

Exhibit 432-A16
Invalidity Chart for U.S. Patent No. 10,674,432 In View of Waters

Lesite, WIPO Patent Application Publication No. 2006/087503 (“Waters”) was filed on February 15, 2005, published on August 24, 2006, and therefore qualifies as prior art under at least 35 U.S.C. § 102 as to the asserted claims of U.S. Pat. No. 10,674,432 (“the ’432 Patent”). Waters, including any material incorporated by reference into Waters, anticipates claims 1-17 (“the Asserted Claims”) of the ’432 Patent under 35 U.S.C. § 102. Waters also renders obvious the Asserted Claims under 35 U.S.C. § 103, alone based on the state of the art and/or in combination with one or more references identified in Samsung’s accompanying disclosure for the ’432 Patent.¹

To the extent Plaintiff alleges that the Waters does not disclose any particular limitation of the Asserted Claims of the ’432 Patent, either expressly or inherently, it would have been obvious to a person of ordinary skill in the art as of the priority date of the ’432 Patent to modify the Waters reference and/or to combine the teachings of the Waters reference with other prior art references, including but not limited to the present prior art references found in Exhibit 432-B and the corresponding section(s) of charts for other prior art references for the ’432 Patent in a manner that would have rendered the Asserted Claims invalid as obvious.

With respect to the obviousness of the Asserted Claims under 35 U.S.C. § 103, one or more of the principles enumerated by the United States Supreme Court in *KSR v. Teleflex*, 550 U.S. 398 (2007) apply, including: (a) combining various claimed elements known in the prior art according to known methods to yield a predictable result; and/or (b) making a simple substitution of one or more known elements for another to obtain a predictable result; and/or (c) using a known technique to improve a similar device or method in the same way; and/or (d) applying a known technique to a known device or method ready for improvement to yield a predictable result; and/or (e) choosing from a finite number of identified, predictable solutions with a reasonable expectation of success or, in other words, the solution was one which was “obvious to try”; and/or (f) a known work in one field of endeavor prompting variations of it for use either in the same field or a different field based on given design incentives or other market forces in which the variations were predictable to one of ordinary skill in the art; and/or (g) a teaching, suggestion, or motivation in the prior art that would have led one of ordinary skill in the art to modify the prior art reference or to combine the teachings of various prior art references to arrive at the claimed invention. It therefore would have been obvious to one of ordinary skill in the art to combine the disclosures of these references in accordance with the principles and rationales set forth above.

The citations to portions of any reference in this chart are exemplary only. For example, a citation that refers to or discusses a figure or figure item should be understood to also incorporate by reference that figure and any additional descriptions of that figure as if set

¹ Samsung notes that Plaintiff appears in many instances to be pursuing overly broad constructions of various limitations of the asserted claims of the ’432 Patent in an effort to piece together an infringement claim where none exists and to accuse a product that does not practice the claims. This claim chart may take into account Plaintiff’s overly broad constructions of the claim limitations. Any assertion that a particular limitation is disclosed by a prior art reference may be based on Plaintiff’s apparent constructions and is not intended to be, and is not, an admission that such constructions are supportable or proper.

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forth fully therein. Samsung reserves the right to rely on the entirety of the references cited in this chart to show that the Asserted Claims are invalid. Citations presented for one claim limitation are expressly incorporated by reference into all other limitations for that claim as well as all limitations of all claims on which that claim depends. Samsung also reserves the right to rely on additional citations or sources of evidence that also may be applicable, or that may become applicable in light of claim construction, changes in Plaintiff's infringement contentions, and/or information obtained during discovery as the case progresses.

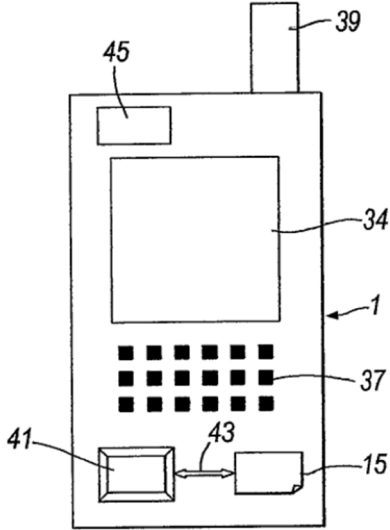
Claim	U.S. Patent No. 10,674,432	Exemplary Disclosure in Waters
[1.1]	A method of operating a smartphone in performing a plurality of financial transactions, the method comprising:	<p>To the extent the preamble is limiting, Waters discloses "A method of operating a smartphone in performing a plurality of financial transactions, the method comprising:" See e.g.:</p> <p>[1.2]-[1.11], <i>infra</i>.</p> <div style="text-align: center;">  <p><i>Fig. 2</i></p> </div>

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		<p>Waters at Figure 2</p> <p>As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimetres. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).</p> <p>Waters at Page 08</p> <p>A similar arrangement could be used, for example, to enable a school child to pay for their lunch using the near field tag 41. OTA messages would be sent at the beginning and the end of the school lunch time so that the near field tag 41 could only be used to make a payment during the appropriate time. The times at which, and the circumstances in which, the OTA messages are sent by the mobile telecommunications network 3 to the user's SIM card 15 may be set by the user of the mobile terminal 1. For example, the user of the mobile terminal 1 may initiate a communication session (such as a SIP communication session) with the mobile telecommunications network 1 to configure the times or places in which the RF tag 41 should be enabled. This updating process may require entry of a password, or employ some other security mechanism, to prevent unauthorised persons from reconfiguring the times and/or locations at which the near field tag is rendered operable or inoperable. Alternatively, the user may configure the times and/or locations at which the OTA messages are sent by some other mechanism - for example, by providing verbal instructions to the operator of</p>
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		<p>mobile telecommunications network 3 by a mobile or PSTN telephone call, or by visiting the website of the mobile telecommunications network operator (whether using the mobile terminal 1 or independently thereof using a PC connected to the Internet).</p> <p>Waters at Page 11</p> <p>Rather than the user of the mobile terminal 1 determining when/where the RF tag 41 is activated, this may be determined by the mobile telecommunications network 3 or some other entity. For example, a school child's parent may set the times during which the school child is able to use their RF tag to make payments, in the example given above relating to paying for a school lunch. In the example given above relating to payment for public transport, the public transportation authority may alternatively or additionally be able to control when OTA messages are sent so that, if it is notified that the mobile terminal 1 incorporating the near field tag 41 has been stolen, that authority can permanently or temporarily deactivate the near field tag 41</p> <p>Waters at Page 12</p>
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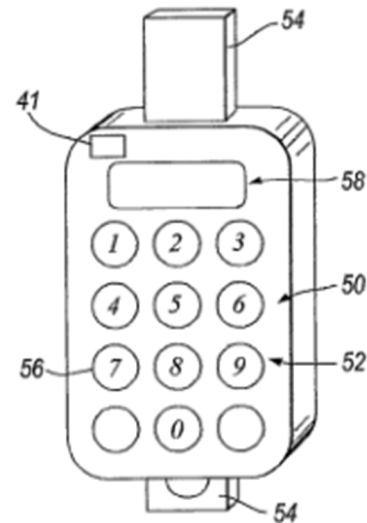


Fig.3

Waters at Figure 3

The housing 52 may further optionally provide a display 58 for prompting the user to enter their PIN number and/or for displaying the PIN number as it is entered, if desired. On entry of the PIN number using the push buttons 56, the entered PIN number is compared to the PIN number stored on the SIM. If the PINs are found to match, communication between the SIM and the PC is permitted to authenticate one or more transactions. The comparison between the entered PIN number and the PIN number stored on the SIM 15 is performed within the dongle 50, and neither the entered PIN number nor the PIN number stored on the SIM is communicated to the PC. This prevents or reduces the likelihood that the PINs will become compromised by disclosure to an authorised party.

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		<p>Waters at Page 18</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
<p>[1.2]</p>	<p>responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone, enabling a mode to communicate by the smartphone information requesting an authorization;</p>	<p>Waters discloses “responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone, enabling a mode to communicate by the smartphone information requesting an authorization;” See e.g.:</p> <p align="center"><i>Fig. 2</i></p>

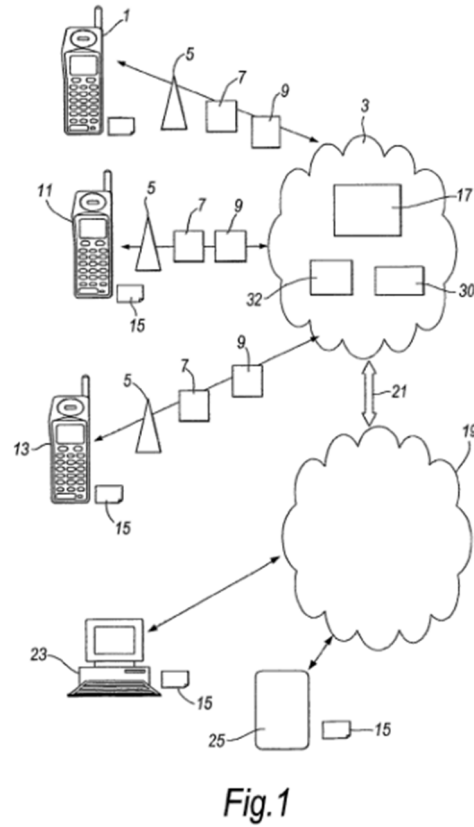
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		<p>Waters at Figure 2</p> <p>A mobile terminal is disclosed which includes a near field or RF ID tag (41). The mobile terminal (1) communicates with the mobile telecommunications network and is authenticated with that network using the SIM (15). The mobile terminal (1) is operable to obtain security data from the user thereof, such as a PIN or biometric data, or the mobile terminal (1) incorporates a sensor such as a light sensor, pressure sensor, heat sensor, skin resistant sensor or inertial sensor. The input device or sensor is used to confirm the identity of the user or to evaluate whether the user wishes to use the near field tag (41) to make a payment or obtain entry to a building (for example). Data from the sensor is passed to the SIM (15), which issues a command enabling the near field tag (41), via link (43). The near field tag (41) may then be read by a reader. The near field tag (41) may be automatically disabled after being read by the reader, after a predetermined time, or when the stimulus to the sensor is no longer present.</p> <p>Waters at Abstract</p> <p>The following arrangements are useful if the near field tag 41 is to be enabled and disabled for fairly long periods of time:</p> <p>(1) Personal identification number (PIN) entry - the keypad 37 of the mobile terminal 1 is used to enter a PIN (or other secret password) to enable the near field tag 41. The user's PIN may be stored in a secure location in the mobile terminal 1 or in the SIM 15. When the user enters their PIN using the keypad 37, the entered PIN is compared with the stored PIN. If the PINs match, the SIM transmits a message, via link 43, to the near field tag 41 to activate the near field tag.</p> <p>(2) Biometric data entry - the mobile terminal 1 may incorporate a fingerprint reader 45. The fingerprint reader 45 scans the fingerprint of the user when the user's finger is placed on the reader 45 and compares it to the user's fingerprint stored in the memory of the mobile terminal 1 or the SIM 15. If the fingerprints are determined to match, the message is sent from the SIM 15, via link 43, to the</p>
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		<p>RF tag 41. As an alternative to a fingerprint, other biometric data could be used - for example, voice recognition (using the mobile terminal's built-in microphone and a voice recognition algorithm within the mobile terminal 1 or SIM card 15) or retinal scanning (using the mobile terminal's built-in camera). Arrangements (1) and (2) above may advantageously be combined with an RF tag 41 that automatically deactivates after it has been read by a reader. That is, the user will activate the RF tag by entering their PIN or biometric data prior to bringing the mobile terminal 1 into proximity to the reader. After successful reading of the RF tag 41, the RF tag automatically disables itself so that no further reading can occur without the PIN or biometric data being re-entered. If the mobile terminal 1 is lost or stolen, an unauthorised person cannot use the RF tag 41.</p> <p>Waters at Page 14</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.3]	while the mode is enabled, transmitting by the smartphone first data to a first device, the first data relating to a plurality of financial transactions to be conducted;	Waters discloses “while the mode is enabled, transmitting by the smartphone first data to a first device, the first data relating to a plurality of financial transactions to be conducted;” See e.g.:

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Waters at Figure 1

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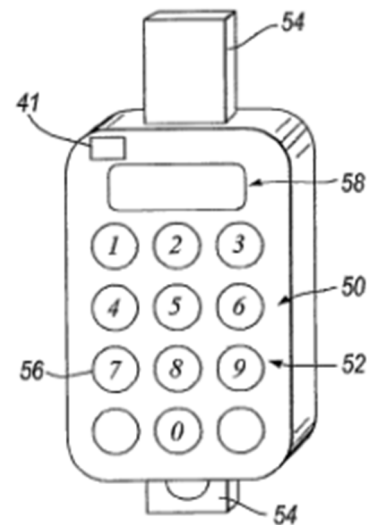


Fig.3

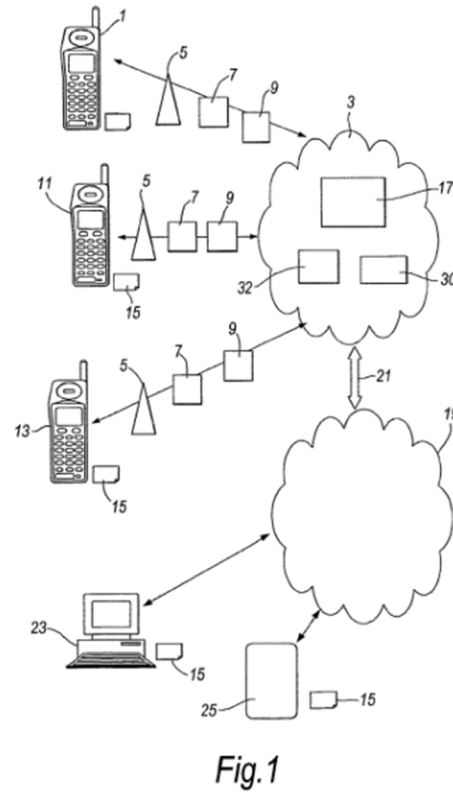
Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.4]	<p>receiving by the smartphone second data from the first device responsive to said transmitting by the smartphone the first data, the second data relating to the plurality of financial transactions to be conducted and differing from the first data;</p>	<p>Waters discloses “receiving by the smartphone second data from the first device responsive to said transmitting by the smartphone the first data, the second data relating to the plurality of financial transactions to be conducted and differing from the first data;” See e.g.:</p>

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Waters at Figure 1

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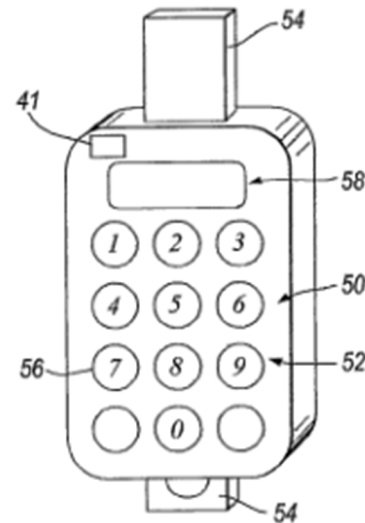


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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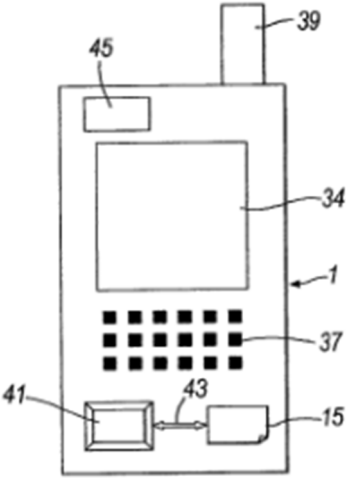
		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.5]	performing a first transaction of the plurality of financial transactions by:	<p>Waters discloses “performing a first transaction of the plurality of financial transactions by:” See e.g.:</p>  <p align="center"><i>Fig.2</i></p>

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		<p>Waters at Figure 2</p> <p>A similar arrangement could be used, for example, to enable a school child to pay for their lunch using the near field tag 41. OTA messages would be sent at the beginning and the end of the school lunch time so that the near field tag 41 could only be used to make a payment during the appropriate time. The times at which, and the circumstances in which, the OTA messages are sent by the mobile telecommunications network 3 to the user's SIM card 15 may be set by the user of the mobile terminal 1. For example, the user of the mobile terminal 1 may initiate a communication session (such as a SIP communication session) with the mobile telecommunications network 1 to configure the times or places in which the RF tag 41 should be enabled. This updating process may require entry of a password, or employ some other security mechanism, to prevent unauthorised persons from reconfiguring the times and/or locations at which the near field tag is rendered operable or inoperable. Alternatively, the user may configure the times and/or locations at which the OTA messages are sent by some other mechanism - for example, by providing verbal instructions to the operator of mobile telecommunications network 3 by a mobile or PSTN telephone call, or by visiting the website of the mobile telecommunications network operator (whether using the mobile terminal 1 or independently thereof using a PC connected to the Internet).</p> <p>Waters at Page 11</p> <p>Rather than the user of the mobile terminal 1 determining when/where the RF tag 41 is activated, this may be determined by the mobile telecommunications network 3 or some other entity. For example, a school child's parent may set the times during which the school child is able to use their RF tag to make payments, in the example given above relating to paying for a school lunch. In the example given above relating to payment for public transport, the public transportation authority may alternatively or additionally be able to control when OTA messages are sent so that, if it is notified that the mobile terminal 1</p>
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incorporating the near field tag 41 has been stolen, that authority can permanently or temporarily deactivate the near field tag 41

Waters at Page 12

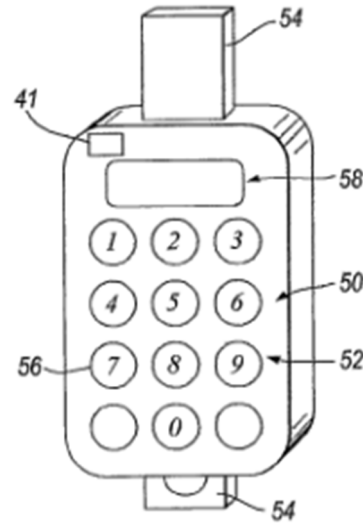


Fig.3

Waters at Figure 3

The housing 52 may further optionally provide a display 58 for prompting the user to enter their PIN number and/or for displaying the PIN number as it is entered, if desired. On entry of the PIN number using the push buttons 56, the entered PIN number is compared to the PIN number stored on the SIM. If the PINs are found to match, communication between the SIM and the PC is permitted to authenticate one or more transactions. The comparison between the entered PIN number and the PIN number stored on the SIM 15 is performed

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		<p>within the dongle 50, and neither the entered PIN number nor the PIN number stored on the SIM is communicated to the PC. This prevents or reduces the likelihood that the PINs will become compromised by disclosure to an authorised party.</p> <p>Waters at Page 18</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.6]	<p>detecting by the smartphone that a proximity condition is satisfied between the smartphone and a first entity, wherein the first entity is distinct from the first device;</p>	<p>Waters discloses “detecting by the smartphone that a proximity condition is satisfied between the smartphone and a first entity, wherein the first entity is distinct from the first device;” See e.g.:</p> <p>The invalidity chart for the ’793 patent in view of Waters at 1.9.</p>

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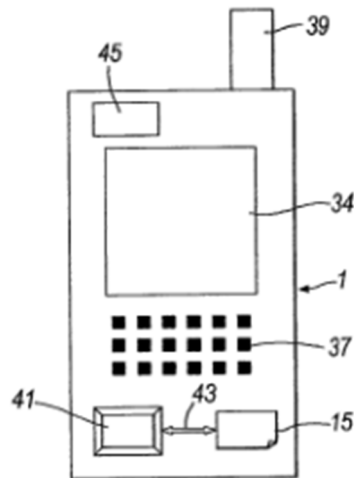


Fig. 2

Waters at Figure 2

The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).

According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any

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		<p>information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p> <p>As an alternative to a fingerprint, other biometric data could be used - for example, voice recognition (using the mobile terminal's built-in microphone and a voice recognition algorithm within the mobile terminal 1 or SIM card 15) or retinal scanning (using the mobile terminal's built-in camera). Arrangements (1) and (2) above may advantageously be combined with an RF tag 41 that automatically deactivates after it has been read by a reader. That is, the user will activate the RF tag by entering their PIN or biometric data prior to bringing the mobile terminal 1 into proximity to the reader. After successful reading of the RF tag 41, the RF tag automatically disables itself so that no further reading can occur without the PIN or biometric data being re-entered. If the mobile terminal 1 is lost or stolen, an unauthorised person cannot use the RF tag 41.</p> <p>Waters at Page 14</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.7]	establishing, using a first air interface, a wireless short-range communications link between the smartphone and the first entity, in	Waters discloses “establishing, using a first air interface, a wireless short-range communications link between the smartphone and the first entity, in response to the proximity condition having been satisfied between the smartphone and the first entity;” See e.g.:

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response to the proximity condition having been satisfied between the smartphone and the first entity;

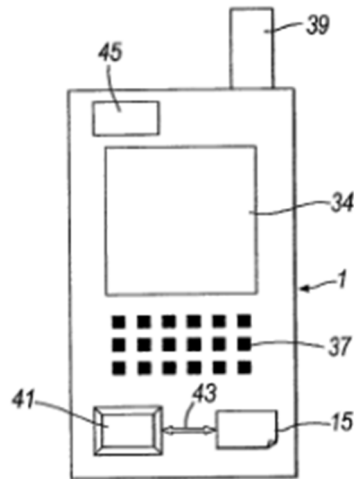


Fig.2

Waters at Figure 2

As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to

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		<p>communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).</p> <p>Waters at Page 08</p> <p>The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).</p> <p>According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p> <p>As an alternative to a fingerprint, other biometric data could be used - for example, voice recognition (using the mobile terminal's built-in microphone and a voice recognition algorithm within the mobile terminal 1 or SIM card 15) or retinal scanning (using the mobile terminal's built-in camera).</p> <p>Arrangements (1) and (2) above may advantageously be combined with an RF tag 41 that automatically deactivates after it has been read by a reader. That is, the user will activate the RF tag by entering their PIN or biometric data prior to bringing the mobile terminal 1 into proximity to the reader. After successful reading of the RF tag 41, the RF tag automatically disables itself so that no</p>
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		<p>further reading can occur without the PIN or biometric data being re-entered. If the mobile terminal 1 is lost or stolen, an unauthorised person cannot use the RF tag 41.</p> <p>Waters at Page 14</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.8]	receiving, using the first air interface, a short-range signal from the first entity; and	Waters discloses “receiving, using the first air interface, a short-range signal from the first entity; and” See e.g.:

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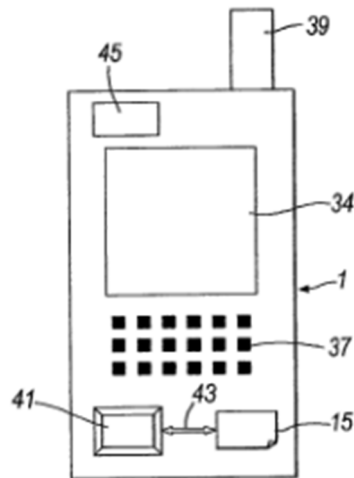


Fig. 2

Waters at Figure 2

As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).

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		<p>Waters at Page 08</p> <p>The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).</p> <p>According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.9]	responsive to receiving the short-range signal from the first entity, sending by the smartphone to the first entity over the first air	Waters discloses “responsive to receiving the short-range signal from the first entity, sending by the smartphone to the first entity over the first air interface, information associated with the second data received from the first device; and” See e.g.:

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interface, information associated with the second data received from the first device; and

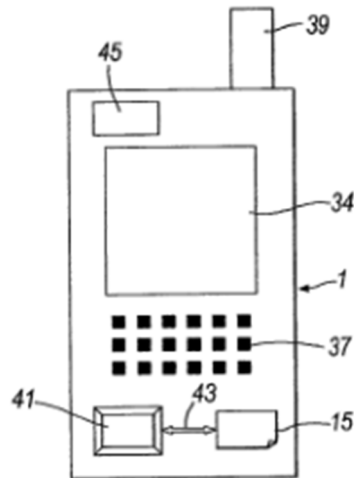


Fig.2

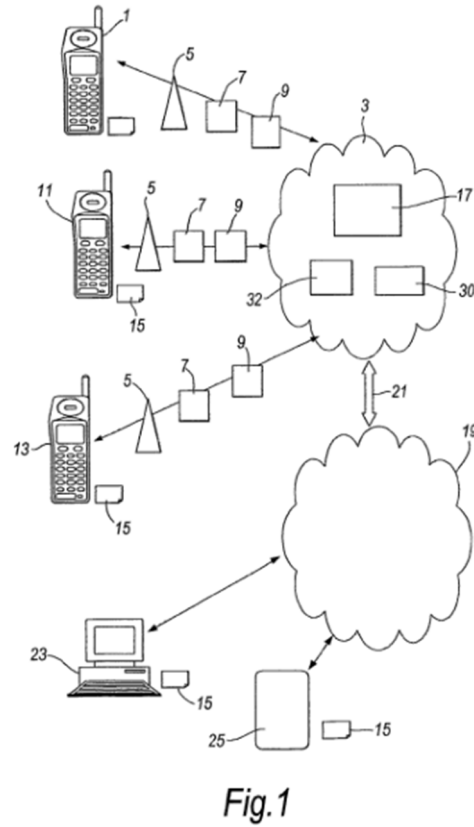
Waters at Figure 2

As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to

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		<p>communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).</p> <p>Waters at Page 08</p> <p>The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).</p> <p>According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p>
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Waters at Figure 1

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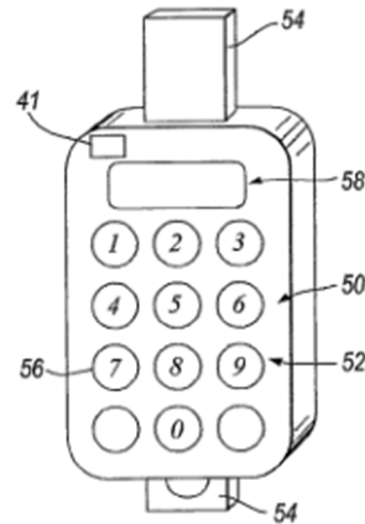


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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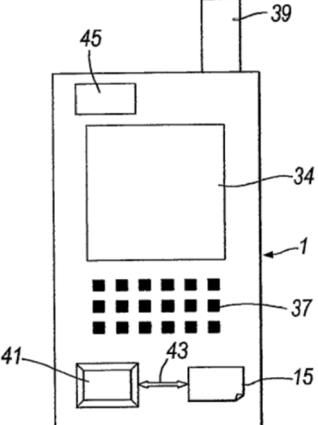
		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
<p>[1.10]</p>	<p>independent of performing said first transaction, receiving by the smartphone a communications service from a wireless network, using a second air interface that differs from the first air interface,</p>	<p>Waters discloses “independent of performing said first transaction, receiving by the smartphone a communications service from a wireless network, using a second air interface that differs from the first air interface,” See e.g.:</p>  <p align="center"><i>Fig. 2</i></p>

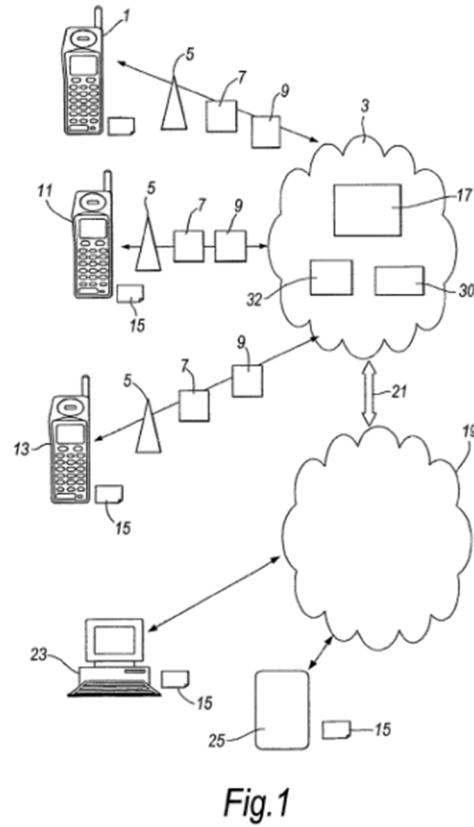
Exhibit 432-A16
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		<p>Waters at Figure 2</p> <p>As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).</p> <p>Waters at Page 08</p> <p>A similar arrangement could be used, for example, to enable a school child to pay for their lunch using the near field tag 41. OTA messages would be sent at the beginning and the end of the school lunch time so that the near field tag 41 could only be used to make a payment during the appropriate time. The times at which, and the circumstances in which, the OTA messages are sent by the mobile telecommunications network 3 to the user's SIM card 15 may be set by the user of the mobile terminal 1. For example, the user of the mobile terminal 1 may initiate a communication session (such as a SIP communication session) with the mobile telecommunications network 1 to configure the times or places in which the RF tag 41 should be enabled. This updating process may require entry of a password, or employ some other security mechanism, to prevent unauthorised persons from reconfiguring the times and/or locations at which the near field tag is rendered operable or inoperable. Alternatively, the user may configure the times and/or locations at which the OTA messages are sent by some other mechanism - for example, by providing verbal instructions to the operator of</p>
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		<p>mobile telecommunications network 3 by a mobile or PSTN telephone call, or by visiting the website of the mobile telecommunications network operator (whether using the mobile terminal 1 or independently thereof using a PC connected to the Internet).</p> <p>Waters at Page 11</p> <p>Rather than the user of the mobile terminal 1 determining when/where the RF tag 41 is activated, this may be determined by the mobile telecommunications network 3 or some other entity. For example, a school child's parent may set the times during which the school child is able to use their RF tag to make payments, in the example given above relating to paying for a school lunch. In the example given above relating to payment for public transport, the public transportation authority may alternatively or additionally be able to control when OTA messages are sent so that, if it is notified that the mobile terminal 1 incorporating the near field tag 41 has been stolen, that authority can permanently or temporarily deactivate the near field tag 41</p> <p>Waters at Page 12</p>
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Waters at Figure 1

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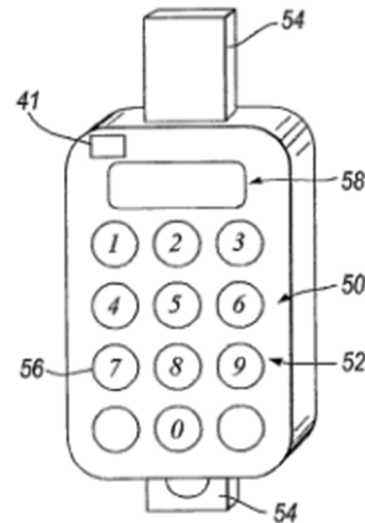


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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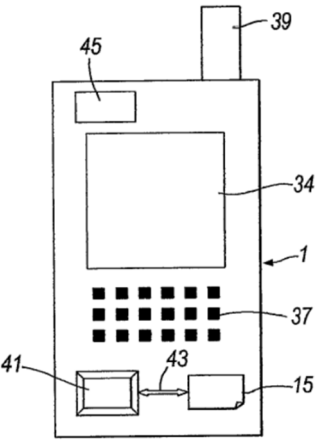
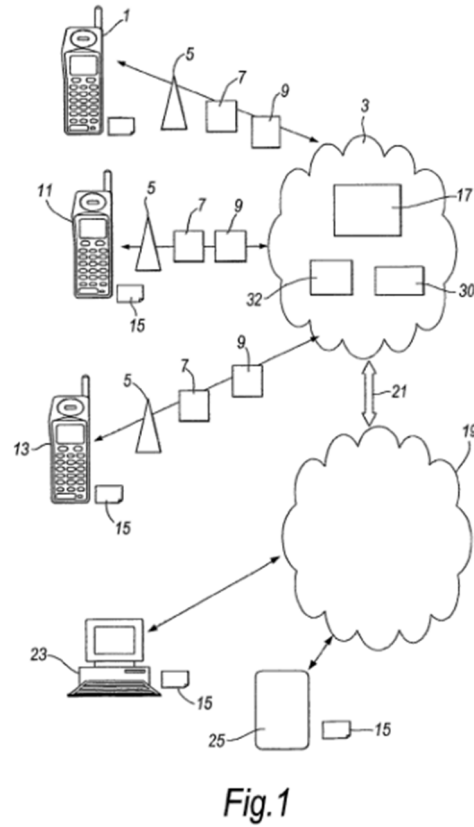
		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[1.11]	<p>wherein said transmitting by the smartphone first data and said receiving by the smartphone second data are performed over an air interface that differs from the first air interface.</p>	<p>Waters discloses “wherein said transmitting by the smartphone first data and said receiving by the smartphone second data are performed over an air interface that differs from the first air interface.” See e.g.:</p>  <p align="center"><i>Fig. 2</i></p>

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		<p>Waters at Figure 2</p> <p>As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).</p> <p>Waters at Page 08</p>
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Waters at Figure 1

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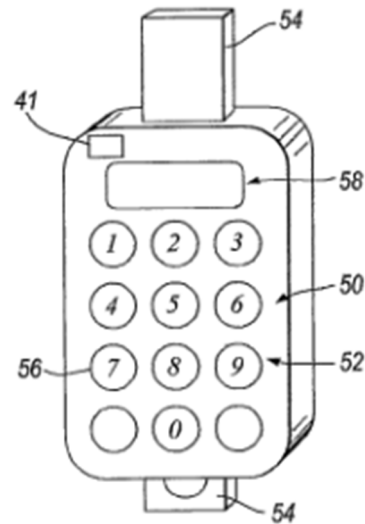


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[2.1]	<p>The method of claim 1, wherein establishing the wireless short-range communications link between the smartphone and the first entity is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.</p>	<p>To the extent the preamble is limiting, Waters discloses “the method of claim 1, wherein establishing the wireless short-range communications link between the smartphone and the first entity is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.” See e.g.:</p> <p>Claim 1, supra.</p>

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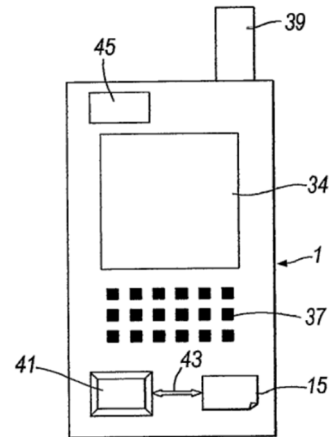


Fig. 2

Waters at Figure 2

As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).

Waters at Page 08

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		<p>The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).</p> <p>According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p> <p>The following arrangements are useful if the near field tag 41 is to be enabled and disabled for fairly long periods of time:</p> <p>(1) Personal identification number (PIN) entry - the keypad 37 of the mobile terminal 1 is used to enter a PIN (or other secret password) to enable the near field tag 41. The user's PIN may be stored in a secure location in the mobile terminal 1 or in the SIM 15. When the user enters their PIN using the keypad 37, the entered PIN is compared with the stored PIN. If the PINs match, the SIM transmits a message, via link 43, to the near field tag 41 to activate the near field tag.</p> <p>(2) Biometric data entry - the mobile terminal 1 may incorporate a fingerprint reader 45. The fingerprint reader 45 scans the fingerprint of the user when the user's finger is placed on the reader 45 and compares it to the user's fingerprint stored in the memory of the mobile terminal 1 or the SIM 15. If the fingerprints</p>
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		<p>are determined to match, the message is sent from the SIM 15, via link 43, to the RF tag 41. As an alternative to a fingerprint, other biometric data could be used - for example, voice recognition (using the mobile terminal's built-in microphone and a voice recognition algorithm within the mobile terminal 1 or SIM card 15) or retinal scanning (using the mobile terminal's built-in camera).</p> <p>Arrangements (1) and (2) above may advantageously be combined with an RF tag 41 that automatically deactivates after it has been read by a reader. That is, the user will activate the RF tag by entering their PIN or biometric data prior to bringing the mobile terminal 1 into proximity to the reader. After successful reading of the RF tag 41, the RF tag automatically disables itself so that no further reading can occur without the PIN or biometric data being re-entered. If the mobile terminal 1 is lost or stolen, an unauthorised person cannot use the RF tag 41.</p> <p>Waters at Page 14</p> <p>(1) Light sensor - for example a photodiode (a sensor that modifies an electric current when exposed to a light source) could be built into the casing of the mobile terminal 1 and act as a switch to activate or deactivate the RF tag 41. The RF tag 41 is controlled by the photo diode so that the RF tag 41 is only enabled when the mobile terminal 1 is exposed to light. Therefore, when the mobile terminal 1 was in an opaque case or the user's pocket, the RF tag 41 will be disabled. The photodiode may be sensitive to a particular frequency range - for example visible light, infra red or ultra violet. The tag reader may be provided with a light emitter that emits light at this frequency, in order to activate the tag.</p> <p>(2) Pressure sensor - a pressure sensor on the casing of mobile terminal 1 acts as a switch. The RF tag 41 is only enabled when the user physically presses the pressure sensor. Therefore, when the mobile terminal is in a case or the user's pocket, the pressure sensor is disabled. The pressure sensor may itself be deactivated by the user, for example, when a function of the mobile terminal 1 is selected such that the keypad 37 is inoperative. The pressure sensor may be combined with the fingerprint scanner 45. The combined sensor detects, not only that pressure is applied, but also that an authorised person is pressing the sensor.</p>
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		<p>Alternatively, the pressure sensor could be combined with an electrical resistance meter and used to detect that it is a human hand pressing the pressure sensor, rather than some other object.</p> <p>(3) Heat sensors - such sensors incorporated in an appropriate position on the casing of the mobile terminal 1 could be configured to detect that the mobile terminal is in a user's hand by detecting the heat from the hand, and only enabling the near field tag 41 when heat from the hand is so detected.</p> <p>Waters at Page 15</p> <p>(4) Skin resistance sensor - a skin resistance sensor may be provided on the casing of the mobile terminal 1 in dependence of the presence of the pressure sensor described above. The near field tag 41 will only be operated when an appropriate resistance, capacitance or inductance is detected, indicating that the user's hand is touching the sensor.</p> <p>(5) Inertial sensors. An inertial sensor incorporated in the mobile terminal can be used to detect that the user is moving the terminal (and tag 41) around at a sufficient speed to indicate that it is to be used. Inertial sensors may be based on micro-accelerators, which are commonly used in motion detectors - for example in gaming and virtual reality/remote control systems.</p> <p>Arrangements (1) to (5) immediately above activate the radio frequency tag 41 in dependence upon ambient conditions (light, pressure, heat, movement etc.) which change from when the card is being stored to when the card is required to be active. Other types of ambient sensors could be used and are within the scope of the invention. The arrangements (1) to (5) described above could be combined with an arrangement for automatically deactivating the near field tag 41 after it has been read once, or alternatively the tag 41 may deactivate when the ambient conditions change (for example the light/pressure/heat/movement is no longer applied).</p> <p>Waters at Page 16</p>
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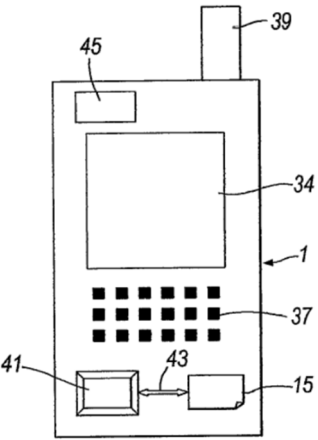
		<p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
<p>[3.1]</p>	<p>The method of claim 1, wherein sending by the smartphone to the first entity, information associated with the second data, is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.</p>	<p>Waters discloses “The method of claim 1, wherein sending by the smartphone to the first entity, information associated with the second data, is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.” See e.g.:</p> <p>Claim 1, supra.</p>  <p align="center">Fig.2</p> <p>Waters at Figure 2</p>

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		<p>As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).</p> <p>Waters at Page 08</p> <p>The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).</p> <p>According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p>
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Exhibit 432-A16
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		<p>Waters at Page 09</p> <p>The following arrangements are useful if the near field tag 41 is to be enabled and disabled for fairly long periods of time:</p> <p>(1) Personal identification number (PIN) entry - the keypad 37 of the mobile terminal 1 is used to enter a PIN (or other secret password) to enable the near field tag 41. The user's PIN may be stored in a secure location in the mobile terminal 1 or in the SIM 15. When the user enters their PIN using the keypad 37, the entered PIN is compared with the stored PIN. If the PINs match, the SIM transmits a message, via link 43, to the near field tag 41 to activate the near field tag.</p> <p>(2) Biometric data entry - the mobile terminal 1 may incorporate a fingerprint reader 45. The fingerprint reader 45 scans the fingerprint of the user when the user's finger is placed on the reader 45 and compares it to the user's fingerprint stored in the memory of the mobile terminal 1 or the SIM 15. If the fingerprints are determined to match, the message is sent from the SIM 15, via link 43, to the RF tag 41. As an alternative to a fingerprint, other biometric data could be used - for example, voice recognition (using the mobile terminal's built-in microphone and a voice recognition algorithm within the mobile terminal 1 or SIM card 15) or retinal scanning (using the mobile terminal's built-in camera).</p> <p>Arrangements (1) and (2) above may advantageously be combined with an RF tag 41 that automatically deactivates after it has been read by a reader. That is, the user will activate the RF tag by entering their PIN or biometric data prior to bringing the mobile terminal 1 into proximity to the reader. After successful reading of the RF tag 41, the RF tag automatically disables itself so that no further reading can occur without the PIN or biometric data being re-entered. If the mobile terminal 1 is lost or stolen, an unauthorised person cannot use the RF tag 41.</p> <p>Waters at Page 14</p> <p>(1) Light sensor - for example a photodiode (a sensor that modifies an electric current when exposed to a light source) could be built into the casing of the</p>
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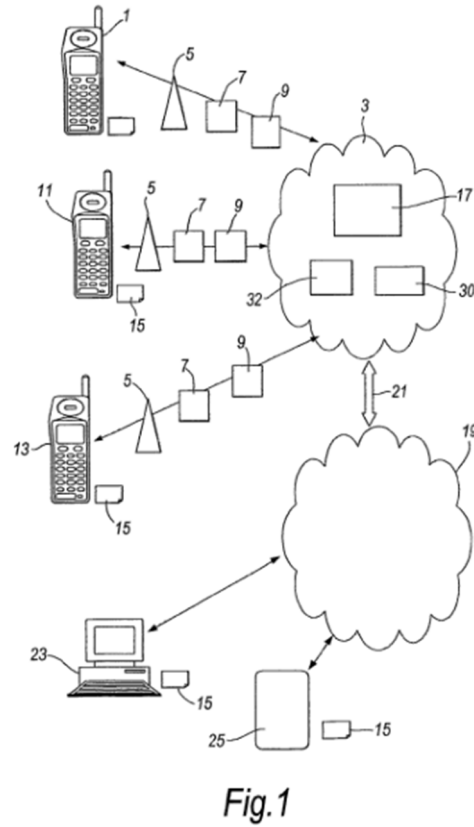
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		<p>mobile terminal 1 and act as a switch to activate or deactivate the RF tag 41. The RF tag 41 is controlled by the photo diode so that the RF tag 41 is only enabled when the mobile terminal 1 is exposed to light. Therefore, when the mobile terminal 1 was in an opaque case or the user's pocket, the RF tag 41 will be disabled. The photodiode may be sensitive to a particular frequency range - for example visible light, infra red or ultra violet. The tag reader may be provided with a light emitter that emits light at this frequency, in order to activate the tag.</p> <p>(2) Pressure sensor - a pressure sensor on the casing of mobile terminal 1 acts as a switch. The RF tag 41 is only enabled when the user physically presses the pressure sensor. Therefore, when the mobile terminal is in a case or the user's pocket, the pressure sensor is disabled. The pressure sensor may itself be deactivated by the user, for example, when a function of the mobile terminal 1 is selected such that the keypad 37 is inoperative. The pressure sensor may be combined with the fingerprint scanner 45. The combined sensor detects, not only that pressure is applied, but also that an authorised person is pressing the sensor. Alternatively, the pressure sensor could be combined with an electrical resistance meter and used to detect that it is a human hand pressing the pressure sensor, rather than some other object.</p> <p>(3) Heat sensors - such sensors incorporated in an appropriate position on the casing of the mobile terminal 1 could be configured to detect that the mobile terminal is in a user's hand by detecting the heat from the hand, and only enabling the near field tag 41 when heat from the hand is so detected.</p> <p>Waters at Page 15</p> <p>(4) Skin resistance sensor - a skin resistance sensor may be provided on the casing of the mobile terminal 1 in dependence of the presence of the pressure sensor described above. The near field tag 41 will only be operated when an appropriate resistance, capacitance or inductance is detected, indicating that the user's hand is touching the sensor.</p> <p>(5) Inertial sensors. An inertial sensor incorporated in the mobile terminal can be used to detect that the user is moving the terminal (and tag 41) around at a</p>
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		<p>sufficient speed to indicate that it is to be used. Inertial sensors may be based on micro-accelerators, which are commonly used in motion detectors - for example in gaming and virtual reality/remote control systems.</p> <p>Arrangements (1) to (5) immediately above activate the radio frequency tag 41 in dependence upon ambient conditions (light, pressure, heat, movement etc.) which change from when the card is being stored to when the card is required to be active. Other types of ambient sensors could be used and are within the scope of the invention. The arrangements (1) to (5) described above could be combined with an arrangement for automatically deactivating the near field tag 41 after it has been read once, or alternatively the tag 41 may deactivate when the ambient conditions change (for example the light/pressure/heat/movement is no longer applied).</p> <p>Waters at Page 16</p>
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Waters at Figure 1

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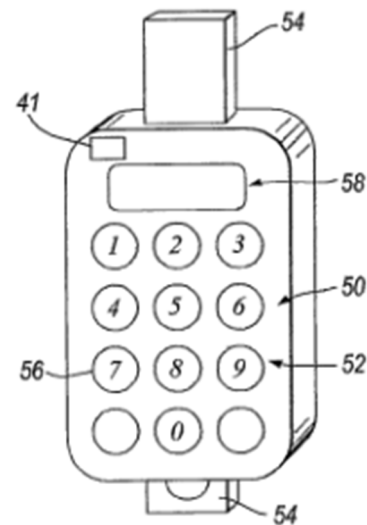


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[4.1]	<p>The method of claim 1, wherein sending by the smartphone to the first entity, information associated with the second data, is performed responsive to a value of at least one parameter associated with the smartphone.</p>	<p>Waters discloses “The method of claim 1, wherein sending by the smartphone to the first entity, information associated with the second data, is performed responsive to a value of at least one parameter associated with the smartphone.” See e.g.:</p> <p>Claim 1, supra.</p>

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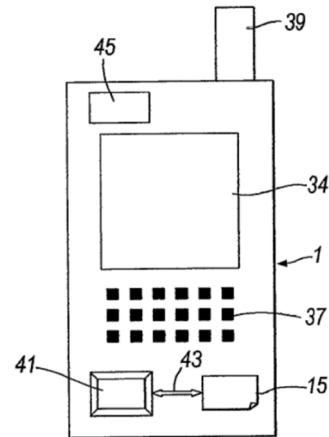


Fig. 2

Waters at Figure 2

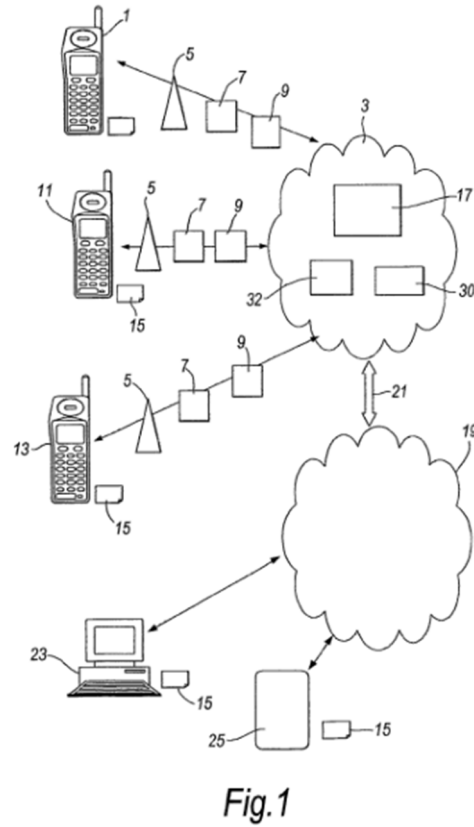
As shown in Figure 2, mobile terminal 1 in accordance with the embodiment includes, in addition to SIM 15, a display 34, keypad 37 and an antenna 39 for communicating wirelessly with the mobile communications network 3. Further, the mobile terminal 1 includes a near field or RFID tag 41. The near field tag 41 operates in the unregulated RF band of 13.56 MHz in this embodiment although other frequencies could be used. No licences are required for the use of the near field devices in this RF band. However, each country imposes certain limitations on the electromagnetic emissions in this RF band. Limitations mean that in practice the distance at which the near field tag 41 can communicate with another device is typically less than 20 centimeters. Often the range of communication is such that the RF tag 41 must touch or almost touch the device with which it is to communicate. Communication may be using the Near Field Communication Interface and Protocol (NFCIP-I).

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		<p>The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).</p> <p>According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p>
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Waters at Figure 1

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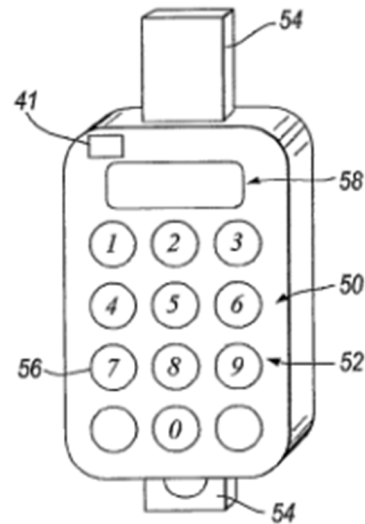


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[5.1]	The method of claim 1, wherein the method further comprises:	<p>To the extent the preamble is limiting, Waters discloses “the method of claim 1, wherein the method further comprises:” See e.g.:</p> <p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[5.2]	performing a second transaction of the plurality of financial transactions by:	<p>Waters discloses “performing a second transaction of the plurality of financial transactions by:” See e.g.:</p>

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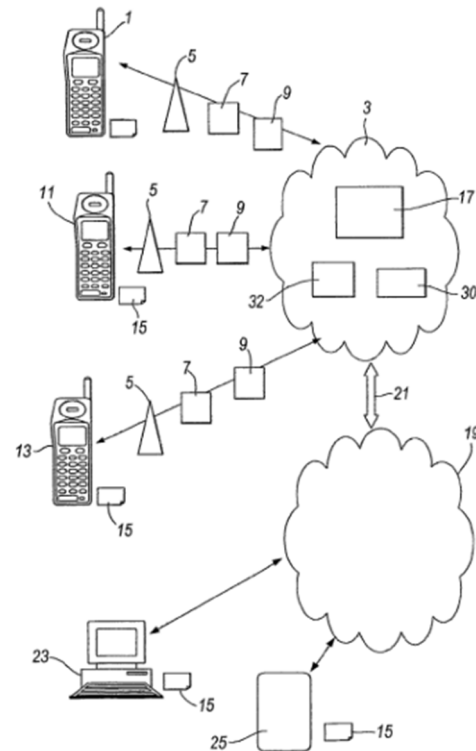


Fig.1

Waters at Figure 1

Rather than the user of the mobile terminal 1 determining when/where the RF tag 41 is activated, this may be determined by the mobile telecommunications network 3 or some other entity. For example, a school child's parent may set the times during which the school child is able to use their RF tag to make payments, in the example given above relating to paying for a school lunch. In the example given above relating to payment for public transport, the public

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transportation authority may alternatively or additionally be able to control when OTA messages are sent so that, if it is notified that the mobile terminal 1 incorporating the near field tag 41 has been stolen, that authority can permanently or temporarily deactivate the near field tag 41

Waters at Page 12

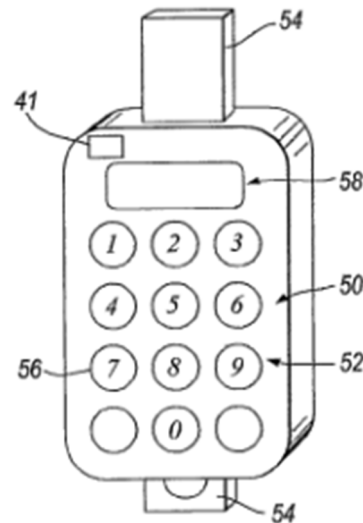


Fig.3

Waters at Figure 3

The housing 52 may further optionally provide a display 58 for prompting the user to enter their PIN number and/or for displaying the PIN number as it is entered, if desired. On entry of the PIN number using the push buttons 56, the entered PIN number is compared to the PIN number stored on the SIM. If the PINs are found to match, communication between the SIM and the PC is

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		<p>permitted to authenticate one or more transactions. The comparison between the entered PIN number and the PIN number stored on the SIM 15 is performed within the dongle 50, and neither the entered PIN number nor the PIN number stored on the SIM is communicated to the PC. This prevents or reduces the likelihood that the PINs will become compromised by disclosure to an authorised party.</p> <p>Waters at Page 18</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[5.3]	<p>detecting by the smartphone that a proximity condition is satisfied between the smartphone and a second entity, wherein the second entity is distinct from the first entity and is further distinct from the first device;</p>	<p>Waters discloses “detecting by the smartphone that a proximity condition is satisfied between the smartphone and a second entity, wherein the second entity is distinct from the first entity and is further distinct from the first device;” See e.g.:</p> <p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[5.4]	<p>establishing, using the first air interface, a wireless short-range communications link between the smartphone and the second entity,</p>	<p>Waters discloses “establishing, using the first air interface, a wireless short-range communications link between the smartphone and the second entity, in response to the proximity condition having been satisfied between the smartphone and the second entity;” See e.g.:</p>

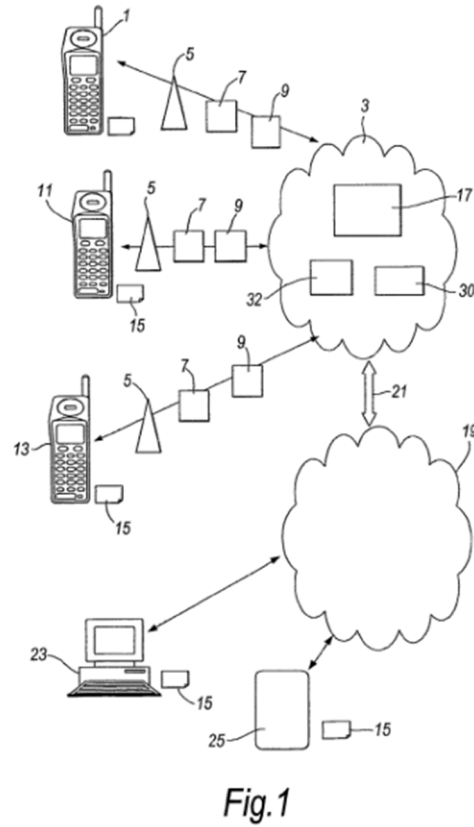
Exhibit 432-A16
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	in response to the proximity condition having been satisfied between the smartphone and the second entity;	<p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[5.5]	receiving, using the first air interface, a short-range signal from the second entity; and	<p>Waters discloses “receiving, using the first air interface, a short-range signal from the second entity; and” See e.g.:</p> <p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[5.6]	responsive to receiving the short-range signal from the second entity, sending by the smartphone to the second entity over the first air interface, information associated with the second data received from the first device.	<p>Waters discloses “responsive to receiving the short-range signal from the second entity, sending by the smartphone to the second entity over the first air interface, information associated with the second data received from the first device.” See e.g.:</p> <p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill</p>

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		in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[6.1]	The method of claim 1,	To the extent the preamble is limiting, Waters discloses “the method of claim 1,” See e.g.: Claim 1, supra. Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[6.2]	wherein said transmitting by the smartphone first data to a first device includes transmitting by the smartphone data relating to a request to pay for a transaction; and	Waters discloses “wherein said transmitting by the smartphone first data to a first device includes transmitting by the smartphone data relating to a request to pay for a transaction; and” See e.g.:

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Waters at Figure 1

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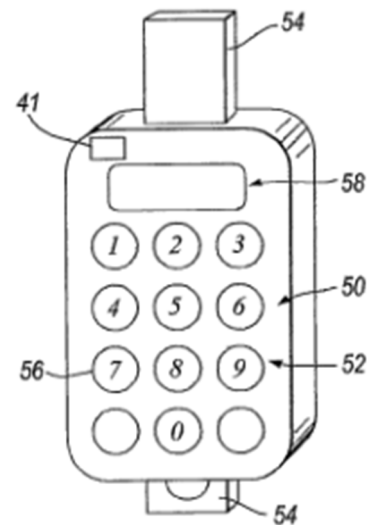


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated

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		<p>in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[6.3]	<p>wherein said receiving by the smartphone second data from the first device includes receiving by the smartphone data relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a transaction.</p>	<p>Waters discloses “wherein said receiving by the smartphone second data from the first device includes receiving by the smartphone data relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a transaction.” See e.g.:</p>

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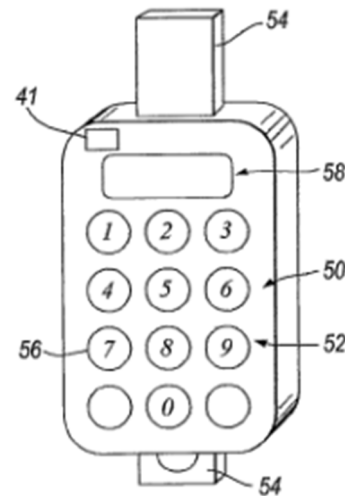


Fig. 3

Waters at Figure 3

The housing 52 may further optionally provide a display 58 for prompting the user to enter their PIN number and/or for displaying the PIN number as it is entered, if desired. On entry of the PIN number using the push buttons 56, the entered PIN number is compared to the PIN number stored on the SIM. If the PINs are found to match, communication between the SIM and the PC is permitted to authenticate one or more transactions. The comparison between the entered PIN number and the PIN number stored on the SIM 15 is performed within the dongle 50, and neither the entered PIN number nor the PIN number stored on the SIM is communicated to the PC. This prevents or reduces the likelihood that the PINs will become compromised by disclosure to an authorised party.

Waters at Page 19

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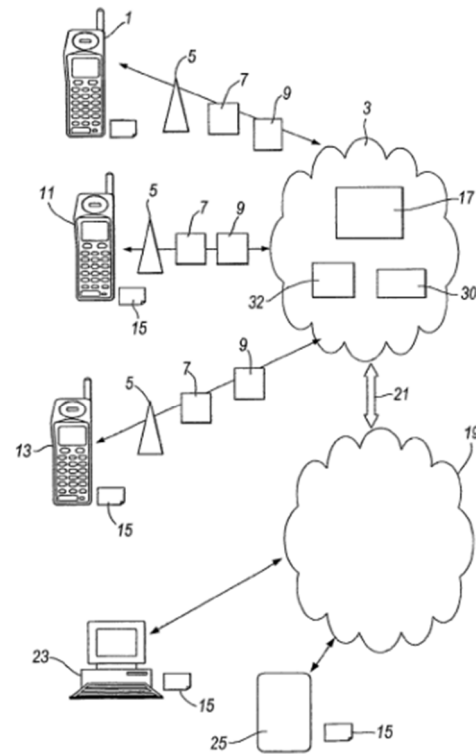


Fig. 1

Waters at Figure 1

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3

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		<p>occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[7.1]	The method of claim 1, comprising:	<p>To the extent the preamble is limiting, Waters discloses “the method of claim 1, comprising:” See e.g.:</p> <p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>

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[7.2]	transmitting by the smartphone third data to a second device; the second device being distinct from the first device and further being distinct from the first entity; and	<p>Waters discloses “transmitting by the smartphone third data to a second device; the second device being distinct from the first device and further being distinct from the first entity; and” See e.g.:</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[7.3]	receiving by the smartphone fourth data from the second device relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a financial transaction,	<p>Waters discloses “receiving by the smartphone fourth data from the second device relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a financial transaction,” See e.g.:</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[7.4]	wherein said transmitting by the smartphone third data to a second device and said receiving by the smartphone fourth data from the second device are performed over the air interface that differs from the first air interface.	<p>Waters discloses “wherein said transmitting by the smartphone third data to a second device and said receiving by the smartphone fourth data from the second device are performed over the air interface that differs from the first air interface.” See e.g.:</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of</p>

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		ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[8.1]	The method of claim 1, wherein said operations further comprise:	<p>To the extent the preamble is limiting, Waters discloses “the method of claim 1, wherein said operations further comprise:” See e.g.:</p> <p>Claim 1, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[8.2]	responsive to performing a financial transaction, causing data to be transmitted selectively to a plurality of predetermined devices and further causing data to be received selectively from said plurality of predetermined devices.	<p>Waters discloses “responsive to performing a financial transaction, causing data to be transmitted selectively to a plurality of predetermined devices and further causing data to be received selectively from said plurality of predetermined devices.” See e.g.:</p>

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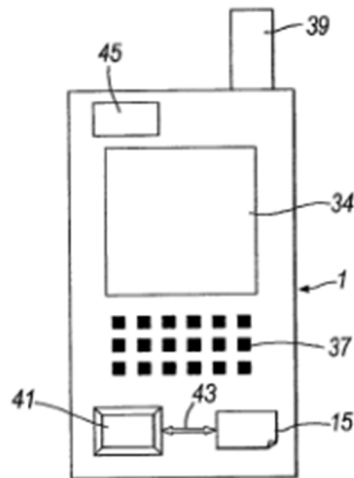


Fig. 2

Waters at Figure 2

The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).

According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any

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		<p>information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p> <p>A similar arrangement could be used, for example, to enable a school child to pay for their lunch using the near field tag 41. OTA messages would be sent at the beginning and the end of the school lunch time so that the near field tag 41 could only be used to make a payment during the appropriate time. The times at which, and the circumstances in which, the OTA messages are sent by the mobile telecommunications network 3 to the user's SIM card 15 may be set by the user of the mobile terminal 1. For example, the user of the mobile terminal 1 may initiate a communication session (such as a SIP communication session) with the mobile telecommunications network 1 to configure the times or places in which the RF tag 41 should be enabled. This updating process may require entry of a password, or employ some other security mechanism, to prevent unauthorised persons from reconfiguring the times and/or locations at which the near field tag is rendered operable or inoperable. Alternatively, the user may configure the times and/or locations at which the OTA messages are sent by some other mechanism - for example, by providing verbal instructions to the operator of mobile telecommunications network 3 by a mobile or PSTN telephone call, or by visiting the website of the mobile telecommunications network operator (whether using the mobile terminal 1 or independently thereof using a PC connected to the Internet).</p> <p>Waters at Page 11</p> <p>Rather than the user of the mobile terminal 1 determining when/where the RF tag 41 is activated, this may be determined by the mobile telecommunications network 3 or some other entity. For example, a school child's parent may set the times during which the school child is able to use their RF tag to make payments, in the example given above relating to paying for a school lunch. In</p>
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the example given above relating to payment for public transport, the public transportation authority may alternatively or additionally be able to control when OTA messages are sent so that, if it is notified that the mobile terminal 1 incorporating the near field tag 41 has been stolen, that authority can permanently or temporarily deactivate the near field tag 41

Waters at Page 12

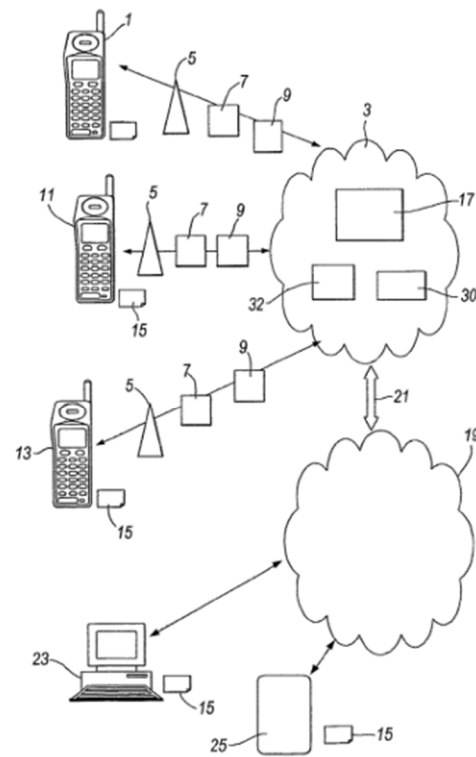


Fig.1

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Waters at Figure 1

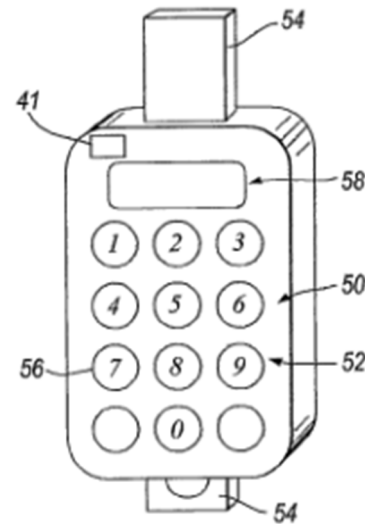


Fig.3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands

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		<p>even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[9.1]	<p>The method of claim 1, wherein the second air interface comprises an Orthogonal Frequency Division Multiplexed and/or an Orthogonal Frequency Division Multiple Access (OFDM/OFDMA) technology.</p>	<p>Waters discloses “the method of claim 1, wherein the second air interface comprises an Orthogonal Frequency Division Multiplexed and/or an Orthogonal Frequency Division Multiple Access (OFDM/OFDMA) technology.” See e.g.:</p> <p>The invalidity chart for the ’793 patent in view of Waters at 8.5.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.1]	<p>A smartphone that is configured to perform operations associated with a plurality of financial transactions; the operations comprising:</p>	<p>To the extent the preamble is limiting, Waters discloses “a smartphone that is configured to perform operations associated with a plurality of financial transactions; the operations comprising:” See e.g.:</p> <p>[1.1], supra. [10.2-10.11], infra.</p>

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		<p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.2]	<p>responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone, enabling a mode to communicate by the smartphone information requesting an authorization;</p>	<p>Waters discloses “responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone, enabling a mode to communicate by the smartphone information requesting an authorization;” See e.g.:</p> <p>[1.2], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.3]	<p>while the mode is enabled, transmitting first data to a first device as a precursor to performing the plurality of financial transactions; and</p>	<p>Waters discloses “while the mode is enabled, transmitting first data to a first device as a precursor to performing the plurality of financial transactions; and” See e.g.:</p> <p>[1.3], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>

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[10.4]	receiving second data from the first device responsive to said transmitting the first data;	<p>Waters discloses “receiving second data from the first device responsive to said transmitting the first data;” See e.g.:</p> <p>[1.4], supra</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.5]	performing a first financial transaction of the plurality of financial transactions by:	<p>Waters discloses “performing a first financial transaction of the plurality of financial transactions by:” See e.g.:</p> <p>[1.5], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.6]	detecting by the smartphone that a proximity condition is satisfied between the smartphone and a first entity, wherein the first entity is distinct from the first device;	<p>Waters discloses “detecting by the smartphone that a proximity condition is satisfied between the smartphone and a first entity, wherein the first entity is distinct from the first device;” See e.g.:</p> <p>[1.6], supra.</p>

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		<p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.7]	<p>establishing, using a first air interface, a wireless short-range communications link between the smartphone and the first entity, in response to the proximity condition having been satisfied between the smartphone and the first entity;</p>	<p>Waters discloses “establishing, using a first air interface, a wireless short-range communications link between the smartphone and the first entity, in response to the proximity condition having been satisfied between the smartphone and the first entity;” See e.g.:</p> <p>[1.7], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.8]	<p>receiving, using the first air interface, a short-range signal from the first entity; and</p>	<p>Waters discloses “receiving, using the first air interface, a short-range signal from the first entity; and” See e.g.:</p> <p>[1.8], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as</p>

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		embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[10.9]	responsive to receiving the short-range signal from the first entity, sending to the first entity over the first air interface, information based on the second data received from the first device; and	<p>Waters discloses “responsive to receiving the short-range signal from the first entity, sending to the first entity over the first air interface, information based on the second data received from the first device; and” See e.g.:</p> <p>[1.9], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[10.10]	independent of performing a transaction to pay for one or more items, receiving by the smartphone a communications service from a wireless network, using a second air interface that differs from the first air interface,	<p>Waters discloses “independent of performing a transaction to pay for one or more items, receiving by the smartphone a communications service from a wireless network, using a second air interface that differs from the first air interface,” See e.g.:</p> <p>[1.10], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>

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[10.11]	wherein said transmitting first data and said receiving second data are performed over an air interface that differs from the first air interface.	<p>Waters discloses “wherein said transmitting first data and said receiving second data are performed over an air interface that differs from the first air interface.” See e.g.:</p> <p>[1.11], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[11.1]	The smartphone of claim 10, wherein establishing the wireless short-range communications link between the smartphone and the first entity is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.	<p>Waters discloses “the smartphone of claim 10, wherein establishing the wireless short-range communications link between the smartphone and the first entity is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.” See e.g.:</p> <p>Claim 10, supra. [2.1], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[12.1]	The smartphone of claim 10, wherein sending by the smartphone to the first entity, information based	<p>Waters discloses “the smartphone of claim 10, wherein sending by the smartphone to the first entity, information based on the second data, is performed responsive to</p>

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	<p>on the second data, is performed responsive to at least one physiological parameter having been sensed by at least one sensor of the smartphone.</p>	<p>at least one physiological parameter having been sensed by at least one sensor of the smartphone.” See e.g.:</p> <p>Claim 10, supra. [3.1], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[13.1]	<p>The smartphone of claim 10, wherein sending by the smartphone to the first entity, information based on the second data, is performed responsive to a value of at least one parameter associated with the smartphone.</p>	<p>Waters discloses “the smartphone of claim 10, wherein sending by the smartphone to the first entity, information based on the second data, is performed responsive to a value of at least one parameter associated with the smartphone.” See e.g.:</p> <p>Claim 10, supra. [4.1], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[14.1]	<p>The smartphone of claim 10, wherein the operations further comprise:</p>	<p>To the extent the preamble is limiting, Waters discloses “the smartphone of claim 10, wherein the operations further comprise:” See e.g.:</p> <p>Claim 10, supra.</p>

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		<p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[14.2]	<p>performing a second financial transaction of the plurality of financial transactions by:</p>	<p>Waters discloses “performing a second financial transaction of the plurality of financial transactions by:” See e.g.:</p> <p>[5.2], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[14.3]	<p>detecting by the smartphone that a proximity condition is satisfied between the smartphone and a second entity; wherein the second entity is distinct from the first entity and is further distinct from the first device;</p>	<p>Waters discloses “detecting by the smartphone that a proximity condition is satisfied between the smartphone and a second entity; wherein the second entity is distinct from the first entity and is further distinct from the first device;” See e.g.:</p> <p>[5.3], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as</p>

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		embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[14.4]	establishing, using the first air interface, a wireless short-range communications link between the smartphone and the second entity, in response to the proximity condition having been satisfied between the smartphone and the second entity;	<p>Waters discloses “establishing, using the first air interface, a wireless short-range communications link between the smartphone and the second entity, in response to the proximity condition having been satisfied between the smartphone and the second entity;” See e.g.:</p> <p>[5.4], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[14.5]	receiving, using the first air interface, a short-range signal from the second entity; and	<p>Waters discloses “receiving, using the first air interface, a short-range signal from the second entity; and” See e.g.:</p> <p>[5.5], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[14.6]	responsive to receiving the short-range signal from the second entity, sending by the smartphone to the	Waters discloses “responsive to receiving the short-range signal from the second entity, sending by the smartphone to the second entity over the first air interface;

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	second entity over the first air interface; information associated with the second data received from the first device.	information associated with the second data received from the first device.” See e.g.: [5.6], supra. Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[15.1]	The smartphone of claim 10,	To the extent the preamble is limiting, Waters discloses “the smartphone of claim 10,” See e.g.: Claim 10, supra. Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[15.2]	wherein said transmitting by the smartphone first data to a first device includes transmitting by the smartphone data relating to a request to pay for a transaction; and	Waters discloses “wherein said transmitting by the smartphone first data to a first device includes transmitting by the smartphone data relating to a request to pay for a transaction; and” See e.g.: [6.2], supra.

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		<p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[15.3]	<p>wherein said receiving by the smartphone second data from the first device includes receiving by the smartphone data relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a transaction.</p>	<p>Waters discloses “wherein said receiving by the smartphone second data from the first device includes receiving by the smartphone data relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a transaction.” See e.g.:</p> <p>[6.3], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[16.1]	<p>The smartphone of claim 10, wherein said operations further comprise:</p>	<p>To the extent the preamble is limiting, Waters discloses “the smartphone of claim 10, wherein said operations further comprise:” See e.g.:</p> <p>Claim 10, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as</p>

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		embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.
[16.2]	transmitting third data to a second device; the second device being distinct from the first device and further being distinct from the first entity; and	<p>Waters discloses “transmitting third data to a second device; the second device being distinct from the first device and further being distinct from the first entity; and” See e.g.:</p> <p>[7.2], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[16.3]	receiving by the smartphone fourth data from the second device relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a financial transaction;	<p>Waters discloses “receiving by the smartphone fourth data from the second device relating to an acknowledgement and/or authorization of enabling a mode/function to pay for a financial transaction;” See e.g.:</p> <p>[7.3], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
[16.4]	wherein said transmitting by the smartphone third data to a second device and said receiving by the	Waters discloses “wherein said transmitting by the smartphone third data to a second device and said receiving by the smartphone fourth data from the second

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	<p>smartphone fourth data from the second device are performed over the air interface that differs from the first air interface.</p>	<p>device are performed over the air interface that differs from the first air interface.” See e.g.: [7.4], supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
<p>[17.1]</p>	<p>The smartphone of claim 10, wherein said operations further comprise:</p>	<p>To the extent the preamble is limiting, Waters discloses “the smartphone of claim 10, wherein said operations further comprise:” See e.g.: Claim 10, supra.</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
<p>[17.2]</p>	<p>responsive to performing a financial transaction, causing data to be transmitted selectively to a plurality of predetermined devices and further causing data to be received selectively from said plurality of predetermined devices.</p>	<p>Waters discloses “responsive to performing a financial transaction, causing data to be transmitted selectively to a plurality of predetermined devices and further causing data to be received selectively from said plurality of predetermined devices.” See e.g.:</p>

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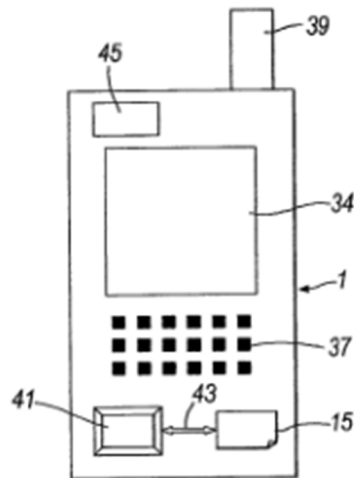


Fig. 2

Waters at Figure 2

The near field tag 41 may operate in accordance with ISO-IEC 14443 and ISO-IEC 15693 standards. The tag 41 includes an inbuilt inductive antenna that allows the card to exchange information with a tag reader when the two are brought into close proximity, as described above. The reader may emit an RF signal to supply power to the tag to communicate with it if the tag is "passive". If the tag is "active" it will have a power supply and its operation is independently of the reader. The near field tag 41 may transmit selected information, such as an ID number (GU ID).

According to an important feature of this embodiment, the near field tag 41 is selectively enabled or disabled for communication with the reader under control of the SIM 15, by means of communication link 43. By means of the link 43, the SIM can enable or disable the near field tag 41 by, for example, rendering its antenna inoperative. In the disabled state, a reader is not able to obtain any

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		<p>information from the near field tag 41, even when brought into close proximity thereto (within a range that, in normal circumstances, near field communication would be possible).</p> <p>Waters at Page 09</p> <p>A similar arrangement could be used, for example, to enable a school child to pay for their lunch using the near field tag 41. OTA messages would be sent at the beginning and the end of the school lunch time so that the near field tag 41 could only be used to make a payment during the appropriate time. The times at which, and the circumstances in which, the OTA messages are sent by the mobile telecommunications network 3 to the user's SIM card 15 may be set by the user of the mobile terminal 1. For example, the user of the mobile terminal 1 may initiate a communication session (such as a SIP communication session) with the mobile telecommunications network 1 to configure the times or places in which the RF tag 41 should be enabled. This updating process may require entry of a password, or employ some other security mechanism, to prevent unauthorised persons from reconfiguring the times and/or locations at which the near field tag is rendered operable or inoperable. Alternatively, the user may configure the times and/or locations at which the OTA messages are sent by some other mechanism - for example, by providing verbal instructions to the operator of mobile telecommunications network 3 by a mobile or PSTN telephone call, or by visiting the website of the mobile telecommunications network operator (whether using the mobile terminal 1 or independently thereof using a PC connected to the Internet).</p> <p>Waters at Page 11</p> <p>Rather than the user of the mobile terminal 1 determining when/where the RF tag 41 is activated, this may be determined by the mobile telecommunications network 3 or some other entity. For example, a school child's parent may set the times during which the school child is able to use their RF tag to make payments, in the example given above relating to paying for a school lunch. In</p>
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the example given above relating to payment for public transport, the public transportation authority may alternatively or additionally be able to control when OTA messages are sent so that, if it is notified that the mobile terminal 1 incorporating the near field tag 41 has been stolen, that authority can permanently or temporarily deactivate the near field tag 41

Waters at Page 12

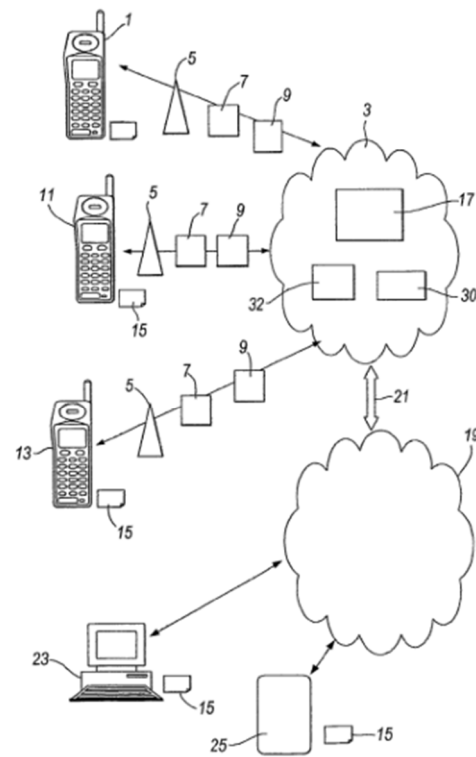


Fig.1

**Exhibit 432-A16
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Waters at Figure 1

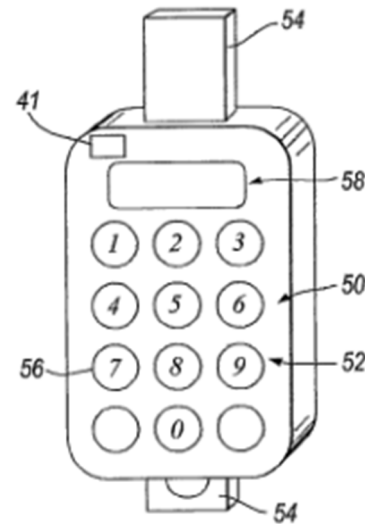


Fig. 3

Waters at Figure 3

The dongle may also incorporate the near field tag 41. The SIM within the dongle can only communicate with the mobile telecommunications network 3 when it is connected to another device, such as a mobile terminal or a PC that is connected to the mobile telecommunications network 3 via the Internet. When this connection between the SIM and the mobile telecommunications network 3 occurs, OTA update messages for the SIM can be received and downloaded to the SIM within the dongle. The commands within these messages can then be executed by the SIM and used to control the tag. The commands may activate/deactivate the tag according to a timetable or set of events, and the SIM controls activation/deactivation of the tag in accordance with these commands

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		<p>even when the SIM is no longer connected to the mobile telecommunications network. In another example, the SIM and the near field tag may be incorporated in a data card, which allows a notebook computer or other device to communicate wirelessly with mobile telecommunications network 3.</p> <p>Waters at Page 19</p> <p>Furthermore, this claim element is obvious in light of Waters itself, when combined with any of the other references as charted for this claim element in Exs. 432-A01-A23, Ex. 432-B, and/or when combined with the knowledge of one of ordinary skill in the art. Motivations to combine may come from the knowledge of the person of ordinary skill themselves, or from the known problems and predictable solutions as embodied in these references. Further motivations to combine references and additional details may be found in the Cover Pleading and Ex. 432-B.</p>
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