent identified above,		
		ment was recorded in the	U.S. Patent and Trademark Office at which a copy thereof is attached.		
	The docu		U.S. Patent and Trademark Office at which a copy thereof is attached.		
		ment was recorded in the	U.S. Patent and Trademark Office at which a copy thereof is attached.		
ļ	Additional doc	cuments in the chain of title	e are listed on a supplemental sheet(s).		
		the assignee was, or conc	ocumentary evidence of the chain of title from the urrently is being, submitted for recordation		
		sion in accordance with 37 CF	original assignment documents(s)) must be submitted FR Part 3, to record the assignment in the records of the		
The ur	ndersigned (whose	title is supplied below) is a	uthorized to act on behalf of the assignee.		
	Ret 1		October 1, 2012		
	Signat	ure	Date		
-	Robert D. Su		312-321-4200		
	Printed or Ty	ped Name	Telephone Number		
	Attorn				
	Title	9			

Electronic Acl	knowledgement Receipt
EFS ID:	13880074
Application Number:	13572166
International Application Number:	
Confirmation Number:	9752
Title of Invention:	REMOTE ENTRY SYSTEM
First Named Inventor/Applicant Name:	Christopher John Burke
Customer Number:	757
Filer:	Robert Dalton Summers/Maggie Pieczonka
Filer Authorized By:	Robert Dalton Summers
Attorney Docket Number:	12838/8
Receipt Date:	01-OCT-2012
Filing Date:	10-AUG-2012
Time Stamp:	16:36:29
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Information:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Miscellaneous Incoming Letter	128388tl.pdf	14596 no		1
'	Miscellaneous incoming Letter	12030011.pui	61dda4a9e67218267b3df1b25957ecfe7c8 3f15a		
Warnings:					

2	Assignee showing of ownership per 37 CFR 3.73.	128388373b.pdf	11548	no	1				
			32629a64a4872999e755cfe36dadbb7b878 d61fa						
Warnings:									
Information:									
Total Files Size (in bytes):			26144						

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.nspto.gov

APPLICATION NUMBER FILING OR 371(C) DATE FIRST NAMED APPLICANT ATTY. DOCKET NO./TITLE

13/572,166 08/10/2012

Christopher John Burke 12838/8

Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 Chicago, IL 60610 CONFIRMATION NO. 9752
POA ACCEPTANCE LETTER

Date Mailed: 10/12/2012

NOTICE OF ACCEPTANCE OF POWER OF ATTORNEY

This is in response to the Power of Attorney filed 10/01/2012.

The Power of Attorney in this application is accepted. Correspondence in this application will be mailed to the above address as provided by 37 CFR 1.33.

/ddinh/				
Office of Data Management	Application Assistance Unit (571)	272-4000	or (571) 272-4200	or 1-888-786-010

page 1 of 1



Michael E. Milz

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NUMBER

FILING OR 371(C) DATE

FIRST NAMED APPLICANT

ATTY. DOCKET NO./TITLE

13/572,166

08/10/2012

Christopher John Burke

12838/8 **CONFIRMATION NO. 9752**

PUBLICATION NOTICE

Brinks Hofer Gilson & Lione P.O. Box 10395 Chicago, IL 60610

Title: REMOTE ENTRY SYSTEM

Publication No.US-2012-0311343-A1

Publication Date: 12/06/2012

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently http://www.uspto.gov/patft/.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Office of Public Records. The Office of Public Records can be reached by telephone at (703) 308-9726 or (800) 972-6382, by facsimile at (703) 305-8759, by mail addressed to the United States Patent and Trademark Office, Office of Public Records, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently http://pair.uspto.gov/. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Managment, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101

page 1 of 1

FORM PTO-1449	APPLICATION SERIAL NO.	CASE NO.
	13/572,166	12838/8
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE	GROUP ART UNIT
APPLICANTS' INFORMATION DISCLOSURE	August 10, 2012	2438
STATEMENT		
Confirmation No. 9752	APPLICANT: BURKE, Christop	her John

EXAMINER INITIAL	OTHER ART – NON PATENT LITERATURE DOCUMENT (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.		
	A1	Notice of Acceptance dated September 18, 2012 for co-pending Australian Patent Office Application No. 2009201293 (3 pp.).	

EXAMINER	DATE CONSIDERED

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

CERTIFICATE OF EFS FILING UNDER 37 CFR §1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: December 13, 2012 Name: Robert D. Summers, Jr., Reg. No. 57,844 Signature: Robert D. Summers, Jr./

В	R	: 1	N	K	S
Н	C)	F	Е	R
G	I	L	s	0	N
&	L	I	0	N	Ε

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re	n re Appln. of: BURKE, Christopher John								
Appli	cation No.:	13/572,166		Examiner: Not Yet Assigned					
Filed		Augu	ıst 10, 2012			 Art Unit: 2438			
_		•	·	OTE		Confirmation No.: 9752			
For:		KEIVI	OTE ENTRY S	YSIEW		Confirma	atio	n No.:	9752
Attor	ney Docket No:	1283	8/8						
			TRAN	SMITT	ΔL				
Comm PO Bo	top Amendment issioner for Patents x 1450 dria, VA 22313-1450				· • <u> </u>				
Sir:									
Attached are: ☐ Transmittal Letter; Information Disclosure Statement; PTO Form 1449; copy of cited reference A1 (3 pp.). Fee calculation: ☐ No additional fee is required. ☐ Small Entity. ☐ An extension fee in an amount of \$ for amonth extension of time under 37 CFR § 1.17().					· · · · ·				
	A petition or processing An additional filing fee					1.17()	١.		
Ц	All additional lilling let	ilas be	sen calculated as si	iowii below				N-4 - 0-	
					Sm	all Entity		Not a Si	mall Entity
	Claims Remaining After Amendment		Highest No. Previously Paid For	Present Extra	Rate	Add'l Fee	OR	Rate	Add'l Fee
Total		Minus			x \$31=			x \$62=	\$
Indep.		Minus			x 125=	:		x \$250=	
First Pr	esentation of Multiple De	p. Claim			+\$225=			+ \$450=	
					Tota	\$		Total	\$
Fee pa	ayment:								
	Please charge Depos	it Accou	ınt No. 23-1925 in t	ne amount	of \$	for the filing	fee.		
	Payment by credit card in the amount of \$ (Form PTO-2038 is attached).								
	The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 associated with this paper (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.								
				Respec	tfully subr	nitted,			

/Robert D. Summers, Jr./

Robert D. Summers, Jr. (Reg. No. 57,844)

BRINKS HOFER GILSON &LIONE December 13, 2012

Date

Electronic Ac	knowledgement Receipt
EFS ID:	14451415
Application Number:	13572166
International Application Number:	
Confirmation Number:	9752
Title of Invention:	REMOTE ENTRY SYSTEM
First Named Inventor/Applicant Name:	Christopher John Burke
Correspondence Address:	Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 - Chicago IL 60610 US 3123214200 -
Filer:	Robert Dalton Summers/Maggie Pieczonka
Filer Authorized By:	Robert Dalton Summers
Attorney Docket Number:	12838/8
Receipt Date:	13-DEC-2012
Filing Date:	10-AUG-2012
Time Stamp:	13:02:04
Application Type:	Utility under 35 USC 111(a)
Payment information:	<u> </u>

Payment information:

Submitted with Payment	no	
File Listing:		

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	T	120200105 15	52815		2
1	Transmittal Letter	128388IDS.pdf	8ee12b416b5aa1bc18475b05bb28507ef7c 4e328	no	
Warnings:					
Information:					
2	Information Disclosure Statement (IDS)	1283881449.pdf	24484	no	1
-	Form (SB08)	.20000	9aa347b85f5f0946baa1d7efa65b9a6e7b8b 1ddd	5	ı
Warnings:					
Information:					
This is not an U	SPTO supplied IDS fillable form				
3	Non Patent Literature	128388A1.pdf	34053	no	3
,	Non ratent Enclature	120300711.pull	b01cb0656c36147f36bc41956613249d7e9 dd327	110	J
Warnings:					
Information:					
4	Miscellaneous Incoming Letter	128388tl.pdf	41662	no	1
·			9572f22d41694abcde66078251defdb1ce0 d63ec		-
Warnings:					
Information:					
		Total Files Size (in bytes):	15	53014	

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New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

Certificate Under 37 CFR 1.8

I hereby certify that this correspondence is being electronically transmitted to the U.S. Patent and Trademark Office, Commissioner for Patents, via the EFS on December 13, 2012.

/Robert D. Summers, Jr./

Robert D. Summers, Jr., Reg. No. 57,844

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: BURKE, Christopher John

Application No.: 13/572,166 | Examiner: Not Yet Assigned

Filed: August 10, 2012 Art Unit: 2438

For: REMOTE ENTRY SYSTEM | Confirmation No.: 9752

Attorney Docket No: 12838/8

INFORMATION DISCLOSURE STATEMENT

In accordance with the duty of disclosure under 37 C.F.R. §1.56 and §§1.97-1.98, and more particularly in accordance with 37 C.F.R. §1.97(b), Applicant hereby cites the following reference:

OTHER ART

Notice of Acceptance dated September 18, 2012 for co-pending Australian Patent Office Application No. 2009201293 (3 pp.).

Applicant is enclosing Form PTO-1449 (one sheet), along with a copy of cited reference A1, which is required under 37 C.F.R. §1.98(a)(2). As the listed reference is in English, no further commentary is believed to be necessary, 37 C.F.R §1.98(a)(3). Applicant respectfully requests the Examiner's consideration of the above reference and entry thereof into the record of this application.

By submitting this Statement, Applicant is attempting to fully comply with the duty of candor and good faith mandated by 37 CFR §1.56. As such, this Statement is not intended to constitute an admission that the enclosed reference, or other information referred to therein, constitutes "prior art" or is otherwise "material to patentability," as that phrase is defined in 37 CFR §1.56(a).

Applicant has calculated no fee to be due in connection with the filing of this Information Disclosure Statement. However, the Director is authorized to charge any fee deficiency associated with the filing of this Information Disclosure Statement to a deposit account, as authorized in the Transmittal accompanying this Information Disclosure Statement.

Respectfully submitted,

<u>December 13, 2012</u>

Date

/Robert D. Summers, Jr./

Robert D. Summers, Jr. (Reg. No. 57,844)

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/572,166	08/10/2012	Christopher John Burke	12838/8	9752
Michael E. Mil	7590 03/26/201 Z	4	EXAM	IINER
Brinks Hofer G P.O. Box 1039:			RAHMAN, MO	OHAMMAD L
Chicago, IL 60			ART UNIT	PAPER NUMBER
			2438	
			MAIL DATE	DELIVERY MODE
			03/26/2014	PAPER

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

The time period for reply, if any, is set in the attached communication.

	Application No. 13/572,166	Applicant(s) BURKE, CHI) RISTOPHER JOHN			
Office Action Summary	Examiner MOHAMMAD L. RAHMAN	Art Unit 2438	AIA (First Inventor to File) Status No			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPL THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statut. Any reply received by the Office later than three months after the mailine arned patent term adjustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be tir will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	nely filed the mailing date o D (35 U.S.C. § 133	f this communication.			
Status						
1) Responsive to communication(s) filed on <u>8/10</u> A declaration(s)/affidavit(s) under 37 CFR 1 .	130(b) was/were filed on					
· <u> </u>	s action is non-final.					
3) An election was made by the applicant in resp			ng the interview on			
; the restriction requirement and electio Since this application is in condition for allowated closed in accordance with the practice under	ance except for formal matters, pro	secution as t	to the merits is			
Disposition of Claims*						
5) Claim(s) 1-44 is/are pending in the application. 5a) Of the above claim(s) is/are withdrawn from consideration. 6) Claim(s) is/are allowed. 7) Claim(s) 1-44 is/are rejected. 8) Claim(s) is/are objected to. 9) Claim(s) are subject to restriction and/or election requirement. * If any claims have been determined allowable, you may be eligible to benefit from the Patent Prosecution Highway program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov . Application Papers						
10) The specification is objected to by the Examine 11) The drawing(s) filed on 8/10/2012 is/are: a) Applicant may not request that any objection to the	accepted or b) objected to by					
Replacement drawing sheet(s) including the correct			* *			
Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). Certified copies: a) All b) Some** c) None of the: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
** See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892)	3) Interview Summary					
2) Niformation Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b) Paper No(s)/Mail Date 12/13/2012 Paper No(s)/Mail Date 12/13/2012 4) Other:						

U.S. Patent and Trademark Office PTOL-326 (Rev. 11-13)

Office Action Summary

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DETAILED ACTION

Claims 1-44 filed 08/10/2012 presented for examination. Claims 1-44 are pending.

Information Disclosure Statement

The information disclosure statement filed 12/13/2012 has been placed in the application file and the information referred to therein has been considered as to the merits.

Oath or Declaration

The Oath filed on 08/10/2012 complies with all the requirements set forth in MPEP 602 and therefore is accepted.

Drawings

The drawings filed on 08/10/2012 have been accepted.

Double Patenting

The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed <u>terminal disclaimer</u> in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

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).

<u>Claims 1-44</u> are provisionally rejected on the ground of <u>nonstatutory obviousness-type double</u> <u>patenting</u> as being unpatentable over <u>claims 1-14 of US Patent # 8,266,442</u>. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-14 of US

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Patent # 8,266,442 contain every element of claims 23-42 of the instant application and thus anticipate

the claim of the instant application.

Claims 1-44 of the instant application therefore is/are not patently distinct from the earlier patent claim(s) and as such is/are unpatentable over obvious-type double patenting. A later patent/application claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim. "A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). " ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001). "Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982). Accordingly,

Claim Rejections - 35 USC § 112

absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-

The following is a quotation of 35 U.S.C. 112(b):

type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-26, 37-40 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter

which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Claims 1, 3, 14, 21, 37, and 39 are directed towards "a system/an apparatus" claim. Claim

elements "means for enrolling, means for receiving, means for mapping, means for matching, means for

emitting, means for receiving, means for providing, means for incorporating, means for constructing" is a

limitation that invokes 35 U.S.C. 112, sixth paragraph. However, the written description fails to disclose

the corresponding structure, material, or acts for the claimed function. Dependent claims 2, 4-13, 15-20,

22-26, 38, and 40 do not cure the deficiencies.

Applicant may:

(a) Amend the claim so that the claim limitation will no longer be interpreted as a limitation

under 35 U.S.C. 112, sixth paragraph; or

(b) Amend the written description of the specification such that it expressly recites what

structure, material, or acts perform the claimed function without introducing any new matter (35 U.S.C.

132(a)).

If applicant is of the opinion that the written description of the specification already implicitly or

inherently discloses the corresponding structure, material, or acts so that one of ordinary skill in the art

would recognize what structure, material, or acts perform the claimed function, applicant should clarify the

record by either:

(a) Amending the written description of the specification such that it expressly recites the

corresponding structure, material, or acts for performing the claimed function and clearly links or

associates the structure, material, or acts to the claimed function, without introducing any new matter (35

U.S.C. 132(a)); or

(b) Stating on the record what the corresponding structure, material, or acts, which are

implicitly or inherently set forth in the written description of the specification, perform the claimed function.

For more information, see 37 CFR 1.75(d) and MPEP §§ 608.01(o) and 2181.

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Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 9-12, 14, 21, 23, 27, 29, 31, 33, 35, 37, and 39 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. US 7,152,045 (hereinafter "Hoffman") in view of Igaki et al. US 5,109,428 (hereinafter "Igaki").

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 1, Hoffman taught a system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for <u>authorization of transactions and transmissions</u>. The tokenless system and method are principally based on a <u>correlative</u>

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comparison of a unique biometrics sample, such as a finger print or voice recording, gathered

directly from the person of an unknown user, with an authenticated biometrics sample of the

same type obtained and stored previously.), the system comprising:

a database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

a transmitter subsystem (i.e. Biometric Input Device, fig. 3 item 12]) comprising:

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42); and

means for enrolling relevant signatures into the database according to the instruction (see col. 8,

lines 25-26);

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting a

secure access signal conveying information dependent upon said accessibility attribute (see col. 8, lines

29-33: comparison of the biometric sample taken from said first individual with any previously

stored biometric samples in said selected personal identification code-basket to make sure that

the biometric sample entered by said first individual is algorithmically unique from the previously

stored at least one biometric sample provided by at least one second individual; see col. 8, lines

46-50, 54-55: comparison of the entered biometric sample from said first individual with said at

least one stored biometric sample from said at least one second individual in said entered

personal identification code-basket for producing either a successful or failed identification

result; an output step wherein said identification result or said determination is externalized and

displayed, and; a presentation step wherein on successful identification of said first individual,

said private code is presented to said first individual);

said system further comprising:

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a receiver sub-system comprising; means for receiving the transmitted secure access signal (See

col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input

by the ATM); and

means for providing conditional access to the controlled item dependent upon said information

(see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends

the resulting asset account number along with the private code. The ATM decrypt the response,

displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the

individual is performing a standard account access [e.g. accessibility attribute], or a "duress"

account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a

session by providing identification by entering their biometric-PIC. The BIA constructs an

Identification Request message, and send it to the DPC for verification. Once the system verifies

the individual, the CST application can operate normally, though limited by the individual's

previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction

authorization service can decide to deny any request for over \$300 from low security BIA,

requiring individuals to use higher security BIA to authorize such sums. The authorization service

can also use the security level as a quide on how much to charge for the transaction, based on

risk.).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught wherein the means for

enrolling relevant signatures into the database of biometric signatures comprises: means for receiving a

series of entries of the biometric signal, said series being characterized according to at least one of the

number of said entries and a duration of each said entry; means for mapping said series into an

instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data

during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially

transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the

produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the

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single operation of pressing the fingerpad onto the inspection plate." This method is the improvement

from already known successive multiple fingerprint pressing down operations to performing only a single

operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide

an improved apparatus and method for use in fingerprint identification for extracting minutia data from

fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried

out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment

between successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of <u>lgaki</u>:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, *[Hoffman, fig. 3, item 12*] the ability

to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad

so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (Ikagi:

Col. 1:49-51]).

Regarding claim 9, Hoffman in view of Igaki further taught a system according to claim 1, further

comprising a control panel for receiving the information and for providing the secure access requested

(Hoffman, fig. 2, ref. 12).

Regarding claim 10, Hoffman in view of Igaki further taught a system according to claim 9

wherein the control panel includes a converter for receiving the secure wireless signal and for outputting

the information (*Hoffman, col. 14, lines 18-24*).

Regarding claim 11, Hoffman in view of Igaki further taught a system according to claim 9,

wherein the biometric sensor authenticates the identity of the user by comparing a biometric input from

the user with a biometric signature for the user in the biometric database. (See Hoffman, col. 8, lines 45-

50).

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Regarding claim 12, Hoffman in view of Igaki further taught a system according to claim 9, wherein the secure wireless signal comprises an RF carrier and a rolling code (Hoffman, col. 15, lines

30-36).

Regarding claim 14, Hoffman taught a transmitter sub-system (i.e. Biometric Input Device, fig. 3 item 12]) for operating in a system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for authorization of transactions and transmissions.

The tokenless system and method are principally based on a correlative comparison of a unique biometrics sample, such as a finger print or voice recording, gathered directly from the person of an unknown user, with an authenticated biometrics sample of the same type obtained and stored

previously.), the system comprising:

a database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

a receiver sub-system comprising means for receiving a secure access signal transmitted by the transmitter sub-system (See col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input by the ATM), and means for providing conditional access to the controlled item dependent upon information conveyed in the secure access signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends the resulting asset account number along with the private code. The ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the individual is performing a standard account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC

privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to

deny any request for over \$300 from low security BIA, requiring individuals to use higher security

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BIA to authorize such sums. The authorization service can also use the security level as a guide

on how much to charge for the transaction, based on risk.);

wherein the transmitter subsystem comprises:

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42); and

means for enrolling relevant signatures into the database according to the instruction (see col. 8,

lines 25-26);

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting the

secure access signal conveying said information dependent upon said accessibility attribute (see col. 8,

lines 29-33: comparison of the biometric sample taken from said first individual with any

previously stored biometric samples in said selected personal identification code-basket to make

sure that the biometric sample entered by said first individual is algorithmically unique from the

previously stored at least one biometric sample provided by at least one second individual; see

col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual

with said at least one stored biometric sample from said at least one second individual in said

entered personal identification code-basket for producing either a successful or failed

identification result; an output step wherein said identification result or said determination is

externalized and displayed, and; a presentation step wherein on successful identification of said

first individual, said private code is presented to said first individual).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught wherein the means for

enrolling relevant signatures into the database of biometric signatures comprises: means for receiving a

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series of entries of the biometric signal, said series being characterized according to at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of Hoffman with the idea of producing a sequence of fingerprint image data of lgaki [lgaki:1:58-61] because the use of lgaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (Ikagi: Col. 1:49-51).

between successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Regarding claim 21, Hoffman taught a receiver sub-system for operating in a system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for authorization of transactions and transmissions. The tokenless system and method are principally based on a correlative comparison of a unique biometrics sample, such as a finger print or voice recording, gathered directly from the person of an unknown user, with an

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authenticated biometrics sample of the same type obtained and stored previously.), the system

comprising:

a database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

a transmitter subsystem (i.e. Biometric Input Device, fig. 3 item 12]) comprising:

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42); and

means for enrolling relevant signatures into the database according to the instruction see col. 8,

lines 25-26),

the transmitter sub-system further comprising:

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting a

secure access signal conveying information dependent upon said accessibility attribute (see col. 8, lines

29-33: comparison of the biometric sample taken from said first individual with any previously

stored biometric samples in said selected personal identification code-basket to make sure that

the biometric sample entered by said first individual is algorithmically unique from the previously

stored at least one biometric sample provided by at least one second individual; see col. 8, lines

46-50, 54-55: comparison of the entered biometric sample from said first individual with said at

least one stored biometric sample from said at least one second individual in said entered

personal identification code-basket for producing either a successful or failed identification

result; an output step wherein said identification result or said determination is externalized and

displayed, and; a presentation step wherein on successful identification of said first individual,

said private code is presented to said first individual);

wherein the receiver sub-system comprises;

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means for receiving the transmitted secure access signal; and means for providing conditional access to the controlled item dependent upon said information (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends the resulting asset account number along with the private code. The ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the individual is performing a standard account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to deny any request for over \$300 from low security BIA, requiring individuals to use higher security BIA to authorize such sums. The authorization service can also use the security level as a quide on how much to charge for the transaction, based on risk.).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art lgaki which addressed the same field of endeavor in fingerprint identification explicitly taught wherein the means for enrolling relevant signatures into the database of biometric signatures comprises: means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide

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an improved apparatus and method for use in fingerprint identification for extracting minutia data from

fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried

out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment

between successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad

so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (Ikagi:

Col. 1:49-51]).

Regarding claim 23, Hoffman-Igaki combination taught a receiver sub-system according to claim

21, wherein the database of biometric signatures comprises signatures in at least one of a system

administrator class and a system user class (*Hoffman, col. 60, lines 34-43; col. 8, lines 20-55*).

Regarding claim 27, Hoffman taught a method for providing secure access to a controlled item,

the method comprising the steps of (see [Abstract] A tokenless identification system and method for

authorization of transactions and transmissions. The tokenless system and method are principally

based on a correlative comparison of a unique biometrics sample, such as a finger print or voice

<u>recording, gathered directly from the person</u> of an unknown user, with an authenticated

biometrics sample of the same type obtained and stored previously.):

enrolling, by a transmitter sub-system, relevant signatures into a database using a biometric

sensor (See [7:24-26] During a registration step, the individual is to register with the system an

authenticated biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal

(BRT) is to register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42),

and

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enrolling relevant signatures into the database according to the instruction (see col. 8, lines 25-

26);

receiving, by the transmitter sub-system, a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

matching, by the transmitter sub-system, the biometric signal against members of the database of

biometric signatures to thereby output an accessibility attribute if the matching is authenticated; emitting,

by the transmitter sub-system, a secure access signal conveying information dependent upon said

accessibility attribute; and providing conditional access to the controlled item dependent upon said

information (see col. 8, lines 29-33: comparison of the biometric sample taken from said first

individual with any previously stored biometric samples in said selected personal identification

code-basket to make sure that the biometric sample entered by said first individual is

algorithmically unique from the previously stored at least one biometric sample provided by at

least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric

sample from said first individual with said at least one stored biometric sample from said at least

one second individual in said entered personal identification code-basket for producing either a

successful or failed identification result; an output step wherein said identification result or said

determination is externalized and displayed, and; a presentation step wherein on successful

identification of said first individual, said private code is presented to said first individual).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught by receiving a series of

entries of the biometric signal, said series being characterized according to at least one of the number of

said entries and a duration of each said entry, mapping said series into an instruction (see Abstract, "An

optical sensor unit optically produces a sequence of fingerprint image data during a single operation of

pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with

increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in

the form of a sequence of fingerprint image data obtained during the single operation of pressing the

fingerpad onto the inspection plate." This method is the improvement from already known successive

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multiple fingerprint pressing down operations to performing only a single operation of pressing down of

the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and

method for use in fingerprint identification for extracting minutia data from fingerprint image data in which

a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single

operation of pressing down of the fingerpad, on a sensor the alignment between successive fingerprint

image data produced in successive, multiple fingerprint pressing down operations as in the prior art

becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of <u>Igaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad

so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (*Ikagi*:

Col. 1:49-51]).

Regarding claim 29, Hoffman-Igaki combination taught a method according to claim 27, wherein

the database of biometric signatures comprises signatures in at least one of a system administrator class, $\frac{1}{2}$

a system user class, and a duress class (Hoffman, col. 60, lines 34-43; col. 8, lines 20-55).

Regarding claim 31, Hoffman taught a method for

enrolling, by a transmitter subsystem, relevant signatures into a database of biometric signatures

(col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36) in a system for

providing secure access to a controlled item (see [Abstract] A tokenless identification system and

method for authorization of transactions and transmissions. The tokenless system and method

are principally based on a correlative comparison of a unique biometrics sample, such as a finger

print or voice recording, gathered directly from the person of an unknown user, with an

authenticated biometrics sample of the same type obtained and stored previously.), the system

comprising:

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said database of biometric signatures; the transmitter sub-system (i.e. Biometric Input Device,

fig. 3 item 12]) comprising:

a biometric sensor configured for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42);

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting a

secure access signal conveying information dependent upon said accessibility attribute (see col. 8, lines

29-33: comparison of the biometric sample taken from said first individual with any previously

stored biometric samples in said selected personal identification code-basket to make sure that

the biometric sample entered by said first individual is algorithmically unique from the previously

stored at least one biometric sample provided by at least one second individual; see col. 8, lines

46-50, 54-55: comparison of the entered biometric sample from said first individual with said at

least one stored biometric sample from said at least one second individual in said entered

personal identification code-basket for producing either a successful or failed identification

result; an output step wherein said identification result or said determination is externalized and

displayed, and; a presentation step wherein on successful identification of said first individual,

said private code is presented to said first individual); and

a receiver sub-system comprising: means for receiving the transmitted secure access signal; and

means for providing conditional access to the controlled item dependent upon information in said secure

access signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-

PIC and sends the resulting asset account number along with the private code. The ATM decrypt

the response, displays [Col. 41, lines 1-8] the private code and <u>examines response to see whether</u>

or not the individual is performing a standard account access [e.g. accessibility attribute], or a

<u>"duress" account access [e.g. accessibility attribute]</u>, see also [38:53-60] An individual using a

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CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to deny any request for over \$300 from low security BIA, requiring individuals to use higher security BIA to authorize such sums. The authorization service can also use the security level as a guide on how much to charge for the transaction, based on risk.); said method comprising the steps of:

enrolling, by the transmitter sub-system, said relevant signatures into the database according to the instruction (*see col. 8, lines 25-26*).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which addressed the same field of endeavor in fingerprint identification explicitly taught receiving, by the transmitter sub-system, a series of entries of the biometric signal characterized according to at least one of the number of said entries and a duration of each said entry; determining, by the transmitter sub-system, at least one of the number of said entries and a duration of each said entry; mapping, by the transmitter sub-system, said series into an instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerprint invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing

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down of the fingerpad, on a sensor the alignment between successive fingerprint image data produced in

successive, multiple fingerprint pressing down operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of <u>lgaki</u>:1:58-61] because

the use of <u>Igaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad

so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (*Ikagi*:

Col. 1:49-51]).

Regarding claim 33, Hoffman taught a method for transmitting a secure access signal in a

system for providing secure access to a controlled item (see [Abstract] A tokenless identification

system and method for <u>authorization of transactions and transmissions</u>. The tokenless system

and method are principally based on a <u>correlative comparison of a unique biometrics sample,</u>

such as a finger print or voice recording, gathered directly from the person of an unknown user,

with an authenticated biometrics sample of the same type obtained and stored previously.), the

system comprising:

a database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

a receiver sub-system comprising: means for receiving the secure access signal transmitted by a

transmitter sub-system (See col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC

is receiving biometric input by the ATM),

the transmitter sub-system (i.e. Biometric Input Device, fig. 3 item 12]) comprising a biometric

sensor (fig.3, ref. 12; col. 13, lines 2-8) and being configured for enrolling relevant signatures into the

database using the biometric sensor (See [7:24-26] During a registration step, the individual is to

register with the system an authenticated biometric sample; [36:44-46] The purpose of the

Biometric Registration Terminal (BRT) is to register new individuals including their biometric-PIC,

see further 37:12-14, 49:40-42).

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transaction, based on risk.);

enrolling relevant signatures into the database according to the instruction (see col. 8, lines 25-

26);

means for providing conditional access to the controlled item dependent upon information conveyed in the secure access signal (see [Col. 40, lines 62-67] the <u>Data processing center (DPC)</u> validates the biometric-PIC and sends the resulting asset account number along with the private code. The ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and <u>examines response to see whether or not the individual is performing a standard account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to deny any request for over \$300 from</u>

said method comprising the steps of: receiving, by the transmitter sub-system, a biometric signal by the biometric sensor (*fig.3, ref. 12; col. 13, lines 2-8*);

low security BIA, requiring individuals to use higher security BIA to authorize such sums. The

authorization service can also use the security level as a quide on how much to charge for the

matching, by the transmitter sub-system, the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute if the matching is authenticated; and emitting, by the transmitter sub-system, the secure access signal conveying said information dependent upon said accessibility attribute (see col. 8, lines 29-33: comparison of the biometric sample taken from said first individual with any previously stored biometric samples in said selected personal identification code-basket to make sure that the biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual with said at least one stored biometric sample from said at least

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one second individual in said entered personal identification code-basket for producing either a

successful or failed identification result; an output step wherein said identification result or said

determination is externalized and displayed, and; a presentation step wherein on successful

identification of said first individual, said private code is presented to said first individual).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught receiving a series of

entries of the biometric signal, said series being characterised according to at least one of the number of

said entries and a duration of each said entry, mapping said series into an instruction (see Abstract, "An

optical sensor unit optically produces a sequence of fingerprint image data during a single operation of

pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with

increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in

the form of a sequence of fingerprint image data obtained during the single operation of pressing the

fingerpad onto the inspection plate." This method is the improvement from already known successive

multiple fingerprint pressing down operations to performing only a single operation of pressing down of

the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and

method for use in fingerprint identification for extracting minutia data from fingerprint image data in which

a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single

operation of pressing down of the fingerpad, on a sensor the alignment between successive fingerprint

image data produced in successive, multiple fingerprint pressing down operations as in the prior art

becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, fig. 3, item 12 the ability

to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad

so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (*Ikagi*:

Col. 1:49-51]).

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Regarding claim 35, Hoffman taught a method for receiving a secure access signal in a system

for providing secure access to a controlled item (see [Abstract] A tokenless identification system and

method for <u>authorization of transactions and transmissions</u>. The tokenless system and method

are principally based on a correlative comparison of a unique biometrics sample, such as a finger

print or voice recording, gathered directly from the person of an unknown user, with an

authenticated biometrics sample of the same type obtained and stored previously.), the system

comprising:

a database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

a transmitter subsystem (i.e. Biometric Input Device, fig. 3 item 12]), comprising:

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42),

enrolling relevant signatures into the database according to the instruction (see col. 8, lines 25-

26);

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting a

secure access signal conveying information dependent upon said accessibility attribute (see col. 8, lines

29-33: comparison of the biometric sample taken from said first individual with any previously

stored biometric samples in said selected personal identification code-basket to make sure that

the biometric sample entered by said first individual is algorithmically unique from the previously

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stored at least one biometric sample provided by at least one second individual; see col. 8, lines

46-50, 54-55: comparison of the entered biometric sample from said first individual with said at

least one stored biometric sample from said at least one second individual in said entered

personal identification code-basket for producing either a successful or failed identification

result; an output step wherein said identification result or said determination is externalized and

displayed, and; a presentation step wherein on successful identification of said first individual,

said private code is presented to said first individual),

said method comprising the steps of: receiving the transmitted secure access signal (See col. 40,

lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input by the

ATM); and providing conditional access to the controlled item dependent upon said information (see [Col.

40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends the

resulting asset account number along with the private code. The ATM decrypt the response,

displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the

individual is performing a standard account access [e.g. accessibility attribute], or a "duress"

account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a

session by providing identification by entering their biometric-PIC. The BIA constructs an

Identification Request message, and send it to the DPC for verification. Once the system verifies

the individual, the CST application can operate normally, though limited by the individual's

previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction

authorization service can decide to deny any request for over \$300 from low security BIA,

requiring individuals to use higher security BIA to authorize such sums. The authorization service

can also use the security level as a quide on how much to charge for the transaction, based on

risk.).

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught by receiving a series of

entries of the biometric signal, said series being characterised according to at least one of the number of

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said entries and a duration of each said entry, mapping said series into an instruction (see Abstract, "An

optical sensor unit optically produces a sequence of fingerprint image data during a single operation of

pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with

increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in

the form of a sequence of fingerprint image data obtained during the single operation of pressing the

fingerpad onto the inspection plate." This method is the improvement from already known successive

multiple fingerprint pressing down operations to performing only a single operation of pressing down of

the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and

method for use in fingerprint identification for extracting minutia data from fingerprint image data in which

a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single

operation of pressing down of the fingerpad, on a sensor the alignment between successive fingerprint

image data produced in successive, multiple fingerprint pressing down operations as in the prior art

becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, *fig. 3, item 12*] the ability

to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad

so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (*Ikagi*:

Col. 1:49-51]).

Regarding claim 37, Hoffman taught an apparatus for providing secure access to a controlled

item (see [Abstract] A tokenless identification system and method for authorization of

transactions and transmissions. The tokenless system and method are principally based on a

correlative comparison of a unique biometrics sample, such as a finger print or voice recording,

gathered directly from the person of an unknown user, with an authenticated biometrics sample of

the same type obtained and stored previously.), said apparatus comprising:

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a transmitter sub-system (i.e. Biometric Input Device, fig. 3 item 12]) comprising:

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into a database using the biometric sensor (See [7:24-26]

During a registration step, the individual is to register with the system an authenticated biometric

sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to register new

individuals including their biometric-PIC, see further 37:12-14, 49:40-42);

means for enrolling relevant signatures into the database according to the instruction (see col. 8,

lines 25-26);

the transmitter sub-system further comprising: means for matching the biometric signal against

members of the database of biometric signatures to thereby output an accessibility attribute if the

matching is authenticated; and means for emitting a secure access signal conveying information

dependent upon said accessibility attribute; and wherein conditional access is provided to the controlled

item dependent upon said information (see col. 8, lines 29-33: comparison of the biometric sample

taken from said first individual with any previously stored biometric samples in said selected

personal identification code-basket to make sure that the biometric sample entered by said first

individual is algorithmically unique from the previously stored at least one biometric sample

provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the

entered biometric sample from said first individual with said at least one stored biometric sample

from said at least one second individual in said entered personal identification code-basket for

producing either a successful or failed identification result; an output step wherein said

identification result or said determination is externalized and displayed, and; a presentation step

wherein on successful identification of said first individual, said private code is presented to said

first individual).

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Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which addressed the same field of endeavor in fingerprint identification explicitly taught wherein the means for enrolling relevant signatures into the database of biometric signatures comprises: means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of <u>Hoffman</u> with the idea of <u>producing a sequence of fingerprint image</u> data of <u>Igaki</u> [<u>Igaki</u>:1:58-61] because the use of <u>Igaki</u> could provide the Biometric Input Device of <u>Hoffman</u> [<u>Hoffman</u>, fig. 3, item 12] the ability to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (<u>Ikagi</u>: Col. 1:49-51).

between successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Regarding claim 39, Hoffman taught an apparatus, in a transmitter sub-system, for enrolling relevant signatures into a database of biometric signatures in a system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for authorization of

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transactions and transmissions. The tokenless system and method are principally based on a

correlative comparison of a unique biometrics sample, such as a finger print or voice recording.

gathered directly from the person of an unknown user, with an authenticated biometrics sample of

the same type obtained and stored previously.), the system comprising:

said database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

the transmitter subsystem (i.e. Biometric Input Device, fig. 3 item 12]), comprising:

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42);

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting a

secure access signal conveying information dependent upon said accessibility attribute (see col. 8, lines

29-33: comparison of the biometric sample taken from said first individual with any previously

stored biometric samples in said selected personal identification code-basket to make sure that

the biometric sample entered by said first individual is algorithmically unique from the previously

stored at least one biometric sample provided by at least one second individual; see col. 8, lines

46-50, 54-55: comparison of the entered biometric sample from said first individual with said at

least one stored biometric sample from said at least one second individual in said entered

personal identification code-basket for producing either a successful or failed identification

result; an output step wherein said identification result or said determination is externalized and

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displayed, and; a presentation step wherein on successful identification of said first individual,

said private code is presented to said first individual);

the system further comprising:

a receiver sub-system comprising: means for receiving the transmitted secure access signal (See

col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input

by the ATM); and

means for providing conditional access to the controlled item dependent upon information in said

secure access signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the

biometric-PIC and sends the resulting asset account number along with the private code. The

ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response to

see whether or not the individual is performing a standard account access [e.g. accessibility

attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An

individual using a CST starts a session by providing identification by entering their biometric-PIC.

The BIA constructs an Identification Request message, and send it to the DPC for verification.

Once the system verifies the individual, the CST application can operate normally, though limited

by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial

transaction authorization service can decide to deny any request for over \$300 from low security

BIA, requiring individuals to use higher security BIA to authorize such sums. The authorization

service can also use the security level as a guide on how much to charge for the transaction,

based on risk.);

means for enrolling relevant signatures into the database according to the instruction (see col. 8,

lines 25-26)

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught said apparatus

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comprising: means for receiving a series of entries of the biometric signal; means for determining at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment between successive fingerprint image data produced in successive, multiple fingerprint pressing down operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because the use of Igaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (Ikagi: Col. 1:49-51).

Claims 2, 15, 22, 28, 32, 34, 36, 38, and 40 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. US 7,152,045 (hereinafter "Hoffman") in view of Igaki et al. US 5,109,428 (hereinafter "Igaki") as applied to claims 1, 14, 21, 27, 31, 33, 35, 37, and 39 above and in further view of Fuks et al. US 6,992,562 hereinafter ("Fuks").

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully

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requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.),

cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 2, 15, 22, 28, 32, 34, 36, 38, 40, Hoffman-Igaki combination taught a system according to claim 1 / a transmitter sub-system according to claim 14 / a receiver sub-system according to claim 21 / a method according to claim 27 / a method according to claim 31 / a method according to claim 33 / a method according to claim 35 / a method according to claim 37 / an apparatus according to claim 39, the combination is silent on but the analogous art Fuks taught wherein the biometric sensor and the transmitter are located in a remote portable key fob (See col. 2, lines 33-35, 42-45: The wireless device (preferably a key fob) includes a transmitter, a biometric sensor).

Therefore, it would have been obvious to one having ordinary skill in the art at the time the applicant(s) invention was made to modify the combined invention of Hoffman & Igaki by including a remote portable key fob that includes transmitter and biometric sensor as taught by Fuks (Fuks, col. 2, lines 33-35, 42-45) for the advantage of providing a secured wireless remote keyless entry device to a system (*Fuks, col. 1, lines 35-55*).

Claims 41, 43 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. US 7,152,045 (hereinafter "Hoffman") in view of Igaki et al. US 5,109,428 (hereinafter "Igaki") and in further view of Koo et al. WO 02/12660 hereinafter ("Koo").

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

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Regarding claim 41, Hoffman taught a method of enrolling a biometric signature into a database

of biometric signatures in a system for providing secure access to a controlled item (see [Abstract] A

tokenless identification system and method for authorization of transactions and transmissions.

The tokenless system and method are principally based on a correlative comparison of a unique

biometrics sample, such as a finger print or voice recording, gathered directly from the person of

an unknown user, with an authenticated biometrics sample of the same type obtained and stored

previously.), the system comprising:

said database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database;

see col. 8, lines 30-36);

a transmitter subsystem (i.e. Biometric Input Device, fig. 3 item 12]) for receiving a biometric

signal (fig.3, ref. 12; col. 13, lines 2-8),

the transmitter sub-system comprising: a biometric sensor (fig.3, ref. 12; col. 13, lines 2-8);

means for enrolling relevant signatures into the database using the biometric sensor (See [7:24-

26] During a registration step, the individual is to register with the system an authenticated

biometric sample; [36:44-46] The purpose of the Biometric Registration Terminal (BRT) is to

register new individuals including their biometric-PIC, see further 37:12-14, 49:40-42);

means for enrolling relevant signatures into the database according to the instruction (see col. 8,

lines 25-26);

means for matching the biometric signal against members of the database of biometric signatures

to thereby output an accessibility attribute if the matching is authenticated; and means for emitting a

secure access signal conveying information dependent upon said accessibility attribute (see col. 8, lines

29-33: comparison of the biometric sample taken from said first individual with any previously

stored biometric samples in said selected personal identification code-basket to make sure that

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the biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual with said at least one stored biometric sample from said at least one second individual in said entered personal identification code-basket for producing either a successful or failed identification result; an output step wherein said identification result or said determination is externalized and displayed, and; a presentation step wherein on successful identification of said first individual,

the system further comprising: a receiver sub-system comprising: means for receiving the transmitted secure access signal (*See col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input by the ATM*); and

said private code is presented to said first individual);

means for providing conditional access to the controlled item dependent upon information in said secure access signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends the resulting asset account number along with the private code. The ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the individual is performing a standard account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to deny any request for over \$300 from low security BIA, requiring individuals to use higher security BIA to authorize such sums. The authorization service can also use the security level as a quide on how much to charge for the transaction, based on risk.); said method comprising the steps of: receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8);

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Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which addressed the same field of endeavor in fingerprint identification explicitly taught wherein the means for enrolling relevant signatures into the database of biometric signatures comprises: means for receiving a series of entries of the biometric signal, said series being characterized according to at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment between successive fingerprint image data produced in successive, multiple fingerprint pressing down operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of Hoffman with the idea of producing a sequence of fingerprint image data of lgaki [lgaki:1:58-61] because the use of lgaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability to produce a sequence of fingerprint image data from a single operation of pressing down of the fingerpad so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (Ikagi: Col. 1:49-51).

Hoffman-Igaki combination taught the method in claim 41; the combination is silent on enrolling the relevant signatures into the database using the biometric sensor as an administrator if the database of biometric signatures is empty. However, the analogous art Koo taught enrolling the relevant signatures

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into the database using the biometric sensor as an administrator if the database of biometric signatures is

empty (Koo, see [Page 16, lines 8-10] if no registered administrator fingerprint information exists as

empty, the inputted fingerprint is registered as initial administrator fingerprint, see also page 10, lines 12-

14).

Therefore, it would have been obvious to one ordinary skilled in the art at the time the applicant's

invention was made to modify the combined method of Hoffman of Igaki with the teaching of Koo for

enrolling the relevant signatures into the database using the biometric sensor as an administrator if the

database of biometric signatures is empty because they are analogous in biometric entry.

One of ordinary skilled in the art would have been motivated to incorporate the idea of Koo [Page,

5, lines 19-22; Page 16, lines 8-10] within the combined method of Hoffman [fig. 1] and Igaki because the

idea of Koo could provide the method of Hoffman to provide an electronic card key administration system

consisted of host computer systems for administration of a plural of the electronic fingerprint recognition

card keys (Koo, Page 3, lines 21-23).

Regarding claim 43, Hoffman-Igaki-Koo combination taught a method according to claim 41

wherein the enrolling step comprises receiving another biometric signal to confirm the enrolling of the

biometric as an administrator (Koo, see the person having inputted his fingerprint is authorized as a new

administrator [Page 16, lines 12-15]; and see also [Page 11, lines 16-18] the fingerprint code of the

administrator is stored by receiving the code stored in the administration system).

One of ordinary skilled in the art would have been motivated to incorporate the idea of Koo [Page

11, lines 16-18; Page 16, lines 12-15] within the combined method of Hoffman [fig. 1] and Igaki because

the idea of Koo could provide the method of Hoffman to provide an electronic card key administration

system consisted of host computer systems for administration of a plural of the electronic fingerprint

recognition card keys (Koo, Page 3, lines 21-23).

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Claims 42 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman et al. US 7,152,045 (hereinafter "Hoffman") in view of Igaki et al. US 5,109,428 (hereinafter "Igaki")

as applied to claim 41 above and in further view of Fuks et al. US 6,992,562 hereinafter ("Fuks").

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.),

cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 43, Hoffman-Igaki-Koo combination taught a method according to claim 41, the

combination is silent on but the analogous art Fuks taught wherein the biometric sensor and the

transmitter are located in a remote portable key fob (Fuks, See col. 2, lines 33-35, 42-45: The wireless

device (preferably a key fob) includes a transmitter, a biometric sensor).

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

applicant(s) invention was made to modify the combined invention of Hoffman, Igaki & Koo by including a

remote portable key fob that includes transmitter and biometric sensor as taught by Fuks (Fuks, col. 2,

lines 33-35, 42-45) for the advantage of providing a secured wireless remote keyless entry device to a

system (Fuks, col. 1, lines 35-55).

Allowable Subject Matter

Claims 3, 13, 16, 24, 30, and 44 would be allowable if rewritten to overcome the rejection(s)

under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), 2nd paragraph, non-statutory obviousness-type

double patenting set forth in this Office action and to include all of the limitations of the base claim (1, 14,

21, 27, 41) and any intervening claims (9-10, 23, 29, 43). Dependent claims 4-8, 17-20, and 25-26

depend upon one of the above-mentioned allowed claims and would be allowable by virtue of their

dependencies.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to MOHAMMAD L. RAHMAN whose telephone number is (571)270-7471. The examiner can

normally be reached on Monday to Friday: 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

TAGHI T. ARANI can be reached on 5712723787. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative

or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-

1000.

/MOHAMMAD L RAHMAN/

Primary Examiner, Art Unit 2438

Art Unit: 2438

					Application/	Control No.	Applicant(s)/Pate Reexamination	nt Under	
		Notice of Reference	s Cited		13/572,166			HRISTOPHER JOHN	
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				U.S. P	ATENT DOCUM	IENTS			
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY			Name		Classification	
*	Α	US-7,152,045	12-2006	Hoffma	n, Ned			705/43	
*	В	US-5,109,428	04-1992	lgaki et	al.			382/125	
*	С	US-6,992,562	01-2006	Fuks et	al.			340/5.52	
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"A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20140317

Receipt date: 12/13/2012 13572166 - GAU: 2438

FORM PTO-1449	APPLICATION SERIAL NO.	CASE NO.
	13/572,166	12838/8
LIST OF PATENTS AND PUBLICATIONS FOR	FILING DATE	GROUP ART UNIT
APPLICANTS' INFORMATION DISCLOSURE	August 10, 2012	2438
STATEMENT		
Confirmation No. 9752	APPLICANT: BURKE, Christop	her John

EXAMINER INITIAL	journ	OTHER ART – NON PATENT LITERATURE DOCUMENT (Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date page(s), volume-issue number(s), publisher, city and/or country where published.					
	A1	Notice of Acceptance dated September 18, 2012 for co-pending Australian Patent Office Application No. 2009201293 (3 pp.).					

EXAMINER	/Mohammad Rahman/	DATE CONSIDERED	03/24/2014	

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

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.L.R.

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
	MOHAMMAD L RAHMAN	2438

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
	MOHAMMAD L RAHMAN	2438

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	44	√							

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BIB DATA SHEET

CONFIRMATION NO. 9752

SERIAL NUMB 13/572,166			E		CLASS 726	GRO	2438	UNIT	ATTC	PRNEY DOCKET NO. 12838/8
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APPLICANTS										
INVENTORS Christopher John Burke, Ramsgate, AUSTRALIA;										
** CONTINUING DATA **********************************										
	** FOREIGN APPLICATIONS ************************************									
** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** ** SMALL ENTITY ** 08/22/2012										
Foreign Priority claimed		Yes No	☐ Metaf	ter	STATE OR		IEETS	TOT		INDEPENDENT
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EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	29	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/03/19 15:33
L2	16349	(713/182-186,168).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34
L3	23869	(726/2,7,26-30).OOLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34
L4	33433	(709/224-225). OOLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:35
L5	738	biometric with identif\$7 same (access near2 (right privilege control)) and (((unconditional unlimited) near2 access) duress alert telemetry)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
L6	33	(enroll\$3 register\$3) with (((biometric adj image) biometric (fingrprint adj image) fingerprint) near (sequence array))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
L7	4829	assign\$3 with (access near (right privilege))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
L8	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
L9	174	7 and 8	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
L10	26	2 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
L11	24	3 and 9	US-PGPUB; USPAT; USOCR;	OR	ON	2014/03/19 15:37

			FPRS; EPO; JPO; DERWENT; IBM_TDB			
L12	4	4 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L13	23	5 and 9	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L14	65	2 and 5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L15	41	3 and 5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L16	11	4 and 5	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L17	27	5 and 7	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L18	165	5 and 8	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
L19	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
L20	131	(assign\$3 provid\$3) with (access adj (right privilege)) same (biometric fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
S1	656	(biometric fingerprint) with (key near fob)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:45
S2	275	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:47
S3	49	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3	US-PGPUB; USPAT; USOCR;	OR	ON	2014/03/18 12:48

		investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20040813"	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S4	43	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:51
S5	0	(biometric fingerprint) with (remote near key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:52
S6	0	(biometric fingerprint) with (remote near2 key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:53
S7	2	("8266442").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:36
S 8	2	"20120278863"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:42
S9	2	"20120311346"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S10	2	"20120311343"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43

EAST Search History (Interference)

<This search history is empty>

3/19/2014 3:41:07 PM

 $\textbf{C:} \ \textbf{Users} \ \textbf{mrahman3} \ \textbf{Documents} \ \textbf{EAST} \ \textbf{Workspaces} \ \textbf{13572166_First.wsp}$

CPC- SEARCHED)	
Symbol	Date	Examiner
		L

CPC COMBINATION SETS - SEAR	CHED	
Symbol	Date	Examiner

	US CLASSIFICATION SEARCHE	:D	
Class	Subclass	Date	Examiner
713	186	03/19/2014	MLR

SEARCH NOTES		
Search Notes	Date	Examiner
Combined text search with classes/sub-classes (see EAST)	3/19/2014	MLR
Inventor name, Assigee	3/19/2014	MLR
NPL Search - Google Scholar IEEE ACM WIPO	3/19/2014	MLR

	INTERFERENCE SEARCH		
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
_			

U.S. Patent and Trademark Office Part of Paper No.: 20140317

PTO/SB/122 (09-04)

Approved for use through 07/31/2006. OMB 0651-0035

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

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CHANGE OF CORRESPONDENCE ADDRESS Application

_forms are submitted.

Address to: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Application Number	13/572,166
Filing Date	August 10, 2012
First Named Inventor	Christopher John Burke
Art Unit	2438
Examiner Name	Mohammad L. Rahman
Attorney Docket Number	12838/8

Please chan	ge the Correspondence Ad	ldress for the above-id	entified pater	t application to:	
	dress associated with ner Number:	00	757		
OR					•
Firm or Individu	ual Name				
Address					
City		S	tate	Zip	
Country		······································			
Telephone			Fax		
This form car	This form cannot be used to change the data associated with a Customer Number. To change the data associated with an existing Customer Number use "Request for Customer Number Data Change" (PTO/SB/124).				
I am the:				mor trambor bata of	mange (F FO/OB/124).
	Applicant/Inventor				
	Assignee of record of the Statement under 37 CFF		Form PTO/S	B/96).	
✓	Attorney or agent of reco	ord. Registration Numb	er 62,972	······································	
	Registered practitioner n executed oath or declara				n without an
Signature	/E. Brandon Nykiel/				
Typed or Printed Name	E. Brandon Nykiel				
Date April 4,		T	elephone 31	2-321-4200	
NOTE: Signatures of a forms if more than one	all the inventors or assignees of red e signature is required, see below	cord of the entire interest or t	heir representati	re(s) are required. Submit r	multiple

This collection of information is required by 37 CFR 1.33. 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 3 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. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Ac	knowledgement Receipt
EFS ID:	18673201
Application Number:	13572166
International Application Number:	
Confirmation Number:	9752
Title of Invention:	REMOTE ENTRY SYSTEM
First Named Inventor/Applicant Name:	Christopher John Burke
Correspondence Address:	Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 - Chicago IL 60610 US 3123214200 -
Filer:	E. Brandon Nykiel/Maggie Pieczonka
Filer Authorized By:	E. Brandon Nykiel
Attorney Docket Number:	12838/8
Receipt Date:	04-APR-2014
Filing Date:	10-AUG-2012
Time Stamp:	12:17:52
Application Type:	Utility under 35 USC 111(a)
Pavment information:	1

Payment information:

Submitted with Payment	no
File Listing:	

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /₊zip	Pages (if appl.)
1		12838_8_ChangeofCorrFiling_ 040414.pdf aedad1dd6eb957a76c8793668 04ba87	12838 8 ChangeofCorrFiling I		2
			aedad1dd6eb957a76c879366849b7c2611 04ba87	, ==	_
	Multipart Description/PDF files in .zip description				
	Document De	scription	Start	Start End	
	Miscellaneous Inco	oming Letter	1 1		1
	Change of A	ddress	ess 2 2		2
Warnings:					
Information:					
		Total Files Size (in bytes)): 79661		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

CERTIFICATE OF EFS FILING UNDER 37 CFR §1.8
I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:
Date: April 4, 2014 Name: E. Brandon Nykiel Signature: /E. Brandon Nykiel/

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Bu	rke	Βı	John	r.	tophei	Chr	of:	ıln.	ada	re A	ln
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Appln. No.: 13/572,166

August 10, 2012

Filed: For:

REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Examiner: Mohammad L. Rahman

Art Unit: 2438

Conf. No.: 9752

TRANSMITTAL

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

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o	ı			

Attac	hed is/are:
\boxtimes	Change of Correspondence Address.
Fee c	alculation:
\boxtimes	No additional fee is required.
	Per 37 CFR §1.27, ☐ Applicant is small entity ☐ Applicant is micro entity.
	An extension fee in an amount of \$ for amonth extension of time under 37 CFR § 1.136(a).
	A petition or processing fee in an amount of \$ under 37 CFR § 1.17().
	An additional filing fee has been calculated as shown below:

					Fee		Small Er	itity Fee	Micro Er	tity Fee
	Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee
Total		Minus			x \$ 80 =	\$	x \$ 40 =	\$	x \$20 =	\$
Independent		Minus			x \$420 =	\$	x \$210 =	\$	x \$105 =	\$
First Presenta	ation of Multiple De	p. Clain	n		+ \$780 =	\$	+ \$390 =	\$	+ \$195 =	\$
					Total	\$	Total	\$	Total	\$

Fee payment: Please charge Deposit Account No. 23-1925 in the amount of \$_____ for ____. Payment by credit card in the amount of \$_____ (Form PTO-2038 is attached). WARNING: Information on this form may become public. Credit card information should not be included on this form. The Director is hereby authorized to charge payment of any additional filling fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925. Respectfully submitted, April 4, 2014 Date | E. Brandon Nykiel/| | E. Brandon Nykiel (Reg. No. 62,972)

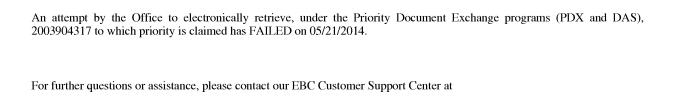
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BRINKS GILSON & LIONE
NBC Tower - Suite 3600, 455 N. Cityfront Plaza Drive, Chicago, IL 60611-5599

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

PRIORITY DOCUMENT EXCHANGE

FAILURE STATUS REPORT



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571-272-4100 (local)

M-F 6AM - Midnight (Eastern Time)

pdx@uspto.gov (email)

Priority Document Exchange Website: http://www.uspto.gov/patents/process/file/pdx/pdx_index.jsp

PTO/SB/26 (08-11)
Approved for use through 07/31/2012. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	Docket Number (Optional) 12838/8			
In re Application of: Christopher John Burke				
Application No.: 13/572,166				
Filed: August 10, 2012				
For: REMOTE ENTRY SYSTEM				
The owner*, <u>SECURICOM (NSW) PTY LTD</u> , of <u>100</u> percent interest in except as provided below, the terminal part of the statutory term of any patent granted on the instant at the expiration date of the full statutory term of prior patent No. <u>8,266,442</u> as the term of s by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application of the prior patent are commonly owned. This agreement runs with any part and is binding upon the grantee, its successors or assigns.	aid prior patent is presently shortened			
In making the above disclaimer, the owner does not disclaim the terminal part of the term of any pater would extend to the expiration date of the full statutory term of the prior patent, "as the term of said pr terminal disclaimer," in the event that said prior patent later: expires for failure to pay a maintenance fee; is held unenforceable; is found invalid by a court of competent jurisdiction; is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; has all claims canceled by a reexamination certificate; is reissued; or is in any manner terminated prior to the expiration of its full statutory term as presently shorter.	ior patent is presently shortened by any			
Check either box 1 or 2 below, if appropriate.				
For submissions on behalf of a business/organization (e.g., corporation, partnership, university etc.), the undersigned is empowered to act on behalf of the business/organization.	y, government agency,			
I hereby declare that all statements made herein of my own knowledge are true and that all statements made are believed to be true; and further that these statements were made with the knowledge that we made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United Statements may jeopardize the validity of the application or any patent issued thereon.	illful false statements and the like so			
2. The undersigned is an attorney or agent of record. Reg. No. 62,972				
/E. Brandon Nykiel/	August 26, 2014 Date			
Signature	Date			
E. Brandon Nykiel				
Typed or printed name				
	(312) 321-4200			
	Telephone Number			
✓ Terminal disclaimer fee under 37 CFR 1.20(d) included.				
WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.				
*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP § 324.				

This collection of information is required by 37 CFR 1.321. 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. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal							
Application Number:	13:	572166					
Filing Date:	10-	-Aug-2012					
Title of Invention:	REMOTE ENTRY SYSTEM						
First Named Inventor/Applicant Name:	Christopher John Burke						
Filer:	E. Brandon Nykiel/Patricia Chiovari						
Attorney Docket Number:	Attorney Docket Number: 12838/8						
Filed as Small Entity							
Utility under 35 USC 111(a) Filing Fees							
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)		
Basic Filing:							
Pages:							
Claims:							
Miscellaneous-Filing:							
Petition:							
Patent-Appeals-and-Interference:							
Post-Allowance-and-Post-Issuance:							
Extension-of-Time:							
Extension - 2 months with \$0 paid		2252	1	300	300		

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Statutory or Terminal Disclaimer	1814	1	160	160
	Tot	(\$)	460	

Electronic Acknowledgement Receipt						
EFS ID:	19967147					
Application Number:	13572166					
International Application Number:						
Confirmation Number:	9752					
Title of Invention:	REMOTE ENTRY SYSTEM					
First Named Inventor/Applicant Name:	Christopher John Burke					
Correspondence Address:	Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 - Chicago IL 60610 US 3123214200 -					
Filer:	E. Brandon Nykiel/Maggie Pieczonka					
Filer Authorized By:	E. Brandon Nykiel					
Attorney Docket Number:	12838/8					
Receipt Date:	26-AUG-2014					
Filing Date:	10-AUG-2012					
Time Stamp:	15:02:29					
Application Type:	Utility under 35 USC 111(a)					

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$460

RAM confirmation Number	1351
Deposit Account	231925
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filling, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)	
1		12838_8_ResponseFiling_0826	650282	yes	18	
'		14.pdf	c804d8fb61a92e40c88407f68de56ee95342 fb40	yes	10	
	Multip	part Description/PDF files in .	zip description			
	Document De	scription	Start	E	nd	
	Miscellaneous Inco	1		1		
	Extension of	2		3		
	Amendment/Req. Reconsiderati	4		4		
	Claims	Claims			11	
	Applicant Arguments/Remarks	Made in an Amendment	12	17		
	Terminal Disclai	mer Filed	18	8 18		
Warnings:						
Information:						
2	Fee Worksheet (SB06)	Fee Worksheet (SB06) fee-info.pdf		no	2	
			5be44cb8235ff022a6369be1e6702958750 7887d		_	
Warnings:				<u>'</u>		
Information:						
		Total Files Size (in bytes)	: 68	32386		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

1	DTIL	TOATE	AL LLC	CH INC	UNDER	27 0	VED 64	0
JE	:17 11	·IUAIE	or cro	LIFING	UNDER	3/ (1.1. 31	.0

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: August 26, 2014

Name: E. Brandon Nykiel

Signature: /E. Brandon Nykiel/

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Filed:

August 10, 2012

For:

REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Examiner:

Rahman, Mohammad L.

Art Unit: 2

2438

Conf. No.: 9

9752

TRANSMITTAL

Mail Stop Amendment Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Attached is/are:

Petition and Fee for Extension of Time (2 months); Amendment and Response to Office Action Mailed March 26, 2014, and Terminal Disclaimer to Obviate a Double Patenting Rejection Over a "Prior" Patent.

Fee calculation:

Ш	No	additiona	fee is	required.
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□ Per 37 CFR §1.27,
 □ Applicant is small entity
 □ Applicant is micro entity.

 \boxtimes An extension fee in an amount of \$300 for a 2-month extension of time under 37 CFR § 1.136(a).

A petition or processing fee in an amount of \$160 under 37 CFR § 1.20(d).

An additional filing fee has been calculated as shown below:

					Fe	е	Small En	tity Fee	Micro En	tity Fee
	Claims Remaining After Amendment	***************************************	Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee
Total		Minus			x\$ 80=	\$	x \$ 40 =	\$	x \$20 =	\$
Independent		Minus			x \$420 =	\$	x \$210 =	\$	x \$105 =	\$
First Presentation of Multiple Dep. Claim			+ \$780 =	\$	+ \$390 =	\$	+ \$195 =	\$		
					Total	\$	Total	\$	Total	\$

Fee payment:

\boxtimes	Please charge Deposit Account No. 23-1925 in the amount of \$460 for Extension of Time (2 months) an
	Terminal Disclaimer.

Payment by credit card in the amount of \$____ (Form PTO-2038 is attached).

WARNING: Information on this form may become public. Credit card information should not be included on this form.

The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

August 26, 2014
Date

/E. Brandon Nykiel/

E. Brandon Nykiel (Reg. No. 62,972)

BRINKS GILSON & LIONE BRINKS GILSON & LIONE

NBC Tower - Suite 3600, 455 N. Cityfront Plaza Drive, Chicago, IL 60611-5599

	CERTIFICATE OF EFS FILII this correspondence is being electronically t	ransmitted to the United States P	atent and Trademark Office,
Commissioner for Pate Date: August 26, 2014	onts, via the EFS pursuant to 37 CFR §1.8 on the	e below date:Signature: <u>/E. Brandon Nykiel/</u>	
		•	
	IN THE UNITED STATES	PATENT AND TRAD	EMARK OFFICE
In re Appln. c	f: Christopher John Burke		
Appln. No.:	13/572,166	Examiner:	Rahman, Mohammad L
Filed:	August 10, 2012	Art Unit:	2438
For:	REMOTE ENTRY SYSTE	M Conf. No.:	9752
Attorney Doc	ket No.: 12838/8		
F	PETITION AND FEE FOR E	XTENSION OF TIME	(37 CFR § 1.136(a))
Mail Stop Am Commissione PO Box 1450 Alexandria, V	er for Patents		
Dear Sir/Mad	lam:		
	tion for an extension of the t 114 for a period of <u>2</u> month(s		Office Action dated
Per 37 CFR	§1.27, ⊠ Applicant is small	entity 🔲 Applicant	is micro entity.
	Extension	Small Entity	Micro Entity

Fee	Fee	Fee
\$ 200	\$ 100	\$ 50
\$ 600	\$ 300	\$150
\$1.400	\$ 700	\$350
	\$1,100	\$550
\$3,000	\$1,500	\$750
	\$ 200 \$ 600 \$1,400 \$2,200	\$ 200

Payment Method:

	Payment by credit card in the amount of \$ to cover the fees listed above. Form PTO-2038 is enclosed for this purpose.			
\boxtimes	The Commissioner is hereby authorized to charge \$300 to cover the fees listed above to Deposit Account No. 23-1925.			
\boxtimes	The Commissioner is hereby authorized to charge any deficiencies in fees or credit overpayment to Deposit Account No. 23-1925.			
		Respectfully submitted,		
Dated:	August 26, 2014	/E. Brandon Nykiel/ E. Brandon Nykiel, Reg. No. 62,972 Attorney for Applicant(s)		

BRINKS GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610 (312) 321-4200

CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being filed electronically with the U.S. Patent and Trademark Office on

Date: August 26, 2014 Name: E. Brandon Nykiel

Signature: /E. Brandon Nykiel/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Filed:

August 10, 2012

For:

REMOTE ENTRY SYSTEM

Attorney Docket No:

12838/8

Examiner: Rahman, Mohammad L.

Art Unit: 2438

Confirmation No. 9752

AMENDMENT AND RESPONSE TO OFFICE ACTION MAILED MARCH 26, 2014

MAIL STOP - Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

In response to the Office Action mailed March 26, 2014, please enter the following amendments and consider the following remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 9 of this paper.

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

What is claimed is:

- 1-44. (Cancelled)
- 45. (New) A transmitter sub-system for providing secure access to a controlled item, the transmitter sub-system comprising:
 - a processor, a memory, and a processor executable software program;
 - a database of biometric signatures;
- a biometric sensor for receiving a biometric signal, wherein said transmitter subsystem is operable for:
- matching the biometric signal against members of the database of biometric signatures; and
- sending an access signal dependent upon the results of the matching, said secure access being provided dependent upon the access signal.
- 46. (New) A system for providing secure access to a controlled item, the system comprising:
 - a processor, a memory, and a processor executable software program;
 - a database of biometric signatures;
 - a transmitter sub-system comprising:
- a biometric sensor for receiving a biometric signal, wherein said transmitter sub-system is operable for;
- matching the biometric signal against members of the database of biometric signatures; and
 - sending an access signal dependent upon the matching; and a receiver sub-system operable for;

receiving the access signal; and

providing conditional access to the controlled item dependent upon the access signal;

wherein the transmitter sub-system is further operable for populating the database of biometric signatures by performing the steps of:

receiving, by the biometric sensor, a succession of entries of the biometric signal; and

populating the database with biometric information derived from the succession of entries.

47. (New) A system according to claim 45, wherein the step of populating the database comprises the steps of:

accepting the succession of entries as control information; and populating the database dependent upon the control information.

48. (New) A system according to claim 45, further operable for:

providing a signal for directing input of the succession of entries of the biometric signal; and

incorporating into the access signal an identification field identifying the biometric signal if the signal matches a member of the database.

49. (New) A system according to claim 45, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class and a system user class, the access signal comprising:

an access attribute if the biometric signal matches a member of the database of biometric signatures; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

50. (New) A system according to claim 45, wherein the controlled item is one of: a locking mechanism for providing physical access; and

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a locking mechanism for providing electronic access.

51. (New) A system according to claim 45, wherein the biometric sensor is responsive to one of voice, retinal pattern, iris pattern, face pattern, and palm configuration, and/or the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver sub-system.

52. (New) A system according to claim 45, wherein said conditional access comprises one of:

provision of access to the controlled item if the access signal comprises an access attribute;

provision of access to the controlled item and sounding of an alert if the access signal comprises a duress attribute; and

denial of access to the controlled item and sounding of an alert if the access signal comprises an alert attribute.

53. (New) A system as claimed in claim 45, wherein:

the transmitter sub-system is further operative for transmitting information capable of granting more than two types of access to the controlled item using a secure wireless signal dependent upon a request from the user and the authentication of the user identity; and the system further comprises a control panel for receiving the information and for providing the secure access requested.

- 54. (New) A system according to claim 52, wherein the control panel includes a converter for receiving the secure wireless signal and for outputting the information, and/or the biometric sensor authenticates the identity of the user by comparing a biometric input from the user with a biometric signature for the user in the biometric database.
- 55. (New) A system according to claim 52, wherein the secure wireless signal comprises an RF carrier and a rolling code, encrypted Bluetooth or other communications protocol, and

the converter converts the secure wireless signal to a Wiegand protocol or other protocol required by the system.

- 56. (New) A system according to claim 45, wherein the biometric sensor and the transmitter sub-system are located in a portable device.
- 57. (New) A transmitter sub-system for operating in a system for providing secure access to a controlled item, wherein the transmitter sub-system comprises:
 - a processor, a memory, and a processor executable software program;
- a biometric sensor for receiving a biometric signal, wherein said transmitter subsystem is operable for;
- matching the biometric signal against members of a database of biometric signatures to thereby output an accessibility attribute;
- emitting an access signal conveying information dependent upon said accessibility attribute; and

populating the database of biometric signatures by:

receiving, by the biometric sensor, a succession of entries of the biometric signal, said succession being characterised according to at least one of the number of said entries and a duration of each said entry; and

populating the database dependent upon the succession of entries.

58. (New) A method for providing secure access to a controlled item in a system comprising a processor, a memory, and a processor executable software program, a database of biometric signatures, a transmitter sub-system comprising a biometric sensor for receiving a biometric signal, the transmitter sub-system being operable for emitting a secure access signal, and a receiver sub-system operable for receiving the transmitted secure access signal and for providing conditional access to the controlled item dependent upon information in said secure access signal, the method comprising the steps of:

populating the database of biometric signatures by:

receiving, by the biometric sensor, a succession of entries of the biometric signal;

determining at least one of the number of said entries and a duration of each said entry; and

populating the database dependent upon the succession of entries; receiving a biometric signal;

matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute;

emitting an access signal conveying information dependent upon said accessibility attribute; and

providing conditional access to the controlled item dependent upon said information.

59. (New) A method according to claim 57, wherein the step of populating the database of biometric signatures further comprises the step of enrolling a biometric signature into the database of biometric signatures by:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

- 60. (New) A method according to claim 57, wherein the step of enrolling the biometric signature further comprises receiving another biometric signal to confirm the enrolling of the biometric signal as an administrator signature dependent upon generation of a feedback signal adapted to direct provision of at least one of the biometric signal and the other biometric signal.
- 61. (New) A method according to claim 57, wherein the biometric sensor and the transmitter sub-system are located in a portable device.
- 62. (New) A non-transitory computer readable medium for storing a computer program comprising instructions or code, which when executed by processors, causes the processors to perform the steps of the method of any one of claims 14 to 17.

63. (New) A system for populating a database of biometric signatures, the system comprising:

a processor, a memory, and a processor executable software program;

a database of biometric signatures; and

a biometric sensor for receiving a biometric signal, wherein said system is operable for populating the database of biometric signatures by performing the steps of:

receiving, by the biometric sensor, a succession of entries of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry; and

populating the database dependent upon the succession of entries

64. (New) A system according to claim 62, wherein the system is further operable for enrolling a biometric signature into the database of biometric signatures by:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

65. (New) A method for populating a database of biometric signatures, the method comprising the steps of:

receiving, by a biometric sensor, a succession of entries of the biometric signal; determining at least one of the number of said entries and a duration of each said entry; and

populating the database dependent upon the succession of entries.

66. (New) A method according to claim 64, wherein the step of populating the database further comprises the steps of:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

67. (New) A system according to claim 49, wherein:

physical access is provided to one of a door, a gate, and a hatch; and electronic access is provided to one of a Personal Computer, a smart phone, a network, and a payment system.

Remarks

Introduction

Claims 45-67 are pending. In this Amendment and Response, claims 1-44 are cancelled. Claims 45-67 are added. Support for the added claims is found in the Specification at least in paragraphs [0079], [0109], [0080], and [0085]. No new matter is added. Applicant respectfully requests reconsideration in view of the amendments and the following remarks.

Double Patenting

The Office Action on page 2 provisionally rejects claims 1-44 on the grounds of non-statutory obviousness-type double patenting, as being unpatentable over claims 1-14 of US Patent No. 8,266,442.

The Applicant does not concede that this objection has been properly taken. However, in order to expedite prosecution in the event that pending claims 45-67 are similarly rejected on grounds of non-statutory obviousness type double patenting, Applicant submits herewith a terminal disclaimer.

Claim Rejections Under 35 U.S.C. § 112

The Office Action on page 4 rejects claims 1-26 and 37-40 under 35 USC 112(b) or 35 USC 112 (pre-AIA) as being indefinite. Pending claims 45-67 do not recite "means for" language, which obviates the rejection. Reconsideration is respectfully requested.

Claim Rejections Under 35 U.S.C. § 103

The Office Action at page 5 rejects claims 1, 9-12, 14, 21, 23, 27, 29, 31, 33, 35, 37 and 39 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman et al (US 7,152,045) in view of Igaki et al (US 5,109,428).

Hoffman

<u>Hoffman</u> is directed to a token-less identification system and method for authorization of transactions and transmissions (Abstract). A "token" in this citation is an inanimate object

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such as a plastic card which confers a capability to the individual presenting the object (column 1 lines 25-29).

Fig. 1 of <u>Hoffman</u> shows the overall configuration of the described arrangement. A Data Processing Centre DPC 1 is connected to terminals 2 through various communication means 3 (column 12 lines 52-54).

The citation refers to a number of different terminals (column 27 line 21 – column 28 line 7). Each terminal is associated with a Biometric Input Apparatus (BIA) which is a combination of hardware and software whose job is to gather, encode, and encrypt biometric input for use in individual identification (column 14 lines 38-45).

Registration is performed in <u>Hoffman</u> using a Biometric Registration Terminal (BRT) (column 27 lines 25-29). The purpose of the BRT (column 36 lines 44-50) is to register new individuals including their biometric-PIC (Personal Identification Code – see column 2 line 9), mailing address, etc. It is submitted that this amount of data entry requires, as well as a biometric sensor for inputting the biometric-PIC, a standard keyboard for entering the data. Clearly, <u>Hoffman</u> is a hard-wired network-based system that is suitable for the "back end" of banking systems for electronic banking purposes (eg see BRTs that are located in places that are physically secure such as retail banking outlets (column 36 line 66 – column 37 line 3)).

In contrast, claim 45 is directed to a "transmitter sub-system", which is clearly part of a wireless based system when the claim is read in the context of the specification as a whole (see Fig. 2 of the present specification for example).

Given the significant constraints of a wireless system in comparison to a hard-wired network system, the Applicant submits that the person of ordinary skill would not find it obvious or straightforward to modify the system of <u>Hoffman</u> in order to arrive at the system recited in claim 45.

Accordingly, the Applicant submits that claim 45 is patentable over <u>Hoffman</u>.

The Office Action concedes that <u>Hoffman</u> is silent in regard to "means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction" and refers to analogous art in Igaki in this regard.

Igaki

The Office Action makes reference to the Abstract in <u>Igaki</u> in this regard, which states that an optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate.

However, claim 46 of the present application recites, among other features, "receiving by the biometric sensor a succession of entries (emphasis added) of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry".

In other words, the biometric sensor of the claimed invention receives a succession of entries of the biometric signal during the enrolment process. In contrast the biometric sensor in <u>Igaki</u> receives only a single fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate (Abstract).

The invention defined by claim 46 as amended is able to receive a succession of biometric signals which the user ensures are of predetermined duration, predetermined quantity, and being input within a predetermined time, and the system uses this information for enrolment purposes. The fact that the user has total control over the succession of biometric signal entries necessarily implies that the signals in the succession of signals are independent of each other.

In contrast <u>Igaki</u> receives only a single biometric signal, and processes the single biometric signal to form a sequence of image data. Since the sequence of derived image data are all derived from (and thus dependent upon) the single biometric signal, the sequence of image data in <u>Igaki</u> are clearly not independent of each other.

The object of <u>Igaki</u> is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor the alignment between successive fingerprint image data produced in successive, <u>multiple fingerprint pressing down operations as in the prior art becomes unnecessary</u> (emphasis added) (column 12 lines 40-45).

<u>Igaki</u> thus explicitly teaches away from successive multiple pressing down operations, which is consistent with the fact that <u>Igaki</u> is concerned with extracting minutia data from

fingerprint image data, and not with enrolling users using a succession of entries of the biometric signal as recited in claim 46 as amended.

Establishment of a prima facie case of obviousness requires that <u>Hoffman</u> when combined with <u>Igaki</u> must teach or suggest all the claim limitations. However, even if <u>Hoffman</u> is combined with <u>Igaki</u>, and the Applicant does not concede that there is any apparent reason for asserting this combination, it is submitted that there is no teaching or suggestion of **EITHER** receiving, by the biometric sensor, a succession of entries of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry; **OR** populating the database dependent upon the succession of entries.

For at least the reasons noted above, it is submitted that claim 46 as amended is patentable over <u>Hoffman</u> and <u>Igaki</u> whether these documents are considered alone or in combination.

Claims 47-67 recite, either explicitly or through dependence, the same or equivalent features to those referred to above in regard to claim 46 as amended. Accordingly, for at least the reasons noted above, it is submitted that claims 46-67 are patentable over <u>Hoffman</u> and <u>Igaki</u> whether these documents are considered alone or in combination.

The Office Action at page 29 rejects claims 2, 15, 22, 28, 32, 34, 36, 38 and 40 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over <u>Hoffman</u> in view of <u>Igaki</u> and further in view of Fuks et al (US 6,992,562).

The Office Action concedes that <u>Hoffman</u> and <u>Igaki</u> are silent in regard to "wherein the biometric sensor and the transmitter sub-system are located in a remote portable key fob", and refer to <u>Fuks</u> in this regard.

New claims 56 and 61 recite *wherein the biometric sensor and the transmitter sub- system are located in a portable device*, however they also recite, by dependence, the features referred to above in regard to claim 46 as amended, and the Applicant is of the opinion that <u>Fuks</u> does not remedy the deficiencies of <u>Hoffman</u> and <u>Igaki</u> in this regard.

Establishment of a prima facie case of obviousness requires that <u>Hoffman</u> when combined with <u>Igaki</u> and <u>Fuks</u> must teach or suggest all the claim limitations. However, even if <u>Hoffman</u> is combined with <u>Igaki</u> and <u>Fuks</u>, and the Applicant does not concede that there is any apparent reason for asserting this combination, it is submitted that there is no teaching or

suggestion of **EITHER** receiving, by the biometric sensor, a succession of entries of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry; **OR** populating the database dependent upon the succession of entries.

For at least the reasons noted above, it is submitted that claims 56 and 61 are patentable over <u>Hoffman</u> and <u>Igaki</u> and <u>Fuks</u> whether these documents are considered alone or in combination.

The Office Action at page 30 rejects claims 41, 43 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over <u>Hoffman</u> in view of <u>Igaki</u> and further in view of Koo et al (WO 02/12660).

The Office Action concedes that <u>Hoffman</u> and <u>Igaki</u> are silent in regard to "enrolling the relevant signatures into the database using the biometric sensor as an administrator if the database of biometric signatures is empty", and refer to <u>Koo</u> in this regard.

New claim 59 recites the noted feature, however it also recites, by dependence, the features referred to above in regard to claim 46 as amended, and the Applicant is of the opinion that <u>Koo</u> does not remedy the deficiencies of <u>Hoffman</u> and <u>Igaki</u> in this regard.

Establishment of a prima facie case of obviousness requires that <u>Hoffman</u> when combined with <u>Igaki</u> and <u>Koo</u> must teach or suggest all the claim limitations. However, even if <u>Hoffman</u> is combined with <u>Igaki</u> and <u>Koo</u>, and the Applicant does not concede that there is any apparent reason for asserting this combination, it is submitted that there is no teaching or suggestion of **EITHER** receiving, by the biometric sensor, a succession of entries of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry; **OR** populating the database dependent upon the succession of entries.

For at least the reasons noted above, it is submitted that claim 59 is patentable over <u>Hoffman</u> and <u>Igaki</u> and <u>Koo</u> whether these documents are considered alone or in combination.

Conclusion

With this amendment and response, the present pending claims of this application are allowable, and Applicants respectfully request the Examiner to issue a Notice of Allowance for this application. Should the Examiner deem a telephone conference to be beneficial in

expediting allowance/examination of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

Respectfully submitted,

/E. Brandon Nykiel/

Date: August 26, 2014

E. Brandon Nykiel Attorney Reg. No. 62,972 Attorney for Applicant

BRINKS GILSON & LIONE P.O. Box 10395 Chicago, Illinois 60610 (312) 321-4200

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875							on or Docket Number 3/572,166	Filing Date 08/10/2012	To be Mailed	
	ENTITY: LARGE SMALL MICRO									
	APPLICATION AS FILED – PART I									
			(Column 1		(Column 2)		•			
┢	FOR	1	NUMBER FIL	_ED	NUMBER EXTRA RATE (\$)			F	FEE (\$)	
Ľ	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A		N/A		N/A			
Ш	SEARCH FEE (37 CFR 1.16(k), (i), (or (m))	N/A		N/A		N/A			
	EXAMINATION FE (37 CFR 1.16(o), (p),		N/A		N/A		N/A			
	TAL CLAIMS CFR 1.16(i))		mir	nus 20 = *			X \$ =			
IND	EPENDENT CLAIM CFR 1.16(h))	S	minus 3 = *				X \$ =			
	APPLICATION SIZE (37 CFR 1.16(s))	of p for s frac	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							
	MULTIPLE DEPEN	IDENT CLAIM P	RESENT (3	7 CFR 1.16(j))						
* If t	he difference in colu	ımn 1 is less thaı	n zero, ente	r "0" in column 2.			TOTAL			
	APPLICATION AS AMENDED – PART II (Column 1) (Column 2) (Column 3)									
:NT	08/26/2014	CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIO	ONAL FEE (\$)	
AMENDMENT	Total (37 CFR 1.16(i))	* 23	Minus	** 44	44 = 0		x \$40 =		0	
EN	Independent (37 CFR 1.16(h))	* 6	Minus	***10	**10 = 0		x \$210 =		0	
AM	Application Si	ze Fee (37 CFR	1.16(s))							
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
				TOTAL ADD'L FEE		0				
	(Column 1) (Column 2) (Column 3)									
		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIO	ONAL FEE (\$)	
AMENDMENT	Total (37 CFR 1.16(i))	*	Minus	**	=		X \$ =			
	Independent (37 CFR 1.16(h))	*	Minus	***	=		X \$ =			
	Application Si	ze Fee (37 CFR	1.16(s))							
A	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))									
							TOTAL ADD'L FEE			
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

This collection of information is required by 37 CFR 1.16. 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 1.14. 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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Application Number				Re	Applicant(s)/Patent under Reexamination BURKE, CHRISTOPHER JOHN		
Document Code - DISQ		Internal Document – DO NOT MAI			NOT MAIL		
TERMINAL DISCLAIMER		☐ APPROVED			☑ DISAPPROVED		
This paten Date Filed : 08/26/2014 to a Te			t				

Disclaimer

Approved/Disapproved by:

Dorethea Lawrence

The person who signed the terminal disclaimer (only for application filed before September 16, 2012): does not have power of attorney, and thus, is not of record. (See FP 14.29.

Resubmit a new terminal disclaimer at no additional fee.

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
13/572,166	08/10/2012	Christopher John Burke	12838/8	9752	
Michael E. Mil	7590 11/10/201 Z.	EXAMINER			
Brinks Hofer G P.O. Box 10395	ilson & Lione		RAHMAN, MOHAMMAD L		
Chicago, IL 60	610		ART UNIT	PAPER NUMBER	
			2438		
			MAIL DATE	DELIVERY MODE	
			11/10/2014	PAPER	

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

The time period for reply, if any, is set in the attached communication.

		Application No. 13/572,166	Applicant(s) BURKE, CHRISTOPHER JOHN					
	Office Action Summary	Examiner MOHAMMAD L. RAHMAN	Art Unit 2438	AIA (First Inventor to File) Status No				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).								
Status								
1) 🛛	Responsive to communication(s) filed on 8/26/	<u>2014</u> .						
	A declaration(s)/affidavit(s) under 37 CFR 1.1	30(b) was/were filed on						
2a)🛛	This action is FINAL . 2b) ☐ This	action is non-final.						
3) 🔲	An election was made by the applicant in response	onse to a restriction requirement :	set forth duri	ng the interview on				
	; the restriction requirement and election	have been incorporated into this	action.					
4)	Since this application is in condition for allowar	nce except for formal matters, pro	secution as	to the merits is				
	closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.					
Dispositi	ion of Claims*							
-	Claim(s) <u>1-67</u> is/are pending in the application.							
	5a) Of the above claim(s) <u>1-44</u> is/are withdrawn							
	Claim(s) is/are allowed.							
·	Claim(s) <u>44-67</u> is/are rejected.							
	Claim(s) is/are objected to.							
·	Claim(s) are subject to restriction and/or	r election requirement.						
* If any cla	ims have been determined <u>allowable</u> , you may be eli	igible to benefit from the Patent Pros	secution Higl	nway program at a				
participatir	ng intellectual property office for the corresponding ap	oplication. For more information, plea	ise see					
http://www	uspto.gov/patents/init_events/pph/index.jsp or send	an inquiry to PPHfeedback@uspto.c	<u>10V</u> .					
Applicati	ion Papers							
	The specification is objected to by the Examine	r						
	The drawing(s) filed on is/are: a) acce		Evaminer					
٠٠/١	Applicant may not request that any objection to the			5(a)				
				* *				
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
Priority under 35 U.S.C. § 119								
	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (t).					
Certified copies:								
a)	□ All b)□ Some** c)□ None of the:							
	 Certified copies of the priority documents have been received. Certified copies of the priority documents have been received in Application No 							
	3. Copies of the certified copies of the priority documents have been received in this National Stage							
application from the International Bureau (PCT Rule 17.2(a)). ** See the attached detailed Office action for a list of the certified copies not received.								
coo the attached detailed office action for a list of the continue copies not received.								
Attachmen	t(s)							
1) Notic	e of References Cited (PTO-892)	3) 🔲 Interview Summary						
	mation Disclosure Statement(s) (PTO/SB/08a and/or PTO/S rr No(s)/Mail Date	Paper No(s)/Mail Da 4) Other:	ate					

U.S. Patent and Trademark Office PTOL-326 (Rev. 11-13)

Office Action Summary

Art Unit: 2438

DETAILED ACTION

This office action is in response to applicant's argument/amendment filed 08/26/2014. Claims 1-

44 have been canceled. New claims 45-67 have been added.

Response to Arguments

Regarding Double Patenting Rehection:

The terminal disclaimer identifies a party who is not the applicant (only for applications filed on

or after September 16, 2012). For cases filed on/after 9/16/12, 37 CFR 1.321 specifies that the applicant

can disclaim, and the terminal disclaimer must specify the extent of the applicant's ownership. A request

under 37 CFR 1.46(c) to change the applicant needs to be filed, which is (1) a request, signed by a

1.33(b) party, (2) a corrected ADS (37 CFR 1.76(c)) that identifies the "new" applicant in the applicant

information, and is underlined since it is new, and (3) a 3.73(c) statement showing chain of title to the new

applicant. Along with the paragraph 1.46(c) request, it is required to file a POA that gives power of the

attorney who is signing the TD along with another copy of the TD unless a TD signed by the applicant.

Therefore, the rejection on the ground of non-statutory obviousness-type double patenting rejection is

maintained. See the attached review decision or in PAIR on 08/28/2014.

Regarding Prior Art rejections:

Applicant argued, see page 10 of remarks, Hoffman et al. is a hard-wired network-based system

but in contrast, claim 45 is directed to a "transmitter sub-system", which is clearly part of a wireless based

system when the claim is read on the context of the specification as a whole.

In response to applicant's argument that the references fail to show certain features of applicant's

invention, it is noted that the features upon which applicant relies (i.e., transmitter sub-system, which is

clearly part of a wireless based system) are not recited in the rejected claim(s). Although the claims

are interpreted in light of the specification, limitations from the specification are not read into the claims.

See In re Van Geuns, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir.1993). Claim does not limit transmitter

sub-system to only a wireless system or a part of wireless based system. Specification discloses, a

transmitter subsystem comprises: a biometric sensor for receiving a biometric signal, means for

matching..., means for emitting... etc. (see specification ¶0013-¶0018, ¶0023) OR FIG. 2 shows the

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transmitter sub-system 116 communicating with the receiver sub-system 117 **using** a direct wireless link for the access signal 108 (see specification ¶0135). Under MPEP § 2111, pending claims must be given their broadest reasonable interpretation consistent with the specification. Given the broadest reasonable interpretation, a transmitter sub-system can be a system which comprises biometric sensor and can communicate with other system using wired or wireless signal. Hoffman clearly teaches the biometric

input apparatus (i.e. transmitter-subsystem) hardware comes in four basic versions: standard, wireless,

integrated phone/cable television (or "CATV")/fax, and ATM. See Hoffman, col. 13, lines 37-50. See

further BIA/Wireless under BIA Models in col. 14, lines 27-40.

Applicant argued, see page 11 of remarks, Igaki et al. does not teach claim 46 of the present application recites, among other features, "receiving by the biometric sensor a succession of the biometric signal, the succession being characterized according to at least one of the said entries and a duration of each said entry"

Claim 46 does not recites, "the succession being characterized according to at least one of the said entries and a duration of each said entry". Specification discloses, see ¶0109, " The first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121, providing that these successive presses are of the appropriate duration, the appropriate quantity, and are input within a predetermined time." As the claim does not characterize the "succession of entries of the biometric signal", it could be interpreted as succession of entries of any kind of biometric signal or succession of finger presses of appropriate duration or appropriate quantity or input within a predetermined time. Igaki discloses, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval (Abstract)." Further, Igaki clearly discloses See [1:40-52] "An object of the present invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a

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sensor the alignment between successive fingerprint image data produced in successive, multiple

fingerprint pressing down operations as in the prior art becomes unnecessary"). Igaki clearly

mentioned that successive fingerprint image data produced in successive, multiple fingerprint

pressing down operations was known in the art. A known operation cannot add any novelty or non-

obviousness to the invention.

Applicants present no further arguments.

For the above reasons, it is believed that the rejections should be sustained.

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).

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(d):

(d) REFERENCE IN DEPENDENT FORMS.—Subject to subsection (e), a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject

matter claimed. A claim in dependent form shall be construed to incorporate by reference all the

limitations of the claim to which it refers.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), fourth paragraph:

Subject to the [fifth paragraph of 35 U.S.C. 112 (pre-AIA)], a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed.

A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to

which it refers.

Claim 62 is rejected under 35 U.S.C. 112(d) or 35 U.S.C. 112 (pre-AIA), 4th paragraph, as being

of improper dependent form for failing to further limit the subject matter of the claim upon which it

depends, or for failing to include all the limitations of the claim upon which it depends.

Dependent claim 12 recites "A non-transitory computer readable medium for storing a computer

program comprising instructions or code, which when executed by.....the steps of the method of any one

of claims 14 to 17." In this case, claim fails the infringement test under 35 USC § 112 ¶4th as it can be

infringed by owning the medium without executing the method. The test as to whether a claim is a proper

dependent claim is that it shall include every limitation of the claim from which it depends (35 U.S.C. 112,

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fourth paragraph) or in other words that it shall not conceivably be infringed by anything which would not

also infringe the basic claim. See MPEP 608.01 (n) III (Infringement Test). There are no claims 14 to 17

because they were canceled in the amendment..

Applicant may cancel the claim(s), amend the claim(s) to place the claim(s) in proper dependent

form, rewrite the claim(s) in independent form, or present a sufficient showing that the dependent claim(s)

complies with the statutory requirements.

Double Patenting

The nonstatutory double patenting rejection 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 and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least

one examined application claim is not patentably distinct from the reference claim(s) because the examined

application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., In re

Berg, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); In re Goodman, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir.

1993); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761

(CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163

USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to

overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a

result of activities undertaken within the scope of a joint research agreement.

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 45-67 are provisionally rejected on the ground of nonstatutory obviousness-type

double patenting as being unpatentable over claims 1-14 of US Patent # 8,266,442. Although the

conflicting claims are not identical, they are not patentably distinct from each other because claims 1-14

of US Patent # 8,266,442 contain every element of claims 23-42 of the instant application and thus

anticipate the claim of the instant application.

Claims 45-67 of the instant application therefore is/are not patently distinct from the earlier patent

claim(s) and as such is/are unpatentable over obvious-type double patenting. A later patent/application

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claim is not patentably distinct from an earlier claim if the later claim is anticipated by the earlier claim. "A later patent claim is not patentably distinct from an earlier patent claim if the later claim is obvious over, or anticipated by, the earlier claim. In re Longi, 759 F.2d at 896, 225 USPQ at 651 (affirming a holding of obviousness-type double patenting because the claims at issue were obvious over claims in four prior art patents); In re Berg, 140F.3d at 1437, 46 USPQ2d at 1233 (Fed. Cir. 1998) (affirming a holding of obviousness type double patenting where a patent application claim to a genus is anticipated by a patent claim to a species within that genus). "ELI LILLY AND COMPANY v BARR LABORATORIES, INC., United States Court of Appeals for the Federal Circuit, ON PETITION FOR REHEARING EN BANC (DECIDED: May 30, 2001). "Claim 12 and Claim 13 are generic to the species of invention covered by claim 3 of the patent. Thus, the generic invention is "anticipated" by the species of the patented invention. Cf., Titanium Metals Corp. v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985) (holding that an earlier species disclosure in the prior art defeats any generic claim) 4. This court's predecessor has held that, without a terminal disclaimer, the species claims preclude issuance of the generic application. In re-Van Ornum, 686 F.2d 937, 944, 214 USPQ 761, 767 (CCPA 1982). Accordingly, absent a terminal disclaimer, claims 12 and 13 were properly rejected under the doctrine of obviousness-type double patenting." (In re Goodman (CA FC) 29 USPQ2d 2010 (12/3/1993).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the

applicant for a patent.

Claims 45, 49-56, and 67 are rejected under pre-AIA 35 U.S.C. 102 (e/a) as being anticipated by Hoffman et al. US 7,152,045 B2 (filed Sep. 10, 2002, PgPub US 2003/0105725 published Jun 5,

2003) hereinafter "Hoffman".

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.),

cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 45, (New) A transmitter sub-system for providing secure access to a controlled

item (see [Abstract] A tokenless identification system and method for authorization of

transactions and transmissions. The tokenless system and method are principally based on a

correlative comparison of a unique biometrics sample, such as a finger print or voice recording,

gathered directly from the person of an unknown user, with an authenticated biometrics sample of

the same type obtained and stored previously.), the transmitter sub-system comprising:

a processor, a memory, and a processor executable software program; a database of biometric

signatures (col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36);

a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8), wherein said

transmitter sub-system is operable for:

matching the biometric signal against members of the database of biometric signatures;

and sending an access signal dependent upon the results of the matching, said secure access

being provided dependent upon the access signal (see col. 8, lines 29-33: comparison of the

biometric sample taken from said first individual with any previously stored biometric

samples in said selected personal identification code-basket to make sure that the

biometric sample entered by said first individual is algorithmically unique from the

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previously stored at least one biometric sample provided by at least one second

individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from

said first individual with said at least one stored biometric sample from said at least one

second individual in said entered personal identification code-basket for producing either

a successful or failed identification result; an output step wherein said identification result

or said determination is externalized and displayed, and; a presentation step wherein on

successful identification of said first individual, said private code is presented to said first

individual).

Regarding claim 49, (New) Hoffman in view of Igaki further teaches a system according to claim

45, wherein the database of biometric signatures comprises signatures in at least one of a system

administrator class and a system user class (Hoffman, col. 60, lines 34-43; col. 8, lines 20-55), the

access signal comprising: an access attribute if the biometric signal matches a member of the database

of biometric signatures; and an alert attribute if the biometric signal does not match a member of the

database of biometric signatures (Hoffman, col. 8, lines 45-51: successful or failed identification

result).

Regarding claim 50, (New) Hoffman in view of Igaki further teaches a system according to claim

45, wherein the controlled item is one of: a locking mechanism for providing physical access; and a

locking mechanism for providing electronic access (*Hoffman, col. 9, lines 1-5*).

Regarding claim 51, (New) Hoffman in view of Igaki further teaches a system according to claim

45, wherein the biometric sensor is responsive to **one** of voice, retinal pattern, iris pattern, face pattern,

and palm configuration, and/or the database of biometric signatures is located in at least one of the

transmitter sub-system and the receiver sub-system (Hoffman, col. 60, lines 34-43; col. 8, lines 20-55).

Regarding claim 52, (New) Hoffman in view of Igaki further teaches a system according to claim

45, wherein said conditional access comprises one of: provision of access to the controlled item if the

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access signal comprises an access attribute; provision of access to the controlled item and sounding of

an alert if the access signal comprises a duress attribute; and denial of access to the controlled item and

sounding of an alert if the access signal comprises an alert attribute (Hoffman, col. 8, lines 45-51:

successful or failed identification result).

Regarding claim 53, (New) Hoffman in view of Igaki further teaches a system as claimed in

claim 45, wherein: the transmitter sub-system is further operative for transmitting information capable of

granting more than two types of access to the controlled item using a secure wireless signal dependent

upon a request from the user and the authentication of the user identity; and the system further comprises

a control panel for receiving the information and for providing the secure access requested (Hoffman,

BIA models - BIA wireless, CATV, col. 14, lines 30-51).

Regarding claim 54, (New) Hoffman in view of Igaki further teaches a system according to claim

52, wherein the control panel includes a converter for receiving the secure wireless signal and for

outputting the information, and/or the biometric sensor authenticates the identity of the user by comparing

a biometric input from the user with a biometric signature for the user in the biometric database

(Hoffman, col. 8, lines 29-50, comparison of entered biometric sample with the stored biometric

sample).

Regarding claim 55, (New) Hoffman in view of Igaki further teaches a system according to claim

52, wherein the secure wireless signal (col. 17, lines 15) comprises an RF carrier and a rolling code,

encrypted Bluetooth or other communications protocol, and the converter converts the secure wireless

signal to a Wiegand protocol or other protocol required by the system (Hoffman, col. 14, lines 18-24).

Regarding claim 56, (New) Hoffman in view of Igaki further teaches a system according to claim

45, wherein the biometric sensor and the transmitter sub-system are located in a portable device

(Hoffman, col. 17, lines 64-67, The phone/CATV version of BIA hardware).

Regarding claim 67, (New) Hoffman further teaches a system according to claim 49, wherein:

physical access is provided to one of a door, a gate, and a hatch; and electronic access is provided to

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one of a Personal Computer, a smart phone, a network, and a payment (Hoffman, fig. 3, col. 14, section

1.1.2 BIA models)

The following is a quotation of the appropriate paragraphs of pre-AIA 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.

Claim 65 is ejected under pre-AIA 35 U.S.C. 102(b) as being anticipated by Igaki et al. US

5,109,428 hereinafter "Igaki".

record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of

requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred

embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.),

cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 65, (New) Igaki teaches a method for populating a database of biometric

signatures, the method comprising the steps of:

receiving, by a biometric sensor (fig. 8, ref. 110), a succession of entries of the biometric signal;

determining at least one of the number of said entries and a duration of each said entry; and populating

the database dependent upon the succession of entries (see Abstract, "An optical sensor unit

optically produces a sequence of fingerprint image data during a single operation of pressing a

fingerpad onto an inspection plate in a direction substantially transverse to the plate and with

increasing pressure over a time interval. A data storing unit stores the produced fingerprint image

data in the form of a sequence of fingerprint image data obtained during the single operation of

pressing the fingerpad onto the inspection plate." This method is the improvement from already

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known successive multiple fingerprint pressing down operations to performing only a single

operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is

to provide an improved apparatus and method for use in fingerprint identification for extracting

minutia data from fingerprint image data in which a plurality of picking-up operations of the

fingerprint image data is carried out by performing only a single operation of pressing down of the

fingerpad, on a sensor the alignment between successive fingerprint image data produced in

successive, multiple fingerprint pressing down operations as in the prior art becomes

unnecessary"; See further fig. 5A-5D).

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966),

that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C.

103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or

nonobviousness.

Claims 46-48, 57-58, 60-61, and 63 are rejected under pre-AIA 35 U.S.C. 103(a) as being

unpatentable over Hoffman in view of Igaki et al. US 5,109,428 hereinafter "Igaki".

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Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 46, (New) A system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for <u>authorization of transactions and transmissions</u>. The tokenless system and method are principally based on a <u>correlative comparison of a unique biometrics sample</u>, such as a finger print or voice recording, gathered <u>directly from the person</u> of an unknown user, with an authenticated biometrics sample of the same type obtained and stored previously.), the system comprising:

a processor, a memory, and a processor executable software program; a database of biometric signatures (*col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36*);

a transmitter sub-system (i.e. Biometric Input Device, fig. 3 item 12]) comprising:

a biometric sensor for receiving a biometric signal (*fig.3, ref. 12; col. 13, lines 2-8*), wherein said transmitter sub-system is operable for;

matching the biometric signal against members of the database of biometric signatures; and sending an access signal dependent upon the matching (see col. 8, lines 29-33: comparison of the biometric sample taken from said first individual with any previously stored biometric samples in said selected personal identification code-basket to make sure that the biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual with said at least one stored biometric sample from said at least one second individual in said entered personal identification code-basket for producing either a successful or failed identification result; an output step wherein said identification result

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or said determination is externalized and displayed, and; a presentation step wherein on

successful identification of said first individual, said private code is presented to said first

individual); and

a receiver sub-system operable for;

receiving the access signal (See col. 40, lines 59-62: Individual enters their biometric

into the BIA, DPC is receiving biometric input by the ATM); and

providing conditional access to the controlled item dependent upon the access

signal (see [Col. 40, lines 62-67] the <u>Data processing center (DPC) validates the biometric-</u>

<u>PIC</u> and sends the resulting asset account number along with the private code. The ATM

decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response

to see whether or not the individual is performing a standard account access [e.g.

accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also

[38:53-60] An individual using a CST starts a session by providing identification by

entering their biometric-PIC. The BIA constructs an Identification Request message, and

send it to the DPC for verification. Once the system verifies the individual, the CST

application can operate normally, though limited by the individual's previously assigned

DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service

can decide to deny any request for over \$300 from low security BIA, requiring individuals

to use higher security BIA to authorize such sums. The authorization service can also use

the security level as a quide on how much to charge for the transaction, based on risk.)

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught wherein the transmitter

sub-system is further operable for populating the database of biometric signatures by performing the

steps of: receiving, by the biometric sensor, a succession of entries of the biometric signal; and

populating the database with biometric information derived from the succession of entries (see Abstract,

"An optical sensor unit optically <u>produces a sequence of fingerprint image data</u> during a single

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operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse

to the plate and with increasing pressure over a time interval. A data storing unit stores the

produced fingerprint image data in the form of a sequence of fingerprint image data obtained

during the single operation of pressing the fingerpad onto the inspection plate." This method is

the improvement from already known successive multiple fingerprint pressing down operations to

performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of

the present invention is to provide an improved apparatus and method for use in fingerprint

identification for extracting minutia data from fingerprint image data in which a plurality of

picking-up operations of the fingerprint image data is carried out by performing only a single

operation of pressing down of the fingerpad, on a sensor the alignment between successive

fingerprint image data produced in successive, multiple fingerprint pressing down operations as

in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

Regarding claim 47, (New) Hoffman-Igaki combination further teaches a system according to

claim 45, wherein the step of populating the database comprises the steps of: accepting the succession

of entries as control information; and populating the database dependent upon the control information

(Igaki, col. 1, line 40- col.2, line 2).

Regarding claim 48, (New) Hoffman-Igaki combination further teaches a system according to

claim 45, further operable for: providing a signal for directing input of the succession of entries of the

biometric signal; and incorporating into the access signal an identification field identifying the biometric

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signal (Igaki, col. 1, line 40- col.2, line 2). if the signal matches a member of the database (Hoffman,

see col. 8, lines 29-33).

Regarding claim 57, (New) Hoffman teaches a transmitter sub-system for operating in a system

for providing secure access to a controlled item (see [Abstract] A tokenless identification system and

method for <u>authorization of transactions and transmissions</u>. The tokenless system and method

are principally based on a <u>correlative comparison of a unique biometrics sample, such as a finger</u>

print or voice recording, gathered directly from the person of an unknown user, with an

authenticated biometrics sample of the same type obtained and stored previously.), wherein the

transmitter sub-system comprises:

a processor, a memory, and a processor executable software program; a biometric sensor for

receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8), wherein said transmitter sub-system is

operable for;

matching the biometric signal against members of a database of biometric signatures to thereby

output an accessibility attribute; emitting an access signal conveying information dependent upon said

accessibility attribute (see col. 8, lines 29-33: comparison of the biometric sample taken from said

first individual with any previously stored biometric samples in said selected personal

identification code-basket to make sure that the biometric sample entered by said first individual

is algorithmically unique from the previously stored at least one biometric sample provided by at

least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric

sample from said first individual with said at least one stored biometric sample from said at least

one second individual in said entered personal identification code-basket for producing either a

successful or failed identification result; an output step wherein said identification result or said

determination is externalized and displayed, and; a presentation step wherein on successful

identification of said first individual, said private code is presented to said first individual);

Hoffman taught the claimed system. Hoffman was silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught populating the database

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of biometric signatures by: receiving, by the biometric sensor, a succession of entries of the biometric signal, said succession being characterised according to at least one of the number of said entries and a duration of each said entry; and populating the database dependent upon the succession of entries (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the alignment between

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because the use of Igaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-51]).

successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Regarding claim 58, (New) Hoffman teaches a method for providing secure access to a controlled item see [Abstract] A tokenless identification system and method for authorization of transactions and transmissions. The tokenless system and method are principally based on a correlative comparison of a unique biometrics sample, such as a finger print or voice recording,

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gathered directly from the person of an unknown user, with an authenticated biometrics sample of the same type obtained and stored previously.) in a system comprising a processor, a memory, and a processor executable software program, a database of biometric signatures (col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36), a transmitter sub-system comprising a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8), the transmitter subsystem being operable for emitting a secure access signal, and a receiver sub-system operable for receiving the transmitted secure access signal (See col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input by the ATM) and for providing conditional access to the controlled item dependent upon information in said secure access signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends the resulting asset account number along with the private code. The ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the individual is performing a standard account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to deny any request for over \$300 from low security BIA, requiring individuals to use higher security BIA to authorize such sums. The authorization service can also use the security level as a guide on how much to charge for the transaction, based on risk.), the method comprising the steps of: populating the database of biometric signatures by:

receiving a biometric signal; matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; emitting an access signal conveying information dependent upon said accessibility attribute; and providing conditional access to the controlled item dependent upon said information attribute (see col. 8, lines 29-33: comparison of the biometric

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sample taken from said first individual with any previously stored biometric samples in said selected personal identification code-basket to make sure that the biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual with said at least one stored biometric sample from said at least one second individual in said entered personal identification code-basket for producing either a successful or failed identification result; an output step wherein said identification result or said determination is externalized and displayed, and; a presentation step wherein on successful identification of said first individual, said private code is presented to said first individual).

Hoffman taught the claimed system. Hoffman was silent on but the analogous art Igaki which addressed the same field of endeavor in fingerprint identification explicitly taught receiving, by the biometric sensor, a succession of entries of the biometric signal; determining at least one of the number of said entries and a duration of each said entry; and populating the database dependent upon the succession of entries; (see Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse to the plate and with increasing pressure over a time interval. A data storing unit stores the produced fingerprint image data in the form of a sequence of fingerprint image data obtained during the single operation of pressing the fingerpad onto the inspection plate." This method is the improvement from already known successive multiple fingerprint pressing down operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor

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the alignment between successive fingerprint image data produced in successive, multiple

fingerprint pressing down operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of <u>lgaki</u> [lgaki:1:58-61] because

the use of Igaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

Regarding claim 60, (New) Hoffman in view of Igaki further teaches a method according to claim

57, wherein the step of enrolling the biometric signature further comprises receiving another biometric

signal to confirm the enrolling of the biometric signal as an administrator signature dependent upon

generation of a feedback signal adapted to direct provision of at least one of the biometric signal and the

other biometric signal (Hoffman, col. 60, lines 34-43; col. 8, lines 20-55).

Regarding claim 61, (New) Hoffman in view of Igaki further taught a method according to claim

57, wherein the biometric sensor and the transmitter sub-system are located in a portable device

(Hoffman, col. 17, lines 64-67, The phone/CATV version of BIA hardware).

Regarding claim 63, (New) Hoffman taught a system for populating a database of biometric

signatures (see [Abstract] A tokenless identification system and method for authorization of

transactions and transmissions. The tokenless system and method are principally based on a

correlative comparison of a unique biometrics sample, such as a finger print or voice recording,

gathered directly from the person of an unknown user, with an authenticated biometrics sample of

the same type obtained and stored previously.), the system comprising:

a processor, a memory, and a processor executable software program; a database of biometric

signatures (col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36); and a

biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8), wherein said system is

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operable for populating the database of biometric signatures by performing the steps of: receiving, by the

biometric sensor(fig.3, ref. 12; col. 13, lines 2-8),

Hoffman was silent on but the analogous art Igaki taught a succession of entries of the biometric

signal, the succession being characterised according to at least one of the number of said entries and a

duration of each said entry; and populating the database dependent upon the succession of entries (see

Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a

single operation of pressing a fingerpad onto an inspection plate in a direction substantially

transverse to the plate and with increasing pressure over a time interval. A data storing unit

stores the produced fingerprint image data in the form of a sequence of fingerprint image data

obtained during the single operation of pressing the fingerpad onto the inspection plate." This

method is the improvement from already known successive multiple fingerprint pressing down

operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52]

"An object of the present invention is to provide an improved apparatus and method for use in

fingerprint identification for extracting minutia data from fingerprint image data in which a

plurality of picking-up operations of the fingerprint image data is carried out by performing only a

single operation of pressing down of the fingerpad, on a sensor the alignment between

successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of lgaki [lgaki:1:58-61] because

the use of <u>Igaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, *Ig. 3, item 12*] the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

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Claims 59, 62, 64 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over

Hoffman in view of Igaki as applied to claim 57 above, and further in view of Koo et al. WO

02/12660 hereinafter "Koo".

Regarding claim 59, (New) Hoffman-Igaki combination teaches a method according to claim 57,

the combination is silent on but the analogous art Koo taught wherein the step of populating the database

of biometric signatures further comprises the step of enrolling a biometric signature into the database of

biometric signatures by: receiving a biometric signal; and enrolling the biometric signal as an

administrator signature if the database of biometric signatures is empty (Koo, see [Page 16, lines 8-10]

if no registered administrator fingerprint information exists as empty, the inputted fingerprint is

registered as initial administrator fingerprint, see also page 10, lines 12-14).

Therefore, it would have been obvious to one ordinary skilled in the art at the time the applicant's

invention was made to modify the combined method of Hoffman of Igaki with the teaching of Koo for

enrolling the relevant signatures into the database using the biometric sensor as an administrator if the

database of biometric signatures is empty because they are analogous in biometric entry.

One of ordinary skilled in the art would have been motivated to incorporate the idea of Koo [Page,

5, lines 19-22; Page 16, lines 8-10] within the combined method of Hoffman [fig. 1] and Igaki because

the idea of Koo could provide the method of Hoffman to provide an electronic card key administration

system consisted of host computer systems for administration of a plural of the electronic fingerprint

recognition card keys (Koo, Page 3, lines 21-23).

Regarding claim 62, (New) A non-transitory computer readable medium for storing a computer

program comprising instructions or code, which when executed by processors, causes the processors to

perform the steps of the method of any one of claims 14 to 17. (Claims 14-17 was canceled. For

examining purpose, examiner construe claims 58-61 and see the same rational cited in the above

claims).

Regarding claim 64, (New) Hoffman-Igaki-Koo combination further teaches a system according

to claim 62, wherein the system is further operable for enrolling a biometric signature into the database of

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biometric signatures by: receiving a biometric signal; and enrolling the biometric signal as an

administrator signature if the database of biometric signatures is empty (Koo, see [Page 16, lines 8-10]

if no registered administrator fingerprint information exists as empty, the inputted fingerprint is

registered as initial administrator fingerprint, see also page 10, lines 12-14).

Claim 66 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Igaki in

view of Koo.

Regarding claim 66, (New) Igaki teaches a method according to claim 64, wherein the step of

populating the database further comprises the steps of:

receiving a biometric signal (Igaki, fig.6, ref. S1); Igaki is silent on but the analogous art Koo

teaches enrolling the biometric signal as an administrator signature if the database of biometric

signatures is empty (Koo, see [Page 16, lines 8-10] if no registered administrator fingerprint

information exists as empty, the inputted fingerprint is registered as initial administrator

fingerprint, see also page 10, lines 12-14).

One of ordinary skilled in the art would have been motivated to incorporate the idea of Koo [Page,

5, lines 19-22; Page 16, lines 8-10 within the combined method of Igaki because the idea of Koo could

provide the method of Igaki to provide an electronic card key administration system consisted of host

computer systems for administration of a plural of the electronic fingerprint recognition card keys (Koo,

Page 3, lines 21-23).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth

in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from

the mailing date of this action. In the event a first reply 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

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is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX

MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to MOHAMMAD L. RAHMAN whose telephone number is (571)270-7471. The examiner can

normally be reached on Monday to Friday: 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

TAGHI T. ARANI can be reached on 5712723787. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative

or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-

1000.

/MOHAMMAD L RAHMAN/

Primary Examiner, Art Unit 2438

Application Number	13/572,166	ontroi No.	Applicant(s)/Patent under Reexamination BURKE, CHRISTOPHER JOHN			
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Document Code - DioQ		Internal D	ocument – De	THOT WAIL		

TERMINAL DISCLAIMER	☐ APPROVED	⊠ DISAPPROVED
Date Filed : 08/26/2014	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:

Dorethea Lawrence

The person who signed the terminal disclaimer (only for application filed before September 16, 2012): does not have power of attorney, and thus, is not of record. (See FP 14.29. fti).

Resubmit a new terminal disclaimer at no additional fee.

U.S. Patent and Trademark Office

EAST Search History

EAST Search History (Prior Art)

Ref #	Ref Hits Search Query DBs			Default Operator	Plurals	Time Stamp
L1	94	(biometric fingerprint) with ((multiple plural consecutive sequential successive) near2 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	ON	2014/11/06 13:34	
L2	33	(biometric fingerprint) with ((multiple plural consecutive sequential successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:34
L3	18809	(713/182-186,168).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
L4	2	L3 and L2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
L5	29312	(726/2,7,26-30).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
L6	0	L5 and L2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
L7	39035	(709/224-225).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
L8	0	L7 and L2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
L9	36	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/11/06 13:35
L10	0	L9 and L1	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
L11	10	(biometric fingerprint) with ((consecutive sequential	US-PGPUB; USPAT; USOCR;	OR	ON	2014/11/06 13:36

		successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S1	656	(biometric fingerprint) with (key near fob)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:45
S2	275	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:47
S 3	49	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:48
S4	43	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:51
S5	0	(biometric fingerprint) with (remote near key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:52
S6	0	(biometric fingerprint) with (remote near2 key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:53
S7	2	("8266442").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:36
S8	2	"20120278863"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:42
S9	2	"20120311346"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S10	2	"20120311343"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S11	29	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/03/19 15:33
S12	16349	(713/182-186,168).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34

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S13	23869	(726/2,7,26-30).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34
S14	33433	(709/224-225).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:35
S15	738	biometric with identif\$7 same (access near2 (right privilege control)) and (((unconditional unlimited) near2 access) duress alert telemetry)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S16	33	(enroll\$3 register\$3) with (((biometric adj image) biometric (fingrprint adj image) fingerprint) near (sequence array))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S17	4829	assign\$3 with (access near (right privilege))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S18	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S19	174	S17 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; BM_TDB	OR	ON	2014/03/19 15:36
S20	26	S12 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S21	24	S13 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S22	4	S14 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM TDB	OR	ON	2014/03/19 15:37
S23	23	S15 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S24	65	S12 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37

S25	41	S13 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S26	11	S14 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S27	27	S15 and S17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S28	165	S15 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S29	1377		US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
S30	131	(assign\$3 provid\$3) with (access adj (right privilege)) same (biometric fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38

EAST Search History (Interference)

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
	MOHAMMAD L RAHMAN	2438

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
	MOHAMMAD L RAHMAN	2438

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U.S. Patent and Trademark Office Part of Paper No.: 20141103

66

Search Notes

Application/Control No.	Applicant(s)/Patent Under Reexamination
13572166	BURKE, CHRISTOPHER JOHN
Examiner	Art Unit
MOHAMMAD L RAHMAN	2438

CPC- SEARCHED		
Symbol	Date	Examiner
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CPC COMBINATION SETS - SEARC	CHED	
Symbol	Date	Examiner

	US CLASSIFICATION S	SEARCHED	
Class	Subclass	Date	Examiner
713	186	03/19/2014	MLR
Updated			
Search			
713	186	11/6/2014	MLR

SEARCH NOTES		
Search Notes	Date	Examiner
Combined text search with classes/sub-classes (see EAST)	3/19/2014	MLR
Inventor name, Assigee	3/19/2014	MLR
NPL Search - Google Scholar IEEE ACM WIPO	3/19/2014	MLR
Updated Search		
Updated keywords combined with classes/sub-classes	11/6/2014	MLR
Inventor name, Assignee	11/6/2014	MLR
NPL Search - Google Scholar IEEE ACM WIPO	11/6/2014	MLR

	INTERFERENCE SEARCH		
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

U.S. Patent and Trademark Office Part of Paper No. : 20141103

Approved for use through 07/31/2012. OMB 0851-0031

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

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TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING	Docket Number (Optional)
REJECTION OVER A "PRIOR" PATENT	12838/8
In re Application of: Christopher John Burke	
Application No.: 13/572,166	
Filed: August 10, 2012	
For: REMOTE ENTRY SYSTEM	
except as provided below, the terminal part of the statutory term of any patent granted on the instant a	aid prior patent is presently shortened tion shall be enforceable only for and
In making the above disclaimer, the owner does not disclaim the terminal part of the term of any pater would extend to the expiration date of the full statutory term of the prior patent , "as the term of said pri terminal disclaimer," in the event that said prior patent later: expires for failure to pay a maintenance fee; is held unenforceable; is found invalid by a court of competent jurisdiction; is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; has all claims canceled by a reexamination certificate;	
is reissued; or is in any manner terminated prior to the expiration of its full statutory term as presently shorte	ned by any terminal disclaimer.
Check either box 1 or 2 below, if appropriate.	
1. For submissions on behalf of a business/organization (e.g., corporation, partnership, university etc.), the undersigned is empowered to act on behalf of the business/organization.	, government agency,
I hereby declare that all statements made herein of my own knowledge are true and that all s belief are believed to be true; and further that these statements were made with the knowledge that wi made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United Statements may jeopardize the validity of the application or any patent issued thereon.	llful false statements and the like so
2. The undersigned is an attorney or agent of record. Reg. No. 34,880	
/Michael E. Milz/	March 10, 2014
Signature	Date
Michael E. Milz	
Typed or printed name	
	(312) 321-4200
	Telephone Number
Terminal disclaimer fee under 37 CFR 1.20(d) included.	
WARNING: Information on this form may become public. Credit card inform be included on this form. Provide credit card information and authorization	
*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner). Form PTO/SB/96 may be used for making this certification. See MPEP § 324.	

This collection of information is required by 37 CFR 1.321. 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 c omplete, 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. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal					
Application Number:	13:	572166			
Filing Date:	10	-Aug-2012			
Title of Invention:	RE	MOTE ENTRY SYSTE	M		
First Named Inventor/Applicant Name:	Ch	ristopher John Burk	e		
Filer:	Mi	chael Edward Milz/k	cathy kerns		
Attorney Docket Number:	12	838/8			
Filed as Small Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:					
Pages:					
Claims:					
Claims in excess of 20		2202	1	40	40
Miscellaneous-Filing:					
Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Extension - 1 month with \$0 paid	2251	1	100	100
Miscellaneous:				
Request for Continued Examination	2801	1	600	600
	Tot	al in USD	(\$)	740

Electronic Acknowledgement Receipt		
EFS ID:	21728234	
Application Number:	13572166	
International Application Number:		
Confirmation Number:	9752	
Title of Invention:	REMOTE ENTRY SYSTEM	
First Named Inventor/Applicant Name:	Christopher John Burke	
Correspondence Address:	Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 - Chicago IL 60610 US 3123214200 -	
Filer:	Michael Edward Milz/Maggie Krause	
Filer Authorized By:	Michael Edward Milz	
Attorney Docket Number:	12838/8	
Receipt Date:	10-MAR-2015	
Filing Date:	10-AUG-2012	
Time Stamp:	16:27:26	
Application Type:	Utility under 35 USC 111(a)	

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$740

RAM confirmation Number	3283
Deposit Account	231925
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filling, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		12838-8-Amendment-TD-EOT-	905210	yes	19
		RCE.pdf	de59c4aecc5983c3d2f230d5d02297b014a 015db	,	
	Multi	part Description/PDF files in .	zip description		
	Document De	escription	Start	E	nd
	Transmittal	1		1	
	Extension o	2		3	
	Request for Continued	4		5	
	Amendment Submitted/Enter	6		6	
	Claim	7	13		
	Applicant Arguments/Remarks	14	19		
Warnings:					
Information:					
2	Terminal Disclaimer Filed	12838-8-TerminalDisclaimer.	374497	no	2
		pdf	e 1b2a8ea2bfd24dc9d1738dea326e74ca98 50033		_
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	33770	no 2	
J rec worksheet (5566)		.cc .mo.par	81 de730e4bd4fe68c2cbcac844359dfdf256 483f		
Warnings:					
Information:					
		Total Files Size (in bytes)	13	13477	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

ERTIFICATE	OF	EFS	FIL	ING	UNDER	37	CFR	\$1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: March 10, 2015

Name: Michael E. Milz (Reg. No. 34,880)

Signature: /Michael E. Milz.

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Filed:

August 10, 2012

For:

REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Examiner:

Rahman, Mohammad L.

Art Unit:

2438

Conf. No.:

9752

TRANSMITTAL

Mail Stop RCE Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Sir:

Attached is/are:

Petition and Fee for Extension of Time (1 month); Request for Continued Examination; Amendment and Response to Final Office Action Mailed November 10, 2014; and Terminal Disclaimer to Obviate a Double Patenting Rejection Over a "Prior" Patent.

Fee calculation:

dditional f	ee is	required.
	dditional f	dditional fee is

- Per 37 CFR §1.27,
 Applicant is small entity ☐ Applicant is micro entity.
- An extension fee in an amount of \$100 for a 1-month extension of time under 37 CFR § 1.136(a).
- A petition or processing fee in an amount of \$600 under 37 CFR §1.17(e)(1).
- An additional filing fee has been calculated as shown below:

					Fee		Small Entity Fee		Micro Entity Fee	
	Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee
Total	68	Minus	67	1	x \$ 80 =	\$	1x \$ 40 =	\$40	x \$20 =	\$
Independent		Minus			x \$420 =	\$	x \$210 =	\$	x \$105 =	\$
First Presentation of Multiple Dep. Claim		+ \$780 =	\$	+ \$390 =	\$	+ \$195 =	\$			
					Total	\$	Total	\$40	Total	\$

Fee payment:

\boxtimes	Please charge Deposit Account No. 23-1925 in the amount of \$740 for 1-month Extension of Time (\$100));
	Request for Continued Examination (\$600); and 1 additional dependent claim (\$40).	

- Payment by credit card in the amount of \$_____ (Form PTO-2038 is attached).

 WARNING: Information on this form may become public. Credit card information should not be included on this form.
- The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

March 10, 2015	/Michael E. Milz/
Date	Michael E. Milz (Reg. No. 34,880)

8 RINKS GILSON & LIONE BRINKS GILSON & LIONE NBC Tower – Suite 3600, 455 N. Cityfront Plaza Drive, Chicago, IL. 60611-5599

	CERTI	FICATE OF EFS FIL	LING UNDER 37 C	CFR §1.8				
I hereby certify that this Commissioner for Patents				ne United	States	Patent and	Trademark	Office

Name: Michael E. Milz (Reg. No. 34,880)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Examiner:

Rahman, Mohammad L.

Filed:

August 10, 2012

Art Unit:

2438

For:

REMOTE ENTRY SYSTEM

Conf. No.:

9752

Attorney Docket No.: 12838/8

PETITION AND FEE FOR EXTENSION OF TIME (37 CFR § 1.136(a))

Mail Stop RCE Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Dear Sir/Madam:

This is a petition for an extension of the time to respond to the final Office Action dated November 10, 2014 for a period of 1 month(s).

Per 37 CFR §1.27, ⊠ Applicant is small entity ☐ Applicant is micro entity.

	Extension		Small Entity	Micro Entity
	Months	Fee	Fee	Fee
\boxtimes	One Month	\$ 200	\$ 100	\$ 50
	Two Months	\$ 600	\$ 300	\$150
	Three Months	\$1,400	\$ 700	\$350
	Four Months	\$2,200	\$1,100	\$550
	Five Months	\$3,000	\$1,500	\$750

Payment Method:

	Payment by credit card in the ar Form PTO-2038 is enclosed for	mount of \$ to cover the fees listed above. this purpose.			
\boxtimes	The Commissioner is hereby authorized to charge \$100 to cover the fees listed above to Deposit Account No. 23-1925.				
	The Commissioner is hereby authorized to charge any deficiencies in fees or credit overpayment to Deposit Account No. 23-1925.				
		Respectfully submitted,			
Dated:	March 10, 2015	/Michael E. Milz/ Michael E. Milz, Reg. No. 34,880			

Attorney for Applicant(s)

BRINKS GILSON & LIONE PO BOX 10395 CHICAGO, IL 60610 (312) 321-4200

CERTIFICATE OF	EFS FILING	UNDER 37 CFF	₹§1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: March 10, 2015

Name: Michael E. Milz (Reg. No. 34,880)

Signature: /Michael E. Milz/

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of	: Christopher John Burke		
Appln. No.:	13/572,166	Examiner:	Rahman, Mohammad L.
Filed:	August 10, 2012	Art Unit:	2438
For:	REMOTE ENTRY SYSTEM	Conf. No.:	9752
Attorney Dock	et No.: 12838/8		

Mail Stop RCE Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

REQUEST FOR CONTINUED EXAMINATION (37 CFR § 1.114)

			REGULATION CONTINUED EXAMINATION (STOLK § 1.114)				
Dear	Sir/M	1 adan	1:				
		s) req 1.114.	uests continued examination of the above-identified application under				
	This	is the	FIRST request under 37 CFR §1.17(e) in this application.				
\boxtimes	Submission under 37 CFR 1.114 (check at least one of the following):						
		Prev	iously submitted:				
			Applicant(s) requests nonentry of any previously-filed unentered amendments.				
			Please enter and consider the Amendment After Final Under 37 CFR §1.116 previously filed on				
			Consider the arguments in the Appeal Brief or Reply Brief previously filed on				
			·				
			Other:				
	\boxtimes	Attac	ched is/are:				
			An Information Disclosure Statement				
		\boxtimes	An Amendment to the written description, claims, or drawings				
			New Arguments and/or New Evidence in support of Patentability				
		\boxtimes	Other: Terminal Disclaimer				

Page 1 of 2

П	Red	uest for suspension of action:					
	App und	Applicant(s) hereby requests suspension of action on the above-identified application under 37 CFR §1.103(c) for a period of months. (Period of suspension shall not exceed 3 months; requires Processing Fee under 37 CFR §1.17(i)).					
\boxtimes	Sma	all/Micro Entity Status:					
	\boxtimes	Applicant(s) hereby asserts entitleme under 37 CFR §§ 1.9 and 1.27.	nt to claim ⊠ small or ☐ micro entity status				
		A small/micro entity statement or assestatus was filed in prior application no and desired.	ertion of entitlement to claim small/micro entity o/ and such status is still proper				
		Is no longer desired.					
\boxtimes	Applicant(s) calculates the following fees to be due in connection with this Request:						
	\boxtimes	A request fee of \$600 under 37 CFR	§1.17(e)(1) or (2).				
		A suspension processing fee of \$	under 37 CFR §1.17(i).				
	\boxtimes	An additional filing fee of \$40 under 3	7 CFR §1.16 (<u>1</u> additional dependent claim).				
	\boxtimes	An extension fee of \$100 under 37 CF	FR §1.17(a) for a <u>1</u> -month extension of time.				
\boxtimes	Fee payment to cover the above-enumerated fee(s):						
	\boxtimes	Please charge Deposit Account No. 2 amount of \$740.	3-1925 (BRINKS GILSON & LIONE) in the				
		A payment by credit card in the amou	nt of \$ (Form PTO-2038 is attached).				
		ed to charge payment of any additional filing nd any patent application processing fees under aper (including any extension fee required to or to credit any overpayment, to Deposit ON & LIONE).					
			Respectfully submitted,				
		, 2015	/Michael E. Milz/				
Date	;		Michael E. Milz (Reg. No. 34,880)				

Appln. No. 13/572,166

BRINKS GILSON & LIONE Page 2 of 2 Docket No. 12838/8

CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being filed electronically with the U.S. Patent and Trademark Office on

Date: March 10, 2015

Name: Michael E. Milz (Reg. No. 34,880) Signature: Michael E. Milz/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Filed:

August 10, 2012

For:

REMOTE ENTRY SYSTEM

Attorney Docket No:

12838/8

Examiner: Rahman, Mohammad L.

Art Unit: 2438

Confirmation No. 9752

AMENDMENT AND RESPONSE TO FINAL OFFICE ACTION MAILED NOVEMBER 10, 2014

MAIL STOP - RCE Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

In response to the final Office Action mailed November 10, 2014, please enter the following amendments and consider the following remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 9 of this paper.

A terminal disclaimer is being submitted with this Amendment and Response.

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

What is claimed is:

- 1-44. (Cancelled)
- 45. (Currently amended) A transmitter sub-system for providing secure access to a controlled item, the transmitter sub-system comprising:
 - a processor, a memory, and a processor executable software program;
 - a database of biometric signatures;
- a biometric sensor for receiving a biometric signal, wherein said transmitter subsystem is operable for:
- matching the biometric signal against members of the database of biometric signatures; and
- sending, using a wireless communication channel, an access signal dependent upon the results of the matching, said secure access being provided dependent upon the access signal.
- 46. (Currently amended) A system for providing secure access to a controlled item, the system comprising:
 - a processor, a memory, and a processor executable software program;
 - a database of biometric signatures;
 - a transmitter sub-system comprising:
- a biometric sensor for receiving a biometric signal, wherein said transmitter sub-system is operable for;
- matching the biometric signal against members of the database of biometric signatures; and
 - sending an access signal dependent upon the matching; and a receiver sub-system operable for;

Page 2 of 14

receiving the access signal; and

providing conditional access to the controlled item dependent upon the access signal;

wherein the transmitter sub-system is further operable for populating the database of biometric signatures by performing the steps of:

receiving, by the biometric sensor, a succession of entries of the biometric signal, said succession being characterized according to at least one of the number of said entries and a duration of each said entry; and

populating the database with biometric information derived from the succession of entries <u>provided that the number of said entries is the appropriate number of entries</u>, and the duration of each said entry is of the appropriate duration.

47. (Currently amended) A system according to claim [[45]] <u>46</u>, wherein the step of populating the database comprises the steps of:

accepting the succession of entries as control information; and populating the database dependent upon the control information.

48. (Currently amended) A system according to claim [[45]] 46, further operable for: providing a signal for directing input of the succession of entries of the biometric signal; and

incorporating into the access signal an identification field identifying the biometric signal if the signal matches a member of the database.

49. (Currently amended) A system according to claim [[45]] <u>46</u>, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class and a system user class, the access signal comprising:

an access attribute if the biometric signal matches a member of the database of biometric signatures; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

50. (Currently amended) A system according to claim [[45]] <u>46</u>, wherein the controlled item is one of:

- a locking mechanism for providing physical access; and a locking mechanism for providing electronic access.
- 51. (Currently amended) A system according to claim [[45]] <u>46</u>, wherein the biometric sensor is responsive to one of voice, retinal pattern, iris pattern, face pattern, and palm configuration, and/or the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver sub-system.
- 52. (Currently amended) A system according to claim [[45]] <u>46</u>, wherein said conditional access comprises one of:

provision of access to the controlled item if the access signal comprises an access attribute:

provision of access to the controlled item and sounding of an alert if the access signal comprises a duress attribute; and

denial of access to the controlled item and sounding of an alert if the access signal comprises an alert attribute.

53. (Currently amended) A system as claimed in claim [[45]] 46, wherein:

the transmitter sub-system is further operative for transmitting information capable of granting more than two types of access to the controlled item using a secure wireless signal dependent upon a request from the user and the authentication of the user identity; and the system further comprises a control panel for receiving the information and for providing the secure access requested.

54. (Currently amended) A system according to claim [[52]] <u>53</u>, wherein the control panel includes a converter for receiving the secure wireless signal and for outputting the information, and/or the biometric sensor authenticates the identity of the user by comparing a biometric input from the user with a biometric signature for the user in the biometric database.

55. (Currently amended) A system according to claim [[52]] <u>53</u>, wherein the secure wireless signal comprises an RF carrier and a rolling code, encrypted Bluetooth or other communications protocol, and the converter converts the secure wireless signal to a Wiegand protocol or other protocol required by the system.

- 56. (Currently amended) A system according to claim [[45]] <u>46</u>, wherein the biometric sensor and the transmitter sub-system are located in a portable device.
- 57. (Currently amended) A transmitter sub-system for operating in a system for providing secure access to a controlled item, wherein the transmitter sub-system comprises:
 - a processor, a memory, and a processor executable software program;
- a biometric sensor for receiving a biometric signal, wherein said transmitter subsystem is operable for;
- matching the biometric signal against members of a database of biometric signatures to thereby output an accessibility attribute;
- emitting an access signal conveying information dependent upon said accessibility attribute; and

populating the database of biometric signatures by:

- receiving, by the biometric sensor, a succession of entries of the biometric signal, said succession being characterised according to at least one of the number of said entries and a duration of each said entry; and
- populating the database dependent upon the succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.
- 58. (Currently amended) A method for providing secure access to a controlled item in a system comprising a processor, a memory, and a processor executable software program, a database of biometric signatures, a transmitter sub-system comprising a biometric sensor for receiving a biometric signal, the transmitter sub-system being operable for emitting a secure access signal, and a receiver sub-system operable for receiving the transmitted secure access

signal and for providing conditional access to the controlled item dependent upon information in said secure access signal, the method comprising the steps of:

populating the database of biometric signatures by:

receiving, by the biometric sensor, a succession of entries of the biometric signal, said succession being characterized according to at least one of the number of said entries and a duration of each said entry;

determining at least one of the number of said entries and a duration of each said entry; and

populating the database dependent upon the succession of entries <u>provided that</u> the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration;

receiving a biometric signal;

matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute;

emitting an access signal conveying information dependent upon said accessibility attribute; and

providing conditional access to the controlled item dependent upon said information.

59. (Currently amended) A method according to claim [[57]] <u>58</u>, wherein the step of populating the database of biometric signatures further comprises the step of enrolling a biometric signature into the database of biometric signatures by:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

60. (Currently amended) A method according to claim [[57]] <u>58</u>, wherein the step of enrolling the biometric signature further comprises receiving another biometric signal to confirm the enrolling of the biometric signal as an administrator signature dependent upon generation of a feedback signal adapted to direct provision of at least one of the biometric signal and the other biometric signal.

61. (Currently amended) A method according to claim [[57]] <u>58</u>, wherein the biometric sensor and the transmitter sub-system are located in a portable device.

- 62. (Currently amended) A non-transitory computer readable medium for storing a computer program comprising instructions or code, which when executed by processors, causes the processors to perform the steps of the method of any one of claims [[14]] <u>58</u> to [[17]] <u>61</u>.
- 63. (Currently amended) A system for populating a database of biometric signatures, the system comprising:
 - a processor, a memory, and a processor executable software program;
 - a database of biometric signatures; and
- a biometric sensor for receiving a biometric signal, wherein said system is operable for populating the database of biometric signatures by performing the steps of:
- receiving, by the biometric sensor, a succession of entries of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry; and
- populating the database dependent upon the succession of entries <u>provided that</u> the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.
- 64. (Currently amended) A system according to claim [[62]] <u>63</u>, wherein the system is further operable for enrolling a biometric signature into the database of biometric signatures by:

receiving a biometric signal; and

- enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.
- 65. (Currently amended) A method for populating a database of biometric signatures, the method comprising the steps of:

receiving, by a biometric sensor, a succession of entries of the biometric signal, said succession being characterized according to at least one of the number of said entries and a duration of each said entry;

determining at least one of the number of said entries and a duration of each said entry; and

populating the database dependent upon the succession of entries <u>provided that the</u> number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

66. (Currently amended) A method according to claim [[64]] <u>65</u>, wherein the step of populating the database further comprises the steps of:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

- 67. (Currently amended) A system according to claim [[49]] <u>50</u>, wherein: physical access is provided to one of a door, a gate, and a hatch; and electronic access is provided to one of a Personal Computer, a smart phone, a network, and a payment system.
- 68. (New) A system according to claim 46, wherein the succession of entries of the biometric signal comprises four entries, the first three of which are of 1 second duration, and the last of which is of 2 second duration.

Remarks

Introduction

Claims 45-68 are pending. In this Amendment and Response, Claims 45-67 are amended. Claim 68 is added. Support for the amendments is found in the Specification at least in paragraphs [0085] and [0109]. No new matter is added. Applicant respectfully requests reconsideration in view of the amendments and the following remarks.

Double Patenting

The Office Action provisionally rejects claims 45-67 on grounds of non-statutory obviousness-type double patenting, as being unpatentable over claims 1-14 of US Patent No. 8,266,442. Applicant submits herewith a terminal disclaimer to overcome the double patenting rejection. Reconsideration is respectfully requested.

Claim Rejections Under 35 U.S.C. § 112

The Office Action rejected claim 62 under 35 U.S.C. § 112, fourth paragraph on grounds that claim 62 recited that it depended on any of claims 14 to 17, even though those claims were cancelled. In this Amendment and Response, claim 62 is amended so that it depends on "any one of claims 58 to 61," which are currently pending. Reconsideration of the § 112 rejections is respectfully requested.

Claim Rejections Under 35 U.S.C. §§ 102, 103

The Office Action rejected claims 45, 49-56, and 67 under 35 U.S.C. 102(e/a) as being anticipated by U.S. Patent No. 7,152,045 ("Hoffman"). Claim 65 was rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,109,428 ("Igaki"). Claims 46-48, 57-58, 60-61, and 63 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoffman in view of Igaki. Claims 59, 62, and 64 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hoffman in view of Igaki, and further in view of WO 02/12660 ("Koo"). Claim 66 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Igaki in view of Koo.

Claim 45

Independent claim 45 is directed to a transmitter sub-system for providing secure access to a controlled item. Said transmitter sub-system is operable for matching a biometric signal against members of a database of biometric signatures, and sending, using a wireless communication channel, an access signal dependent upon the results of the matching, said secure access being provided dependent upon the access signal.

Hoffman fails to teach these limitations.

Hoffman describes a hard-wired network-based system that is suitable for the "back end" of banking systems for electronic banking purposes (see, e.g., BRTs that are located in places that are physically secure such as retail banking outlets). Hoffman, col. 36, line 66—col. 37, line 3). However, Hoffman, fails to teach or suggest at least sending, using a wireless communication channel, an access signal dependent upon results of matching.

For at least this reason, Hoffman fails to render unpatentable claim 45. Reconsideration is respectfully is respectfully requested.

Claim 46

Independent claim 46 is directed to a system for providing secure access to a controlled item. The system comprises a transmitter sub-system operable for populating a database of biometric signatures by performing the steps of populating the database with biometric information derived from succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

The combination of Hoffman and Igaki fails to teach these limitations.

As acknowledged in the Office Action, Hoffman fails to teach populating a database of biometric signatures. *See* Office Action mailed November 10, 2014, p. 13. Igaki fails to remedy the deficiencies of Hoffman.

Igaki describes an optical sensor unit that optically produces a sequence of fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate. Igaki, Abstract. In particular, minutia data from fingerprint image data is extracted in which a plurality of picking-up operations of the fingerprint image data is carried out by performing

only a single operation of pressing down on the fingerpad so that multiple fingerprint pressing down operations becomes unnecessary. *Id.* col. 1, lines 40-42.

However, despite Igaki describing a "sequence of fingerprint image data," Igaki describes that this is generated from only a "single operation of pressing a fingerpad." It necessarily follows then that since there is only single operation of pressing a fingerpad, any alleged database in Igaki would not be populated due to repeated fingerprint pressing, and as such any alleged database in Igaki would not be populated with biometric information derived from a succession of entries, as recited in claim 46. As such, even if Igaki is combined with Hoffman, the combination fails to teach a transmitter sub-system operable for populating a database of biometric signatures by performing the steps of populating the database with biometric information derived from succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

For at least these reasons, the combination of Hoffman and Igaki fails to render unpatentable claim 46 or any claim that depends on claim 46. Reconsideration is respectfully requested.

Claim 57

Independent claim 57 is directed to a transmitter sub-system for operating in a system for providing secure access to a controlled item. Said transmitter sub-system is operable for populating a database of biometric signatures by: receiving, by a biometric sensor, a succession of entries of a biometric signal, said succession being characterised according to at least one of the number of said entries and a duration of each said entry; and populating the database dependent upon the succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

The combination of Hoffman and Igaki fails to teach these limitations. Instead, at best, the combination describes producing fingerprint image data based on a single operation of pressing a fingerpad.

For at least these reasons, the combination of Hoffman and Igaki fails to render unpatentable claim 57. Reconsideration is respectfully requested.

Page 11 of 14

Claim 58

Independent claim 58 is directed to a method for providing secure access to a controlled item in a system. The method comprising the steps of: populating a database of biometric signatures by: receiving, by a biometric sensor, a succession of entries of a biometric signal, said succession being characterized according to at least one of the number of said entries and a duration of each said entry; determining at least one of the number of said entries and a duration of each said entry; and populating the database dependent upon the succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

The combination of Hoffman and Igaki fails to teach these limitations. Instead, at best, the combination describes producing fingerprint image data based on a single operation of pressing a fingerpad.

For at least these reasons, the combination of Hoffman and Igaki fails to render unpatentable claim 58 or any claim that depends on claim 58. Reconsideration is respectfully requested.

Claim 63

Independent claim 63 is directed to a system for populating a database of biometric signatures. Said system is operable for populating the database of biometric signatures by performing the steps of: receiving, by a biometric sensor, a succession of entries of the biometric signal, the succession being characterised according to at least one of the number of said entries and a duration of each said entry; and populating a database dependent upon the succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

The combination of Hoffman and Igaki fails to teach these limitations. Instead, at best, the combination describes producing fingerprint image data based on a single operation of pressing a fingerpad.

For at least these reasons, the combination of Hoffman and Igaki fails to render unpatentable claim 63 or any claim that depends on claim 63. Reconsideration is respectfully requested.

Claim 65

Independent claim 65 is directed to a method for populating a database of biometric signatures. The method includes the steps of: receiving, by a biometric sensor, a succession of entries of the biometric signal, said succession being characterized according to at least one of the number of said entries and a duration of each said entry; determining at least one of the number of said entries and a duration of each said entry; and populating the database dependent upon the succession of entries provided that the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

Igaki fails to teach these limitations at least because Igaki merely describes producing fingerprint image data based on a single operation of pressing a fingerpad.

For at least these reasons, Igaki fails to render unpatentable claim 65 or any claim that depends on claim 65. Reconsideration is respectfully requested.

New Claim 68

Newly added claim 68 depends on independent claim 46 and further recites that the succession of entries of the biometric signal comprises four entries, the first three of which are of 1 second duration, and the last of which is of 2 second duration. Applicant submits that claim 68 is patentable at least by virtue of its dependency on claim 46. Favorable consideration of newly added claim 68 is respectfully requested.

Conclusion

With this amendment and response, the present pending claims of this application are allowable, and Applicants respectfully request the Examiner to issue a Notice of Allowance for this application. Should the Examiner deem a telephone conference to be beneficial in expediting allowance/examination of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

Respectfully submitted,

/Michael E. Milz/ Michael E. Milz Attorney Reg. No. 34,880 Attorney for Applicant

Date: March 10, 2015

BRINKS GILSON & LIONE P.O. Box 10395 Chicago, Illinois 60610 (312) 321-4200 Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

P	PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 13/572,166		Filing Date 08/10/2012	To be Mailed	
							ENTITY: L	ARGE 🛛 SMA	LL MICRO	
	APPLICATION AS FILED – PART I									
			(Column 1)	(Column 2)			_		
FOR			NUMBER FIL	.ED	NUMBER EXTRA		RATE (\$)	F	EE (\$)	
BASIC FEE (37 CFR 1.16(a), (b), or (c))		or (c))	N/A		N/A		N/A			
SEARCH FEE (37 CFR 1.16(k), (i), or (m))			N/A		N/A		N/A			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))			N/A		N/A		N/A			
	ΓAL CLAIMS CFR 1.16(i))		minus 20 = *			X \$ =				
INDEPENDENT CLAIMS (37 CFR 1.16(h))			minus 3 = *			X \$ =				
	☐APPLICATION SIZE FEE (37 CFR 1.16(s)) If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
	MULTIPLE DEPEN	IDENT CLAIM F	PRESENT (37	7 CFR 1.16(j))						
* If	the difference in colu	umn 1 is less tha	an zero, ente	r "0" in column 2.			TOTAL			
		(Column 1)		APPLICAT	ION AS AMEN		ART II			
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This collection of information is required by 37 CFR 1.16. 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 1.14. 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. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Application Number	Application/Control No.		Applicant(s)/Patent under Reexamination BURKE, CHRISTOPHER JOHN				
Document Code - DISQ		Internal Do	cument – DO NOT MAIL				
TERMINAL DISCLAIMER	⊠ APPROVED		□ DISAPPROVED				
Date Filed : 3/10/15	Date Filed : 3/10/15 to a Te						
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/572,166	08/10/2012	Christopher John Burke	12838/8	9752
Michael E. Mil	7590 04/27/201 Z	5	EXAM	INER
Brinks Hofer G P.O. Box 10395			RAHMAN, MO	OHAMMAD L
Chicago, IL 60	610		ART UNIT	PAPER NUMBER
			2438	
			MAIL DATE	DELIVERY MODE
			04/27/2015	PAPER

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

The time period for reply, if any, is set in the attached communication.

		Application No. 13/572,166	Applicant(s BURKE, CH	RISTOPHER JOHN		
	Office Action Summary	Examiner MOHAMMAD L. RAHMAN	Art Unit 2438	AIA (First Inventor to File) Status No		
Period fo	The MAILING DATE of this communication app r Reply	pears on the cover sheet with the c	orresponden	ce address		
A SHO THIS COM - Exten after 3 - If NO - Failur Any re	DRTENED STATUTORY PERIOD FOR REPLY MMUNICATION. Issions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply is specified above, the maximum statutory period veron to the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing of patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	ely filed the mailing date of 0 (35 U.S.C. § 13	of this communication.		
Status						
1) 🛛	Responsive to communication(s) filed on 3/10/	<u>′2015</u> .				
	A declaration(s)/affidavit(s) under 37 CFR 1.1	30(b) was/were filed on				
2a)	This action is FINAL . 2b)⊠ This	action is non-final.				
3) 🔲	An election was made by the applicant in response	onse to a restriction requirement s	set forth duri	ng the interview on		
	; the restriction requirement and election					
=	Since this application is in condition for allowar closed in accordance with the practice under <i>E</i>	-				
Disposition	on of Claims*					
	Claim(s) 45-68 is/are pending in the application	n.				
!	5a) Of the above claim(s) is/are withdraw	wn from consideration.				
6)	Claim(s) is/are allowed.					
	Claim(s) <u>45-68</u> is/are rejected.					
8)	Claim(s) is/are objected to.					
•	Claim(s) are subject to restriction and/o	•				
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http://www.	<u>.uspto.gov/patents/init_events/pph/index.jsp</u> or send	an inquiry to PPHfeedback@uspto.d	<u>ov</u> .			
	on Papers					
	The specification is objected to by the Examine					
11) 🔲 -	The drawing(s) filed on is/are: a)□ acc	epted or b) \square objected to by the E	Examiner.			
	Applicant may not request that any objection to the					
	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See	37 CFR 1.121(d).		
12) 🔲 ,	inder 35 U.S.C. § 119 Acknowledgment is made of a claim for foreign ied copies:	priority under 35 U.S.C. § 119(a)	-(d) or (f).			
	 □ All b) □ Some** c) □ None of the: 1. □ Certified copies of the priority document 2. □ Certified copies of the priority document 		ion No			
	3. Copies of the certified copies of the price application from the International Bureau		ed in this Na	tional Stage		
** See the	application from the International Bureau (PCT Rule 17.2(a)). See the attached detailed Office action for a list of the certified copies not received.					
Attachment	• •	_				
1) X Notice	e of References Cited (PTO-892)	3) Interview Summary				
	nation Disclosure Statement(s) (PTO/SB/08a and/or PTO/S · No/s)/Mail Date	Paper No(s)/Mail Da 4) Other:				

U.S. Patent and Trademark Office PTOL-326 (Rev. 11-13)

Office Action Summary

Part of Paper No./Mail Date 20150421

Art Unit: 2438

DETAILED ACTION

The present application is being examined under the pre-AIA first to invent provisions.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR

1.17(e), was filed in this application after final rejection. Since this application is eligible for continued

examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the

finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's

submission filed on March 10, 2015 has been entered. Claims 1-44 were previously canceled. Claims 45-

68 are pending.

Response to Arguments

a) The terminal disclaimer filed on 03/10/2015 disclaiming the terminal portion of any patent

granted on this application which would extend beyond the expiration date of any patent granted on US

Patent # 8,266,442 has/have been reviewed and is accepted. The terminal disclaimer has been

recorded.

b) Applicant argued in page 10 of Remarks (filed 3/10/2015), Hoffman fails to teach or suggest at

least sending, using a wireless communication channel, an access signal dependent upon the results of

the matching. In support of the argument, applicant mentioned BRTs are located in places that are

physically secure such as retail banking outlets (col. 36, lines 66 – col. 37, lines 3).

Examiner respectfully disagrees. Hoffman evidently teaches

Biometric Input Apparatus (BIA) hardware comes in four basic versions: standard, wireless, integrated phone/cable television (or "CATV")/fax and ATM (col. 13, lines 46-

48).

Hoffman further teaches the BRT uses an attached BIA for biometric entry and

BIA/Wireless

Standard model, but serial line replaced with <u>spread-spectrum wireless</u> <u>communications module using external antenna. Used in restaurant point of sale</u>

(col. 14, lines 37-40).

Art Unit: 2438

c) The newly added limitations to independent claims 46, 57, 58, 63, and 65, changes the scope,

necessitated new ground(s) of rejection.

Claim Objections

Claims 46-57, 59-61, 64, 66-68 are objected to because of the following informalities:

a) Claims 47-56, 59-61, 64, 66-68 are all dependent claims that recite the limitation "A method/ A

system according to..." in the preamble. It is suggested the limitation be amended to "[[A]] The method /

The System according to ... "

b) Claims 46, 57 recite "operable for;" which is an incomplete sentence.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of 35 U.S.C. 112(b):

(b) CONCLUSION.—The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the inventor or a joint inventor

regards as the invention.

The following is a quotation of 35 U.S.C. 112 (pre-AIA), second paragraph:

The specification shall conclude with one or more claims particularly pointing out and distinctly

claiming the subject matter which the applicant regards as his invention.

Claims 45-46, 48, 53, 57-58, 63, and 65 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112

(pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the

subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

a) Claims 45-46, 48, 53, 57-58 recite "operable for" in preamble and couple of places which is

considered as the applicant merely constitutes a statement of intended use and do not impose any

positive limitation on the scope of the claim.

b) The terms "appropriate number", "appropriate duration" in claims 46, 57, 58, 63, and 65 is a

relative term which renders the claim indefinite. The term "appropriate" is not defined by the claim, the

specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in

the art would not be reasonably apprised of the scope of the invention.

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Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent

therefor, subject to the conditions and requirements of this title.

Claims 45-68 are rejected under 35 U.S.C. 101 because the claimed invention is directed to a

judicial exception (i.e. an abstract idea) without significantly more.

Independent claims 45, 46, 57, 58, 63, and 65 are directed towards a judicial exception (i.e., a

law of nature, a natural phenomenon, or an abstract idea) without significantly more because the claim(s)

as a whole, considering all claim elements both individually and in combination, do not amount to

significantly more than an abstract idea. Claims are directed towards performing a simple biometric

authentication. The underlying invention is merely a simple biometric matching operation to access a

controlled item. The claim(s) does/do not include additional elements that are sufficient to amount to

significantly more than the judicial exception because the additional element(s) or combination of

elements in the claim(s) other than the abstract idea per se amount(s) to no more than recitation of

generic computer structure (e.g. transmitter sub-system, receiver sub-system, biometric sensor, wireless

communication channel) that serves to perform generic computer functions (e.g. receiving biometric

signal, receiving more than one biometric entry, matching the received signal with database, providing

access to a controlled item) that are well-understood, routine, and conventional activities previously

known to the pertinent industry. Further, the claims do not recite an improvement to another technology or

technical field, an improvement to the functioning of the computer itself, or meaningful limitations beyond

generally linking the use of an abstract idea to a particular technological environment. Therefore, the

claim(s) 1 is rejected under 35 U.S.C. 101 as being directed to non-statutory subject matter.

See

1. Preliminary Examination Instructions in view of the Supreme Court Decision in Alice Corporation Pty.

Ltd. C. CLS Bank International et al. (http://www.uspto.gov/patents/announce/alice_pec_25jun2014.pdf).

2. Federal Register Notice: 2014 Interim Guidance on Patent Subject Matter Eligibility

Art Unit: 2438

(http://www.gpo.gov/fdsys/pkg/FR-2014-12-16/pdf/2014-29414.pdf).

3. Abstract Idea Examples (http://www.uspto.gov/patents/law/exam/abstract_idea_examples.pdf)

Dependent claims 2-11 depends from claim 1 do cure the deficiencies set forth above.

Dependent claim(s) 47-56, 59-62, 64, 66-68 when analyzed as a whole are held to be patent

ineligible under 35 U.S.C. 101 because the additional recited limitation(s) fail(s) to establish that the

claim(s) is/are not directed to an abstract idea. The claims do not include additional elements that are

sufficient to amount to significantly more than the judicial exception because the additional limitations are

merely instructions to implement the abstract idea on a computer and require no more than a generic

computer to perform generic computer functions that are well-understood, routine and conventional

activities previously known to the industry (e.g. accepting, populating biometric entries, sending an alert,

provision or denial of access).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of pre-AIA 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for

patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the application for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the

international application designated the United States and was published under Article

21(2) of such treaty in the English language.

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the

applicant for a patent.

Claim 45 is rejected under pre-AIA 35 U.S.C. 102 (e/a) as being anticipated by Hoffman et

al. US 7,152,045 B2 (filed Sep. 10, 2002, PgPub US 2003/0105725 published Jun 5, 2003) hereinafter

"Hoffman".

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Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 45, (New) A transmitter sub-system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for <u>authorization of transactions and transmissions</u>. The tokenless system and method are principally based on a <u>correlative comparison of a unique biometrics sample</u>, such as a finger print or voice recording, <u>gathered directly from the person</u> of an unknown user, with an authenticated biometrics sample of the same type obtained and stored previously.), the transmitter sub-system comprising:

a processor, a memory, and a processor executable software program; a database of biometric signatures (*col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36*);

a biometric sensor for receiving a biometric signal (*fig.3, ref. 12; col. 13, lines 2-8*), wherein said transmitter sub-system is operable for:

matching the biometric signal against members of the database of biometric signatures; and sending, using a wireless communication channel (Biometric Input Apparatus (BIA) hardware comes in four basic versions: standard, wireless, integrated phone/cable television (or "CATV")/fax and ATM [col. 13, lines 46-48]; BIA/Wireless: Standard model, but serial line replaced with spread-spectrum wireless communications module using external antenna. Used in restaurant point of sale [col. 14, lines 37-40]), an access signal dependent upon the results of the matching, said secure access being provided dependent upon the access signal (see col. 8, lines 29-33: comparison of the biometric sample taken from said first individual with any previously stored biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of

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the entered biometric sample from said first individual with said at least one stored biometric sample from said at least one second individual in said entered personal identification codebasket for producing either a successful or failed identification result; an output step wherein said identification result or said determination is externalized and displayed, and; a presentation step wherein on successful identification of said first individual, said private code is presented to said

first individual).

Claim Rejections - 35 USC § 103

The following is a quotation of pre-AIA 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.

The factual inquiries set forth in Graham v. John Deere Co., 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under pre-AIA 35 U.S.C.

103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

2. Ascertaining the differences between the prior art and the claims at issue.

3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or

nonobviousness.

Claims 46-58, 60-63, and 67-68 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Igaki et al. US 5,109,428 hereinafter "Igaki" and in further

view of Pu et al. US 6.229.906 hereinafter "Pu".

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully

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requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 46, (Currently Amended) Hoffman teaches a system for providing secure access to a controlled item (see [Abstract] A tokenless identification system and method for authorization of transactions and transmissions. The tokenless system and method are principally based on a correlative comparison of a unique biometrics sample, such as a finger print or voice recording, gathered directly from the person of an unknown user, with an authenticated biometrics sample of the same type obtained and stored previously.), the system comprising:

a processor, a memory, and a processor executable software program; a database of biometric signatures (*col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36*);

a transmitter sub-system (i.e. Biometric Input Device, fig. 3 item 12) comprising:

a biometric sensor for receiving a biometric signal (*fig.3, ref. 12; col. 13, lines 2-8*), wherein said transmitter sub-system is operable for;

matching the biometric signal against members of the database of biometric signatures; and sending an access signal dependent upon the matching (see col. 8, lines 29-33: comparison of the biometric sample taken from said first individual with any previously stored biometric samples in said selected personal identification code-basket to make sure that the biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual with said at least one stored biometric sample from said at least one second individual in said entered personal identification code-basket for producing either a successful or failed identification result; an output step wherein said identification result or said determination is externalized and displayed, and; a presentation step wherein on

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successful identification of said first individual, said private code is presented to said first

individual); and

a receiver sub-system operable for;

receiving the access signal (See col. 40, lines 59-62: Individual enters their biometric

into the BIA, DPC is receiving biometric input by the ATM); and

providing conditional access to the controlled item dependent upon the access

signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-

PIC and sends the resulting asset account number along with the private code. The ATM

decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response

to see whether or not the individual is performing a standard account access [e.g.

accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also

[38:53-60] An individual using a CST starts a session by providing identification by

entering their biometric-PIC. The BIA constructs an Identification Request message, and

send it to the DPC for verification. Once the system verifies the individual, the CST

application can operate normally, though limited by the individual's previously assigned

DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service

can decide to deny any request for over \$300 from low security BIA, requiring individuals

to use higher security BIA to authorize such sums. The authorization service can also use

the security level as a guide on how much to charge for the transaction, based on risk.)

Hoffman taught the claimed system. Hoffman is silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught wherein the transmitter

sub-system is further operable for populating the database of biometric signatures by performing the

steps of: receiving, by the biometric sensor, a succession of entries of the biometric signal; and

populating the database with biometric information derived from the succession of entries (see Abstract,

"An optical sensor unit optically produces a sequence of fingerprint image data during a single

operation of pressing a fingerpad onto an inspection plate in a direction substantially transverse

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to the plate and with increasing pressure over a time interval. A data storing unit stores the

produced fingerprint image data in the form of a sequence of fingerprint image data obtained

during the single operation of pressing the fingerpad onto the inspection plate." This method is

the improvement from already known successive multiple fingerprint pressing down operations to

performing only a single operation of pressing down of the fingerpad. see [1:40-52] "An object of

the present invention is to provide an improved apparatus and method for use in fingerprint

identification for extracting minutia data from fingerprint image data in which a plurality of

picking-up operations of the fingerprint image data is carried out by performing only a single

operation of pressing down of the fingerpad, on a sensor the alignment between successive

fingerprint image data produced in successive, multiple fingerprint pressing down operations as

in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, fig. 3, item 12 the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

Hoffman-Igaki combination is silent on but the analogous art Pu teaches said succession being

characterized according to at least one of the number of said entries (Pu. col. 2, lines 18-22; 5, lines 25-

46) and a duration of each said entry (Pu, col. 5, lines 50-55); the number of said entries is the

appropriate number of entries, and the duration of each said entry is of the appropriate duration (Pu, col.

2, lines 40-43; col. 4, lines 30-33, 40-67; col. 5, lines 50-55).

Therefore, one of ordinary skilled artisan would have been motivated to modify the combined

system of Hoffman & Igaki with the idea of succession being characterized according to at least one of

the number of said entries and a duration of each said entry, the number of said entries is the appropriate

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number of entries, and the duration of each said entry is of the appropriate duration as taught by Pu

because the use of Pu could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the

ability to include at least one of the number of said entries and a duration of each said entry, the number

of said entries is the appropriate number of entries, and the duration of each said entry is of the

appropriate duration to implement high security of the system by using secret sequence codes formed by

body parts (*Pu, col. 3, lines 21-23*).

Regarding claim 47, (Currently Amended) Hoffman-Igaki-Pu combination further teaches a

system according to claim 46, wherein the step of populating the database comprises the steps of:

accepting the succession of entries as control information; and populating the database dependent upon

the control information (Igaki, col. 1, line 40- col.2, line 2).

Regarding claim 48, (Currently Amended) Hoffman-Igaki-Pu combination further teaches a

system according to claim 46, further operable for: providing a signal for directing input of the succession

of entries of the biometric signal; and incorporating into the access signal an identification field identifying

the biometric signal (Igaki, col. 1, line 40- col.2, line 2). if the signal matches a member of the database

(Hoffman, see col. 8, lines 29-33).

Regarding claim 49, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim 46, wherein the database of biometric signatures comprises signatures in at

least one of a system administrator class and a system user class (Hoffman, col. 60, lines 34-43; col. 8,

lines 20-55), the access signal comprising: an access attribute if the biometric signal matches a member

of the database of biometric signatures; and an alert attribute if the biometric signal does not match a

member of the database of biometric signatures (Hoffman, col. 8, lines 45-51: successful or failed

identification result).

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Regarding claim 50, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim 46, wherein the controlled item is one of: a locking mechanism for providing

physical access; and a locking mechanism for providing electronic access (Hoffman, col. 9, lines 1-5).

Regarding claim 51, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim 46, wherein the biometric sensor is responsive to one of voice, retinal pattern,

iris pattern, face pattern, and palm configuration, and/or the database of biometric signatures is located in

at least one of the transmitter sub-system and the receiver sub-system (Hoffman, col. 60, lines 34-43;

col. 8, lines 20-55).

Regarding claim 52, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim 46, wherein said conditional access comprises one of: provision of access to

the controlled item if the access signal comprises an access attribute; provision of access to the

controlled item and sounding of an alert if the access signal comprises a duress attribute; and denial of

access to the controlled item and sounding of an alert if the access signal comprises an alert attribute

(Hoffman, col. 8, lines 45-51: successful or failed identification result).

Regarding claim 53, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system as claimed in claim 46, wherein: the transmitter sub-system is further operative for transmitting

information capable of granting more than two types of access to the controlled item using a secure

wireless signal dependent upon a request from the user and the authentication of the user identity; and

the system further comprises a control panel for receiving the information and for providing the secure

access requested (Hoffman, BIA models - BIA wireless, CATV, col. 14, lines 30-51).

Regarding claim 54, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim 53, wherein the control panel includes a converter for receiving the secure

wireless signal and for outputting the information, and/or the biometric sensor authenticates the identity of

the user by comparing a biometric input from the user with a biometric signature for the user in the

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biometric database (Hoffman, col. 8, lines 29-50, comparison of entered biometric sample with the

stored biometric sample).

Regarding claim 55, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim 53, wherein the secure wireless signal (col. 17, lines 15) comprises an RF

carrier and a rolling code, encrypted Bluetooth or other communications protocol, and the converter

converts the secure wireless signal to a Wiegand protocol or other protocol required by the system

(Hoffman, col. 14, lines 18-24).

Regarding claim 56, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

system according to claim $\underline{46}$, wherein the biometric sensor and the transmitter sub-system are located in

a portable device (Hoffman, col. 17, lines 64-67, The phone/CATV version of BIA hardware).

Regarding claim 57, (New) Hoffman teaches a transmitter sub-system for operating in a system

for providing secure access to a controlled item (see [Abstract] A tokenless identification system and

method for <u>authorization of transactions and transmissions</u>. The tokenless system and method

are principally based on a correlative comparison of a unique biometrics sample, such as a finger

print or voice recording, gathered directly from the person of an unknown user, with an

authenticated biometrics sample of the same type obtained and stored previously.), wherein the

transmitter sub-system comprises:

a processor, a memory, and a processor executable software program; a biometric sensor for

receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8), wherein said transmitter sub-system is

operable for;

matching the biometric signal against members of a database of biometric signatures to thereby

output an accessibility attribute; emitting an access signal conveying information dependent upon said

accessibility attribute (see col. 8, lines 29-33: comparison of the biometric sample taken from said

first individual with any previously stored biometric samples in said selected personal

identification code-basket to make sure that the biometric sample entered by said first individual

is algorithmically unique from the previously stored at least one biometric sample provided by at

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least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric

sample from said first individual with said at least one stored biometric sample from said at least

one second individual in said entered personal identification code-basket for producing either a

successful or failed identification result; an output step wherein said identification result or said

determination is externalized and displayed, and; a presentation step wherein on successful

identification of said first individual, said private code is presented to said first individual);

Hoffman taught the claimed system. Hoffman was silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught populating the database

of biometric signatures by: receiving, by the biometric sensor, a succession of entries of the biometric

signal, said succession being characterised according to at least one of the number of said entries and a

duration of each said entry; and populating the database dependent upon the succession of entries (see

Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a

single operation of pressing a fingerpad onto an inspection plate in a direction substantially

transverse to the plate and with increasing pressure over a time interval. A data storing unit

stores the produced fingerprint image data in the form of a sequence of fingerprint image data

obtained during the single operation of pressing the fingerpad onto the inspection plate." This

method is the improvement from already known successive multiple fingerprint pressing down

operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52]

"An object of the present invention is to provide an improved apparatus and method for use in

fingerprint identification for extracting minutia data from fingerprint image data in which a

plurality of picking-up operations of the fingerprint image data is carried out by performing only a

single operation of pressing down of the fingerpad, on a sensor the alignment between

successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of <u>lgaki</u> [lgaki:1:58-61] because

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the use of Igaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

Hoffman-Igaki combination is silent on but the analogous art Pu teaches the number of said

entries (Pu, col. 2, lines 18-22; 5, lines 25-46) is the appropriate number of entries, and the duration of

each said entry (Pu, col. 5, lines 50-55) is of the appropriate duration (Pu, col. 2, lines 40-43; col. 4,

lines 30-33, 40-67; col. 5, lines 50-55).

Therefore, one of ordinary skilled artisan would have been motivated to modify the combined

system of Hoffman & Igaki with the idea of the number of said entries is the appropriate number of

entries, and the duration of each said entry is of the appropriate duration as taught by Pu because the

use of Pu could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability to

include the number of said entries is the appropriate number of entries, and the duration of each said

entry is of the appropriate duration to implement high security of the system by using secret sequence

codes formed by body parts (Pu, col. 3, lines 21-23).

Regarding claim 58, (Currently Amended) Hoffman teaches a method for providing secure

access to a controlled item see [Abstract] A tokenless identification system and method for

authorization of transactions and transmissions. The tokenless system and method are principally

based on a correlative comparison of a unique biometrics sample, such as a finger print or voice

recording, gathered directly from the person of an unknown user, with an authenticated

biometrics sample of the same type obtained and stored previously.) in a system comprising a

processor, a memory, and a processor executable software program, a database of biometric signatures

(col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36), a transmitter sub-

system comprising a biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8),

the transmitter sub-system being operable for emitting a secure access signal, and a receiver sub-system

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operable for receiving the transmitted secure access signal (See col. 40, lines 59-62: Individual enters their biometric into the BIA, DPC is receiving biometric input by the ATM) and for providing conditional access to the controlled item dependent upon information in said secure access signal (see [Col. 40, lines 62-67] the Data processing center (DPC) validates the biometric-PIC and sends the resulting asset account number along with the private code. The ATM decrypt the response, displays [Col. 41, lines 1-8] the private code and examines response to see whether or not the individual is performing a standard account access [e.g. accessibility attribute], or a "duress" account access [e.g. accessibility attribute], see also [38:53-60] An individual using a CST starts a session by providing identification by entering their biometric-PIC. The BIA constructs an Identification Request message, and send it to the DPC for verification. Once the system verifies the individual, the CST application can operate normally, though limited by the individual's previously assigned DPC privilege level., Furthermore [68:10-15] a financial transaction authorization service can decide to deny any request for over \$300 from low security BIA, requiring individuals to use higher security BIA to authorize such sums. The authorization service can also use the security level as a guide on how much to charge for the transaction, based on **risk.**), the method comprising the steps of: populating the database of biometric signatures by:

receiving a biometric signal; matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; emitting an access signal conveying information dependent upon said accessibility attribute; and providing conditional access to the controlled item dependent upon said information attribute (see col. 8, lines 29-33: comparison of the biometric sample taken from said first individual with any previously stored biometric samples in said selected personal identification code-basket to make sure that the biometric sample entered by said first individual is algorithmically unique from the previously stored at least one biometric sample provided by at least one second individual; see col. 8, lines 46-50, 54-55: comparison of the entered biometric sample from said first individual with said at least one stored biometric sample from said at least one second individual in said entered personal identification code-

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basket for producing either a successful or failed identification result; an output step wherein said

identification result or said determination is externalized and displayed, and; a presentation step

wherein on successful identification of said first individual, said private code is presented to said

first individual).

Hoffman taught the claimed system. Hoffman was silent on but the analogous art Igaki which

addressed the same field of endeavor in fingerprint identification explicitly taught receiving, by the

biometric sensor, a succession of entries of the biometric signal; determining at least one of the number of

said entries and a duration of each said entry; and populating the database dependent upon the

succession of entries; (see Abstract, "An optical sensor unit optically produces a sequence of

fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate

in a direction substantially transverse to the plate and with increasing pressure over a time

interval. A data storing unit stores the produced fingerprint image data in the form of a sequence

of fingerprint image data obtained during the single operation of pressing the fingerpad onto the

inspection plate." This method is the improvement from already known successive multiple

fingerprint pressing down operations to performing only a single operation of pressing down of

the fingerpad. see [1:40-52] "An object of the present invention is to provide an improved

apparatus and method for use in fingerprint identification for extracting minutia data from

fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing only a single operation of pressing down of the fingerpad, on a sensor

the alignment between <u>successive fingerprint image data produced in successive, multiple</u>

fingerprint pressing down operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of lgaki [lgaki:1:58-61] because

the use of <u>lgaki</u> could provide the Biometric Input Device of <u>Hoffman</u>, *Ig. 3, item 12*] the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

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troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

Hoffman-Igaki combination is silent on but the analogous art Pu teaches said succession being

characterized according to at least one of the number of said entries (Pu, col. 2, lines 18-22; 5, lines 25-

46) and a duration of each said entry (Pu, col. 5, lines 50-55); the number of said entries is the

appropriate number of entries, and the duration of each said entry is of the appropriate duration (Pu, col.

2, lines 40-43; col. 4, lines 30-33, 40-67; col. 5, lines 50-55).

Therefore, one of ordinary skilled artisan would have been motivated to modify the combined

system of <u>Hoffman & Igaki</u> with the idea of succession being characterized according to at least one of

the number of said entries and a duration of each said entry, the number of said entries is the appropriate

number of entries, and the duration of each said entry is of the appropriate duration as taught by Pu

because the use of Pu could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the

ability to include at least one of the number of said entries and a duration of each said entry, the number

of said entries is the appropriate number of entries, and the duration of each said entry is of the

appropriate duration to implement high security of the system by using secret sequence codes formed by

body parts (*Pu, col. 3, lines 21-23*).

Regarding claim 60, (Currently Amended) Hoffman in view of Igaki & Pu further teaches a

method according to claim 58, wherein the step of enrolling the biometric signature further comprises

receiving another biometric signal to confirm the enrolling of the biometric signal as an administrator

signature dependent upon generation of a feedback signal adapted to direct provision of at least one of

the biometric signal and the other biometric signal (Hoffman, col. 60, lines 34-43; col. 8, lines 20-55).

Regarding claim 61, (Currently Amended) Hoffman in view of Igaki & Pu further taught a method

according to claim 58, wherein the biometric sensor and the transmitter sub-system are located in a

portable device (Hoffman, col. 17, lines 64-67, The phone/CATV version of BIA hardware).

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Regarding claim 62, (Currently Amended) Hoffman-Igaki-Pu combination teaches a non-transitory computer readable medium for storing a computer program comprising instructions or code, which when executed by processors, causes the processors to perform the steps of the method of any

one of claims 58 to 61.(see the same rational cited in the above claims 58-61).

Regarding claim 63, (New) Hoffman taught a system for populating a database of biometric

signatures (see [Abstract] A tokenless identification system and method for authorization of

transactions and transmissions. The tokenless system and method are principally based on a

correlative comparison of a unique biometrics sample, such as a finger print or voice recording,

gathered directly from the person of an unknown user, with an authenticated biometrics sample of

the same type obtained and stored previously.), the system comprising:

a processor, a memory, and a processor executable software program; a database of biometric

signatures (col. 44, lines 34-36: IBD individual biometric database; see col. 8, lines 30-36); and a

biometric sensor for receiving a biometric signal (fig.3, ref. 12; col. 13, lines 2-8), wherein said system is

operable for populating the database of biometric signatures by performing the steps of: receiving, by the

biometric sensor(*fig.3, ref. 12; col. 13, lines 2-8*),

Hoffman was silent on but the analogous art Igaki taught a succession of entries of the biometric

signal, the succession being characterised according to at least one of the number of said entries and a

duration of each said entry; and populating the database dependent upon the succession of entries (see

Abstract, "An optical sensor unit optically produces a sequence of fingerprint image data during a

single operation of pressing a fingerpad onto an inspection plate in a direction substantially

transverse to the plate and with increasing pressure over a time interval. A data storing unit

stores the produced fingerprint image data in the form of a sequence of fingerprint image data

obtained during the single operation of pressing the fingerpad onto the inspection plate." This

method is the improvement from already known successive multiple fingerprint pressing down

operations to performing only a single operation of pressing down of the fingerpad. see [1:40-52]

"An object of the present invention is to provide an improved apparatus and method for use in

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fingerprint identification for extracting minutia data from fingerprint image data in which a

plurality of picking-up operations of the fingerprint image data is carried out by performing only a

single operation of pressing down of the fingerpad, on a sensor the alignment between

successive fingerprint image data produced in successive, multiple fingerprint pressing down

operations as in the prior art becomes unnecessary").

Therefore, one of ordinary skilled artisan would have been motivated to modify the system of

Hoffman with the idea of producing a sequence of fingerprint image data of Igaki [Igaki:1:58-61] because

the use of Igaki could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability

to produce a sequence of fingerprint image data of pressing down of the fingerpad so that the

troublesome process of the repeated fingerpad pressing down operation is eliminated (igaki: Col. 1:49-

51]).

Hoffman-Igaki combination is silent on but the analogous art Pu teaches the number of said

entries (Pu, col. 2, lines 18-22; 5, lines 25-46) is the appropriate number of entries, and the duration of

each said entry (Pu, col. 5, lines 50-55) is of the appropriate duration (Pu, col. 2, lines 40-43; col. 4,

lines 30-33, 40-67; col. 5, lines 50-55).

Therefore, one of ordinary skilled artisan would have been motivated to modify the combined

system of Hoffman & Igaki with the idea of the number of said entries is the appropriate number of

entries, and the duration of each said entry is of the appropriate duration as taught by Pu because the

use of Pu could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the ability to

include the number of said entries is the appropriate number of entries, and the duration of each said

entry is of the appropriate duration to implement high security of the system by using secret sequence

codes formed by body parts (Pu, col. 3, lines 21-23).

Regarding claim 67, (Currently Amended) Hoffman in view of Igaki and Pu further teaches a

system according to claim $\underline{50}$, wherein: physical access is provided to one of a door, a gate, and a hatch;

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and electronic access is provided to one of a Personal Computer, a smart phone, a network, and a

payment (Hoffman, fig. 3, col. 14, section 1.1.2 BIA models).

Regarding claim 68, (Currently Amended) Hoffman-Igaki-Pu combination further teaches a

system according to claim 46, wherein the succession of entries of the biometric signal comprises four

entries, the first three of which are of 1 second duration, and the last of which is of 2 second duration (Pu,

col. 5, lines 50-55, By removing and placing the user's fingerprint on the input device for a

plurality of times with different duration, a fingerprint Morse Code is generated. Based on the

specification application uses dit, dit, dah entry which is a Morse code).

Claim 65 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Igaki in

view of Pu.

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified

citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in properties the response to applied fully the entire references as

requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred

embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.),

cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 65, (New) Igaki teaches a method for populating a database of biometric

signatures, the method comprising the steps of:

receiving, by a biometric sensor (fig. 8, ref. 110), a succession of entries of the biometric signal;

determining at least one of the number of said entries and a duration of each said entry; and populating

the database dependent upon the succession of entries (see Abstract, "An optical sensor unit

optically produces a sequence of fingerprint image data during a single operation of pressing a

fingerpad onto an inspection plate in a direction substantially transverse to the plate and with

increasing pressure over a time interval. A data storing unit stores the produced fingerprint image

data in the form of a sequence of fingerprint image data obtained during the single operation of

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pressing the fingerpad onto the inspection plate." This method is the improvement from already

known successive multiple fingerprint pressing down operations to performing only a single

operation of pressing down of the fingerpad. see [1:40-52] "An object of the present invention is

to provide an improved apparatus and method for use in fingerprint identification for extracting

minutia data from fingerprint image data in which a plurality of picking-up operations of the

fingerprint image data is carried out by performing only a single operation of pressing down of the

fingerpad, on a sensor the alignment between successive fingerprint image data produced in

successive, multiple fingerprint pressing down operations as in the prior art becomes

unnecessary"; See further fig. 5A-5D).

Igaki is silent on but the analogous art Pu teaches said succession being characterized according

to at least one of the number of said entries (Pu, col. 2, lines 18-22; 5, lines 25-46) and a duration of

each said entry (Pu, col. 5, lines 50-55); the number of said entries is the appropriate number of entries,

and the duration of each said entry is of the appropriate duration (Pu, col. 2, lines 40-43; col. 4, lines

30-33, 40-67; col. 5, lines 50-55).

Therefore, one of ordinary skilled artisan would have been motivated to modify the combined

system of Hoffman & Igaki with the idea of succession being characterized according to at least one of

the number of said entries and a duration of each said entry, the number of said entries is the appropriate

number of entries, and the duration of each said entry is of the appropriate duration as taught by Pu

because the use of Pu could provide the Biometric Input Device of Hoffman [Hoffman, fig. 3, item 12] the

ability to include at least one of the number of said entries and a duration of each said entry, the number

of said entries is the appropriate number of entries, and the duration of each said entry is of the

appropriate duration to implement high security of the system by using secret sequence codes formed by

body parts (*Pu, col. 3, lines 21-23*).

Claim 66 is rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Igaki in

view of Pu as claimed 65 above and in further view of Koo.

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Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred embodiments. *Merck & Co. v. Biocraft Laboratories*, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.), *cert. denied*, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 66, (New) Igaki-Pu-Koo combination teaches a method according to claim 64, wherein the step of populating the database further comprises the steps of:

receiving a biometric signal (*Igaki*, *fig.6*, *ref. S1*); Igaki is silent on but the analogous art Koo teaches enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty (*Koo*, see [*Page 16*, *lines 8-10*] if no registered administrator fingerprint information exists as empty, the inputted fingerprint is registered as initial administrator fingerprint, see also page 10, lines 12-14).

One of ordinary skilled in the art would have been motivated to incorporate the idea of Koo [Page, 5, lines 19-22; Page 16, lines 8-10] within the combined method of Igaki because the idea of Koo could provide the method of Igaki to provide an electronic card key administration system consisted of host computer systems for administration of a plural of the electronic fingerprint recognition card keys (Koo, Page 3, lines 21-23).

Claims 59, 64 are rejected under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of Igaki & Pu as applied to claims 58, 63 above, and further in view of Koo et al. WO 02/12660 hereinafter "Koo".

Examiner Notes: Examiner has pointed out particular references contained in the prior arts of record in the body of this action for the convenience of the applicant. Although the specified citations are representative of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. Applicant should consider the entire prior art as applicable as to the limitations of the claims. It is respectfully requested from the applicant, in preparing the response, to consider fully the entire references as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior arts or disclosed by the examiner. A reference may be relied upon for all that it would have reasonably suggested to one having ordinary skill the art, including non-preferred

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embodiments. Merck & Co. v. Biocraft Laboratories, 874 F.2d 804, 10 USPQ2d 1843 (Fed. Cir.),

cert. denied, 493 U.S. 975 (1989). See MPEP 2123.

Regarding claim 59, (Currently Amended) Hoffman-Igaki-Pu combination teaches a method

according to claim 58, the combination is silent on but the analogous art Koo taught wherein the step of

populating the database of biometric signatures further comprises the step of enrolling a biometric

signature into the database of biometric signatures by: receiving a biometric signal; and enrolling the

biometric signal as an administrator signature if the database of biometric signatures is empty (Koo, see

[Page 16, lines 8-10] if no registered administrator fingerprint information exists as empty, the

inputted fingerprint is registered as initial administrator fingerprint, see also page 10, lines 12-14).

Therefore, it would have been obvious to one ordinary skilled in the art at the time the applicant's

invention was made to modify the combined method of Hoffman, Igaki, and Pu with the teaching of Koo

for enrolling the relevant signatures into the database using the biometric sensor as an administrator if the

database of biometric signatures is empty because they are analogous in biometric entry.

One of ordinary skilled in the art would have been motivated to incorporate the idea of Koo [Page,

5, lines 19-22; Page 16, lines 8-10] within the combined method of Hoffman [fig. 1], Igaki, and Pu

because the idea of Koo could provide the method of Hoffman to provide an electronic card key

administration system consisted of host computer systems for administration of a plural of the electronic

fingerprint recognition card keys (Koo, Page 3, lines 21-23).

Regarding claim 64, (New) Hoffman-Igaki-Koo combination further teaches a system according

to claim <u>63</u>, wherein the system is further operable for enrolling a biometric signature into the database of

biometric signatures by: receiving a biometric signal; and enrolling the biometric signal as an

administrator signature if the database of biometric signatures is empty (Koo, see [Page 16, lines 8-10]

if no registered administrator fingerprint information exists as empty, the inputted fingerprint is

registered as initial administrator fingerprint, see also page 10, lines 12-14).

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Conclusion

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

US 6,992,562 (Fuks), US 7,174,017 (Bantz), US 6,195,447 (Ross).

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to MOHAMMAD L. RAHMAN whose telephone number is (571)270-7471. The examiner can

normally be reached on Monday to Friday: 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

TAGHI T. ARANI can be reached on 5712723787. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

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at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative

or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-

1000.

/MOHAMMAD L RAHMAN/

Primary Examiner, Art Unit 2438

		Notice of Reference	e Cited		Application/ 13/572,166	Control No.	Applicant(s)/I Reexamination	Patent Under on RISTOPHER JOHN
		Notice of Reference	s Cilea		Examiner		Art Unit	
					МОНАММА	D L. RAHMAN	2438	Page 1 of 1
				U.S. P	ATENT DOCUM	IENTS		
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY			Name		Classification
*	А	US-6,195,447 B1	02-2001	Ross, F	Paul C.			382/125
*	В	US-6,229,906 B1	05-2001	Pu et a	l.			382/116
*	С	US-6,992,562 B2	01-2006	Fuks et	al.			340/5.52
*	D	US-7,174,017 B2	02-2007	Bantz e	et al.			380/255
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"A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 20150421

Search Notes

Application/Control No.	Applicant(s)/Patent Under Reexamination		
13572166	BURKE, CHRISTOPHER JOHN		
Examiner	Art Unit		
MOHAMMAD L RAHMAN	2438		

CPC- SEARCHED		
Symbol	Date	Examiner
H04L63/0861	4/22/2015	MLR
G06F21/32	4/22/2015	MLR

CPC COMBINATION SETS - SEARCHED				
Symbol	Date	Examiner		

US CLASSIFICATION SEARCHED					
Class	Subclass	Date	Examiner		
713	186	03/19/2014	MLR		
Updated					
Search					
713	186	11/6/2014	MLR		

SEARCH NOTES					
Search Notes	Date	Examiner			
Combined text search with classes/sub-classes (see EAST)	3/19/2014	MLR			
Inventor name, Assigee	3/19/2014	MLR			
NPL Search - Google Scholar IEEE ACM WIPO	3/19/2014	MLR			
Updated Search					
Updated keywords combined with classes/sub-classes	11/6/2014	MLR			
Inventor name, Assignee	11/6/2014	MLR			
NPL Search - Google Scholar IEEE ACM WIPO	11/6/2014	MLR			
Updated Text search combined with CPC symbols (see EAST)	4/22/2015	MLR			
Inventor name, Assignee	4/22/2015	MLR			
NPL Search - Google Scholar IEEE ACM WIPO	4/22/2015	MLR			

INTERFEREN	CE SEARCH

U.S. Patent and Trademark Office Part of Paper No.: 20150421

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

U.S. Patent and Trademark Office Part of Paper No.: 20150421

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	93012	(G07C9/00158 or G06F21/35 or H04W12/08 or H04L63/0861 or G06F21/32 or H04W84/18 or H04W84/12).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/22 21:24
L2	55	(duration (time near5 (period length span))) with ((biometric fingerprint (retina near2 scan)) near5 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/22 21:25
L3	17	L1 and L2	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/22 21:25
S1	656	(biometric fingerprint) with (key near fob)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:45
S2	275	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:47
S3	49	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:48
S4	43	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:51
S5	0	(biometric fingerprint) with (remote near key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:52
	0	(biometric fingerprint) with (remote near2 key near fob) and (audit\$	US-PGPUB; USPAT; USOCR;	OR	ON	2014/03/18 12:53

		examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	FPRS; EPO; JPO; DERWENT; IBM_TDB			
S7	2	("8266442").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:36
S8	2	"20120278863"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:42
S9	2	"20120311346"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S10	2	"20120311343"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S11	29	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/03/19 15:33
S12	16349	(713/182-186,168).COLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34
S13	23869	(726/2,7,26-30).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34
S14	33433	(709/224-225). CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:35
S15	738	biometric with identif\$7 same (access near2 (right privilege control)) and (((unconditional unlimited) near2 access) duress alert telemetry)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S16	33	(enroll\$3 register\$3) with (((biometric adj image) biometric (fingrprint adj image) fingerprint) near (sequence array))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35

S17	4829	assign\$3 with (access near (right privilege))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S18	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S19	174	S17 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S20	26	S12 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S21	24	S13 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S22	4	S14 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S23	23	S15 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S24	65	S12 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S25	41	S13 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S26	11	S14 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37

S27	27	S15 and S17	US-PGPUB;	OR	ON	2014/03/19
			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			15:37
S28	165	S15 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S29	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
S30	131	(assign\$3 provid\$3) with (access adj (right privilege)) same (biometric fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
S31	94	(biometric fingerprint) with ((multiple plural consecutive sequential successive) near2 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:34
S32	33	(biometric fingerprint) with ((multiple plural consecutive sequential successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:34
S33	18809	(713/182-186,168).CCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
S34	2	S33 and S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S35	29312	(726/2,7,26-30).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
S36	0	S35 and S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35

S37	39035	(709/224-225).CCLS.	US-PGPUB;	OR	OFF	2014/11/06
			USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			13:35
S38	0	S37 and S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S39	36	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/11/06 13:35
S40	O	S39 and S31	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S41	10	(biometric fingerprint) with ((consecutive sequential successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:36
S42	17	(calculat\$3 detect\$3 identify\$3) with (number near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:40
S43	O	(calculat\$3 detect\$3 identify\$3) with (duration near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:40
S44	1	(calculat\$3 detect\$3 identify\$3) with ((duration period time) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:40
S45	1	(calculat\$3 detect\$3 identify\$3) with ((duration period time length span) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:41
S46	14	((duration period time length span) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:42
S47	0	(duration (time near2 (period length span))) with ((each multiple plural) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/04/21 10:47

			DERWENT; IBM_TDB			
S48	0	(duration (time near5 (period length span))) with ((each multiple plural) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:47
S49	23	(duration (time near5 (period length span))) with (biometric near2 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:47
S50	8	(biometric fingerprint) SAME ((consecutive sequential successive) near2 entr\$3) SAME ((number count\$3) near5 entr\$3) AND (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:15
S51	13	(biometric fingerprint) SAME ((consecutive sequential successive) near2 entr\$3) AND ((number count\$3) near5 entr\$3) AND (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:16
S52	55	(duration (time near5 (period length span))) with ((biometric fingerprint (retina near2 scan)) near5 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:25
S53	19	(duration (time near5 (period length span))) with ((biometric fingerprint (retina near2 scan)) near5 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:25
S54	161	"5109428"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:15
S55	4	"5109428".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:15
S56	3	(biometric fingerprint) same ((consecutive successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:20
S57	43	(biometric fingerprint) same ((consecutive successive multiple) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO;	OR	ON	2015/04/21 12:22

			DERWENT; IBM_TDB			
S58	2	"6195447 ".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 13:12
S59	2	"6229906".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 13:41

EAST Search History (Interference)

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
	MOHAMMAD L RAHMAN	2438

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U.S. Patent and Trademark Office Part of Paper No.: 20150421

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
	MOHAMMAD L RAHMAN	2438

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U.S. Patent and Trademark Office Part of Paper No. : 20150421

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Examiner: Rahman, Mohammad

Filed:

August 10, 2012

Art Unit:

2438

For:

REMONTE ENTRY SYSTEM

Conf. No.: 9752

Attorney Docket No.: 12838-8

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, Applicant(s) hereby cites the following references:

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	В3	WO 02/095589 A1	11-28-2002	PCT	N/A
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OTHER ART - NON PATENT LITERATURE DOCUMENTS

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	B5	Office Action for corresponding Canadian application number 2,535,434 dated March 27, 2015

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Page 1 of 3

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Published: (71) Applicant: IDENTIX INCORPORATED [US/US];

with international search report

CA 95014 (US).

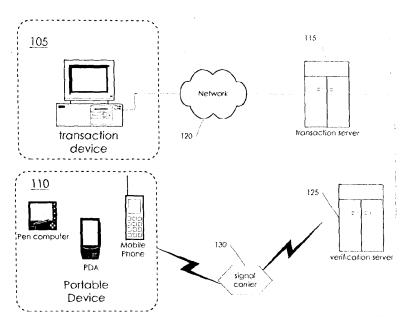
94063 (US).

5600 Rowland Road, Minnetonka, MN 55343 (US).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(72) Inventors: SANCHEZ, Juan, Federico; 329 N First Street #312, San Jose, CA 95110 (US). LEDEEN,

(54) Title: MOBILE IDENTITY VERIFICATION



(57) Abstract: A method performed at a verification server of verifying an identity of a user attempting to access a transaction hosted by a server includes a receiving a biometric signal from a verification system that is housed within a portable device and that is separate from the transaction server and the verification server. The received biometric signal is validated, and acknowledgement of validation is sent to the transaction server. The received biometric signal includes information relating to the user's identity that was obtained using biometric verification.

MOBILE IDENTITY VERIFICATION

TECHNICAL FIELD

This invention relates to identity verification, and more particularly to universal mobile identity verification.

BACKGROUND

Biometric identity verification is a useful tool for validating a user's identity without the annoyance of remembering a password and with the convenience and safety of biometric identification.

Fingerprint identity verification is one example of a biometric identity verification system. Fingerprint identity verification includes, among other steps, acquiring fingerprint data using a fingerprint reader. Typically, fingerprint data are obtained by reflecting or scattering an image of a finger surface onto an image sensor, such as a charge coupled device. Fingerprint readers are described in, for example, U.S. Pat. No. 4,924,085 to Kato et al., U.S. Pat. No. 5,088,817 to Igaki et al., and U.S. Pat. No. 5,067,162 to Driscoll, Jr., et al. In each of these fingerprint readers, a light source is irradiated at an angle onto the ridge and valley portions of a fingerprint that has been pressed against a light conducting plate. Depending upon the particular orientation of the light source with respect to the light conducting plate, and the location of the image sensing device, either the reflected or the scattered light from the fingerprint is transferred. The image sensor captures the transferred light so that the captured fingerprint data can be stored.

SUMMARY

In one general aspect, a method is performed at a verification server for verifying an identity of a user attempting to access a transaction hosted by a server. The method includes receiving a biometric signal from a verification system that is housed in a portable device and that is separate from the transaction server and the verification server. The method further includes validating the received biometric signal, and sending acknowledgement of validation to the transaction server. The received biometric signal

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includes information relating to the user's identity that was obtained using biometric verification.

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Implementations may include one or more of the following features. The method may include receiving a user identifier from the transaction server and generating an access identifier in response to the received user identifier. The method may also include sending the access identifier to the transaction server for presentation to the user and prompting a user to enter the access identifier. The access identifier may be received from the user and validated, and the user may be prompted to produce the biometric signal by performing a verification action. Validating the received access identifier may include determining if the received access identifier corresponds to the generated access identifier.

The received biometric signal may be validated by determining if the received biometric signal corresponds to a predetermined biometric template for the user. A biometric signal may be transmitted through a wireless channel. A biometric signal may include information relating to a physical feature of the user.

The portable device may be a cellular telephone. The portable device may be a personal digital assistant.

In another general aspect, a system for verifying an identity of a user attempting to access a transaction hosted by a server includes a device and a verification server. The device is separate from the transaction server and carried by the user, and the device includes a verification system. The verification server is separate from the transaction server and the device. The verification server includes a processor having a communication link that transmits content to and from the user device and to and from the transaction server, and memory. The memory stores instructions performed by the processor (i) to receive a biometric signal from the verification system; (ii) to validate the received biometric signal; and (iii) to send acknowledgement of validation to the transaction server. The received biometric signal includes information relating to the user's identity that was obtained using biometric verification.

Implementations may include one or more of the following features. The verification system may include an imager, a processor, and memory. The memory stores instructions performed by the verification system processor (i) to image a finger; (ii) to

convert the finger image into a biometric template; and (iii) to prepare the biometric template for subsequent transmission.

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The transaction server may include a processor having a communication link that transmits content to and from the user device and to and from the verification server, and memory. The memory stores instructions performed by the transaction server processor (i) to receive a user request to access the transaction; (ii) to receive a user identifier; (iii) to send the user identifier to the verification server; (iv) to receive an access identifier from the verification server; (v) to present the access identifier to the portable device; (vi) to receive acknowledgement verifying the user identity from the verification server; and (vii) to grant the user access to the transaction.

In another general aspect, a system for converting a portable device into a portable verification device includes a body that houses components needed to perform a first function of the portable device, a compartment in the body of the portable device, and an adapted compartment. The compartment stores an energy source to power the housed components of the portable device. The adapted compartment is designed to encapsulate a fingerprint reader. The adapted compartment fits in the compartment of the portable device to convert the portable device into a portable verification device that performs the first function and a second verification function.

Implementations may include one or more of the following features. The portable device may be a cellular telephone. The compartment may include a battery pack. The adapted compartment may include a battery pack.

The fingerprint reader may include an imager, a processor, and memory. The memory stores instructions performed by the processor (i) to image a finger, (ii) to convert the finger image into a biometric template, and (iii) to prepare the biometric template for transmission.

In another general aspect, a method of converting a portable device into a portable verification device includes forming a mold cavity shaped like a compartment in a body of the portable device to to store an energy source to power elements needed to perform a first function of of the portable device. The method also includes inserting a fingerprint reader into the mold cavity and injecting a material into the mold cavity to encapsulate the fingerprint reader. The injected material is permitted to solidify to form an adapted compartment. The adapted compartment is attached to the portable device to convert the

portable device into a portable verification device that performs the first function and a verification function.

Implementations may include one or more of the following features. The portable device may be a cellular telephone and the compartment may include a battery pack.

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The systems and methods of biometric identity verification have several advantages. The biometric identity verification system and method exploits the ubiquity of wireless telephony and Internet access, thus enabling biometric identity verification with minimal modification to existing infrastructure. Accordingly, such a biometric identity verification system and method increases or promotes use of biometric verification to add security to many transactions.

Other features and advantages will be apparent from the following detailed description, the accompanying drawings, and the claims.

DESCRIPTION OF DRAWINGS

The invention is described by way of examples with reference to the accompanying drawings wherein:

Fig. 1 is a block diagram of a mobile identity verification system.

Fig. 2 is a block diagram of a portable device that may be used in the mobile identity verification system of Fig. 1.

Fig. 3 and 4 are front and back schematic views, respectively, of a portable device used in the mobile identity verification system of Fig. 1.

Fig. 5 is a flow chart of a procedure for forming a battery pack in the portable device of Figs. 3 and 4.

Figs. 6 and 7 are flow charts of procedures performed by the mobile identity verification system.

Like reference symbols in the various drawings indicate like elements.

DETAILED DESCRIPTION

Widespread adoption of fingerprint identity verification is inhibited because of a lack of installed infrastructure of fingerprint readers into various form factors such as, for example, personal computers, personal digital assistants (PDAs), and public data terminals. Although fingerprint reader technology is now available in small and moderately priced form factors, the technical complexity of installation into a wide

variety and number form factors has had a negative effect on deployment of applications that may benefit from biometric verification of identity.

For example, portable personal identification devices (PIDs) may be used to provide secure access to a host facility such as a home security system, an automated teller machine, an automobil alarm system, or a garage door opener. The PID may include a biometric sensor system capable of sensing a biometric trait (such as a fingerprint) of a user that is unique to the user. The PID then provides a biometric signal indicative of the user's identity to the host facility. Such systems are described in U.S. Application No. 09/066,643, titled "PERSONAL IDENTIFICATION SYSTEM," and filed on April 24, 1998, and U.S. Application No. 09/298,326, titled "PERSONAL IDENTIFICATION SYSTEM AND METHOD," and filed on April 23, 1999, assigned to the assignee of the subject application and both of which are incorporated herein by reference.

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Referring to Fig. 1, a mobile identity verification system 100 exploits the ubiquity of wireless communications to enable biometric identity verification with minimal modifications to existing infrastructure, thus increasing the possibility of using biometric identity verification in every day transactions. In general, a user enters biometric information into a portable device (such as a cellular telephone) when trying to enter a transaction at a transaction device (such as an Internet web page, a personal computer, or an automated teller machine). Using wireless communication, the portable device sends a biometric signal to an independent verification server (that may be separate from the portable device), which performs verification services and indicates such user verification to a transaction server in communication with the transaction device.

In wireless communications, electromagnetic waves (rather than some form of wire or cable) carry the propagation signal over part or all of the communication path. Some devices, such as intrusion alarms, employ acoustic waves at frequencies above the range of human hearing; these devices are also sometimes classified as wireless. Standard wireless communications systems include radio wave systems, microwave systems, and infrared systems. Standard applications using wireless communications include cellular telephones and pagers, global positioning systems, cordless computer peripherals, cordless telephone sets, home entertainment system control boxes, satellite television, and wireless local area networks.

The mobile identity verification system 100 includes a transaction device 105, a portable device 110, a transaction server 115 coupled to the transaction device 105 through a network 120, and a verification server 125 coupled to the portable device 110 using any signal carrier 130 such as a radio tower, microwave antenna, or infrared transmitter/receiver.

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The transaction device 105 may be any device at which the user wishes to access a transaction. Examples of transaction devices 105 include personal computers, credit card terminals, and automatic teller machines. For example, the user may wish to access a web site that is enabled for fingerprint identity verification. As another example, the user may wish to use a credit card at a credit card terminal that requires biometric verification of the authorized card holder.

In any case, the transaction device 105 controls operations of the transaction and is enabled for biometric verification. To achieve these functions, the transaction device 105 may include various input/output (I/O) devices (for example, a mouse, a keyboard, a display, or a microphone) and a general purpose computer having a central processor unit (CPU), an I/O unit, and a memory that stores data and various programs such as an operating system, and one or more application programs. The memory stores a program that controls transactions enabled for biometric verification. The computer system may also include some sort of communications card or device (for example, a modem or network adapter) for exchanging data with a network via a communications link (for example, a telephone line or cable).

The transaction server 115 communicates with the transaction device 105 through the network 120 and with the verification server 125 either through a direct connection or through a wireless connection. The transaction server 115 may include one or more general-purpose computers (for example, personal computers), one or more special-purpose computers (for example, devices specifically programmed to communicate with each other), or a combination of one or more general-purpose computers and one or more special-purpose computers. The transaction server 115 may be arranged to operate within or in concert with one or more other systems, such as for example, one or more Local Area Networks (LANs) and/or one or more Wide Area Networks (WANs). The transaction server 115 is generally capable of executing instructions under the command of a transaction controller (not shown). The transaction server 115 is connected to the transaction controller by a wired or wireless data pathway capable of delivering data.

The portable device 110 may be any wireless device that a user is likely to carry such as a cellular telephone, a PDA, or a pen computer. The portable device 110 includes wireless communication equipment such as, for example, a transceiver (receiver/transmitter), audio circuitry (such as microphone or speaker), and various controller circuits for controlling communications. In addition to including necessary wireless communication equipment, the portable device 110 may include various input/output (I/O) devices (for example, a pointing device, a keyboard, or a display), a central processor unit (CPU), an I/O unit, and a memory that stores data and various programs such as an operating system, and one or more application programs.

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The portable device 110 may include an externally-accessible (analog or digital) data connector for accessory devices such as, for example, headsets. When an accessory device is attached to the data connector, and once a predetermined event (for example, an initiation of a call on a cellular telephone) occurs, that accessory device operates as an input/output device for the portable device 110. In this case, the accessory device may override operation of internal devices of the portable device 110. For example, the accessory device may cause some internal devices of the portable device 110 to bypass a microphone.

Referring also to Fig. 2, the portable device 110 is equipped with a verification system 200 that includes all the necessary components for fingerprint identification, signal conversion, compression, encryption, and communication. The verification system 200 includes a fingerprint reader 205 that images the finger, image capture electronics 210 for receiving the output from the fingerprint reader 205 and for converting the output into a format readable by a controller 215.

The fingerprint reader 205 includes the necessary optics and illuminating sources for illuminating the finger. Fingerprint readers are described in U.S. Application No. 09/571,741, titled "FINGERPRINT IMAGING DEVICE" and filed on May 15, 2000, and U.S. Application No. 09/637,063, titled "FINGERPRINT IMAGING DEVICE" and filed on August 11, 2000, assigned to the assignee of the subject application and both of which are incorporated herein by reference.

The controller 215 may include a processor 220 and memory 225 storing software for converting image data from the image capture electronics 210 into a biometric template, and for compressing and encrypting the template to avoid interception during data communication. Thus, the memory 225 may store software 230 for capturing and

imaging, software 235 for biometric template extraction, software 240 for data encryption and packaging, and software 245 for call control and protocol. The memory 225 may be used to store finger images and other suitable data that may be accessed by the processor 220. The verification system 200 may also include a modulator/demodulator (or a high speed touch tone generator) 250 for preparing data from the controller 215 for transmission.

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Any suitable data communications system 255 may be implemented within the device 110 to transmit the template to a central verification server. For example, as discussed above, a suitable data communication system 255 may include analog and digital radio systems such as are used in cellular telephones. The communication system 255 may include a data or voice connector 260 for communicating with the modulator/demodulator 250 and standard wireless communication electronics 265 for use in portable devices and telephony applications. Additionally, the device 110 includes other various components 270 that control standard operation of the device 110. The various electronic components of the verification system 200 may be configured on a PC card or any suitable device.

The verification server 125 may include one or more general-purpose computers (for example, personal computers), one or more special-purpose computers (for example, devices specifically programmed to communicate with each other), or a combination of one or more general-purpose computers and one or more special-purpose computers. The verification server 125 may be arranged to operate within or in concert with one or more other systems, such as for example, one or more Local Area Networks (LANs) and/or one or more Wide Area Networks (WANs). The verification server 125 is generally capable of executing instructions under the command of a verification controller (not shown), which may be connected to the verification server by a wired or wireless data pathway capable of delivering data. In general, the verification server 125 performs the user identity verification that will be used by the transaction device 105 to grant access of a transaction to the user.

Referring also to Figs. 3 and 4, in one implementation, the portable device 110 may be a cellular telephone 300 that includes a telephone body 302 and a battery compartment 304. The battery compartment 304 contains the batteries used to power the cellular telephone. To facilitate fingerprint identity verification, the fingerprint reader

205 may be molded into an adapted battery component 410 that attaches to the telephone body 302 and fits within the battery compartment 304.

An externally-accessible data connector 306 may protrude into the battery compartment 304. In this case, the adapted battery component 410 may interface with the data connector 306 through a matching connector. In another design, the adapted battery component 410 may include a cable lead and a mating connector that connects into the data connector 306.

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In some designs, a battery is also molded into the adapted battery component 410. In other designs, a battery is secured by the adapted battery component 410 into the battery compartment 304 of the telephone body 302. In any case, no modifications to the body 302 are required using the adapted battery component 410. Moreover, no approval (for example, FCC) is required to gain regulatory acceptance. Users may purchase the adapted battery component 410 to upgrade their existing cellular telephone to provide mobile identity verification at any time.

The adapted battery component 410 may be formed of any material suitable for use in the cellular telephone. For example, the adapted battery component 410 may be made from a non-conductive material using a variety of known techniques, such as a strong thermoplastic (for example, acrylonitrile-butadiene-styrene (ABS)) that may be injection molded or compression molded. Accordingly, the fingerprint reader 205 may be integrally formed with the battery component 410, during injection molding. The battery component 410 may also be formed, for example, from a lightweight metal having an electrically non-conductive coating. Specific dimensions of the battery component 410 depend on the size of the cellular telephone 300.

Referring also to Fig. 5, in one implementation, the adapted battery component 410 is formed using a production procedure 500 such as injection molding. The fingerprint reader is inserted and appropriately positioned into a mold cavity shaped like the battery component (step 505). Other components such as a battery and wires are inserted and positioned into the mold cavity (step 510). A prepared material such as a plastic resin or a polymer is injected under pressure into the mold cavity to encapsulate the fingerprint reader and the other positioned components (step 515). The prepared and injected material is permitted to solidify to form the adapted battery component (step 520) and the mold cavity is subsequently removed (step 525). The adapted battery component

may then be integrated into the battery compartment of, for example, a cellular telephone..

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Typically, the user programs a personal identification number (PIN) into the portable device 110 immediately after purchase of the portable device 110. This PIN is also stored, for example, into the memory of the fingerprint reader of the portable device 110 for future transmission and reference.

Referring to Figs. 6 and 7, the system 100 performs a procedure 600 for mobile identity verification. Initially, the transaction server 115 receives from a user at the transaction device 105 a request to access a verification-enabled transaction (step 605). For example, the user may access a web site that is enabled for biometric verification. Next, the transaction server 115 receives a user identifier (step 610). For example, the user may enter a user ID and then press a "verify" button at a web site instead of entering a password.

The transaction server 115 sends the user identifier to the verification server 125 (step 615). Upon receipt of the user identifier (step 620), the verification server 125 generates and sends an access identifier (for example, a randomly-generated multi-digit token) to the transaction server 115 (step 625). Upon receipt of the access identifier, the transaction server 115 presents the access identifier to the user at the transaction device 105 and requests that the user enter this access identifier when subsequently verifying her identity (step 630).

Next, the portable device 110 receives a user initiation to access the verification server 125 (step 635). For example, a user initiation may include the user pressing a speed dial button on her cellular telephone to access the verification server. The verification server 125 receives the initiation, initiates a connection by establishing a communication channel with the portable device 110 (step 637). The verification server prompts the user to enter her access identifier into the portable device 110 (step 640). For example, if the portable device 110 is a cellular telephone, the verification server 125 may prompt the user by playing a recorded message. Once the connection is established, then subsequent transmission to and from the portable device 110 will rely on transmission through the data connector 306. For example, transmitted information through an analog data connector 306 may include audible frequency shift or phase shift keyed analog modem signals. In this case, the user of the portable device 110 may be required to initiate a connection to an analog modem at the verification server. Transmitted

information through a digital data connector 306 is binary in form and presented in serial data packets. Once the connection is established, the verification system takes over operation of the portable device 110.

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In another implementation in which the portable device 110 transmits digital information, the verification system of the portable device 110 may be able to initiate the call directly at step 635 using cellular digital packet data (CDPD) protocol over an analog or digital cellular network (or using GSM digital protocol outside the United States). In any case, the amount of information that will be carried through the established communication channel is about 1 kilobyte (kB). Even at moderate data transmission speeds (for example, 9600 bps) that typically characterize wireless communication, the 1 kB payload may be uploaded in about less than 10 seconds of data transmission time.

The portable device 110 receives the access identifier from the user (who has entered the access identifier) and forwards this access identifier to the verification server 125 over the established communication channel (step 645). Upon receipt of the access identifier (step 650), the verification server 125 determines if the received access identifier is valid (step 655). If the access identifier is not valid (step 655), the verification server 125 may continue to prompt the user to enter a correct access identifier for a predetermined number of times (step 640). If the access identifier is valid (step 655), the verification server 125 forwards a signal through the established communication channel to the portable device 110 to prompt the user to verify her identity (step 660).

Next, the portable device 110 receives user verification input (step 662) and subsequently performs a verification procedure (step 665). As shown in Fig. 7, if the identity verification is fingerprint verification, the portable device 110 may perform a procedure 665 for verification. Initially, the portable device fingerprint reader images the finger (step 700). The portable device may then emit an acknowledgement tone to indicate a satisfactory image grab and extraction. Next, the fingerprint reader of the portable device converts the finger image into a verification signal such as a biometric template (step 705). The fingerprint reader then prepares the verification signal for subsequent transmission by, for example, compressing and encrypting the verification signal to reduce the likelihood of interception during transmission (step 710).

After the verification procedure is complete (step 665), the portable device 110 transmits the verification signal to the verification server 125 over the established communication channel (step 670). The verification server 125 receives and processes

the verification signal (step 675). For example, if the verification signal has been compressed and/or encrypted by the portable device 110, the verification server 125 decompresses and/or decrypts the verification signal at step 675.

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The verification server 125 determines if the verification signal is a valid signal by comparing the verification signal against a pre-established enrollment template for that particular user (step 680). If the verification signal is valid (step 680), then the user's identity has been successfully verified and the verification server 125 may notify the user as such (step 685). For example, notification may include the verification server 125 disconnecting its direct connection with the portable device 110. Otherwise, if the verification signal is not valid (step 680), the verification server 125 prompts the user to try again (step 660) until a predetermined retry limit is exhausted.

The verification server 125 sends an acknowledgement of positive verification of the user's identity for that access identifier to the transaction server 115 (step 690). When the transaction server 115 receives the positive verification acknowledgement, the transaction server 115 grants to the user access of the transaction (step 695). For example, if the transaction server is a host server of a web site, the user would be able to login to and access that web site.

A number of embodiments of the invention have been described. Nevertheless, it will be understood that various modifications may be made without departing from the spirit and scope of the invention.

The identity verification may include other forms of biometric verification such as, for example, speech recognition, which would require no modification to the portable device. In this case, all of the modifications would be programmed at the verification server of the system 100. Another form of biometric identification that may be implemented is a cornea or iris scan.

Fingerprint identity verification may be used to surreptitiously indicate duress. For example, the verification server may include several templates for a user, each template indicating a user's intentions. One of those templates may correspond to an alternate finger that a user would only use when faced with an emergency. In this way, the verification server may record the duress transaction and/or place an emergency call to proper authorities. This feature would provide added security, safety, and peace of mind for the user.

A duress indicator may not be as easy to implement using speech recognition. However, a duress indicator may be implemented through a user modification of the user's PIN or a user modification of an access identifier. For example, the user may add an extra digit (that may be predefined) to one of these identifiers to indicate duress.

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In some transactions, such as credit card or telephone transactions, the transaction server may be implemented as an operator associated with the transaction device 105, which may be a telephone. The operator performs many of the operations of the transaction server 115, including requesting an access identifier from the verification server 125. The operator communicates with the user who is requesting a transaction from the portable device 110. The operator at the transaction device may open up an extra line using a conference mode of the telephone to dial in to the verification server 125 simultaneously with communication with the user. The verification server 125 answers as if the user had initiated the call and performs an audio dialogue. When the verification server requests the identity verification to be performed, the user presses their finger against the finger print reader, activating the mobile identity verification function. The portable device captures the fingerprint image, extracts the template, encodes the data (using an encryption scheme), establishes a modern link to the verification server (which is awaiting the modem's communication), and transmits the template. The verification server reports successful verification or requests a retry. If successful, the verification server forwards verification to the transaction server. The operator breaks the connection to the conference, hanging up on the verification server line, while remaining connected to the user. In this way, the user performs a verification transaction while still online with the assisting operator.

The adapted battery component 410 may be designed to provide space for marketing information so that the user of a mobile identity verification device 110 is simultaneously promoting the product to others. The adapted battery component 410 may be migrated to other cellular telephones of the same style and type as the original cellular telephone that was upgraded. Therefore, the user need not purchase a new adapted battery component every time she buys a new cellular telephone.

Accordingly, other embodiments are within the scope of the following claims.

What is claimed is:

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1	1. A method performed at a verification server of verifying an identity of a user
2	attempting to access a transaction hosted by a transaction server, the method comprising:
3	receiving a biometric signal from a verification system that is housed in a portable
4	device and that is separate from the transaction server and the verification server;
5	validating the received biometric signal; and
6	sending acknowledgement of validation to the transaction server;
7	wherein the received biometric signal includes information relating to the user's
8	identity that was obtained using biometric verification.

- 1 2. The method of claim 1 further comprising receiving a user identifier from the transaction server and generating an access identifier in response to the received user identifier.
 - 3. The method of claim 2 further comprising sending the access identifier to the transaction server for presentation to the user and prompting a user to enter the access identifier.
- 4. The method of claim 3 further comprising:
 receiving the access identifier from the user;
 validating the received access identifier; and
 prompting the user to produce the biometric signal by performing a verification
 action.
 - 5. The method of claim 4 wherein validating the received access identifier includes determining if the received access identifier corresponds to the generated access identifier.
- 1 6. The method of claim 1 wherein validating the received biometric signal includes determining if the received biometric signal corresponds to a predetermined biometric template for the user.

1	7.	The method of claim 1 wherein receiving a biometric signal includes					
2	receiving a b	iometric signal transmitted through a wireless channel.					
1	8.	The method of claim 1 wherein receiving a biometric signal includes					
2	receiving info	ormation relating to a physical feature of the user.					
1	9.	The method of claim 1 wherein the portable device is a cellular telephone.					
1	10.	The method of claim 1 wherein the portable device is a personal digital					
2	assistant.						
1	11.	A system for verifying an identity of a user attempting to access a transaction					
2	hosted by a to	ransaction server, the system comprising:					
3	a device separate from the transaction server and carried by the user, the device						
4	including a v	erification system;					
5	a veri	fication server separate from the transaction server and the device, the					
6	verification s	erver comprising:					
7		a processor having a communication link that transmits content to and from					
8	the user device	ce and to and from the transaction server; and					
9		memory storing instructions performed by the processor (i) to receive a					
0	biometric sig	nal from the verification system; (ii) to validate the received biometric signal;					
1	and (iii) to se	and acknowledgement of validation to the transaction server;					
2	where	ein the received biometric signal includes information relating to the user's					
3	identity that	was obtained using biometric verification.					
1	12.	The system of claim 11 wherein the verification system comprises:					
2	an im	ager,					
3		cessor, and					
4	memo	ory that stores instructions performed by the verification system processor (i) to					
5	image a finge	er; (ii) to convert the finger image into a biometric template; and (iii) to prepare					
6		template for subsequent transmission.					

1	13. The system of claim 11 wherein the transaction server comprises.
2	a processor having a communication link that transmits content to and from the user
3	device and to and from the verification server;
4	memory storing instructions performed by the transaction server processor (i) to
5	receive a user request to access the transaction; (ii) to receive a user identifier; (iii) to send
6	the user identifier to the verification server; (iv) to receive an access identifier from the
7	verification server; (v) to present the access identifier to the portable device; (vi) to receive
8	acknowledgement verifying the user identity from the verification server; and (vii) to grant
9	the user access to the transaction.
1	14. A system for converting a portable device into a portable verification device,
2	the system comprising:
3	a body that houses components needed to perform a first function of the portable
4	device;
5	a compartment in the body of the portable device to store an energy source to power
6	the housed components of the portable device; and
7	an adapted compartment into which a fingerprint reader is encapsulated;
8	wherein the adapted compartment fits in the compartment of the portable device to
9	convert the portable device into a portable verification device that performs the first function
10	and a second verification function.
1	15. The system of claim 14 wherein the portable device is a cellular telephone.
1	16. The system of claim 14 wherein the compartment includes a battery pack.
1	17. The system of claim 14 wherein the adapted compartment includes a battery
2	pack.
1	18. The system of claim 14 wherein the fingerprint reader includes:
2	an imager,
3	a processor, and

4	memory that stores instructions performed by the processor (i) to image a finger, (ii)
5	to convert the finger image into a biometric template, and (iii) to prepare the biometric
6	template for transmission.
1	19. A method of converting a portable device into a portable verification device,
2	the method comprising:
3	forming a mold cavity shaped like a compartment in a body of the portable device to
4	store an energy source to power elements needed to perform a first function of of the portable
5	device;
6	inserting a fingerprint reader into the mold cavity;
7	injecting a material into the mold cavity to encapsulate the fingerprint reader;
8	permitting the injected material to solidify to form an adapted compartment; and
9	attaching the adapted compartment to the portable device to convert the portable
10	device into a portable verification device that performs the first function and a verification
11	function.
1	20. The method of claim 19 wherein the portable device is a cellular telephone
2	and the compartment includes a battery pack.

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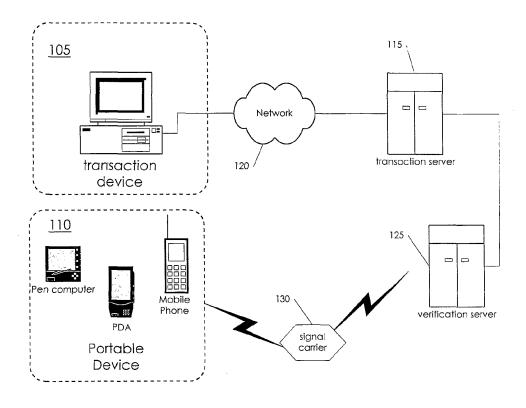


Fig. 1

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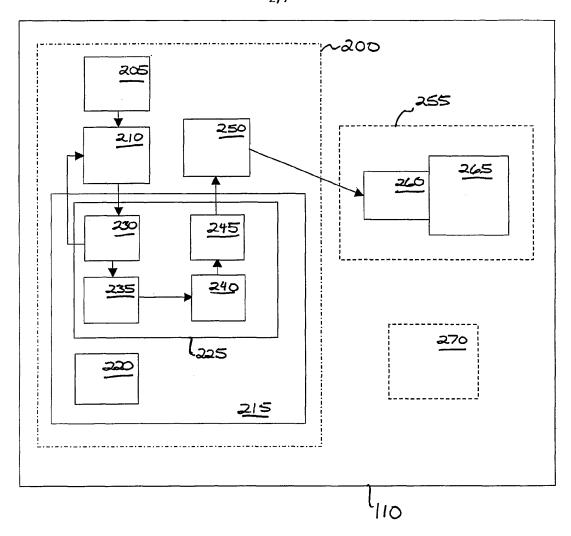


Fig. 2

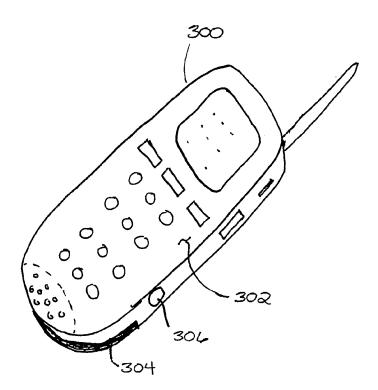


Fig. 3

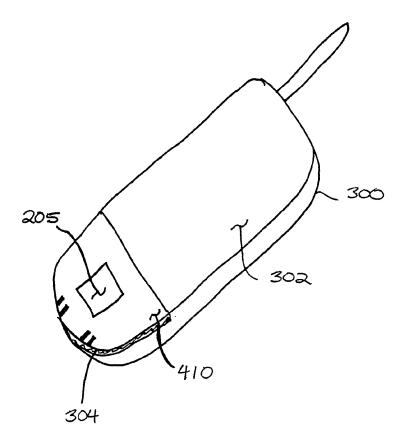


Fig. 4

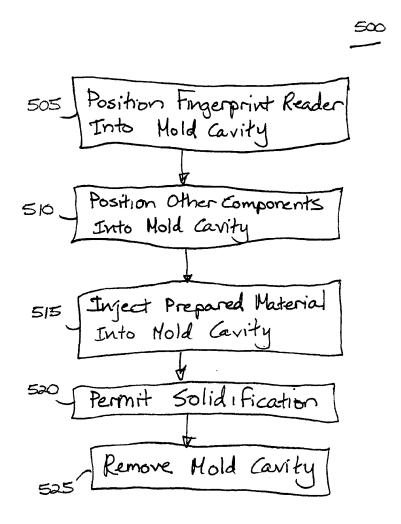
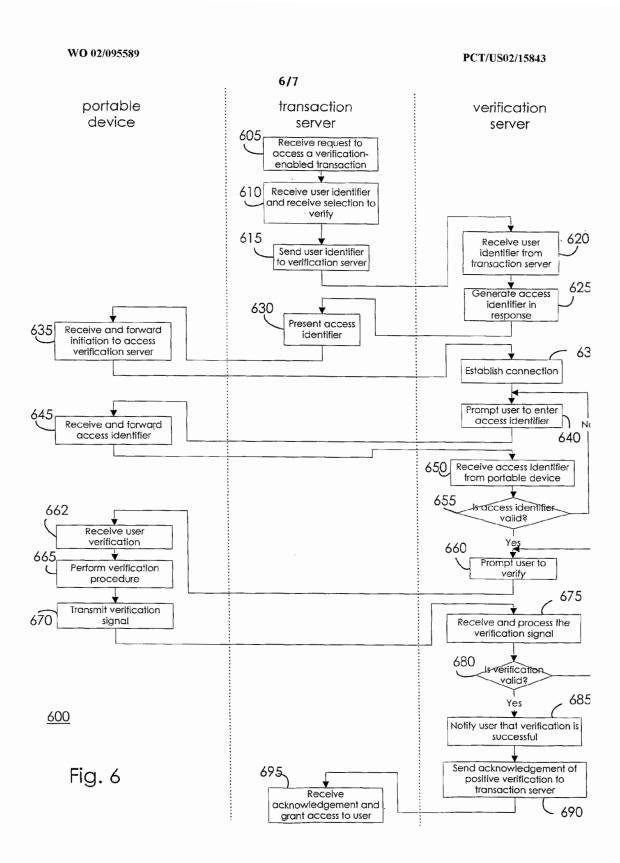


Fig. 5



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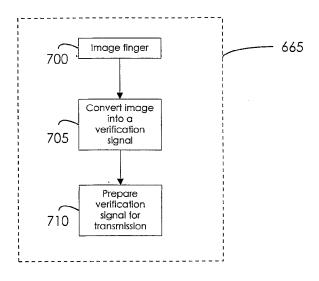


Fig. 7

INTERNATIONAL SEARCH REPORT International application No. PCT/US02/15843 CLASSIFICATION OF SUBJECT MATTER IPC(7) :GO6F 11/30 US CL :718/201, 200, 202 According to International Patent Classification (IPC) or to both national classification and IPC FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) U.S.: 718/201, 200, 202 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EAST - JPO, EPO, DERWENT, USPATFULL, IBMTBD terms: biometric, verification, remote, authentics, authorizs. DOCUMENTS CONSIDERED TO BE RELEVANT Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Y US 5,915,973 A (HOEHN-SARIC ET AL) 29 June 1999, entire 1-10 document. Y US 6,040,783 A (HOUVENER et al.) 21 March 2000, entire 1-10 Further documents are listed in the continuation of Box C. See patent family annex. later document published after the international filing date or priority date and not in conflict with the application but cited to understand Special categories of cited documents: աՆա document defining the general state of the art which is not considered to be of particular relevance "A" the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be "E earlier document published on or after the international filing date considered novel or cannot be considered to involve an inventive step document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) when the document is taken alone "L" u Vu document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "O" document referring to an oral disclosure, use, exhibition or other document published prior to the international filing date but later than the priority date claimed document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 2 4 JUL 2002 01 JULY 2002 Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Authorized officer

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First Named Inventor/Applicant Name:	Christopher John Burke					
Correspondence Address:	Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 - Chicago IL 60610 US 3123214200 -					
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		Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee	
Total		68	Minus	67	1	x \$ 80 =	\$	1x \$ 40 =	\$40	x \$20 =	\$	
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Filing Date	August 10, 2012
First Named Inventor	Christopher John Burke
Art Unit	2438
Examiner Name	Mohammad L. Rahman
Attorney Docket Number	12838/8

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EFS ID:	EFS ID: 22397514				
Application Number:	13572166				
International Application Number:					
Confirmation Number:	9752				
Title of Invention:	REMOTE ENTRY SYSTEM				
First Named Inventor/Applicant Name:	Christopher John Burke				
Correspondence Address:	Michael E. Milz Brinks Hofer Gilson & Lione P.O. Box 10395 - Chicago IL 60610 US 3123214200 -				
Filer:	Michael Edward Milz/Alice Thoennes				
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Attorney Docket Number:	12838/8				
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File Listing:	

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /₊zip	Pages (if appl.)
1		12838-8-ChangeCorresp.pdf	124623 yes		2
·	1		2fbaf4a750711cd7573ebb477ea44123c051 a038	, c.s	
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		12	24623		

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If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

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IN	I THE UNITED	STATES	PATENT	AND 1	TRADEMARK	OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Filed: For: August 10, 2012

REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Examiner: Rahman, Mohammad L.

Art Unit: 2438

Conf. No.: 9752

TRANSMITTAL

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Sir:				
Attac	hed is/are:			
\boxtimes	Change of Correspodence Address - Application.			
Fee c	alculation:			
\boxtimes	No additional fee is required.			
	Per 37 CFR §1.27, Applicant is small entity	Applicant is micr	o entity.	
	An extension fee in an amount of \$ for a	month extension	on of time under 37	CFR § 1.136(a).
	A petition or processing fee in an amount of \$	under 37 CFR §	1.17().	
	An additional filing fee has been calculated as sho	own below:		
		Fee	Small Entity Fee	Micro Entity Fee

					Fe	е	Small En	tity Fee	Micro En	tity Fee
	Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee
Total		Minus			x \$ 80 =	\$	x \$ 40 =	\$	x \$20 =	\$
Independent		Minus			x \$420 =	\$	x \$210 =	\$	x \$105 =	\$
First Presenta	First Presentation of Multiple Dep. Claim			+ \$780 =	\$	+ \$390 =	\$	+ \$195 =	\$	
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	The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.								
		Respect	tfully sub	omitted.					
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Date		Michael	F. Milz	(Rea No. 34	.880)				

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Date: July 27, 2015

Name: E. Brandon Nykiel (Reg. No. 62,972) Signature: /E. Brandon Nykiel/

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Filed:

August 10, 2012

For:

REMOTE ENTRY SYSTEM

Attorney Docket No:

12838/8

Examiner: Rahman,

Mohammad L.

Art Unit: 2438

Confirmation No. 9752

AMENDMENT AND RESPONSE TO NON-FINAL OFFICE ACTION MAILED APRIL 27, 2014

MAIL STOP - Amendment Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir or Madam:

In response to the non-final Office Action mailed April 27, 2015, please enter the following amendments and consider the following remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 7 of this paper.

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of the Claims:

What is claimed is:

1-68. (Cancelled)

69. (New) A system for providing secure access to a controlled item, the system comprising:

a database of biometric signatures;

a transmitter sub-system comprising:

a biometric sensor for receiving a biometric signal;

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute; and

a receiver sub-system comprising:

means for receiving the transmitted secure access signal; and

means for providing conditional access to the controlled item dependent upon said information, wherein the transmitter sub-system further comprises means for populating the data base of biometric signatures, the population means comprising:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and means for populating the data base according to the instruction.

70. (New) The system according to claim 69, further comprising:

means for providing a signal for directing input of the series of entries of the biometric signal;

means for incorporating into the secure access signal an identification field identifying the biometric signal if the signal matches a member of the database; and

means for constructing an audit trail of biometric signals provided to the biometric sensor for the purpose of accessing the controlled item.

71. (New) The system according to claim 69, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class, a system user class, and a duress class, the accessibility attribute preferably comprising:

an access attribute if the biometric signal matches a member of the database of biometric signatures;

a duress attribute if the biometric signal matches a member of the database of biometric signatures and said member belongs to the duress class; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

- 72. (New) The system according to claim 69, wherein the controlled item is one of: a locking mechanism of a door; and an electronic lock on a Personal Computer (PC).
- 73. (New) The system according to claim 69, wherein the biometric sensor is responsive to one of voice, retinal pattern, iris pattern, face pattern, and palm configuration, and/or the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver sub-system.
- 74. (New) The system according to claim 69, wherein said conditional access comprises one of:

provision of access to the controlled item if the accessibility attribute comprises an access attribute:

provision of access to the controlled item and sounding of an alert if the accessibility attribute comprises a duress attribute; and

denial of access to the controlled item and sounding of an alert if the accessibility attribute comprises an alert attribute.

75. (New) The system as claimed in claim 69, wherein:

the biometric sensor is for authenticating the identity of a user;

the means for emitting comprises a transmitter for transmitting information capable of granting more than two types of access to the controlled item using a secure wireless signal dependent upon a request from the user and the authentication of the user identity; and

the system further comprising a control panel for receiving the information and for providing the secure access requested.

- 76. (New) The system according to claim 75, wherein the control panel includes a converter for receiving the secure wireless signal and for outputting the information, and/or the biometric sensor authenticates the identity of the user by comparing a biometric input from the user with a biometric signature for the user in a biometric database, and/or the biometric sensor, the biometric database, and the transmitter are located in a remote fob.
- 77. (New) The system according to claim 76, wherein the secure wireless signal comprises an RF carrier and a rolling code, and the converter preferably converts the rolling code to the Wiegand protocol.
- 78. (New) A transmitter sub-system for operating in a system for providing secure access to a controlled item, wherein the transmitter sub-system comprises:

a biometric sensor for receiving a biometric signal;

means for matching the biometric signal against members of a database of biometric signatures to thereby output an accessibility attribute; and

means for emitting a secure access signal conveying said information dependent upon said accessibility attribute;

wherein the transmitter sub-system further comprises means for populating the database of biometric signatures, the populating means comprising:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and means for populating the database according to the instruction.

79. (New) A method for providing secure access to a controlled item in a system comprising a database of biometric signatures, a transmitter sub-system comprising a biometric sensor for receiving a biometric signal, and means for emitting a secure access signal capable of granting more than two types of access to the controlled item, and a receiver sub-system comprising means for receiving the transmitted secure access signal, and means for providing conditional access to the controlled item dependent upon information in said secure access signal, the method comprising the steps of:

populating the database of biometric signatures by:

receiving a series of entries of the biometric signal;

determining at least one of the number of said entries and a duration of each

said entry;

mapping said series into an instruction; and

populating the database according to the instruction;

receiving a biometric signal;

matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute;

emitting a secure access signal conveying information dependent upon said accessibility attribute; and

providing conditional access to the controlled item dependent upon said information.

80. (New) The method according to claim 79, wherein the step of populating the database of biometric signatures further comprises the step of enrolling a biometric signature into the database of biometric signatures comprising the steps of:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

- 81. (New) The method according to claim 80, wherein the step of enrolling the biometric signature further comprises receiving another biometric signal to confirm the enrolling of the biometric signal as an administrator signature, and is preferably performed dependent upon generation of a feedback signal adapted to direct provision of at least one of the biometric signal and the other biometric signal.
- 82. (New) A non-transitory computer readable storage medium for storing a computer program comprising instructions, which when executed by processors causes the processors to perform the steps of the method of claim 79.

Remarks

I. Introduction

Claims 69-82 are pending. In this Amendment and Response, Claims 45-68 are cancelled. Claims 69-82 are added. No new matter is added. Applicant respectfully requests reconsideration in view of the amendments and the following remarks.

II. Claim Objections

Now cancelled dependent claims 47-56, 59-61, 64, and 66-68 were objected to for reciting "A method" or "A system." Cancellation of these claims obviates the objection. Additionally, Applicant notes that in the currently pending claims, "The" is used instead of "A" in order to avoid similar claim objections.

Now cancelled claims 46 and 57 were objected to for reciting "operable for;" on grounds that such use is an incomplete sentence. In addition to these claims being cancelled, these claim terms are not used in the currently pending claims, which obviates the objection.

III. Claim Rejections Under 35 U.S.C. § 112

In the Office Action, claims 45-46, 48, 53, 57, 58, 63, and 65 were rejected under 35 U.S.C. § 112, second paragraph on grounds that the term "operable for" is a statement of intended use and does not impose any positive limitation on the scope of the claims. In addition, claims 46, 57, 58, 63, and 65 were rejected under 35 U.S.C. § 112, second paragraph on grounds that the terms "appropriate number" and "appropriate duration" are relative terms that render the claims indefinite. The currently pending claims do not use these terms, which obviates the rejection.

IV. Claim Rejections Under 35 U.S.C. § 101

Claims 45-68 were rejected under 35 U.S.C. § 101 on grounds that they were directed to an abstract idea without significantly more. Applicants do not agree with the § 101 rejections as to claims 45-68, and their cancellation should in no way be construed as acquiescing to the rejections. In addition, Applicant provides the following reasons why

currently pending claims 69-82 are directed to statutory subject matter and should not be rejected under § 101.

A. Federal Register Interim Guidance

The Federal Register Notice: 2014 Interim Guidance on Patent Subject Matter Eligibility states that "In accordance with the existing two-step analysis for patent subject matter eligibility under 35 U.S.C. 101 explained in MPEP 2106, the claimed invention:

- (Step 1) "must be directed to one of the four statutory categories" and
- (Step 2) 'must not be wholly directed to subject matter encompassing a judicially recognized exception"

The Interim Guidance states further that a claim to a process, machine, manufacture or composition of matter (Step 1: YES) that is not directed to any judicial exceptions (Step 2A: NO) is eligible and needs no further eligibility analysis.

Step 2A (Part 1 Mayo Test) involves determining whether the claim is directed to a law of nature, a natural phenomenon, or an abstract idea (judicial exceptions).

B. The Office Action

The Office Action states that the "Claims are directed towards performing a simple biometric authentication. The underlying invention is merely a simple biometric matching operation to access a controlled item".

The Office Action asserts that "The claim(s) does/do not include additional elements that are sufficient to amount to significantly more than the judicial exception because the additional element(s) or combination of elements in the claim(s) other than the abstract idea per se amount(s) to no more than recitation of generic computer structure" (this relates to Step 2 of the Interim Guidance process.

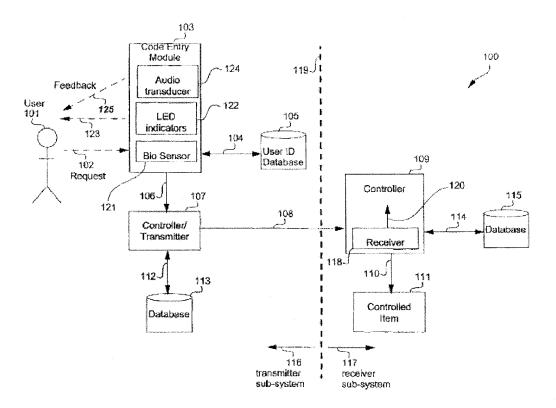
C. The Claimed Invention

New system claim 69 is directed to providing secure access to a controlled item by matching a received biometric signal against members of a database of biometric signatures,

Page 8 of 17

and providing conditional access to the controlled item dependent upon the success or otherwise of the matching operation. The controlled item 111 can be a door locking mechanism on a secure door, or an electronic key circuit in a personal computer (PC) that is to be accessed by the user 101 [0080].

New claim 69 is clearly directed to a machine (the statutory categories are process, machine, manufacture or composition of matter). The claimed invention is illustrated, in one example, in Fig. 2 of the present specification, reproduced below for convenience.



The operation of the claimed invention is provided at [0078] - [0080] which states (paraphrased) A user 101 makes a request 102 to a biometric sensor 121 in a code entry module 103 which interrogates a user identity database 105. If the identity of the user 101 is authenticated, then the code entry module 103 sends a signal 106 to a controller/transmitter 107 which checks a current rolling code in a database 113. If the incoming rolling code is legitimate, then the controller 109 sends a command 110 to a controlled item 111. The

controlled item 111 can be a door locking mechanism on a secure door, or an electronic key circuit in a personal computer (PC) that is to be accessed by the user 101.

Clearly the invention operates to provide the access (e.g., by opening the door), and does not merely generate information.

The Interim Guidance states that a claim to a machine that is not directed to any judicial exceptions (Step 2A: NO) is eligible and needs no further eligibility analysis.

It is respectfully submitted that the Office Action erred in characterising the claims as being directed to a judicial exception, being an abstract idea.

The Abstract Idea Examples referred to in the Office Action describe the following patent-eligible examples:

- i. Isolating and Removing Malicious Code from Electronic Messages;
- ii. E-Commerce Outsourcing System/Generating a Composite Web Page;
- iii. Digital Image Processing;
- iv. Global Positioning System.

The following patent-ineligible examples are also described:

- v. Digital Image Processing;
- vi. The Game of Bingo;
- vii. E-Commerce providing Transaction Performance Guaranty;
- viii. Distribution of Products over the Internet.

It is apparent that <u>none</u> of the above examples involve an apparatus or a method in which an actual physical effect flows from practicing the invention, such as opening a door, or enabling physical access to a PC.

It is submitted that new claim 69 is not directed towards performing a simple biometric authentication, but rather is directed towards using biometric authentication to either produce or prevent physical access to a controlled item.

Accordingly, the claim to the machine is not directed to any judicial exceptions, is therefore eligible and needs no further eligibility analysis.

Accordingly, for at least the reasons noted above, it is submitted that new claim 69 is eligible under 35 USC 101, and the rejection should be set aside.

The other claims recite, either explicitly or by dependence, the same or equivalent features to those referred to in regard to new claim 69. Accordingly, for at least the reasons noted above, it is submitted that new claims 69-82 are eligible under 35 USC 101, and the rejection should be set aside.

V. Claim Rejections Under 35 U.S.C. § 102

The Office Action at page 5 rejects now cancelled claim 45 (directed to a transmitter sub-system) under pre-AIA 35 U.S.C. 102(e/a) as being anticipated by Hoffman et al (US 7,152,045).

New claim 78 is directed to a transmitter sub-system and recites, among other features:

- i. wherein the transmitter sub-system further comprises means for populating the database of biometric signatures, the populating means comprising:
- ii. means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;
- iii. means for mapping said series into an instruction; and
- iv. means for populating the database according to the instruction.

Hoffman does not disclose or suggest any of the above-noted features.

For at least this reason, new claim 78 is novel over Hoffman.

VI. Claim Rejections Under 35 U.S.C. § 103

The Office Action at page 7 rejects now cancelled claims 46-58, 60-63, and 67-68 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over Hoffman in view of lgaki et al. (US 5,109,428) hereinafter "lgaki" and in further view of Pu et al. (US 6,229,906) hereinafter "Pu".

Now cancelled claim 46 is directed to a system for providing secure access to a controlled item, as is new claim 69.

New claim 69 recites, among other features, the following:

- i. wherein the transmitter sub-system further comprises means for populating the database of biometric signatures, the populating means comprising:
- ii. means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;
- iii. means for mapping said series into an instruction; and
- iv. means for populating the database according to the instruction.

The Office Action states the following:

- v. <u>Hoffman-lgaki</u> combination is silent on but the analogous art <u>Pu</u> teaches said succession being characterized according to at least one of the number of said entries and a duration of each said entry;
- vi. the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration.

The Office Action then asserts that one of ordinary skilled artisan would have been motivated to modify the combined system of <u>Hoffman & Igaki</u> with the idea of succession being characterized according to at least one of the number of said entries and a duration of each said entry, the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration as taught by Pu because the use of <u>Pu</u>

could provide the Biometric Input Device of <u>Hoffman</u> the ability to include at least one of the number of said entries and a duration of each said entry, the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration to implement high security of the system by using secret sequence codes formed by body parts.

In order to address this rejection, the operation of claim 69 is firstly described as follows: the claimed system populates the signature database using series of entries from a user such as the administrator. In particular (see [0109] – [0111]) [0109] an administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121, providing that these successive presses are of the appropriate duration, the appropriate quantity, and are input within a predetermined time. In one arrangement, the control information is encoded by either or both (a) the number of finger presses and (b) the relative duration of the finger presses. If the successive finger presses are provided within this predetermined time, then the controller 107 accepts the presses as potential control information and checks the input information against a stored set of legal control signals. One example of a legal control signal can be expressed as follows: "Enrol an ordinary user"->dit, dit, dit, dah

Accordingly, (a) the series of entries of the biometric signal is generated by the administrator, and (b) the information contained by the series of entries defines, in the above example, enrolment of an ordinary user.

In contrast, <u>Igaki</u> receives only a single fingerprint image data during a single operation of pressing a fingerpad onto an inspection plate (Abstract). <u>Igaki</u> then processes the single biometric signal to form a sequence of image data. The object of <u>Igaki</u> (col. 1, lines 41-52) is to provide an improved apparatus and method for use in fingerprint identification for extracting minutia data from fingerprint image data in which a plurality of picking-up operations of the fingerprint image data is carried out by performing <u>only a single operation of pressing down of the fingerpad</u> (emphasis added) on a sensor. The alignment between successive fingerprint image data produced in successive, multiple fingerprint pressing down operations <u>as in the prior art becomes unnecessary</u>, and the troublesome process of the repeated fingerpad pressing down operations <u>is eliminated</u>.

In <u>Igaki</u> the sequence of image data is generated as follows (col. 6, lines 1-17) A fingerpad of the person to be registered is pressed on the plate of the fingerprint sensor. The pressure of the fingerpad is increased from an initial low value gradually to higher values to reach a predetermined constant high value. During this increase of the pressure, the fingerprint image is optically picked up every 1/30 second. The optically picked up fingerprint image is analog-to-digitally converted into digital data. The converted digital data is supplied to the binarization circuit where the binarization of the converted digital data is carried out. The binarized data is stored into the first frame memory.

Igaki thus receives only a single finger press from a user, and generates a sequence of image data from that single finger press. Igaki intends, by this process, "to ensure the correctness of the registered fingerprint data in which minutiae (characteristic points) having a high frequency of appearance are adopted as the registered data" while avoiding the problems of the prior art being "... it is troublesome for the person whose fingerprint is being picked up to carry out such a plurality of picking-up operations, and further, it is necessary to carry out an alignment between minutiae because the location of the second operation of pressing down of the fingerprint after the lifting of the fingerprint after the first operation of pressing down of the fingerprint does not usually coincide with the location of the fingerprint in the first pressing down operation." (col. 1, lines 14-17, 30-39).

Combining <u>Hoffman</u> and <u>Igaki</u> would appear to improve the accuracy of <u>Hoffman</u> when receiving a biometric signal (col. 13, lines 2-8).

However, the proposal to combine \underline{Pu} with $\underline{Hoffman-Igaki}$ is problematic for the following reasons.

The Office Action makes reference to the following passages from Pu:

- vii. characterized according to at least one of the number of said entries (Pu, col. 2, lines 18-22; 5, lines 25-46)
- viii. a duration of each said entry (Pu, col. 5, lines 50-55);

ix. the number of said entries is the appropriate number of entries, and the duration of each said entry is of the appropriate duration (Pu, col. 2, lines 40-43; col. 4, lines 30-33, 40-67; col. 5, lines 50-55).

<u>Pu</u> is concerned with an identification system using biometric information of human body parts and a secret sequence code. In particular, biometric information of human body parts is used to form the secret sequence code. Specifically, a combination entry device recognizes user's fingerprints which are entered as a sequence. While the sensor can be fooled for any one fingerprint, the use of a plurality of different fingerprints improves the identification capability. In particular, the combination of fingerprints in the proper order is necessary to undo the lock. (Abstract)

It is submitted that there is no logical manner in which <u>Pu</u> can be combined with <u>Hoffman – Igaki</u> without the impermissible use of hindsight, and even then the combination will not operate in the same manner as the claimed invention.

Firstly, as noted above <u>Hoffman – Igaki</u> specifically uses a single finger-press in order to overcome the limitations of the prior art requirements for multiple finger presses in order to ensure the correctness of the registered fingerprint data in which minutiae having a high frequency of appearance are adopted as the registered data. <u>Pu</u> on the other hand uses a plurality of different fingerprints in order to generate a code, which teaches away from the single finger-press basis of <u>Hoffman – Igaki</u>.

Secondly, as noted the use of a plurality of different fingerprints in <u>Pu</u> improves the identification capability. In particular, the combination of fingerprints in the proper order is necessary to undo the lock. (Abstract) Accordingly, <u>Pu</u> is concerned with accuracy of identification capability, not with enrolment of users.

Finally, the Office Action itself states, at page 11, 1st paragraph, that the motivation for combining <u>Pu</u> with <u>Hoffman – Igaki</u> is <u>to implement high security of the system</u> by using secret sequence codes formed by body parts. This would clearly not disclose or suggest wherein the transmitter sub-system further comprises means for populating the database of biometric signatures, the populating means comprising: means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of

the number of said entries and a duration of each said entry; means for mapping said series into an instruction; and means for populating the database according to the instruction.

For at least the reasons noted above, it is submitted that new claim 69 is patentable over <u>Hoffman</u>, <u>Igaki</u> and <u>Pu</u> whether these documents are considered alone or in combination.

The other claims recite, either explicitly or by dependence, the same or equivalent features to those referred to in regard to new claim 69. Accordingly, for at least the reasons noted above, it is submitted that new claims 69-82 are patentable over <u>Hoffman</u>, <u>Igaki</u> and <u>Pu</u> whether these documents are considered alone or in combination.

The Office Action at page 22 rejects pending claim 66 under pre-AIA 35 U.S.C. 103(a) as being unpatentable over lgaki in view of Pu and further in further view of Koo et al (WO 2002/12660).

The Office Action concedes that <u>lgaki</u> is silent on but the analogous art <u>Koo</u> teaches enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

However, the Applicant is of the opinion that <u>Koo</u> does not remedy the deficiency of <u>Igaki</u> and <u>Pu</u> as noted above, and that combining <u>Igaki</u>, <u>Pu</u>, and <u>Koo</u> would not disclose or suggest wherein the transmitter sub-system further comprises means for populating the database of biometric signatures, the populating means comprising: means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry; means for mapping said series into an instruction; and means for populating the database according to the instruction.

For at least the reasons noted above, it is submitted that the new claims 69-82 are patentable over <u>Igaki</u>, <u>Pu</u>, and <u>Koo</u> whether these documents are considered alone or in combination.

VII. Conclusion

With this amendment and response, the present pending claims of this application are allowable, and Applicants respectfully request the Examiner to issue a Notice of Allowance for this application. Should the Examiner deem a telephone conference to be beneficial in expediting allowance/examination of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

Respectfully submitted,

/E. Brandon Nykiel/

E. Brandon Nykiel/ Attorney Reg. No. 62,972 Attorney for Applicant

Date: July 27, 2015

BRINKS GILSON & LIONE P.O. Box 10395 Chicago, Illinois 60610 (312) 321-4200

Electronic Acl	knowledgement Receipt
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Application Number:	13572166
International Application Number:	
Confirmation Number:	9752
Title of Invention:	REMOTE ENTRY SYSTEM
First Named Inventor/Applicant Name:	Christopher John Burke
Customer Number:	757
Filer:	E. Brandon Nykiel/Maggie Krause
Filer Authorized By:	E. Brandon Nykiel
Attorney Docket Number:	12838/8
Receipt Date:	27-JUL-2015
Filing Date:	10-AUG-2012
Time Stamp:	15:58:46
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		12838_8_ResponseFiling_0727	897989	V/05	18
'		15.pdf	9c935201c890eeea5698c609ad506e45888 cf850	yes	10

	Multipart Description/PDF files in .zip description								
	Document Description	Start	End						
	Miscellaneous Incoming Letter	1	1						
	Amendment/Req. Reconsideration-After Non-Final Reject	2	2						
	Claims	3	7						
	Applicant Arguments/Remarks Made in an Amendment	8	18						
Warnings:		•							
Information:									
	Total Files Size (in bytes	8):	97989						

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

ERTIFICATE	OF	EFS	FILING	UNDER	37	CFR §	1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: July 27, 2015 Name: E. Brandon Nykiel Signature: /E. Brandon Nykiel/

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.: 13/572,166

Filed:

For:

Sir:

August 10, 2012

REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Examiner: Rahman, Mohammad L.

Art Unit: 2438

Conf. No.: 9752

TRANSMITTAL

Mail Stop Amendment Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Attac	hed is/are:								
\boxtimes	Amendment and Response to Non-Final Office Action Mailed April 27, 2015.								
Fee c	alculation:								
\boxtimes	No additional fee is required.								
\boxtimes	Per 37 CFR §1.27, ☒ Applicant is small entity ☐ Applicant is micro entity.								
	An extension fee in an amount of \$ for amonth extension of time under 37 CFR § 1.136(a).								
	A petition or processing fee in an amount of \$ under 37 CFR § 1.20().								
	An additional filing fee has been calculated as shown below:								

					Fee Small En		tity Fee	Micro Er	tity Fee	
	Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee
Total	68	Minus	67	1	x \$ 80 =	\$	1x \$ 40 =	\$40	x \$20 =	\$
Independent		Minus			x \$420 =	\$	x \$210 =	\$	x \$105 =	\$
First Presentation of Multiple Dep. Claim		+ \$780 =	\$	+ \$390 =	\$	+ \$195 =	\$			
					Total	\$	Total	\$40	Total	\$

111511	Presentation of Multiple Dep. Claim	1 4700 -	Ψ	1 4000 -	Ψ	, ψ100	Ψ
		Total	\$	Total	\$40	Total	\$
Fee	payment:						
	Please charge Deposit Account No. 23-1925	5 in the amount o	of \$	for	·········		<u>.</u> ;
	Payment by credit card in the amount of \$				ded on this	form.	
	and any patent application processing fee	irector is hereby authorized to charge payment of any additional filing fees required under 37 CFR § in patent application processing fees under 37 CFR § 1.17 (including any extension fee require that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.					
		Respect	fully s	ubmitted,			
July 27, 2015		/E. Bran	don N	ykiel/			
Date		F Branc	ton Ny	kiel (Reg. No	62 972)		

BRINKS GILSON &LIONE BRINKS GILSON & LIONE NBC Tower - Suite 3600, 455 N. Cityfront Plaza Drive, Chicago, IL 60611-5599

P	PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					n or Docket Number 3/572,166	Filing Date 08/10/2012	To be Mailed	
	ENTITY: ☐ LARGE ☒ SMALL ☐ MICRO								
	APPLICATION AS FILED – PART I								
			(Column	1)	(Column 2)				
FOR			NUMBER FI	LED	NUMBER EXTRA		RATE (\$)	FEE (\$)	
	BASIC FEE (37 CFR 1.16(a), (b),	or (c))	N/A		N/A		N/A		
	SEARCH FEE (37 CFR 1.16(k), (i), (i)	or (m))	N/A		N/A		N/A		
	EXAMINATION FE (37 CFR 1.16(o), (p),		N/A		N/A		N/A		
	TAL CLAIMS CFR 1.16(i))		mir	nus 20 = *			X \$ =		
	EPENDENT CLAIM CFR 1.16(h))	IS	m	inus 3 = *			X \$ =		
If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
	MULTIPLE DEPEN	IDENT CLA	IM PRESENT (3	7 CFR 1.16(j))					
* If	the difference in colu	umn 1 is les	s than zero, ente	er "0" in column 2.			TOTAL		
	APPLICATION AS AMENDED – PART II (Column 1) (Column 2) (Column 3)								
LN	07/27/2015	CLAIMS REMAINII AFTER AMENDM		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIONAL F	EE (\$)
AMENDMENT	Total (37 CFR 1.16(i))	* 14	Minus	** 44	= 0		x \$40 =	0	
	Independent (37 CFR 1.16(h))	* 3	Minus	***10	= 0		x \$210 =	0	
AM	Application Si	Application Size Fee (37 CFR 1.16(s))							
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
							TOTAL ADD'L FEI	0	
		(Columr	า 1)	(Column 2)	(Column 3)			
		CLAIM REMAIN AFTEI AMENDM	IING R	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EX	TRA	RATE (\$)	ADDITIONAL F	EE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=		X \$ =		
AMENDMENT	Independent (37 CFR 1.16(h))	*	Minus	***	=		X \$ =		
JEN	Application Size Fee (37 CFR 1.16(s))						+		
Ā	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))								
							TOTAL ADD'L FEI		
** If	* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. * If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". * If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.								

This collection of information is required by 37 CFR 1.16. 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 1.14. 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. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450

Alexandria, Virginia 22313-14. www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

757 7590 BGL P.O. BOX 10395 CHICAGO, IL 60610 10/16/2015

EXAMINER

RAHMAN, MOHAMMAD L

ART UNIT

PAPER NUMBER

2438

DATE MAILED: 10/16/2015

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/572,166	08/10/2012	Christopher John Burke	12838/8	9752

TITLE OF INVENTION: REMOTE ENTRY SYSTEM

	APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
_	nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/19/2016

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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

Page 1 of 3

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDE	ENCE ADDRESS (Note: Use Bl	Fee pap	(s) Transmittal Thi	is certificate ca I paper, such a	nnot be used f is an assignme	or domestic mailings of the or any other accompanying nt or formal drawing, must	
757 7590 10/16/2015 BGL P.O. BOX 10395 CHICAGO, IL 60610			I he Stai add tran	Cer ereby certify that th tes Postal Service v ressed to the Mail asmitted to the USP	tificate of Mai is Fee(s) Trans vith sufficient p Stop ISSUE TO (571) 273-2	iling or Trans smittal is being postage for firs FEE address 2885, on the da	mission g deposited with the United st class mail in an envelope above, or being facsimile tte indicated below.
CHICAGO, IL 0	0610						(Depositor's name)
							(Signature)
							(Date)
ADDI ICATION NO	FILING DATE	<u> </u>	EIDOT NA MED INDIENTOE		ATTODNEY	OCKET NO.	CONFIRMATION NO.
APPLICATION NO.			FIRST NAMED INVENTOR		ATTORNEY D		
13/572,166	08/10/2012	COURTS &	Christopher John Burke		1283	38/8	9752
TITLE OF INVENTION:	REMOTE ENTRY SY	STEM					
APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE TOTA	AL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0		\$480	01/19/2016
EXAMI	INIDD	ART UNIT	CLASS-SUBCLASS	1			
		2438	726-007000	_			
RAHMAN, MC 1. Change of corresponde				actant front maga li			
CFR_1.363).		· ·	2. For printing on the p (1) The names of up to	o 3 registered pater		1	
☐ Change of corresponded Address form PTO/SB	ondence address (or Cha 3/122) attached.	nge of Correspondence	or agents OR, alternatively, (2) The name of a single firm (having as a member a 2				
"Fee Address" indi PTO/SB/47; Rev 03-03 Number is required.	cation (or "Fee Address 2 or more recent) attache	" Indication form ed. Use of a Customer	(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON	THE PATENT (print or ty	pe)			
PLEASE NOTE: Unle	ess an assignee is ident in 37 CFR 3.11. Com	ified below, no assignee	data will appear on the p T a substitute for filing an	atent. If an assign	ee is identified	l below, the de	ocument has been filed for
(A) NAME OF ASSIC	•	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	(B) RESIDENCE: (CITY	· ·	COUNTRY)		
Please check the appropri	ate assignee category or	categories (will not be pr	rinted on the patent):	Individual 🗖 Co	orporation or of	ther private gro	oup entity 🚨 Government
4a. The following fee(s) a	re submitted:	41	b. Payment of Fee(s): (Ple	ase first reapply ar	ny previously p	paid issue fee	shown above)
☐ Issue Fee	n e e	tu. D	☐ A check is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached.				
	o small entity discount p		The director is hereby authorized to charge the required fee(s), any deficiency, or credits any				
			overpayment, to Depo	osit Account Number	er	(énclose a	n extra copy of this form).
5. Change in Entity Stat	us (from status indicate	d above)					
	g micro entity status. Se		NOTE: Absent a valid co	ertification of Micro	Entity Status	(see forms PTC	D/SB/15A and 15B), issue
☐ Applicant asserting small entity status. See 37 CFR 1.27			fee payment in the micro entity amount will not be accepted at the risk of application abandonment. NOTE: If the application was previously under micro entity status, checking this box will be taken				
☐ Applicant changing to regular undiscounted fee status.			to be a notification of los NOTE: Checking this bo		•		tlement to small or micro
	-		entity status, as applicable				
NOTE: This form must be	e signed in accordance v	vith 37 CFR 1.31 and 1.33	3. See 37 CFR 1.4 for sign	ature requirements	and certification	ons.	
Authorized Signature				Date			
Typed or printed name	·			Registration N	To		
			Page 2 of 3				

PTOL-85 Part B (10-13) Approved for use through 10/31/2013.

OMB 0651-0033

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



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
13/572,166	08/10/2012	Christopher John Burke	12838/8 9752		
757 75	90 10/16/2015		EXAM	INER	
BGL P.O. BOX 10395			RAHMAN, MOHAMMAD L		
CHICAGO, IL 606	510		ART UNIT	PAPER NUMBER	
			2438		
			DATE MAILED: 10/16/201	5	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. 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 1.14. 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, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

- 1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
- 2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
- 3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
- 4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
- 5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
- 6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
- 7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
- 8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
- 9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

	Application No. 13/572,166	Applicant(s) BURKE, CHRISTOPHER JOHN						
Notice of Allowability	Examiner	Art Unit	AIA (First Inventor to					
Notice of Anomability	MOHAMMAD L. RAHMAN	2438	File) Status No					
			NO					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included nerewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.								
1. \boxtimes This communication is responsive to <u>See Continuation Shee</u>	<u>et</u> .							
A declaration(s)/affidavit(s) under 37 CFR 1.130(b) was/	were filed on							
 An election was made by the applicant in response to a restreated requirement and election have been incorporated into this ac 		ne interview on	; the restriction					
 The allowed claim(s) is/are 69-71 and 73-82. As a result of the Prosecution Highway program at a participating intellectual please see http://www.uspto.gov/patents/init_events/pph/index 	property office for the corresponding	g application. F	or more information,					
4. 🛮 Acknowledgment is made of a claim for foreign priority unde	r 35 U.S.C. § 119(a)-(d) or (f).							
Certified copies:								
a) ☑ All b) ☐ Some *c) ☐ None of the:								
1. Certified copies of the priority documents have								
2. Certified copies of the priority documents have	-		and the estimate of the second state of					
3. Copies of the certified copies of the priority doc	uments nave been received in this n	iational stage a	pplication from the					
International Bureau (PCT Rule 17.2(a)). * Certified copies not received:								
Gertified copies flot received.								
Applicant has THREE MONTHS FROM THE "MAILING DATE" of noted below. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		complying with t	the requirements					
5. CORRECTED DRAWINGS (as "replacement sheets") must	be submitted.							
including changes required by the attached Examiner's Paper No./Mail Date	Amendment / Comment or in the O	ffice action of						
Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in th			not the back) of					
 DEPOSIT OF and/or INFORMATION about the deposit of Bi attached Examiner's comment regarding REQUIREMENT FO 			ne					
Attachment(s)	- 57							
1. Notice of References Cited (PTO-892)	5. 🛛 Examiner's Amendr							
 Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>5/15/2015</u> 	6. 🛛 Examiner's Stateme	ent of Reasons	for Allowance					
3. Examiner's Comment Regarding Requirement for Deposit	7. 🔲 Other							
of Biological Material 4. ☑ Interview Summary (PTO-413), Paper No./Mail Date <u>9/30/2015</u> .								
/MOHAMMAD L RAHMAN/								
Primary Examiner, Art Unit 2438								
	i							

U.S. Patent and Trademark Office PTOL-37 (Rev. 08-13)

Notice of Allowability

Part of Paper No./Mail Date 20151001

Continuation of Item 1. This communication is responsive to: examiner initiated interview on 9/30/2015 and communication filed 7/27/2015.

Art Unit: 2438

DETAILED ACTION

1. The present application is being examined under the pre-AIA first to invent provisions.

2. This notice of allowance is in response to examiner initiated interview on 9/30/2015 and

applicant's arguments/amendments filed 07/27/2015.

3. The text of those sections of Title 35 U.S. Code not included in this section can be found

in the prior office action. The prior office actions are incorporated herein by reference. In particular, the

observations with respect to claim language, and response to previously presented arguments.

4. Claims 69, 78, and 79 have been amended.

Claims 1-68 and 72 have been canceled.

Claims 69-71 and 73-82 are now renumbered as claims 1-13 are pending.

EXAMINER'S AMENDMENT

5. An examiner's amendment to the record appears below. Should the changes and/or

additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To

ensure consideration of such an amendment, it MUST be submitted no later than the payment of the

issue fee.

6. Authorization for this examiner's amendment was given in a telephone interview with

applicants' representative Nykiel Brandon, Registration No. 62,972 on September 30, 2015 and via email

on September 30, 2015.

Please Enter the following claim amendments:

Please replace claim 69 with the following:

69. (Currently amended) A system for providing secure access to a controlled item, the system

comprising:

a database of biometric signatures;

a transmitter sub-system comprising:

a biometric sensor for receiving a biometric signal;

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means for matching the biometric signal against members of the database of biometric

signatures to thereby output an accessibility attribute; and

means for emitting a secure access signal conveying information dependent upon said

accessibility attribute; and

a receiver sub-system comprising:

means for receiving the transmitted secure access signal; and

means for providing conditional access to the controlled item dependent upon said information,

wherein the transmitter sub-system further comprises means for populating the data base of

biometric signatures, the population means comprising:

means for receiving a series of entries of the biometric signal, said series being

characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and

means for populating the data base according to the instruction,

wherein the controlled item is one of: a locking mechanism of a physical access

structure or an electronic lock on an electronic computing device.

Please replace claim 78 with the following:

78. (Currently amended) A transmitter sub-system for operating in a system for providing secure

access to a controlled item, wherein the transmitter sub-system comprises:

a biometric sensor for receiving a biometric signal;

means for matching the biometric signal against members of a database of biometric signatures

to thereby output an accessibility attribute; and

means for emitting a secure access signal conveying said information dependent upon said

accessibility attribute;

wherein the transmitter sub-system further comprises means for populating the database of

biometric signatures, the populating means comprising:

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means for receiving a series of entries of the biometric signal, said series being

characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and

means for populating the database according to the instruction,

wherein the controlled item is one of: a locking mechanism of a physical access structure or an

electronic lock on an electronic computing device.

Please replace claim 79 with the following:

79. (Currently amended) A method for providing secure access to a controlled item in a system

comprising a database of biometric signatures, a transmitter sub-system comprising a biometric sensor

for receiving a biometric signal, and means for emitting a secure access signal capable of granting more

than two types of access to the controlled item, and a receiver sub-system comprising means for

receiving the transmitted secure access signal, and means for providing conditional access to the

controlled item dependent upon information in said secure access signal, the method comprising the

steps of:

populating the database of biometric signatures by:

receiving a series of entries of the biometric signal;

determining at least one of the number of said entries and a duration of each said entry;

mapping said series into an instruction; and

populating the database according to the instruction;

receiving a biometric signal;

matching the biometric signal against members of the database of biometric signatures to thereby

output an accessibility attribute;

emitting a secure access signal conveying information dependent upon said accessibility

attribute; and

providing conditional access to the controlled item dependent upon said information,

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wherein the controlled item is one of: a locking mechanism of a physical access structure or an electronic lock on an electronic computing device.

RESPONSE TO ARGUMENTS

- 7. The terminal disclaimer filed on 03/10/2015 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of any patent granted on US patent # 8,266,442 has/have been reviewed and accepted. The terminal disclaimer has been recorded.
- 8. In view of examiner's amendments to independent claims 69, 78 and 79 and applicants' persuasive arguments (see pp. 7-11 in remarks) filed 07/27/2015, claims 69-71, and 73-82 are statutory under 35 USC § 101.
 - 9. 35 USC § 112 ¶6th Interpretation:

Claim 69

In claim 69, each of the "means for" features are recited as being included with a "transmitter sub-system or a "receiver sub-system." The Specification shows and describes each of the transmitter sub-system and the receiver sub-system as including sufficient structure. For example, Fig. 2 shows a transmitter sub-system 116 as including a controller/transmitter 107, an audio transducer 124, LED indicators 122, a biometric sensor 121, a user ID database 105, and a database 113, all of which are structural elements. Fig. 10 further shows that the controller/transmitter 107 includes a processor 1005, memory 1004, an audio-video interface 1007, a communication interface 1008, an interconnected bus 1004, and an input/output (I/O) interface, which are structural elements. Fig. 2 and 10 also show the receiver sub-system as including a controller 109, a database 115, and a receiver 118, which are structural elements.

In addition to the structural elements shown in Figs. 2 and 10, methods of operation (i.e., acts) associated with the transmitter sub-system 116 and the receiver sub-system 117 are described with reference to flow charts in Figs. 3, 4, and 6-9. The Specification ties the acts described with reference to these figures to the structural elements disclosed in Figs. 2 and 10. For example, in paragraph [0134], the Specification states:

FIG. 10 is a schematic block diagram of the system in FIG. 2. The disclosed secure access methods are preferably practiced using a computer system arrangement 100', such as that shown in FIG. 10 wherein the processes of FIGS. 3-4, and 6-9 may be implemented as software, such as application program modules executing within the computer system 100'. In particular, the method steps for providing secure access are effected by instructions in the software that are carried out under direction of the respective processor modules 107 and 109 in the transmitter and receiver sub-systems 116 and 117. The instructions may be formed as one or more code modules, each for performing one or more particular tasks. The software may also be divided into two separate parts, in which a first part performs the provision of secure access methods and a second part manages a user interface between the first part and the user. The software may be stored in a computer readable medium, including the storage devices described

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below, for example. The software is loaded into the transmitter and receiver sub-systems 116 and 117 from the computer readable medium, and then executed under direction of the respective processor modules 1 07 and 109. A computer readable medium having such software or computer program recorded on it is a computer program product. The use of the computer program product in the computer preferably effects an advantageous apparatus for provision of secure access.

Further support in the Specification, referencing Fig. 2 and/or the methods of Figs. 3-4, 6-9, is provided for each of the means for limitations in claim 69 as follows:

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute

Block 202 in Fig. 3 and [0092]: The received biometric signal 102 is compared with information in the biometric signature database 105.

means for emitting a secure access signal conveying information dependent upon said accessibility attribute

Block 205 in Fig. 3 and [0093]: The controller 107 sends the appropriate access signal 108 to the controller 109.

means for receiving the transmitted secure access signal

[0096]: Fig. 4 shows the method of operation of the control sub-system 117 of FIG. 2. The method 300 commences with a testing step 301 which continuously checks whether the access signal 108 has been received from 107. The step 301 is performed by the controller 109. When the access signal 108 is received, the process 300 is directed from the step 301 by means of a YES arrow to a step 302.

means for providing conditional access to the controlled item dependent upon said information

[0096]: In the step 302, the controller 109 compares the rolling code received by means of the access signal 108 with a reference code in the database 115. A subsequent testing step 303 is performed by the controller 109. In the step 303 if the code received on the access signal 108 is successfully matched against the reference code in the database 115 then the process 300 is directed in accordance with a YES arrow to a step 304. [0097] In the step 304 the controller 109 sends the control signal 110 to the controlled item 111 (for example opening the secured door).

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry

[0109]: The first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121; [0104]: FIG. 6 shows a process 700 that determines if a biometric signal has been received by the biometric sensor 121 in the code entry module in FIG. 2; [0105]: If the database 105 is empty, then the process 700 is directed to 706 in FIG. 8, which depicts a process 800 dealing with the enrolment or the administration function for loading relevant signatures into the database 105.

means for mapping said series into an instruction

[0109]: The first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121, providing that these successive presses are of the appropriate duration, the appropriate quantity, and are input within

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a predetermined time. In one arrangement, the control information is encoded by either or both (a) the number of finger presses and (b) the relative duration of the finger presses. If the successive finger presses are provided within this predetermined time, then the controller 107 accepts the presses as potential control information and checks the input information against a stored set of legal control signals;

means for populating the data base according to the instruction

[0110]: One example of a legal control signal can be expressed as follows: [0111] "Enrol an ordinary user"->dit, dit, dah

Claim 70

In claim 70, support for the "means for" language for purposes of § 112, second paragraph even if § 112, paragraph 6 is invoked is as follows:

means for providing a signal for directing input of the series of entries of the biometric signal

This feature is about assisting the user to input a series of entries of the biometric signal. For example, see [0081] The code entry module 103 also incorporates at least one mechanism for providing feedback to the user 101. This mechanism can, for example, take the form or one or more Light Emitting Diodes (LEDs) 122 Which can provide visual feedback, depicted by an arrow 123 to the user 101. Alternately or in addition the mechanism can take the form of an audio signal provided by an audio transducer 124 providing audio feedback 125. *Also*, [0110] One example of a legal control signal can be expressed as follows: [0111] "Enrol an ordinary user"->dit, dit, dah Where "dit" is a finger press of one second's duration (provided by the user 101 in response to the feedback provided by the Amber LED as described below), and "dah" is a finger press of two second's duration:

means for incorporating into the secure access signal an identification field identifying the biometric signal if the signal matches a member of the database;

This feature is optionally used when, for example, a user provides a biometric signal to the step 201 in Fig. 3, and their biometric signal is matched against signatures in the database in the steps 202 and 203 in Fig. 3. [0079] states that if the identity of the user 101 is authenticated successfully, then the code entry module 103 sends a signal 106 to a controller/transmitter 107 which sends an access signal, as depicted by an arrow 108 to a controller 109. If the incoming rolling code forming the access signal 108 is found to be legitimate, then the controller 109 sends a command, as depicted by an arrow 110, to a controlled item 111. The controlled item 111 can be a door locking mechanism on a secure door, or an electronic key circuit in a personal computer (PC) that is to be accessed by the user 101. The fact that the user presently providing the biometric signal provides a legitimate signal is sufficient to open the controlled door, or access the controlled PC without that user having to identify themselves further. Eg if "John" provides a biometric signal which matches a signature in the database, then John is able to access the controlled item without his name "John" being inserted into the access signal 108. If however it is desired to construct an audit trail, then as well as providing John with access to the controlled item, it is also necessary to record the fact that it is John who is doing the accessing. This is the object of the "incorporation of the identification field into the secure access signal", and this is clearly only done if the user is a legitimate user and has a matching biometric signal in the database.

means for constructing an audit trail of biometric signals provided to the biometric sensor for the purpose of accessing the controlled item

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see [0121]: An optional additional step (not shown) can prepare an identification field for insertion into the access signal 108. This sends, to the receiver sub-system 117, ID information that the receiver sub-system can use to construct an audit trail listing Which users, having signatures in

the database 105, have been provided with access to the controlled item 111

Claim 78

The "means for" language recited in this claim is supported by the Specification for purposes of § 112, paragraph 2 even if § 112, paragraph 6 is invoked at least for the reasons set forth above for claim 69.

10. In view of examiner's amendments to independent claims 69, 78 and 79 and applicants'

persuasive arguments (see pp. 11-16 in remarks) filed 07/27/2015, claims 69-71, and 73-82 are in

condition for allowance over prior arts of record.

ALLOWABLE SUBJECT MATTER

11. Claims 69-71 and 73-82 are allowed over prior art of record.

EXAMINER'S STATEMENT OF REASONS FOR ALLOWANCE

12. Regarding the claimed terms, the Examiner notes that a "general term must be

understood in the context in which the inventor presents it." In re Glaug 283 F.3d 1335, 1340, 62 USPQ2d

1151, 1154 (Fed. Cir. 2002). Therefore the Examiner must interpret the claimed terms as found on the

specification of the instant application. Clearly almost all the general terms in the claims may have

multiple meanings. So where a claim term "is susceptible to various meanings,...the inventor's

lexicography must prevail.... " Id. Using these definitions for the claims, the claimed invention was not

reasonably found in the prior art.

13. This communication warrants No Examiner's Reason for Allowance, Applicant's reply

make evident the reasons for allowance, satisfying the "record as a whole" proviso of the rule 37 CFR

1.104(e). Specifically, amended independent claims 69, 78, and 79 in view of examiner's amendment and

the substance of applicant's persuasive arguments, see pp. 11-16 in remarks filed 07/27/2015 from the

record and no statement is deemed necessary (see MPEP 1302.14).

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None of the prior art of record taken by itself or in any combination, would have anticipated or

made obvious the claimed invention of the present application at or before the time it was filed.

Examiner performed updated search and additional search does not yield other specific

references that reasonably, either singularly or in combination with cited references, would result a proper

rejection that would have anticipated or made obvious all the steps disclosed in the independent claims

69, 78, and 79 with proper motivation at or before the time it was effectively filed.

14. Any comments considered necessary by applicant must be submitted no later than

payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION

15. Prior arts made of record, not relied upon:

US 5,933,515 (Pu et al.), US 2004/0042642 (Bolle et al.).

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to MOHAMMAD L. RAHMAN whose telephone number is (571)270-7471. The examiner can

normally be reached on Monday to Friday: 9:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

TAGHI T. ARANI can be reached on 5712723787. The fax phone number for the organization where this

application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative

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or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/MOHAMMAD L RAHMAN/ Primary Examiner, Art Unit 2438

	Application No.	Applicant(s)
Examiner-Initiated Interview Summary	13/572,166	BURKE, CHRISTOPHER JOHN
•	Examiner	Art Unit
	MOHAMMAD L. RAHMAN	2438
All participants (applicant, applicant's representative, PTO	personnel):	
(1) <u>MOHAMMAD L. RAHMAN</u> .	(3)	
(2) <u>BRANDON NYKIEL</u> .	(4)	
Date of Interview: 30 September 2015.		
Type: Telephonic Video Conference Personal [copy given to: applicant [applicant's representative]	
Exhibit shown or demonstration conducted: Yes If Yes, brief description:	⊠ No.	
Issues Discussed 101 112 102 103 Other (For each of the checked box(es) above, please describe below the issue and detail		
Claim(s) discussed: <u>69,78 and 79</u> .		
Identification of prior art discussed: None.		
Substance of Interview (For each issue discussed, provide a detailed description and indicate if agreement reference or a portion thereof, claim interpretation, proposed amendments, arguments.)		dentification or clarification of a
To expedite prosecution, the Examiner telephoned and spondauthorized the Examiner to amend Claims 69, 78, and 79 as condition for allowance.		
Applicant recordation instructions: It is not necessary for applicant to p	rovide a separate record of the substa	ance of interview.
Examiner recordation instructions : Examiners must summarize the substance of an interview should include the items listed in MPEP 713. general thrust of each argument or issue discussed, a general indication of general results or outcome of the interview, to include an indication as to we	04 for complete and proper recordation any other pertinent matters discusse	on including the identification of the dregarding patentability and the
Attachment		
/MOHAMMAD L RAHMAN/ Primary Examiner, Art Unit 2438		
LS. Patent and Trademark Office		

PTOL-413B (Rev. 8/11/2010) Interview Summary Paper No. 20151001

					Application/C	Control No.		Applicant(s)/Pa	tent Under
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		Notice of Reference	s Citea		Examiner			Art Unit	
					МОНАММАЕ	L. RAHMAN		2438	Page 1 of 1
				U.S. P	ATENT DOCUMI	ENTS			1
*		Document Number Country Code-Number-Kind Code	Date MM-YYYY		Name		CF	PC Classification	US Classification
*	А	US-5,933,515 A	08-1999	Pu; Alle	 en			306K9/00006	340/5.53
*	В	US-2004/0042642 A1	03-2004	Bolle, F	Rudolf Maarten		(G07C9/00134	382/115
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).) Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office PTO-892 (Rev. 01-2001)

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Notice of References Cited

Part of Paper No. 20151001

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L2	56	(duration (time near5 (period length span))) and ((series sequence\$1) near5 (biometric fingerprint (retina near2 scan)) near5 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/01 13:36
L3	23	L2 AND (G07C9/00158 or G06F21/35 US-PGPUB; or H04W12/08 or H04L63/0861 or USPAT; USCR; FPRS; H04W84/12).cpc. EPO; JPO; DERWENT; IBM TDB		OR	ON	2015/10/01 13:36
L4	12	L2 and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	L2 and (@ad OR @pd OR @rlad OR US-PGPUB; OR ON		ON	2015/10/01 13:37
L5	108	((series sequence\$1) near5 (biometric fingerprint (retina near2 scan)) near5 entr\$3) US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB		ON	2015/10/01 14:41	
L6	23	L3 AND (G07C9/00158 or G06F21/35 or H04W12/08 or H04L63/0861 or G06F21/32 or H04W84/18 or H04W84/12).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR ON		2015/10/01 14:42
L7	20	L5 and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/10/01 14:43
L8	<u> </u>		ON	2015/10/01 14:43		
S1	656	(biometric fingerprint) with (key near fob)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:45
S2	275	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3	US-PGPUB; USPAT;	OR	ON	2014/03/18 12:47

		investigat\$3)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S 3	49	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20040813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:48
S4	43	(biometric fingerprint) with (key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	USPAT;	OR	ON	2014/03/18 12:51
S 5	0	(biometric fingerprint) with (remote near key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:52
S6	O	(biometric fingerprint) with (remote near2 key near fob) and (audit\$ examin\$3 investigat\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/18 12:53
S7	2	("8266442").PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:36
S8	2	"20120278863"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:42
S9	2	"20120311346"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S10	2	"20120311343"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 12:43
S11	29	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/03/19 15:33
S12	16349	(713/182-186,168).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	OFF	2014/03/19 15:34

L			IBM_TDB	L	1	
S13	23869	(726/2,7,26-30).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:34
S14	33433	(709/224-225).COLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/03/19 15:35
S15	738	biometric with identif\$7 same (access near2 (right privilege control)) and (((unconditional unlimited) near2 access) duress alert telemetry)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S16	(enroll\$3 register\$3) with (((biometric adj image) biometric (fingrprint adj image) fingerprint) near (sequence array)) [EF] DI		US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S17	4829	assign\$3 with (access near (right privilege))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:35
S18	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM TDB	OR	ON	2014/03/19 15:36
S19	174	S17 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S20	26	S12 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:36
S21	24	S13 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S22	4	S14 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/03/19 15:37

			IBM_TDB			
S23	23	S15 and S19	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S24	65	S12 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S25	41	S13 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S26	11	S14 and S15	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S27	27	S15 and S17	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:37
S28	165	S15 and S18	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM TDB	OR	ON	2014/03/19 15:37
S29	1377	(access near (right privilege)) same ((biometric adj image) biometric (fingrprint adj image) fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
S30	131	(assign\$3 provid\$3) with (access adj (right privilege)) same (biometric fingerprint)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/03/19 15:38
S31	94	(biometric fingerprint) with ((multiple plural consecutive sequential successive) near2 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:34
S32	33	(biometric fingerprint) with ((multiple plural consecutive sequential successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT;	OR	ON	2014/11/06 13:34

			IBM_TDB	L	1	
S33	18809	(713/182-186,168).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
S34	2	S33 and S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S35	29312	(726/2,7,26-30).OCLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
S36	O	S35 and S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S37	39035	(709/224-225).COLS.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2014/11/06 13:35
S38	0	S37 and S32	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S39	36	((Christopher) near2 (Burke)).INV.	US-PGPUB; USPAT; USOCR	OR	ON	2014/11/06 13:35
S40	0	S39 and S31	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:35
S41	10	(biometric fingerprint) with ((consecutive sequential successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2014/11/06 13:36
S42	17	(calculat\$3 detect\$3 identify\$3) with (number near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:40
S43	0	(calculat\$3 detect\$3 identify\$3) with (duration near5 (biometric near2	US-PGPUB; USPAT;	OR	ON	2015/04/20 21:40

		entr\$3))	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S44	1	(calculat\$3 detect\$3 identify\$3) with ((duration period time) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:40
S45	1	(calculat\$3 detect\$3 identify\$3) with ((duration period time length span) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/20 21:41
S46	14	((duration period time length span) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:42
S47	О	(duration (time near2 (period length span))) with ((each multiple plural) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:47
S48	0	(duration (time near5 (period length span))) with ((each multiple plural) near5 (biometric near2 entr\$3))	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:47
S49	23	(duration (time near5 (period length span))) with (biometric near2 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 10:47
S50	8	(biometric fingerprint) SAME ((consecutive sequential successive) near2 entr\$3) SAME ((number count\$3) near5 entr\$3) AND (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:15
S51	13	(biometric fingerprint) SAME ((consecutive sequential successive) near2 entr\$3) AND ((number count\$3) near5 entr\$3) AND (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:16
S52	55	(duration (time near5 (period length span))) with ((biometric fingerprint (retina near2 scan)) near5 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 11:25
S53	19	(duration (time near5 (period length span))) with ((biometric fingerprint	US-PGPUB; USPAT;	OR	ON	2015/04/21 11:25

		(retina near2 scan)) near5 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S54	161	"5109428"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:15
S55	4	"5109428".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:15
S56	3	(biometric fingerprint) same ((consecutive successive) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:20
S57	43	(biometric fingerprint) same ((consecutive successive multiple) near2 entr\$3) and (@ad OR @pd OR @rlad OR @ptad) < "20030813"	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 12:22
S58	2	"6195447 ".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 13:12
S59	2	"6229906".PN.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/21 13:41
S60	93012	(G07C9/00158 or G06F21/35 or H04W12/08 or H04L63/0861 or G06F21/32 or H04W84/18 or H04W84/12).cpc.	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/22 21:24
S61	55	(duration (time near5 (period length span))) with ((biometric fingerprint (retina near2 scan)) near5 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/22 21:25
S62	17	S60 and S61	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/04/22 21:25
S63	56	(duration (time near5 (period length span))) and ((series sequence\$1)	US-PGPUB; USPAT;	OR	ON	2015/09/09 11:55

		near5 (biometric fingerprint (retina near2 scan)) near5 entr\$3)	USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB			
S64	56	(duration (time near5 (period length span))) and ((series sequence\$1) near5 (biometric fingerprint (retina near2 scan)) near5 entr\$3)	US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2015/09/09 13:14

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	4	((duration (time near5 (period length span))) and ((series sequence\$1) near5 (biometric fingerprint (retina near2 scan)) near5 entr\$3) and (map\$4 match\$3) and database).CLM.	US- PGPUB; USPAT; UPAD	OR	ON	2015/10/01 13:28

10/1/2015 2:43:47 PM

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Proposed Examiner's Amendment

69. (Currently amended) A system for providing secure access to a controlled item, the system comprising:

- a database of biometric signatures;
- a transmitter sub-system comprising:

a biometric sensor for receiving a biometric signal;

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute; and

means for emitting a secure access signal conveying information dependent upon said accessibility attribute; and

a receiver sub-system comprising:

means for receiving the transmitted secure access signal; and

means for providing conditional access to the controlled item dependent upon said information,

wherein the transmitter sub-system further comprises means for populating the data base of biometric signatures, the population means comprising:

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry;

means for mapping said series into an instruction; and

means for populating the data base according to the instruction,

wherein the controlled item is one of: a locking mechanism of a physical access structure or an electronic lock on an electronic computing device.

70. (Previously presented) The system according to claim 69, further comprising: means for providing a signal for directing input of the series of entries of the biometric signal;

means for incorporating into the secure access signal an identification field identifying the biometric signal if the signal matches a member of the database; and

means for constructing an audit trail of biometric signals provided to the biometric sensor for the purpose of accessing the controlled item.

71. (Previously presented) The system according to claim 69, wherein the database of biometric signatures comprises signatures in at least one of a system administrator class, a system user class, and a duress class, the accessibility attribute preferably comprising:

an access attribute if the biometric signal matches a member of the database of biometric signatures;

a duress attribute if the biometric signal matches a member of the database of biometric signatures and said member belongs to the duress class; and

an alert attribute if the biometric signal does not match a member of the database of biometric signatures.

72. (Cancelled)

- 73. (Previously presented) The system according to claim 69, wherein the biometric sensor is responsive to one of voice, retinal pattern, iris pattern, face pattern, and palm configuration, and/or the database of biometric signatures is located in at least one of the transmitter sub-system and the receiver sub-system.
- 74. (Previously presented) The system according to claim 69, wherein said conditional access comprises one of:

provision of access to the controlled item if the accessibility attribute comprises an access attribute:

provision of access to the controlled item and sounding of an alert if the accessibility attribute comprises a duress attribute; and

denial of access to the controlled item and sounding of an alert if the accessibility attribute comprises an alert attribute.

75. (Previously presented) The system as claimed in claim 69, wherein: the biometric sensor is for authenticating the identity of a user;

the means for emitting comprises a transmitter for transmitting information capable of granting more than two types of access to the controlled item using a secure wireless signal

the system further comprising a control panel for receiving the information and for

dependent upon a request from the user and the authentication of the user identity; and

providing the secure access requested.

76. (Previously presented) The system according to claim 75, wherein the control panel

includes a converter for receiving the secure wireless signal and for outputting the information,

and/or the biometric sensor authenticates the identity of the user by comparing a biometric input

from the user with a biometric signature for the user in a biometric database, and/or the biometric

sensor, the biometric database, and the transmitter are located in a remote fob.

77. (Previously presented) The system according to claim 76, wherein the secure wireless

signal comprises an RF carrier and a rolling code, and the converter preferably converts the

rolling code to the Wiegand protocol.

78. (Currently amended) A transmitter sub-system for operating in a system for providing

secure access to a controlled item, wherein the transmitter sub-system comprises:

a biometric sensor for receiving a biometric signal;

means for matching the biometric signal against members of a database of biometric

signatures to thereby output an accessibility attribute; and

means for emitting a secure access signal conveying said information dependent upon

said accessibility attribute;

wherein the transmitter sub-system further comprises means for populating the database

of biometric signatures, the populating means comprising:

means for receiving a series of entries of the biometric signal, said series being

characterised according to at least one of the number of said entries and a duration of each said

entry;

means for mapping said series into an instruction; and

means for populating the database according to the instruction,

wherein the controlled item is one of: a locking mechanism of a physical access structure or an electronic lock on an electronic computing device.

79. (Currently amended) A method for providing secure access to a controlled item in a system comprising a database of biometric signatures, a transmitter sub-system comprising a biometric sensor for receiving a biometric signal, and means for emitting a secure access signal capable of granting more than two types of access to the controlled item, and a receiver sub-system comprising means for receiving the transmitted secure access signal, and means for providing conditional access to the controlled item dependent upon information in said secure access signal, the method comprising the steps of:

populating the database of biometric signatures by:

receiving a series of entries of the biometric signal;

determining at least one of the number of said entries and a duration of each said

entry;

mapping said series into an instruction; and

populating the database according to the instruction;

receiving a biometric signal;

matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute;

emitting a secure access signal conveying information dependent upon said accessibility attribute; and

providing conditional access to the controlled item dependent upon said information, wherein the controlled item is one of: a locking mechanism of a physical access structure or an electronic lock on an electronic computing device.

80. (Previously presented) The method according to claim 79, wherein the step of populating the database of biometric signatures further comprises the step of enrolling a biometric signature into the database of biometric signatures comprising the steps of:

receiving a biometric signal; and

enrolling the biometric signal as an administrator signature if the database of biometric signatures is empty.

81. (Previously presented) The method according to claim 80, wherein the step of enrolling the biometric signature further comprises receiving another biometric signal to confirm the enrolling of the biometric signal as an administrator signature, and is preferably performed dependent upon generation of a feedback signal adapted to direct provision of at least one of the biometric signal and the other biometric signal.

82. (Previously presented) A non-transitory computer readable storage medium for storing a computer program comprising instructions, which when executed by processors causes the processors to perform the steps of the method of claim 79.

Sufficient Support for "means for" Language in the Claims

The MPEP states that "the broadest reasonable interpretation of a claim limitation that invokes 35 U.S.C. 112(f) or pre-AIA 35 U.S.C. 112, sixth paragraph is the structure, material or act described in the specification as performing the entire claimed function and equivalents to the disclosed structure, material or act. *See* MPEP 2181.

Even if the "means for" language in the claims is interpreted as invoking § 112, para. 6, § 112, paragraph 2 is satisfied for the following reasons:

Claim 69

In claim 69, each of the "means for" features are recited as being included with a "transmitter sub-system or a "receiver sub-system." The Specification shows and describes each of the transmitter sub-system and the receiver sub-system as including sufficient structure. For example, Fig. 2 shows a transmitter sub-system 116 as including a controller/transmitter 107, an audio transducer 124, LED indicators 122, a biometric sensor 121, a user ID database 105, and a database 113, all of which are structural elements. Fig. 10 further shows that the controller/transmitter 107 includes a processor 1005, memory 1004, an audio-video interface 1007, a communication interface 1008, an interconnected bus 1004, and an input/output (I/O) interface, which are structural elements. Fig. 2 and 10 also show the receiver sub-system as including a controller 109, a database 115, and a receiver 118, which are structural elements.

In addition to the structural elements shown in Figs. 2 and 10, methods of operation (i.e., acts) associated with the transmitter sub-system 116 and the receiver sub-system 117 are described with reference to flow charts in Figs. 3, 4, and 6-9. The Specification ties the acts described with reference to these figures to the structural elements disclosed in Figs. 2 and 10. For example, in paragraph [0134], the Specification states:

FIG. 10 is a schematic block diagram of the system in FIG. 2. The disclosed secure access methods are preferably practiced using a computer system arrangement 100', such as that shown in FIG. 10 wherein the processes of FIGS. 3-4, and 6-9 may be implemented as software, such as application program modules executing within the computer system 100'. In particular, the method steps for providing secure access are effected by instructions in the software that are carried out under direction of the respective processor modules 107 and 109 in the transmitter and receiver sub-systems 116 and 117. The instructions may be formed as one or more code modules, each for performing one or more particular tasks. The software may also be divided into two separate parts, in which a first part performs the provision of secure access methods and a second part manages a user interface between the first part and the user. The software may be stored in a computer readable medium, including the storage devices described below, for example. The software is loaded into the transmitter and receiver sub-systems 116 and 117 from the computer readable medium, and then executed under direction of the respective processor modules 1 07 and 109. A computer readable medium having such software or computer program recorded on it is a computer program product. The use of the computer program product in the computer preferably effects an advantageous apparatus for provision of secure access.

Further support in the Specification, referencing Fig. 2 and/or the methods of Figs. 3-4, 6-9, is provided for each of the means for limitations in claim 69 as follows:

means for matching the biometric signal against members of the database of biometric signatures to thereby output an accessibility attribute

Block 202 in Fig. 3 and [0092]: The received biometric signal 102 is compared with information in the biometric signature database 105.

means for emitting a secure access signal conveying information dependent upon said accessibility attribute

Block 205 in Fig. 3 and [0093]: The controller 107 sends the appropriate access signal 108 to the controller 109.

means for receiving the transmitted secure access signal

[0096]: Fig. 4 shows the method of operation of the control sub-system 117 of FIG. 2. The method 300 commences with a testing step 301 which continuously checks whether the access signal 108 has been received from 107. The step 301 is performed by the controller 109. When the access signal 108 is received, the process 300 is directed from the step 301 by means of a YES arrow to a step 302.

means for providing conditional access to the controlled item dependent upon said information

[0096]: In the step 302, the controller 109 compares the rolling code received by means of the access signal 108 with a reference code in the database 115. A subsequent testing step 303 is performed by the controller 109. In the step 303 if the code received on the access signal 108 is successfully matched against the reference code in the database 115 then the process 300 is directed in accordance with a YES arrow to a step 304. [0097] In the step 304 the controller 109 sends the control signal 110 to the controlled item 111 (for example opening the secured door).

means for receiving a series of entries of the biometric signal, said series being characterised according to at least one of the number of said entries and a duration of each said entry

[0109]: The first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121; [0104]: FIG. 6 shows a process 700 that determines if a biometric signal has been received by the biometric sensor 121 in the code entry module in FIG. 2; [0105]: If the database 105 is empty, then the process 700 is directed to 706 in FIG. 8, which depicts a process 800

dealing with the enrolment or the administration function for loading relevant signatures into the database 105.

means for mapping said series into an instruction

[0109]: The first administrator can provide control information to the code entry module by providing a succession of finger presses to the biometric sensor 121, providing that these successive presses are of the appropriate duration, the appropriate quantity, and are input within a predetermined time. In one arrangement, the control information is encoded by either or both (a) the number of finger presses and (b) the relative duration of the finger presses. If the successive finger presses are provided within this predetermined time, then the controller 107 accepts the presses as potential control information and checks the input information against a stored set of legal control signals;

means for populating the data base according to the instruction

[0110]: One example of a legal control signal can be expressed as follows: [0111] "Enrol an ordinary user"->dit, dit, dah

Claim 70

In claim 70, support for the "means for" language for purposes of § 112, second paragraph even if § 112, paragraph 6 is invoked is as follows:

means for providing a signal for directing input of the series of entries of the biometric signal

This feature is about assisting the user to input a series of entries of the biometric signal. For example, see [0081] The code entry module 103 also incorporates at least one mechanism for providing feedback to the user 101. This mechanism can, for example, take the form or one or more Light Emitting Diodes (LEDs) 122 Which can provide visual feedback, depicted by an arrow 123 to the user 101. Alternately or in addition the mechanism can take the form of an audio signal provided by an audio transducer 124 providing audio feedback 125. *Also*, [0110] One example of a legal control signal can be expressed as follows: [0111] "Enrol an ordinary user"->dit, dit, dah Where "dit" is a finger press of one second's duration (provided by the user 101 in response to the feedback provided by the Amber LED as described below), and "dah" is a finger press of two second's duration:

means for incorporating into the secure access signal an identification field identifying the biometric signal if the signal matches a member of the database;

This feature is optionally used when, for example, a user provides a biometric signal to the step 201 in Fig. 3, and their biometric signal is matched against signatures in the database in the steps 202 and 203 in Fig. 3. [0079] states that if the identity of the user 101 is authenticated successfully, then the code entry module 103 sends a signal 106 to a controller/transmitter 107 which sends an access signal, as depicted by an arrow 108 to a controller 109. If the incoming rolling code forming the access signal 108 is found to be

legitimate, then the controller 109 sends a command, as depicted by an arrow 110, to a controlled item 111. The controlled item 111 can be a door locking mechanism on a secure door, or an electronic key circuit in a personal computer (PC) that is to be accessed by the user 101. The fact that the user presently providing the biometric signal provides a legitimate signal is sufficient to open the controlled door, or access the controlled PC without that user having to identify themselves further. Eg if "John" provides a biometric signal which matches a signature in the database, then John is able to access the controlled item without his name "John" being inserted into the access signal 108. If however it is desired to construct an audit trail, then as well as providing John with access to the controlled item, it is also necessary to record the fact that it is John who is doing the accessing. This is the object of the "incorporation of the identification field into the secure access signal", and this is clearly only done if the user is a legitimate user and has a matching biometric signal in the database.

means for constructing an audit trail of biometric signals provided to the biometric sensor for the purpose of accessing the controlled item

see [0121]: An optional additional step (not shown) can prepare an identification field for insertion into the access signal 108. This sends, to the receiver sub-system 117, ID information that the receiver sub-system can use to construct an audit trail listing Which users, having signatures in the database 105, have been provided with access to the controlled item 111

Claim 78

The "means for" language recited in this claim is supported by the Specification for purposes of § 112, paragraph 2 even if § 112, paragraph 6 is invoked at least for the reasons set forth above for claim 69.

Receipt date: 05/15/2015

13572166 - GAU: 2438

CERTIFICATE OF EFS FILING UNDER 37 CFR §1.8

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS on the below date

Name: E. Brandon Nykiel

Signature: /E. Brandon Nykiel/

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Appln. of: Christopher John Burke

Appln. No.:

13/572,166

Examiner: Rahman, Mohammad

Filed:

August 10, 2012

Art Unit:

2438

For:

REMONTE ENTRY SYSTEM

Conf. No.: 9752

Attorney Docket No.: 12838-8

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

In accordance with the duty of disclosure, Applicant(s) hereby cites the following references:

US PATENT REFERENCES

EXAMINER INITIAL	DOCOMENT NOMBER		DATE	NAME
	B1	2002/0038818 A1	04-04-2002	Zingher et al.
	B2	2003/0126439 A1	07-03-2003	Wheeler et al.

FOREIGN PATENT REFERENCES

EXAMINER INITIAL		DOCUMENT NUMBER Number-Kind Code (if known)	DATE	COUNTRY	TRANSLATION YES OR NO
	В3	WO 02/095589 A1	11-28-2002	PCT	N/A

OTHER ART - NON PATENT LITERATURE DOCUMENTS

EXAMINER INITIAL	serial, s	Include name of author, title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.									
	B4	Extended European Search Report for corresponding EP application number 14188004 dated April 22, 2015									
B5		Office Action for corresponding Canadian application number 2,535,434 dated March 27, 2015									

Receipt date: 05/15/2015

Appln. No. 13/572,166

Information Disclosure Statement

13572166 - GAU: 2438

Attorney Docket No. 12838-8

	IORITY INFORMATION: This application plains priority under 25 USC \$120 to the following United States of
U	This application claims priority under 35 USC §120 to the following United States papplication(s): In accordance with 37 CFR §1.98(d), copies of the references cited herein which submitted to, or cited by, the office, in compliance with 37 CFR §1.98(a)-(c) in the earlier application are not provided herewith. The Examiner is directed to those references cited in all Inform Disclosure Statements filed in the priority United States patent application(s) cited above in addit the references cited herein.
2. CE	RTIFICATIONS: (CHECK ALL THAT APPLY)
	For purposes of 37 CFR §1.704(d)(i), Applicant hereby certifies that each item of information cont in this Information Disclosure Statement was first cited in any communication from a patent office counterpart foreign or international application or from the Office, and that this communication was received by any individual designated in 37 CFR §1.56(c) more than thirty days prior to the filing of Information Disclosure Statement.
	For purposes of 37 CFR §1.704(d)(ii), Applicant hereby certifies that each item of inform contained in this Information Disclosure Statement is a communication that was issued by a poffice in a counterpart foreign or international application or by the Office, and that this communic was not received by any individual designated in 37 CFR §1.56(c) more than thirty days prior tilling of this Information Disclosure Statement.
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	Applicant hereby certifies pursuant to 37 CFR §1.97(e)(2) that no item of information contained i Information Disclosure Statement was cited in a communication from a foreign patent office counterpart foreign application, and, to the knowledge of the undersigned after making reaso inquiry, no item of information contained in this Statement was known to any individual designat 37 CFR §1.56(c), more than three months prior to the filing of this Information Disclosure Statement
3. FE	E INFORMATION: (CHECK IF FEE REQUIRED)
	Applicant has calculated a processing fee in the amount of to be due under 37 §1.17(p) in connection with the filing of this Information Disclosure Statement. Applicant authorizing the fee to Deposit Account
\boxtimes	The Director is hereby authorized to charge any fee deficiency associated with the filing of Information Disclosure Statement to Deposit Account <u>23-1925</u> .
either which Paten	ant to the undersigned attorney's obligation and duties under 37 CFR §§ 1.56 and 1.98(a)(3) an English language abstracts, partial translations, or full translations are included for patent docur are not in English for the express purpose of providing a concise explanation of the references to and Trademark Office with the opportunity to evaluate the same. Applicant respectfully requestiner's consideration of the above reference(s) and entry thereof into the record of this application.
manda the er	bmitting this Statement, Applicant is attempting to fully comply with the duty of candor and good ated by 37 CFR §1.56. As such, this Statement is not intended to constitute an admission that an aclosed references, or other information referred to therein, constitutes "prior art" or is other rial to patentability," as that phrase is defined in 37 CFR §1.56(a).
NA- 4	Respectfully submitted,
May 1 Date	5, 2015 /E. Brandon Nykiel/ E. Brandon Nykiel (Reg. No. 62,972)
	niner /Mohammad Rahman/ Date +0/04/2015

Technique using order and timing for enhancing fingerprint authentication system effectiveness

C Hekimian - US Patent App. 10/741,087, 2003 - Google Patents

... The timer or "clock" begins **counting** in fixed increments of perhaps a quarter of a second, from ... A clock local to the sensing station **counts** in fixed increments starting from this first fingertip closure ... If the send command is detected the clock **count** is saved to the buffer and the buffer ...

Cited by 8 Related articles All 2 versions Cite Save

Fingerprint matching using transformation parameter clustering

RS Germain, A Califano, S Colville - Computing in Science and ..., 1997 - computer.org ... drawn be- tween each pair of minutiae, the number of ridges crossed by this line can be **counted**, as shown in Figure 4. This ridge-**counting** procedure repeats ... The full index consists of nine components: the length of each side, the ridge **count** between each pair, and the ... Cited by 241 Related articles All 10 versions Cite Save

Minutia data extraction in **fingerprint** identification

S Igaki, T Shinzaki, F Yamagishi, H ikeda... - US Patent..., 1992 - Google Patents ... on a sensor the alignment between **successive fingerprint** image data produced in **successive**, multiple **fingerprint** ... for the content of the storage for minutia data is carried out thereby to **count** the number ... number of the minutia data from the highest result of the **counting** is stored ... Cited by 115 Related articles All 2 versions Cite Save

Duplicate Data Elimination in a SAN File System.

B Hong, D Plantenberg, DDE Long, M Sivan-Zimet - MSST, 2004 - Citeseer ... Because block reference **counts** are crucial to data integrity, any up-date on them should be ... A **fingerprint** is valid only if its block reference **count** is no less than 1 ... The linear structure makes **consecutive fingerprint** comparisons efficient because all related **entries** are in memory. ...

Cited by 66 Related articles All 24 versions Cite Save More

Audio fingerprinting: Combining computer vision & data stream processing

S Baluja, M Covell - Acoustics, Speech and Signal Processing, ..., 2007 - leeexplore.leee.org ... When we look at the wavelets for **successive** images for two songs, we see easily ... Figure 1. The representation for two songs -4 **consecutive** spectrogram images shown for each, skipping ... The similarity of the bit vectors is computed by **counting** the exact matches in the p-length ... Cited by 72 Related articles All 8 versions Cite Save

Fingerprint verification method employing plural correlation judgement levels and sequential judgement stages

T Kamiya, K Kawasaki, K Kawai, M Nagura... - US Patent ..., 1991 - Google Patents ... stepping operation described above, whereupon the degree of correlation is measured by **counting** the number ... of mutually non-corresponding pixels for the secondary window region c are **counted**, to obtain ... if the input **fingerprint** image is of poor quality, then the **count** value N ... Cited by 71 Related articles All 2 versions Cite Save

The STCN Fingerprint

PCA Vriesema - Studies in bibliography, 1986 - JSTOR

... If a signature falls under only a part of one character or under parts of two **successive** characters, these parts **count** as whole ... A space, regardless of length, **counts** as one character and is represented as a \$. The characters are tran-scribed in accordance with the relevant ... Cited by 11 Related articles All 2 versions Cite Save More

System and method for **fingerprint** data verification

PC Ross - US Patent 6,195,447, 2001 - Google Patents

... minutia include particular types of irregularities, the scanning angle, the ridge **count**, and the ... Again taking into account the phenomena that **successive** detected **fingerprint** image minutia from the ... Jun 2, 2010, Dec 30, 2010, Craig Stephen Etchegoyen, Use of **Fingerprint** with an ... Cited by 46 Related articles All 2 versions Cite Save

Fingerprint recognition and retrieval system

MK Sparrow - US Patent 4,747,147, 1988 - Google Patents

... θ) of said ridge scan line from a predetermined first angular orientation, means for **counting** the number of ... the predetermined point on the line for the purpose of measuring said ridge **counts** (R), and ... are scanned can be determined for the entire **fingerprint** and ridge **count** data (R ... Cited by 116 Related articles All 2 versions Cite Save

Method and apparatus for fingerprint matching using transformation parameter clustering based on local

count successive fingerprint entry - Google Scholar

feature correspondences

A Califano, SE Colville, RS Germain - US Patent 6,041,133, 2000 - Google Patents ... associated with the given triplet of feature points including, for example, the ridge counts, local direction ... in step 801 by initializing a variable N e that represents the a count of eligible ... largest of the three sides associated with the triplet, and then enumerating successive sides by ... Cited by 40 Related articles All 2 versions Cite Save

Fingerprinting to identify repeated sound events in long-duration personal audio recordings

JP Ogle, DPW Ellis - Acoustics, Speech and Signal Processing, ..., 2007 - leeexplore leee.org ... proposed a system to identify repeating multimedia segments from long **duration** streams using vector quantized low-level feature vec- tors [8]. Herley outlined a ... The linear search algorithm must scan the file in order check- ing each **fingerprint entry** to identify potential matches. ... Cited by 39 Related articles All 8 versions Cite Save

Fingerprint image entry device of electrostatic capacitance sensing type

I Fujieda - US Patent 6,055,324, 2000 - Google Patents

... 7) for consecutively making the signal generating electrodes serving as the scanning signal leads in each row to generate signals having an active **duration** which overlaps in ... FIG. 1 is a perspective view showing a first embodiment of a **fingerprint** image **entry** device of ... Cited by 15 Related articles All 2 versions Cite Save

Fingerprint apparatus and method

T Higuchi - US Patent 6,950,540, 2005 - Google Patents

... This registration is temporary for the **duration** of the guest's stay at the hotel ... **fingerprint**, the apparatus communicates with the hotel server 1302 to determine if the input **fingerprint** matches the **fingerprint** data on ... If it does, the lock mechanism of the door is released allowing **entry**. ... Cited by 38 Related articles All 4 versions Cite Save

Acquiring a 2D rolled equivalent fingerprint image from a non-contact 3D finger scan

A Fatehpuria, Dt. Lau... - Defense and ..., 2006 - proceedings spiedigifallibrary.org ... The advantages of the proposed system are: • Automated Fingerprint Entry: As proposed, the hand is scanned while rested with the palm down. ... We can also control the flash duration to match the acquisition window of all the cameras. ... Cited by 18 Related articles All 4 versions Cite Save

Biometric sequence codes

A Pu, D Psairis - US Patent 6,229,906, 2001 - Google Patents

... By removing and placing the user's **fingerprint** on the input device for a plurality of times with different **duration**, a **fingerprint** Morse Code is generated and then ... For example, one **fingerprint** can be used to form a code by rotating the finger 90° at one sequential **entry** relative to ... Cited by 15 Related articles All 2 versions Cite Save

Dual technology door **entry** person authentication

S Huseth, B Anderson - US Patent App. 10/728,564, 2003 - Google Patents

... Dual technology door **entry** person authentication US 20050122210 A1. Abstract. A security system reader receives a signal containing an ... activates the power supply 50 to generate power in a sufficient amount and for a sufficient **duration** to power the **fingerprint** reader 46 ... Cited by 1 Related articles All 2 versions Cite Save

Fingerprint based authentication system with keystroke dynamics for realistic user

GV Kumar, K Prasanth, SG Raj... - Current Trends in ..., 2014 - ieeexplore.ieee.org ... key (See Figure 3 (c)) • Up to up time is the time **duration** in between ... We presented a novel approach for authentication of the user based on **fingerprint**, login credential and login according to the biometric characteristics based on keystrokes of the password **entry**. ... Related articles Cite Save

Method and system of deduplication-based fingerprint index caching

W Wu, V Janakiraman - US Patent 8,392,384, 2013 - Google Patents

... It may also increase the **duration** of a restore operation, such that a client may have to wait for an unacceptably long period of ... Then, content router 130 may search cached **fingerprint** index 135 and/or persistent **fingerprint** index 145 to locate the **fingerprint entry** containing the ... Cited by 3 Related articles All 3 versions Cite Save

Method and system for authenticating a user of a computer system

J McKeeth - US Patent 6,766,456, 2004 - Google Patents

... a particular geometric pattern under the condition that the user performs such pattern concurrently with, or after a predetermined **duration** from, scanning his/her **fingerprint**. In performing the passive act, the user may wait a predetermined time intervals between **entry** of various ...

Cited by 33 Related articles All 2 versions Cite Save

Modeling of indoor positioning systems based on location fingerprinting

K Kaemarungsi, P Krishnamurthy - INFOCOM 2004. Twenty- ..., 2004 - ieeexplore.ieee.org

duration of fingerprint entry - Google Scholar

... position. This sample vector is compared with all li existing entries in the database. The **fingerprint entry** that has the closest match to the user's sample of RSS is used by the system as the estimate of the user's current location. This ... Cited by 475 Related articles All 8 versions Cite Save

Issue Classification

Application/Control No.	Applicant(s)/Patent Under Reexamination
13572166	BURKE, CHRISTOPHER JOHN
Examiner	Art Unit
MOHAMMAD L RAHMAN	2438

CPC				
Symbol			Туре	Version
G07C	9	/ 00158	F	2013-01-01
G06F	21	/ 32	I	2013-01-01
G06F	21	<i>i</i> 35	I	2013-01-01
H04L	63	/ 0861	I	2013-01-01
H04W	12	<i>I</i> 08	I	2013-01-01
H04W	84	/ 12	A	2013-01-01
H04W	84	<i>l</i> 18	A	2013-01-01
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CPC Combination Sets										
Symbol	Туре	Set	Ranking	Version						

		Total Clain	ns Allowed:			
(Assistant Examiner)	(Date)	13				
/MOHAMMAD L RAHMAN/ Primary Examiner.Art Unit 2438	10/01/2015	O.G. Print Claim(s)	O.G. Print Figure			
(Primary Examiner)	(Date)	69	2			

U.S. Patent and Trademark Office Part of Paper No. 20151001

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Issue Classification	13572166	BURKE, CHRISTOPHER JOHN
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US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFI								FICATION		
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/MOHAMMAD L RAHMAN/ Primary Examiner.Art Unit 2438	10/01/2015	O.G. Print Claim(s)	O.G. Print Figure			
(Primary Examiner)	(Date)	69	2			

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	Application/Control No.	Applicant(s)/Patent Under Reexamination
Issue Classification	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
		7.1.2

	Claims renumbered in the same order as presented by applicant									☐ CPA ⊠ T.D. ☐ R.1.47					
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		Total Claims Allowed:		
(Assistant Examiner)	(Date)	13		
/MOHAMMAD L RAHMAN/ Primary Examiner.Art Unit 2438	10/01/2015	O.G. Print Claim(s)	O.G. Print Figure	
(Primary Examiner)	(Date)	69	2	

U.S. Patent and Trademark Office Part of Paper No. 20151001

Application/Control No. Index of Claims 13572166 Examiner MOHAMMAD L RAHMAN Applicant(s)/Patent Under Reexamination BURKE, CHRISTOPHER JOHN Art Unit 2438

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35 36

Application/Control No. Index of Claims 13572166 Examiner MOHAMMAD L RAHMAN Applicant(s)/Patent Under Reexamination BURKE, CHRISTOPHER JOHN Art Unit 2438

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71 72

	Application/Control No.	Applicant(s)/Patent Under Reexamination
Index of Claims	13572166	BURKE, CHRISTOPHER JOHN
	Examiner	Art Unit
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Search Notes



Application/Control No.	Applicant(s)/Patent Under Reexamination
13572166	BURKE, CHRISTOPHER JOHN
Examiner	Art Unit
MOHAMMAD L RAHMAN	2438

CPC- SEARCHED		
Symbol	Date	Examiner
H04L63/0861	4/22/2015	MLR
G06F21/32	4/22/2015	MLR

CPC COMBINATION SETS - SEARCHED							
Symbol	Date	Examiner					

US CLASSIFICATION SEARCHED								
Class	Subclass	Date	Examiner					
713	186	03/19/2014	MLR					
Updated								
Search								
713	186	11/6/2014	MLR					

SEARCH NOTES								
Search Notes	Date	Examiner						
Combined text search with classes/sub-classes (see EAST)	3/19/2014	MLR						
Inventor name, Assigee	3/19/2014	MLR						
NPL Search - Google Scholar IEEE ACM WIPO	3/19/2014	MLR						
Updated Search								
Updated keywords combined with classes/sub-classes	11/6/2014	MLR						
Inventor name, Assignee	11/6/2014	MLR						
NPL Search - Google Scholar IEEE ACM WIPO	11/6/2014	MLR						
Updated Text search combined with CPC symbols (see EAST)	4/22/2015	MLR						
Inventor name, Assignee	4/22/2015	MLR						
NPL Search - Google Scholar IEEE ACM WIPO	4/22/2015	MLR						
Updated text search combined with CPC symbols (G07C9/00158 or G06F21/35 or H04W12/08 or H04L63/0861 or G06F21/32 or H04W84/18 or H04W84/12).cpc.	10/1/2015	MLR						
Google Scholar, IEEE, ACM	10/1/2015	MLR						
Inventor name, Assignee	10/1/2015	MLR						

U.S. Patent and Trademark Office Part of Paper No.: 20151001

	INTERFERENCE SEARCH								
US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner						
DOT claim search	((duration (time near5 (period length span))) and ((series sequence\$1) near5 (biometric fingerprint (retina near2 scan)) near5 entr\$3) and (map\$4 match\$3) and database).CLM.	10/1/2015	MLR						

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January 15, 2016	(Date)

APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR	A	TTORNEY DOCKET NO.	CONFIRMATION NO.
13/572,166 I'LE OF INVENTION	08/10/2012 : REMOTE ENTRY SY	STEM	Christopher John Burke		12838/8	9752
APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE F	EE TOTAL FEE(S) DUE	DATE DUE
nonprovisional	SMALL	\$480	\$0	\$0	\$480	01/19/2016
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RAHMAN, MO	DHAMMAD L	2438	726-007000	•		
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Filing Date:	10-	Aug-2012			
Title of Invention:	RE/	MOTE ENTRY SYSTE.	M		
First Named Inventor/Applicant Name:	Ch	ristopher John Burk	e		
Filer:	E. E	Brandon Nykiel/Patr	icia Chiovari		
Attorney Docket Number:	128	338/8			
Filed as Small Entity					
Filing Fees for Utility under 35 USC 111(a)					
Description		Fee Code	Quantity	Amount	Sub-Total in USD(\$)
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Petition:					
Patent-Appeals-and-Interference:					
Post-Allowance-and-Post-Issuance:					
Utility Appl Issue Fee		2501	1	480	480

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
	Tot	al in USD	(\$)	480

Electronic Acknowledgement Receipt					
EFS ID:	24638893				
Application Number:	13572166				
International Application Number:					
Confirmation Number:	9752				
Title of Invention:	REMOTE ENTRY SYSTEM				
First Named Inventor/Applicant Name:	Christopher John Burke				
Customer Number:	757				
Filer:	E. Brandon Nykiel/Jesus Rodriguez				
Filer Authorized By:	E. Brandon Nykiel				
Attorney Docket Number:	12838/8				
Receipt Date:	15-JAN-2016				
Filing Date:	10-AUG-2012				
Time Stamp:	15:59:22				
Application Type:	Utility under 35 USC 111(a)				

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$480
RAM confirmation Number	2620
Deposit Account	231925
Authorized User	NYKIEL, BRANDON

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.
1		12838_8_IssueFeeFiling_01151	167914	yes	2
		6.pdf	5d18e848cff250d0ce6acde84c6dfce1c1fc9 045		2
	Multir	part Description/PDF files in .:	zip description		
	Document Des	Start	E	nd	
	Miscellaneous Inco	1		1	
	Issue Fee Paymen	2		2	
Warnings:			.1		
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30479	no	2
			fa1eb2980cc68fb1e3ed0c7309d52811c580 2e14		
Warnings:					
Information:					
		Total Files Size (in bytes):	19	98393	

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

I hereby certify that this correspondence is being electronically transmitted to the United States Patent and Trademark Office, Commissioner for Patents, via the EFS pursuant to 37 CFR §1.8 on the below date:

Date: January 15, 2016 Name: E. Brandon Nykiel Signature: /E. Brandon Nykiel/

BRINKS GILSON & LIONE

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

ln	re Appli	ո. of:	Christophe	er John Burke
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Appln. No.: 13/572,166

August 10, 2012

REMOTE ENTRY SYSTEM

Attorney Docket No.: 12838/8

Examiner: Rahman, Shawnchoy

Art Unit: 2438

Conf. No.: 9752

TRANSMITTAL

Mail Stop Issue Fee Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

Alexandria, VA 22313-145

Fee	cal	cu	lati	on:

Filed:

For:

L	No additiona	al fee is required.	

Per 37 CFR §1.27,
 Applicant is small entity ☐ Applicant is micro entity.

An extension fee in an amount of \$_____ for a _____-month extension of time under 37 CFR § 1.136(a).

A petition or processing fee in an amount of \$____ under 37 CFR § 1.20(____).

An additional filing fee has been calculated as shown below:

					Fee		Small Entity Fee		Micro Entity Fee	
	Claims Remaining After Amendment		Highest No. Previously Paid	Present Extra	Rate	Add'l Fee	Rate	Add'l Fee	Rate	Add'l Fee
Total		Minus			x \$ 80 =	\$	1x \$ 40 =	\$40	x \$20 =	\$
Independent		Minus			x \$420 =	\$	x \$210 =	\$	x \$105 =	\$
First Presentation of Multiple Dep. Claim				+ \$780 =	\$	+ \$390 =	\$	+ \$195 =	\$	
			Total	\$	Total	\$40	Total	\$		

Fee payment:

\boxtimes	Please charge Deposit Acc	ınt No.	23-1925 in the	amount of	\$ <u>480</u> for	Issue F
\triangle	Flease charge Deposit Acc	IIIL INU.	25-1925 111 1116	amount of	ψ 100 101	13346

Payment by credit card in the amount of \$_____ (Form PTO-2038 is attached).

WARNING: Information on this form may become public. Credit card information should not be included on this form.

The Director is hereby authorized to charge payment of any additional filing fees required under 37 CFR § 1.16 and any patent application processing fees under 37 CFR § 1.17 (including any extension fee required to ensure that this paper is timely filed), or to credit any overpayment, to Deposit Account No. 23-1925.

Respectfully submitted,

January 15, 2016	/E. Brandon Nykiel/
Date	E. Brandon Nykiel (Reg. No. 62,972)

BRINKS GILSON &LIONE BRINKS GILSON & LIONE
NBC Tower - Suite 3600, 455 N. Cityfront Plaza Drive, Chicago, IL 60611-5599



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

 APPLICATION NO.
 ISSUE DATE
 PATENT NO.
 ATTORNEY DOCKET NO.
 CONFIRMATION NO.

 13/572,166
 02/23/2016
 9269208
 12838/8
 9752

757

7590

02/03/2016

BGL P.O. BOX 10395 CHICAGO, IL 60610

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment is 78 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site http://pair.uspto.gov for additional applicants):

Christopher John Burke, Ramsgate, AUSTRALIA;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit <u>SelectUSA.gov</u>.

IR103 (Rev. 10/09)

AO 120 (Rev. 08/10)

TO:

Mail Stop 8 Director of the U.S. Patent and Trademark Office P.O. Box 1450 Alexandria, VA 22313-1450

REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

Alexa	ndria, VA 22313-1450	TRADEMARK					
In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas, Waco Divison on the following ☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):							
DOCKET NO. 6:21-cv-00165	DATE FILED 2/23/2021	U.S. DISTRICT COURT Western District of Texas, Waco Divison					
PLAINTIFF CPC Patent Technologi	······································	DEFENDANT Apple Inc.					
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK					
1 US 8,620,039	39 12/31/2013 CPC Patent Technologies Pty Ltd. by assignment						
2 US 9,269,208	2/23/2016	CPC Patent Technologies Pty Ltd. by assignment					
3 US 9,665,705	5/30/2017	CPC Patent Technologies Pty Ltd. by assignment					
5							
DATE INCLUDED	INCLUDED BY	the following patent(s)/ trademark(s) have been included: mendment					
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	HOLDER OF PATENT OR TRADEMARK					
2	<u> </u>						
3							
4							
5							
	e-entitled case, the following	ng decision has been rendered or judgement issued:					
DECISION/JUDGEMENT							
CLERK	(E ^x	Y) DEPUTY CLERK DATE					

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy

AO 120 (Rev. 08/10)

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REPORT ON THE FILING OR DETERMINATION OF AN ACTION REGARDING A PATENT OR TRADEMARK

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In Compliance with 35 U.S.C. § 290 and/or 15 U.S.C. § 1116 you are hereby advised that a court action has been filed in the U.S. District Court Western District of Texas, Waco Divison on the following ☐ Trademarks or ☑ Patents. (☐ the patent action involves 35 U.S.C. § 292.):								
OOCKET NO. DATE FILED U.S. DISTRICT COURT								
PLAINTIFF	2/23/2021	I	vvestem District of Texas	s, vvaco Divison				
CPC Patent Technologic	es Pty Ltd.		HMD Global OY					
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK		HOLDER OF PATENT O	R TRADEMARK				
1 US 9,269,208	2/23/2016	СРС	CPC Patent Technologies Pty Ltd. by assignment					
2 US 9,665,705	5/30/2017	CPC	CPC Patent Technologies Pty Ltd. by assignment					
3								
4								
5			***************************************					
	In the above—entitled case, t	the following	patent(s)/ trademark(s) have been incl	luded:				
DATE INCLUDED	INCLUDED BY							
DITIES AT COST OF THE		mendment	☐ Answer ☐ Cross Bill	Other Pleading				
PATENT OR TRADEMARK NO.	DATE OF PATENT OR TRADEMARK	nananan pananananananan	HOLDER OF PATENT O	R TRADEMARK				
1								
2								
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In the abov	veentitled case, the following	ng decision has	been rendered or judgement issued:					
DECISION/JUDGEMENT								
CLERK	ľŒ	Y) DEPUTY	CLERK	DATE				
		•						

Copy 1—Upon initiation of action, mail this copy to Director Copy 3—Upon termination of action, mail this copy to Director Copy 2—Upon filing document adding patent(s), mail this copy to Director Copy 4—Case file copy