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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US03
		Application Number	
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US03	
		Application Number		
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Application Information:

Title of the Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES			
Attorney Docket Number	IPH-2-2235US03	Small Entity Status Claimed ☐		
Application Type	Nonprovisional			
Subject Matter	Utility			
Suggested Class (if any)		Sub Class (if any)		
Suggested Technology Center (if any)				
Total Number of Drawing Sheets (if any)	9	Suggested Figure for Publication (if any)	2	

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Prior Application Status	Pending	Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
	Continuation of	12644948	2009-12-22
Prior Application Status	Expired	Remove	
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)
12644948	non provisional of	61140126	2008-12-23

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US03	
		Application Number		
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES			

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Signature	/John Porrazza/		Date (YYYY-MM-DD)	2012-06-11
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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US03
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Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		

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DATA TRANSFER BETWEEN WIRELESS DEVICES

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation of U.S. Patent Application Serial No. 12/644,948, filed December 22, 2009, which claims the benefit of U.S. Provisional Application Serial No. 61/140,126, filed December 23, 2008. The contents of the above-referenced applications are hereby incorporated by reference herein.

FIELD OF INVENTION

[0002] This application is related to wireless communications.

BACKGROUND

[0003] In current communications, functionality that allows the transfer of data (such as files or digital media) between devices in both fixed and wireless environments is commonplace. Currently, data transfers may be performed using applications such as electronic mail, or multimedia message services (MMS) with the data being transmitted from one device to another through suitable technologies, for example, General Packet Radio Service (GPRS) or Wireless Local Area Network (WLAN). As the sophistication of user interfaces supporting data transfers has developed (for example, the emergence of touch screen and multi-touch technology), the user experience has been simplified considerably. These advances in user interface technology may be seen in devices such as the Apple® iPhone® and iPod Touch®.

[0004] Despite these advances, however, file transfers may still be a cumbersome, multi-step task requiring adaptation between multiple implementations. For example, many technologies involve a fragmented approach to access and manipulation of files such as attachments. These hurdles inhibit the more regular use of file transfer schemes in spontaneous situations. A simplified and more intuitive approach to data transfer between devices is therefore required.

SUMMARY

[0005] A method for controlling communication of data in wireless communications, implemented in a wireless transmit/receive unit (WTRU) detects environment information relating to at least one candidate WTRU operating in a local area associated with the WTRU. A user input is received via a user interface, wherein the user input relates to a selection of data for transfer between the WTRU and at least one of the candidate WTRUs and to an identified target WTRU. The user input is processed as well as the information relating to the at least one candidate WTRU. At least one target WTRU is identified from the at least one candidate WTRU based in part on the user input. Information relating to candidate WTRUs is solicited through a lower layer. Environment information is used to identify the target WTRU and transmission instructions are generated to enable transmission of data to the target WTRU.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] A more detailed understanding may be had from the following description, given by way of example in conjunction with the accompanying drawings wherein:

[0007] Figure 1 shows a sending and receiving wireless transmit/receive unit (WTRU) that may be used for data transfer between devices;

[0008] Figure 2 shows a wireless communication environment for data communication between devices;

[0009] Figure 3 shows a target discrimination algorithm for identifying a target WTRU;

[0010] Figure 4 is a block diagram of a method of communicating data between wireless devices;

[0011] Figure 5 is a block diagram of physical layer security for data communication between devices;

[0012] Figure 6 shows a user input for transferring a data file between devices;

[0013] Figures 7A and 7B show a user experience during a data communication between devices at a sending device and a receiving device;

[0014] Figure 8 shows a user input for transferring a data file to a target device, where the user input includes a directional indication of the location of the target device; and

[0015] Figure 9 shows a user input for transferring a data file from a sending device to multiple receiving devices.

DETAILED DESCRIPTION

[0016] When referred to hereafter, the terminology "wireless transmit/receive unit (WTRU)" includes but is not limited to a user equipment (UE), a communications device, a mobile station, a fixed or mobile subscriber unit, a pager, a cellular telephone, a personal digital assistant (PDA), a computer, or any other type of device capable of operating in a wireless environment. When referred to hereafter, the terminology "base station" includes but is not limited to a Node-B, a site controller, an access point (AP), or any other type of interfacing device capable of operating in a wireless environment.

[0017] Figure 1 is an illustration of a sending WTRU 101 and a receiving WTRU 103 whereby data is transferred between the WTRUs. The sending WTRU 101 and the receiving WTRU 103 are similarly equipped. The sending WTRU 101 and receiving WTRU 103 are separated by a communications environment 115 that may include other similarly equipped WTRUs which are not shown for simplicity. In general, WTRU 101, and WTRU 103 are each minimally comprised of an application processor 105, a communication peripheral 107, and a touchscreen/display peripheral 109. The communication peripheral 107 may be implemented as a wireless personal area network (WPAN) device, for example Bluetooth®, Wireless Universal Serial Bus (W-USB) or WiFi® in ad-hoc mode. The application processor 105 may be equipped with

software such as an operating system (O/S)/ kernel 117 (for example, Linux® or Windows®), middleware 119, and applications 113. The O/S may include necessary drivers to provide support for the touchscreen 109 and the communication peripheral 107 in addition to a file system 121 for storing media. An application 123 (hereinafter referred to as “TapAPP”) may include application software configured to implement a method of data transfer between WTRU 101 and WTRU 103. TapAPP 123 may run on the application processor 105 running a high-end O/S such as Linux ® or Windows®, for example. The communication peripherals 107 may include technologies such as a third generation partnership (3GPP) second or third generation standards (2G/3G) modem, Bluetooth® or WiFi®. Any combination or all of these communication technologies may be implemented in a single component design. Other peripherals such as a touchscreen/display 109, may also be supported. Peripherals 107, 109 may be operationally coupled to the application processor 105 through a physical interface 125 which, by way of example, may be a serial peripheral interface (SPI) or shared memory. The application processor 105 may provide support for the peripherals 107, 109 through drivers or general application software.

[0018] TapAPP 123 may run on either or both of the sending 101 and receiving 103 WTRUs. TapAPP 123 may run on any communications device, and may be run in a send or receive mode. TapAPP 123 runs on the embedded O/S 117 and may be implemented as a native application, a Java® application or any other suitable type of application on the WTRUs 101, 103. TapAPP 123 may be a stand alone application 113 or may be tightly bound to middleware 119 thereby providing a background process, giving the user an “always on” usage experience. Additionally or alternatively, TapAPP 123 may be implemented as a plug-in application that may be launched by a user as needed in a manner known in the art. TapAPP 123 may provide display features to indicate a current state of the application (i.e. send or receive mode). For example, while in send mode, TapAPP 123 may allow the user to access and display a media file, such as a digital photograph for transfer, on the touchscreen/display 109. In

one representation of receive mode, TapAPP 123 may provide a touch point on the screen 109 or illuminate a touch point upon the user touching the touchscreen 109, thereby enabling the user to access the underlying functionality of TapAPP 123 and receive the data transfer from the sending WTRU 101. The underlying mechanics and technologies of touchscreens and displays are beyond the scope of this disclosure and are therefore omitted for the sake of clarity.

[0019] Referring to Figure 2, a WTRU 101 configured for communicating data to target WTRU 101_{c,t} is shown. The WTRU 101 comprises a user interface (UI) 109, a processor 105, a communication peripheral 107, and an antenna 209. Other components located within the WTRU 101, for example, are a transmitter and receiver, but are not shown to avoid obfuscating the data communication illustration of Figure 2. The communication peripheral 107 operates in the lower layers, for example, the physical (PHY) communication layer. The communication peripheral 107 receives and processes information relating to the electromagnetic environment in which the WTRU 101 is operating. The electromagnetic environment (hereafter referred to as local areas 211, 213) contains information being provided by the energy emanating from other WTRUs 101_c operating within the local areas 211, 213 of the WTRU 101.

[0020] The local area in which WTRU 101 is operating may be configured to be a smaller radius of communication as identified by 213, or the local area may be configured to be a larger radius as identified by 211. The radius that defines the local areas 211, 213 may be configured at the WTRU 101 by a user-defined variable that defines a search radius with respect to the WTRU 101. Additionally, the local area in which the WTRU 101 is operating may be defined by any other appropriate manner. The communication peripheral 107 receives and maintains the environment information relating to the WTRUs 101_c operating within the local areas 211, 213.

[0021] WTRUs 101_c operating within the local areas 211, 213 of WTRU 101 are referred to as candidate WTRUs 101_c because they are potential recipients of data to be communicated by WTRU 101. As shown in Figure 2, there may be more than one

candidate WTRU 101_c as indicated by the WTRUs denoted with a “c”. Candidate WTRUs 101_c may be WTRUs similarly equipped like WTRU 101. From the candidate WTRUs 101_c, at least one target WTRU 101_{c,t} will be selected. Figure 2 shows only one target WTRU 101_{c,t}, but there may be more than one target WTRU 101_{c,t} selected from the candidate WTRUs 101_c. For example, one WTRU 101 configured to communicate data to another WTRU, may communicate data to one or a multitude of other WTRUs selected from a set of candidate WTRUs 101_c.

[0022] WTRU 101 comprises a UI 109 which may allow a user to provide user input to the WTRU 101. Through the UI 109, the user may provide user preferences relating to the communication of data from the WTRU 101. The UI 109, may be implemented, for example, in a touchscreen/display. Using a touchscreen display, the user may provide gestural actions to indicate user preferences. The user’s gestures may be directed to some visual depiction displayed on the touchscreen/display. The user may manipulate the visual depiction through a pre-defined gesture that is indicative of the user’s preferences regarding the data communication. For example, the visual depiction may identify a selected media element stored in the WTRU 101. The user may manipulate the visual depiction of the media element to indicate the movement of the media element through the local areas 211, 213, in which the WTRU 101 is operating. Such movement, for example, may include distance denoted by the speed at which the visual depiction is moved across the UI 109, or alternatively by the pressure exerted on the surface of the UI 109 by the user. Other gestural inputs may be defined to indicate user preferences. Direction of a data communication within the local areas 211, 213 where the WTRU 101 is operating may be indicated by a movement of the visual depiction in the direction to indicate the direction of the data communication. Thus, for example, if the user wishes a data communication to occur between the user’s WTRU 101 and another WTRU operating in local areas 211, 213 (i.e. the user has identified a desired target WTRU 101_{c,t}), the user may provide a

gesture via the UI 109 that is representative of the distance and direction of the selected target WTRU 101_{c,t} with respect to the sending WTRU 101.

[0023] WTRU 101 includes a processor 105 that is configurable to process information from the UI 109 and the communication peripheral 107. Electromechanical signals from the UI 109 are provided as inputs to the processor 105. Processor 105 may be configurable to execute machine readable instructions stored in any type of memory. Processor 105 is also configured to receive environment information stored by the communication peripheral 107. The environment information and the user input are then used as inputs to the processor 105 and are processed to identify a target WTRU 101_{c,t}. The electromechanical inputs from the UI 109, which may include for example, an indication of direction and distance, are then correlated to the environment information stored at the lower layers by the communication peripheral 107. Based on the correlation, a identification of at least one target WTRU 101_{c,t} is determined and a data communication from the WTRU 101 may be transmitted to the identified target WTRU 101_{c,t}.

[0024] The lower level information is provided to the application processor 105 according to the communication technology being used. For example, the information available to the application processor 205 may vary based on an implementation using a Third Generation Partnership Project (3GPP) technology, an Institute of Electronic and Electrical Engineers (IEEE) standard such as WiFi, or some other communication technology. For example IEEE 802.21 standard may be used where the TapAPP may register with an 802.21 client or other proprietary client to access and process lower layer information. Specific information relevant to the TapAPP's identification of a target WTRU 101_{c,t} may be provided from the communications peripheral 107.

[0025] Figure 3 shows inputs that may be used to drive a target discrimination algorithm 313 that uniquely identifies a target WTRU for transfer of data. Possible inputs include environment information 301, receiver information 303, touchscreen information 305 and other information 307, such as WTRU 101 orientation for example

where the WTRU 101 includes an accelerometer and supporting drivers. After processing the available inputs 301, 303, 305, and 307 by the application processor 105 through a target discrimination algorithm 313, configuration information 309 and transmission instructions 311 are generated as outputs.

[0026] The environment information 301 may, for example, be generated as follows. The application processor 105 may process instructions to periodically solicit information from the communication peripheral 107 relating to candidate WTRUs 101_c operating in the local areas 211, 213 of a communicating WTRU 101. A configuration variable may be provided that allows the end user to define a search radius (e.g. 2-3m) in which to solicit information. Devices outside the configured search radius will be excluded from received environment information. Throughout the timeframe that the application processor 105 is running a data communication application, the solicited information will be regenerated or updated. Upon receiving a user input indicating a data communication is desired, the solicited environment information 301 may be refreshed. The information collected regarding the candidate WTRUs 101_c is included in the environment information 301 and may be used as an input to the target discrimination algorithm 313. In an embodiment, environment information 301 may be solicited by a localization method. For example, in a mesh network or a sensor network, the solicitation may include both the neighboring devices as well as independent device elements that enable the location and identity of each candidate WTRU to be determined accurately. Such a network may be comprised of independent sensors that respond to the communication peripheral 107 of the communicating WTRU 101, or may include the candidate WTRUs 101_c operating in the local areas 211, 213 of the communicating WTRU 101.

[0027] The environment information 301 may be gathered via a service discovery protocol (SDP) such as currently available in protocols such as Bluetooth®, for example. This protocol allows the WTRU 101 to discover the services (e.g. TapAPP as described herein) that are supported by other WTRUs operating in the local

environment. An application such as TapAPP described above may invoke SDP functionality to discover all of the TapAPP enabled WTRUs operating in a particular location. For example, a Bluetooth® connection may be used to implement a SDP for this purpose. A radio dialog between the WTRU 101 and one or more candidate WTRUs 101_c is established according to the defined SDP. Information received in the radio dialog may be analyzed and filtered (e.g. power level, or quality of a received signal) to determine the individual candidate WTRUs 101_c or set of candidate WTRUs 101_c in a local proximity. When a set of candidate WTRUs 101_c is determined, a second level of search radius granularity may be applied by further defined radio dialogs between the WTRU 101 and a subset of candidate WTRUs 101_c. In addition to the SDP information directly discoverable by the WTRU 101, each candidate WTRU 101_c may exchange additional locally gathered information (e.g. GPS, or other location information gathered via a localization scheme) with other candidate WTRUs 101_c. On a condition that a sufficient number of candidate WTRUs 101_c are identified by the SDP, triangulation mechanisms may be implemented to establish a view of relative locations between a set of identified candidate WTRUs 101_c. The entire environment discovery procedure may be implemented continuously and in real-time while the TapAPP is running on all the candidate WTRUs 101_c with the TapAPP capabilities to update and maintain a real-time local map that is preserved in each instance of the TapAPP.

[0028] The receiver information 303, may be generated according to the following example. During data communication, send and receive operations are initiated between a sending WTRU 101 and a target WTRU 101_{c,t}. The user of the sending WTRU 101 initiates, through a user input, a send operation for a selected media element. On the receiving side, the target WTRU 101_{c,t} user may touch and hold the touchscreen of the target WTRU 101_{c,t} for all or part of the transfer process. The user input of the target WTRU 101_{c,t} may result in the target WTRU 101_{c,t} transmitting a radio signal to the sending WTRU 101, for example, an acknowledgement signal, the

radio signal may be reported to the application processor 105. This receiver information 303 may serve as an input to the target discrimination algorithm 313.

[0029] A user input received from the UI 109, for example a touchscreen/display, may be translated into application signals by the touchscreen/display 109 or processor 105. This touchscreen information 305 is input to the target discrimination algorithm 313 to identify a target WTRU 101_{c,t}. Touchscreen information 305 may include a file reference, speed, pressure, acceleration, timing information, direction, etc. File reference information may be used to identify a selected media element stored in the file system of the sending WTRU 101 that is the object of the data communication.

[0030] Directional inputs provided by the user via the touchscreen/display 109 may be synthesized to establish relative orientation to the real-time local map and select a target WTRU 101_{c,t} from the identified group of candidate WTRUs 101_c to establish a one-to-one communication between the transmitting WTRU 101 and the target WTRU 101_{c,t} or a selected one-to-many communication to a plurality of target WTRUs 101_{c,t}. In an example of a user input, an accelerometer associated with the WTRU 101 may provide input regarding the orientation of the WTRU 101 with respect to the real-time local map. For example, if the WTRU 101 was held upside-down, the real-time local map would be referenced and applied upside-down as dictated by the orientation of the sending WTRU 101.

[0031] Other information 307 may be used as an input to the target discrimination algorithm 313. For example, if the sending WTRU 101 device is equipped with an accelerometer and supporting drivers, the orientation of the sending WTRU 101 may be used as input information 307. Any type of other information 307 germane to the selection of a target WTRU 101_{c,t} may be used as an input to the target discrimination algorithm 313.

[0032] Configuration information 309 may include settings for attributes such as power level, antenna orientation, security parameters and the like. Transmission instructions 311 may include information regarding the data to be communicated and

the identity of the target WTRU 101_{c,t} as well as instructions for implementing the transfer through specific components in the communication peripheral. The configuration information 309 and transmission instructions 311 may be delivered to the communication peripheral 107. The configuration information 309 and transmission instructions 311 may impact the configuration of the Layer 2/3 baseband components, (e.g., the power settings), and/or the analog and radio frequency components, (e.g., antenna orientation of the communication peripheral 107). The application processor 105 in the sending WTRU 101 may control the manner in which the data is transferred to the target WTRU 101_{c,t}, for example, by breaking the data into blocks corresponding to the manner in which the visual depiction of the data should appear at the target WTRU 101_{c,t}. This control may involve the appending of some segmentation/display guidance information to the file blocks that may be used at the target WTRU 101_{c,t} receiver to help render the visual depiction in a synergistic manner which is described in more detail hereinafter with respect to Figure 7.

[0033] Figure 4 shows a method of identifying a target WTRU 101_{c,t} for a data communication with multiple WTRUs. Environment information 301 is solicited and information related to at least one candidate WTRU 101_c operating in the local area of the sending WTRU 101 is detected 401. A user input is received 403, for example, through a touchscreen/display UI 109, wherein the user input is related to the communication of data from the sending WTRU 101 to at least one candidate WTRU 101_c. The user input and the environment information relating to the candidate WTRUs 101_c is processed simultaneously 405. For example, in a target discrimination algorithm 313 as described in Figure 3. At least one target WTRU 101_{c,t} is identified from the set of candidate WTRUs 407. The target WTRU 101_{c,t} is identified at least in part on the user input received and the environment information 301 detected.

[0034] Physical layer security mechanisms may be applied to establish the environment information 301 as well as securing the data for short range data communication between WTRUs 101. The data may be transferred only as far as is

necessary to reach a minimal set of users in the local environment of the sending WTRU 101. The target discrimination algorithm 313 may be configured to secure the file from beyond a local group (i.e. the local environment of the sending WTRU 101) and excluding others. One example of achieving this is a secure data transfer based on the reciprocity of the wireless channels between the sending WTRU 101 and the target WTRU 101_{c,t}. The uniqueness and reciprocity of the wireless channel may be utilized to accomplish this in two steps. First, the location information for a particular WTRU 101 is associated with a channel impulse response (CIR) from that WTRU 101, which is unique, albeit variable. The CIR may be used to generate a secret key stream for that location. A more detailed description of such a secret key encryption may be found in U.S. Patent Application No. 11/339,958 which is herein incorporated by reference. A common cipher source, for example, Advanced Encryption Standard (AES), may be seeded with the key, and the information for the target WTRU 101_{c,t} is encrypted with it. Alternatively or in addition, the CIR based information may be used to authenticate the message. The result is that only the selected target WTRU 101_{c,t} may receive the data, because only the target WTRU 101_{c,t} has the required channel-based key.

[0035] Figure 5 shows an implementation of physical layer security for data communication between multiple WTRUs 101. The static (or slowly changing) physical location 501 of WTRUs 101 operating in the local areas 211, 213 and their respective radio channels 503 are input to a locations and channels association unit 505 that associates the locations 501 and the channels 503 of each WTRU 101 operating in the local areas 211, 213. Dynamic receiver information 507 relating to the CIR of each communicating WTRU 101 is used by channel-based key distillation unit 509, which continuously generates channel-based encryption keys for each WTRU 101 in the local environment. When required by a user, as indicated by touchscreen information 513, a target WTRU 101_{c,t} may be identified from an available listing of candidate WTRUs 101_c by the dynamic target matching algorithm 515. The dynamic target matching algorithm 515, receives input from the locations and channels association unit 505, the

channel-based encryption keys 509, and the touchscreen information 513, and the directional information 511 of the sending WTRU as inputs to identify one or more target WTRUs 101_{c,t} as the recipient(s) of the data communication. Transmission instructions 517 are generated to facilitate the data transfer to the target WTRUs 101_{c,t}.

[0036] Referring now to Figure 6, a user input action for sending a file to another device is shown. The data transfer may take place from a sending WTRU 101 as shown in Figure 1. The sending WTRU 101 may use an application such as TapAPP 123 to facilitate the data transfer. The sending WTRU 101 may have a touchscreen/display device 109 through which an end user may provide input information to the sending WTRU 101. The transfer application (TapAPP 123) may be running on the sending WTRU 101. As an example, TapAPP 123 may be configured to receive a simple three step hand (or finger) motion to enable the data transfer. The three steps include a tap 6A, a push action 6B, and a release action 6C. Referring to 6A, the user taps 605 the touchscreen 109 at a location on the touchscreen 109 where a visual depiction 603 of a media element to be transferred is displayed. Without lifting the finger used to tap 605 the visual depiction 603, the user then pushes the visual depiction 603 of the media element across the touchscreen 109 as shown by the directional arrow 607 in Figure 6B. In an embodiment, the direction in which the user pushes the visual depiction 603 may simulate the direction of a target receiving WTRU 101_{c,t} which is the intended recipient of the media element to be transferred. The media element may be any type of data file capable of being stored on the WTRU 101, for example, the media element may be a digital photograph, a video file, a word processing document or the like. When the user has pushed the visual depiction 603 of the media element in the direction the user would like the media element to be transferred, the user then releases 609 contact with the visual depiction 603 to initiate the data transfer. The three user actions 6A, 6B, and 6C, provide inputs to the touchscreen 109, which may be converted to electromechanical signals through

mechanisms known in the art. The electromechanical signals may serve as input to the TapAPP 123 application, which may generate environmental information and transmission instructions relating to a target WTRU 101_{c,t} selected by TapAPP in a manner explained above with respect to Figure 3. The environmental information 301 and transmission instructions 311 are then processed by the WTRU 101 and the media element is transmitted 611.

[0037] Figures 7A and 7B are an illustration of a data transfer depicted from the perspective of both a sending WTRU 101 and a receiving WTRU 103. The data transfer is a process between two or more WTRUs. For example, the data transfer may originate from one sending WTRU 101 and be directed toward one or more receiving WTRUs 103. As seen in Figure 7A, the media element being transferred in this example is a digital photograph. A visual depiction 603 may be displayed on the touchscreen/display 109. The sender may touch the touchscreen 109 and push 707 the visual depiction 603 of the digital photograph in the direction of the intended receiving WTRU 103. A receiving WTRU 103 may run TapAPP 123 to enable the receiving WTRU 103 to receive the transferred data. The receiving WTRU 103, for example, may be running TapAPP 123 in a receive mode. The TapAPP 123 provides an indication 603b or a prompt that a data transfer is ready for receiving. To receive a file, the user may touch 701 the touchscreen 109 to initiate reception of the data transfer. The user may touch 701 the touchscreen 109 for the entire time the data transfer is taking place, or the user may touch 701 the touchscreen 109 for some portion of the time the data transfer is occurring.

[0038] During the transfer, the visual depiction 603 may be configured to display the progress of the data transfer to the user at one or both of the sending WTRU 101 and the receiving WTRU 103. As shown in Figure 7A on the sending WTRU 101 as visual depiction 603a, the portion of the data transfer remaining to be sent may be displayed on the touchscreen/display 109 of the sending WTRU 101 as a partial visual depiction 603a of the digital photograph. As the data transfer progresses, the visual

depiction 603a is updated to indicate the remaining amount of data to be transferred. Similarly, at the receiving WTRU 103, a visual depiction 603b may be displayed on the touchscreen/display 109 of the receiving WTRU 103 to indicate to a user the amount of the data transfer that has been transmitted to the receiving WTRU 103. As shown in Figure 7B, when the data transfer is complete, the visual depiction 603 is displayed in its entirety at the receiving WTRU 103. Upon receipt of the file, the user of the receiving WTRU 103 may release the touchscreen 109 and the receiving WTRU 103 may send an application level acknowledgment to the sending WTRU 101. Thus, as shown in Figures 7A and 7B, the user may observe the visual depiction 603a disappearing from the sending WTRU 101 while the visual depiction 603b is emerging on the receiving WTRU103 in such manner that the overall visual depiction 603 is preserved for the duration of the data transfer. The underlying data transfer mechanism may prioritize the transfer of data file elements to enable this user experience. In an alternate embodiment, this user experience may be provided at the application level. The file may be transferred as a whole, but the rendering aspect of the application on both the send and receive sides of the data transfer creates the appearance of a progressive and contiguous data transfer.

[0039] Figure 8 is an illustration of the user experience while sending a data transfer in a direction of a targeted recipient. The same three step process described in Figure 6 is utilized where the sender taps 605 a visual depiction 603 of the selected media element. As shown in Figure 8B, the sender then pushes the visual depiction 603 of the media element to the right 801 which may simulate the physical direction with relation to the sending WTRU 101 where an intended receiving WTRU 103 (not shown) is operating. Based on the input information of the user, including the direction 801 in which the sender pushed the visual depiction 603 of the media element, the sending WTRU 101 may be configured to transmit the data transfer in a direction 803 matching the direction of the user action direction 801. The visual depiction 603 may be configured to indicate the progress of the data transfer and may

accomplish this by causing the visual depiction 603 to disappear from the touchscreen/display 109 in the same direction as the user action direction 801. Antenna orientation may be utilized to control the transmission direction 803.

[0040] Figure 9 shows an illustration of a UI 109 being used to perform a data communication to multiple receiving WTRUs. The user may tap on a visual depiction 903 of a media element selected for communication to a receiving WTRU as shown in Figure 9A. As shown, the user may tap on the visual depiction 903 multiple times 905. While in the example of Figure 9A, the user taps the visual depiction 903 twice, the user may tap the visual depiction 903 any number of times corresponding to the intended number of receiving WTRUs. Upon performing a multiple tap 905, the master visual depiction 903 will be split into a number of secondary visual depictions 907, 909 equal to the number of taps 905 of the user. This action by the user will lock the master visual depiction 903 while allowing the secondary visual depictions 907, 909 to be manipulated by the user via the UI 109. For example, with respect to Figure 9B, a user may use a two-hand, two finger motion to move secondary visual depiction 907 in the direction of a first target WTRU, while simultaneously moving secondary visual depiction 909 in the direction of a second target WTRU. The user may also use a single-hand, single finger motion to move each secondary visual depiction 907, 909 sequentially. Upon release of the secondary visual depiction 907, 909, the data is communicated to a target WTRU identified by the process described herein regarding Figure 2. The secondary visual depictions 907, 909 may be smaller than the master visual depiction 903, or the secondary depictions may be the same size as the master depiction. Alternatively, the secondary depictions 907, 909 may have a visually distinguishing feature that distinguishes them from the master depiction 903 to the user.

[0041] Although features and elements are described above in particular combinations, each feature or element can be used alone without the other features and elements or in various combinations with or without other features and elements.

The methods or flow charts provided herein may be implemented in a computer program, software, or firmware incorporated in a computer-readable storage medium for execution by a general purpose computer or a processor. Examples of computer-readable storage mediums include a read only memory (ROM), a random access memory (RAM), a register, cache memory, semiconductor memory devices, magnetic media such as internal hard disks and removable disks, magneto-optical media, and optical media such as CD-ROM disks, and digital versatile disks (DVDs).

[0042] Suitable processors include, by way of example, a general purpose processor, a special purpose processor, a conventional processor, a digital signal processor (DSP), a plurality of microprocessors, one or more microprocessors in association with a DSP core, a controller, a microcontroller, Application Specific Integrated Circuits (ASICs), Field Programmable Gate Arrays (FPGAs) circuits, any other type of integrated circuit (IC), and/or a state machine.

[0043] A processor in association with software may be used to implement a radio frequency transceiver for use in a wireless transmit receive unit (WTRU), user equipment (UE), terminal, base station, radio network controller (RNC), or any host computer. The WTRU may be used in conjunction with modules, implemented in hardware and/or software, such as a camera, a video camera module, a videophone, a speakerphone, a vibration device, a speaker, a microphone, a television transceiver, a hands free headset, a keyboard, a Bluetooth® module, a frequency modulated (FM) radio unit, a liquid crystal display (LCD) display unit, an organic light-emitting diode (OLED) display unit, a digital music player, a media player, a video game player module, an Internet browser, and/or any wireless local area network (WLAN) or Ultra Wide Band (UWB) module.

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CLAIMS

What is claimed is:

1. A method for use in a wireless transmit/receive unit (WTRU), the method comprising:
 - detecting, at the WTRU, information relating to at least one candidate WTRU in a geographic area associated with the WTRU;
 - receiving, at the WTRU, user input that includes a gestural input and a selection of data for transfer between the WTRU and a target WTRU;
 - processing, at the WTRU, the user input and the information;
 - identifying, at the WTRU, the target WTRU from the at least one candidate WTRU based at least in part on the user input; and
 - transmitting the selected data to the target WTRU.
2. The method of claim 1, wherein the gestural input identifies the target WTRU.
3. The method of claim 1, wherein the user input is received via a touchscreen display.
4. The method of claim 1, further comprising receiving data from the target WTRU.
5. The method of claim 1, wherein the detecting information further includes detecting a location of the at least one candidate WTRU.
6. The method of claim 5, wherein the gestural input is directed towards the target WTRU.

7. A wireless transmit/receive unit (WTRU) comprising:
 - a processor configured to detect information relating to at least one candidate WTRU in a geographic area associated with the WTRU;
 - a display configured to receive user input that includes a gestural input and a selection of data for transfer between the WTRU and a target WTRU;
 - the processor configured to:
 - process the user input and the information; and
 - identify the target WTRU from the at least one candidate WTRU based at least in part on the user input; and
 - a transmitter configured to transmit the selected data to the target WTRU.
8. The WTRU of claim 7, wherein the gestural input identifies the target WTRU.
9. The WTRU of claim 7, wherein the display receives user input via a touchscreen display.
10. The WTRU of claim 7, further comprising a receiver configured to receive data from the target WTRU.
11. The WTRU of claim 7, wherein the processor is further configured to detect information by detecting a location of the at least one candidate WTRU.
12. The WTRU of claim 11, wherein the gestural input is directed towards the target WTRU.
13. A method for use in a wireless transmit/receive unit (WTRU), the method comprising:

determining, at the WTRU, location information relating to at least one candidate WTRU;

receiving input, at the WTRU, that includes a selection of a target WTRU of the at least one candidate WTRU and a selected action;

associating, at the WTRU, the target WTRU with one of the at least one candidate WTRUs based at least in part on the input and the location information;

generating, at the WTRU, data to be transmitted to the target WTRU based at least in part on the input; and

transmitting the data to the target WTRU.

14. The method of claim 13, wherein the selected action indicates a selected file to be transferred to the target WTRU and the data includes the selected file.

15. The method of claim 13, wherein the input that includes a selection of a target WTRU is a gestural user input.

16. The method of claim 15, wherein the gestural user input is directed towards a physical location of the target WTRU.

17. The method of claim 15, wherein the gestural user input is directed towards a graphical representation of the target WTRU.

18. The method of claim 13, wherein the determining location information includes identifying the at least one candidate WTRU based on physical location.

19. The method of claim 13, wherein the determining location information includes identifying the at least one candidate WTRU based on an ability to communicate with a same network as the WTRU.

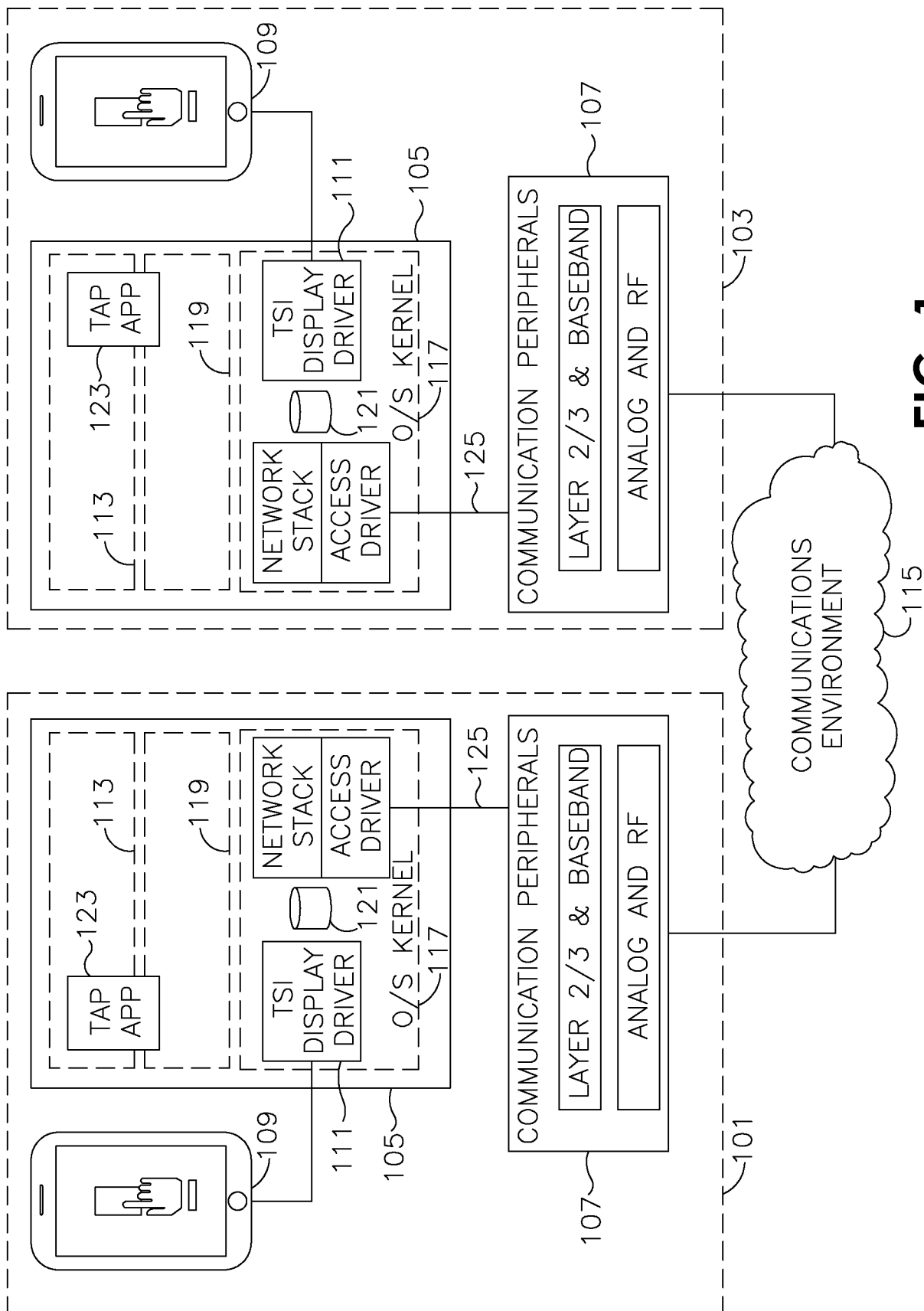
20. The method of claim 13, further comprising receiving data from the target WTRU.

ABSTRACT

A method of data transfer between wireless transmit/receive units (WTRUs) is described. The WTRUs may be within a given geographic area of each other or in communication with the same network. Location information relating to the WTRUs may be determined. The location information may be presented to a user of the WTRU. Data may be transferred from one WTRU to a target WTRU based on user input. The WTRU may determine the target WTRU based on user input and/or location information. The user input may be a gestural input. The gestural input may be received via a display or touchscreen. The user input may identify a given action or identify a particular file for transfer. The WTRU may receive data from the target WTRU.

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**FIG. 1**

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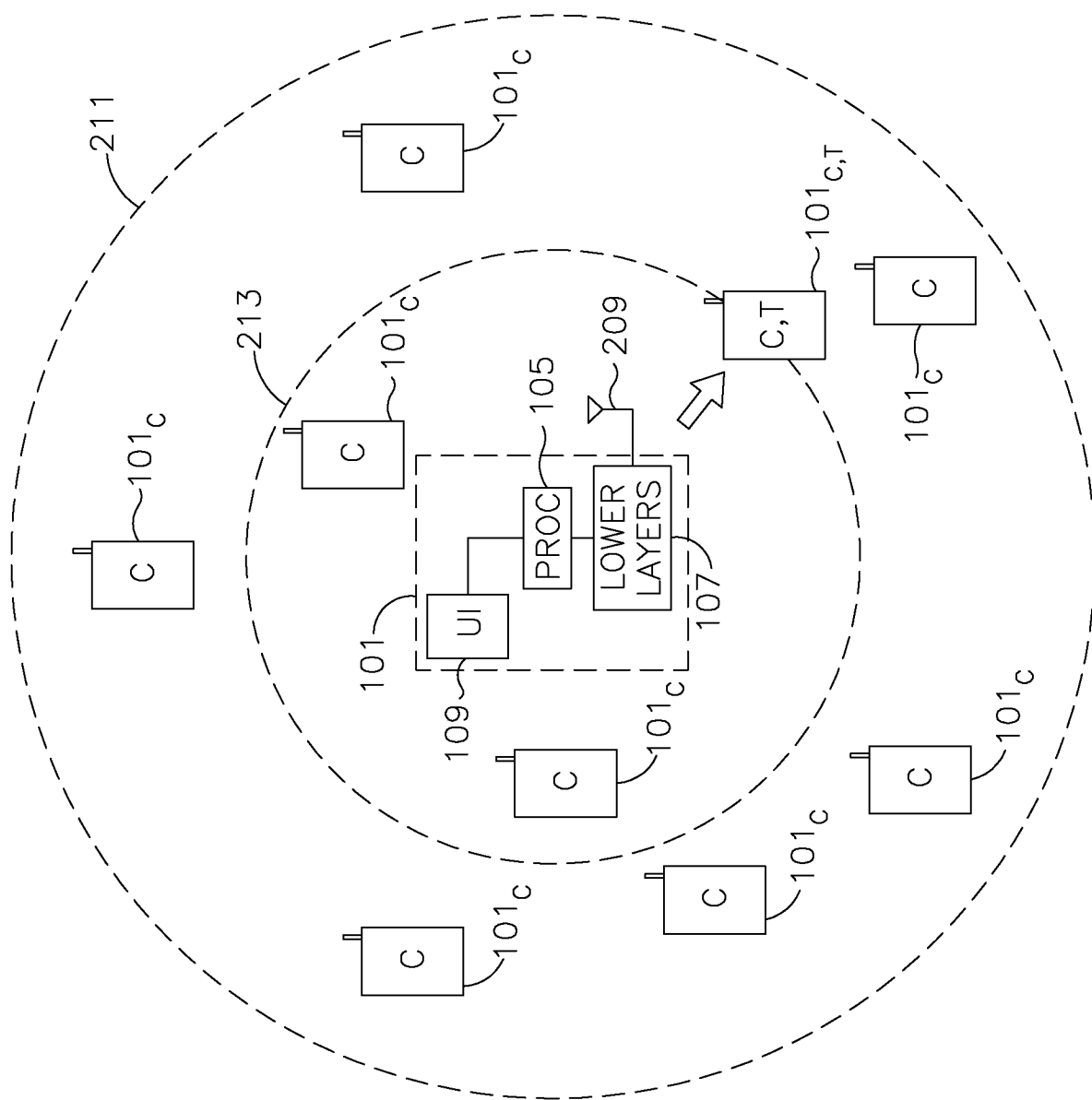
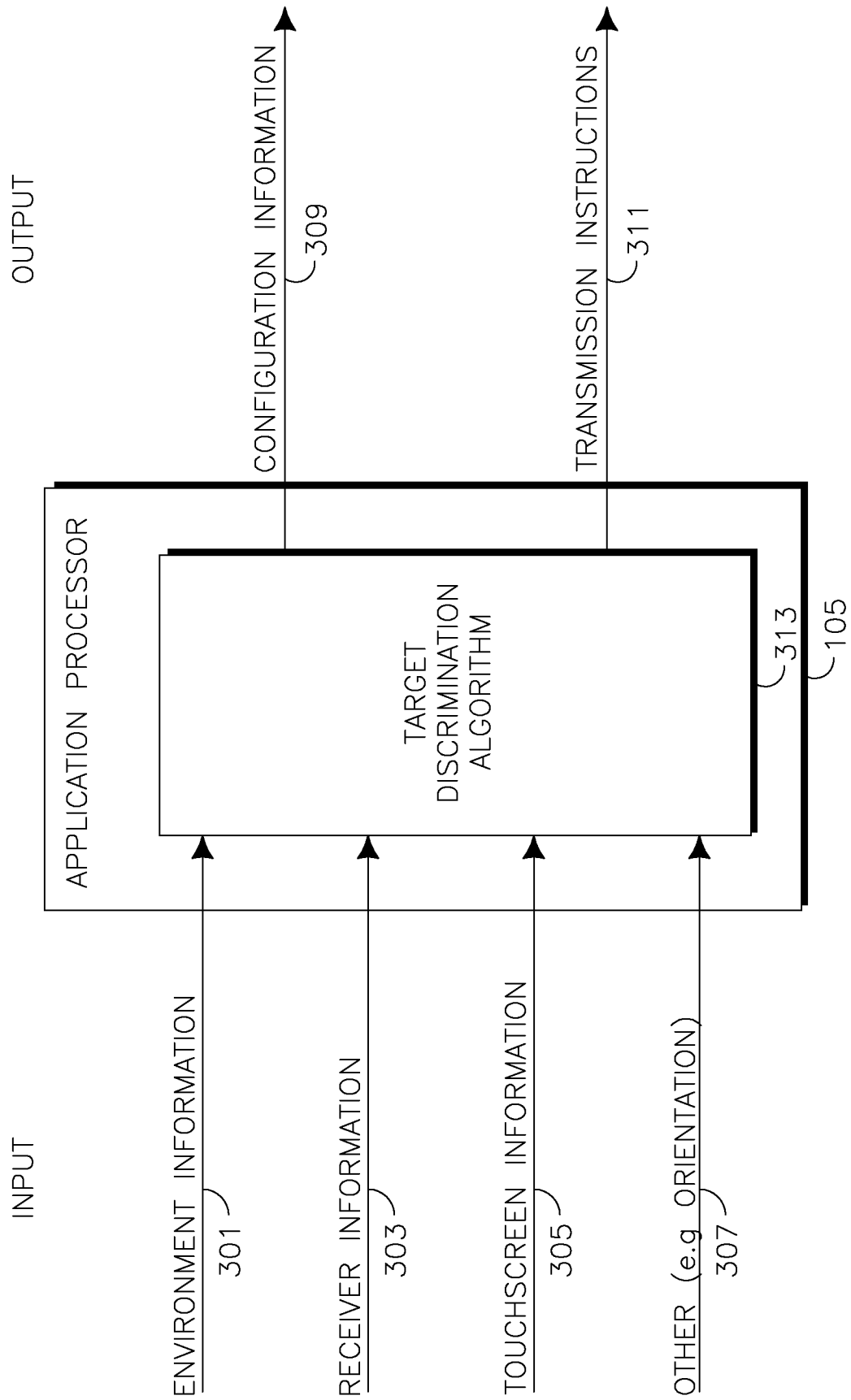


FIG. 2

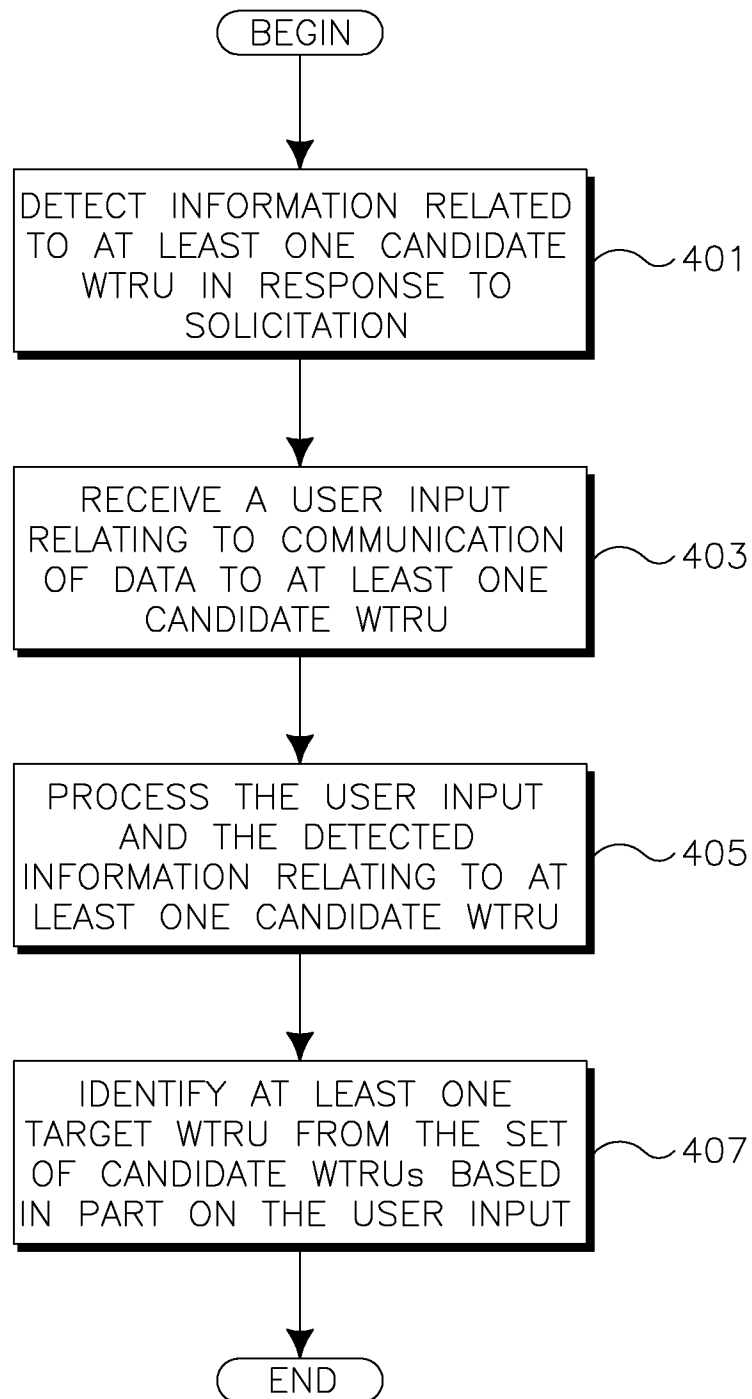
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FIG. 3

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**FIG. 4**

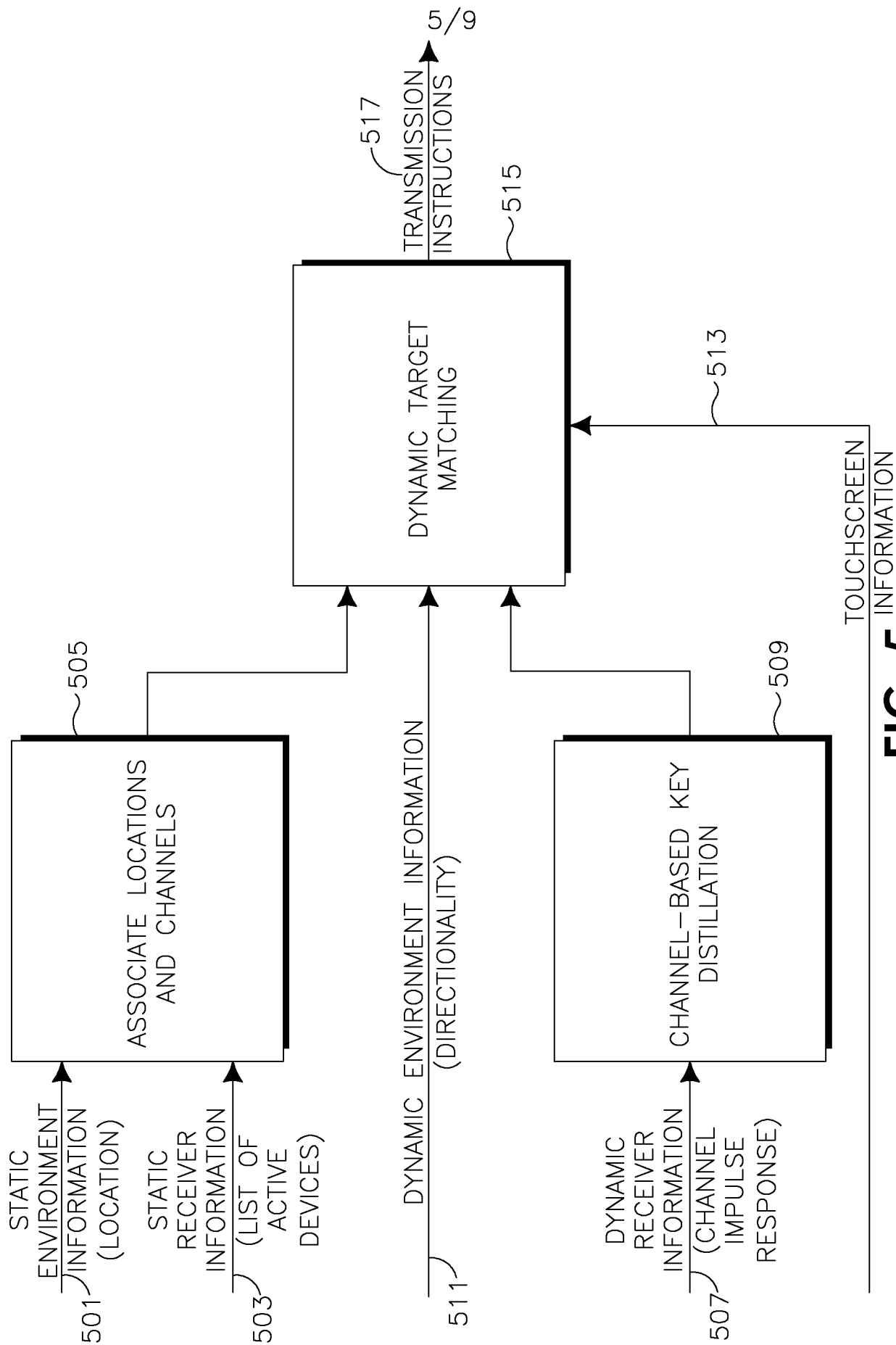


FIG. 5

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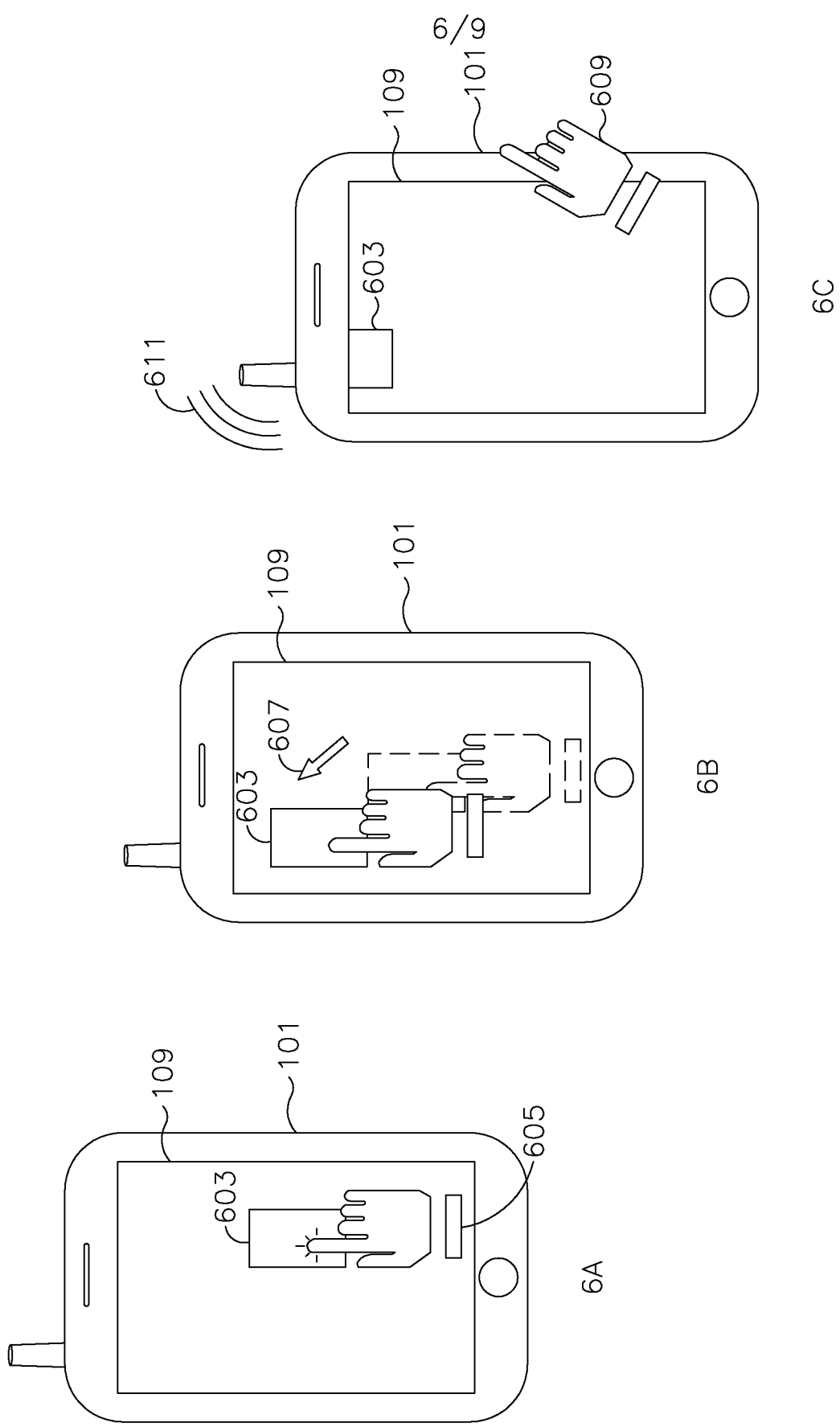


FIG. 6

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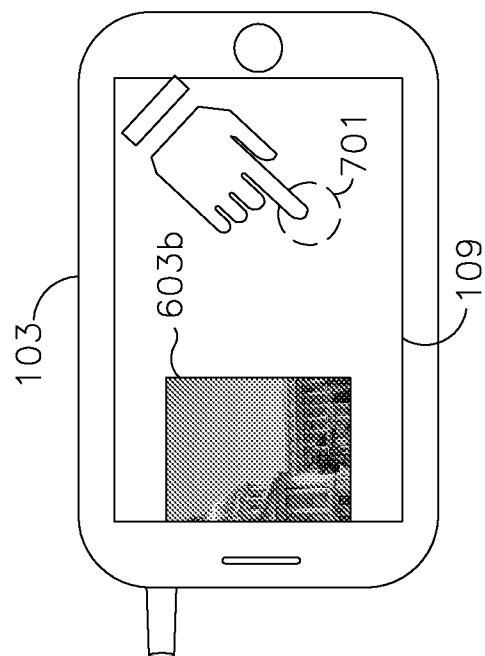


FIG. 7A

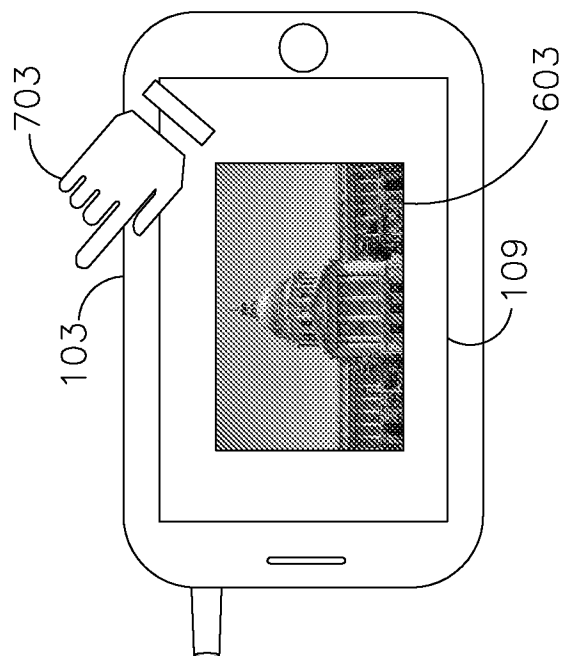
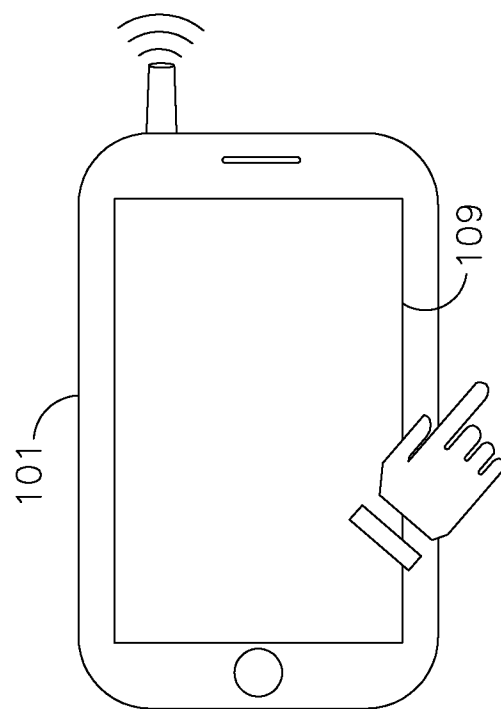
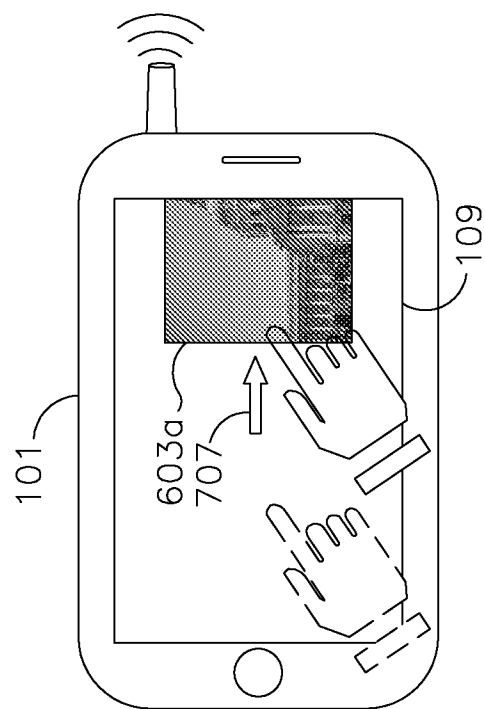


FIG. 7B



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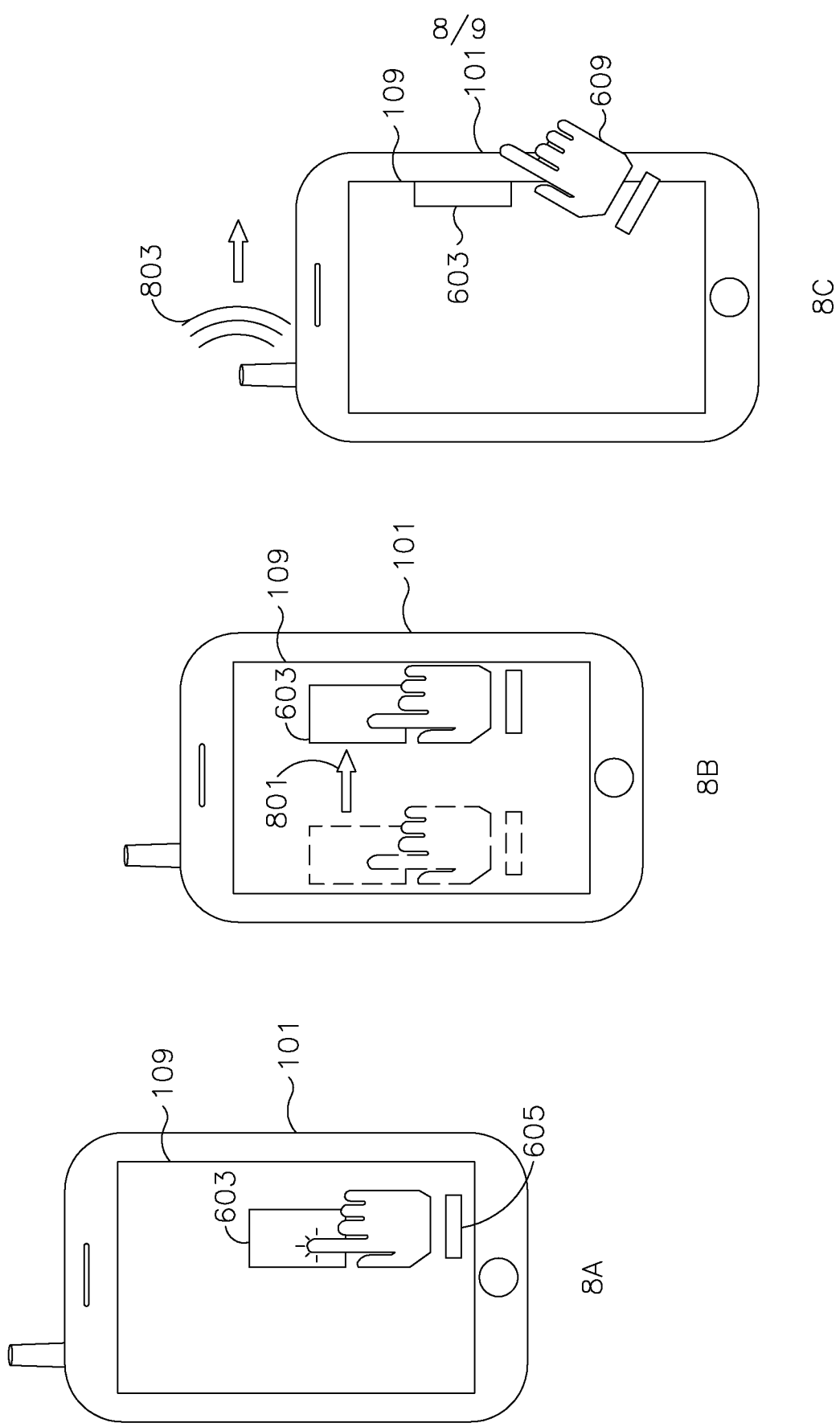


FIG. 8

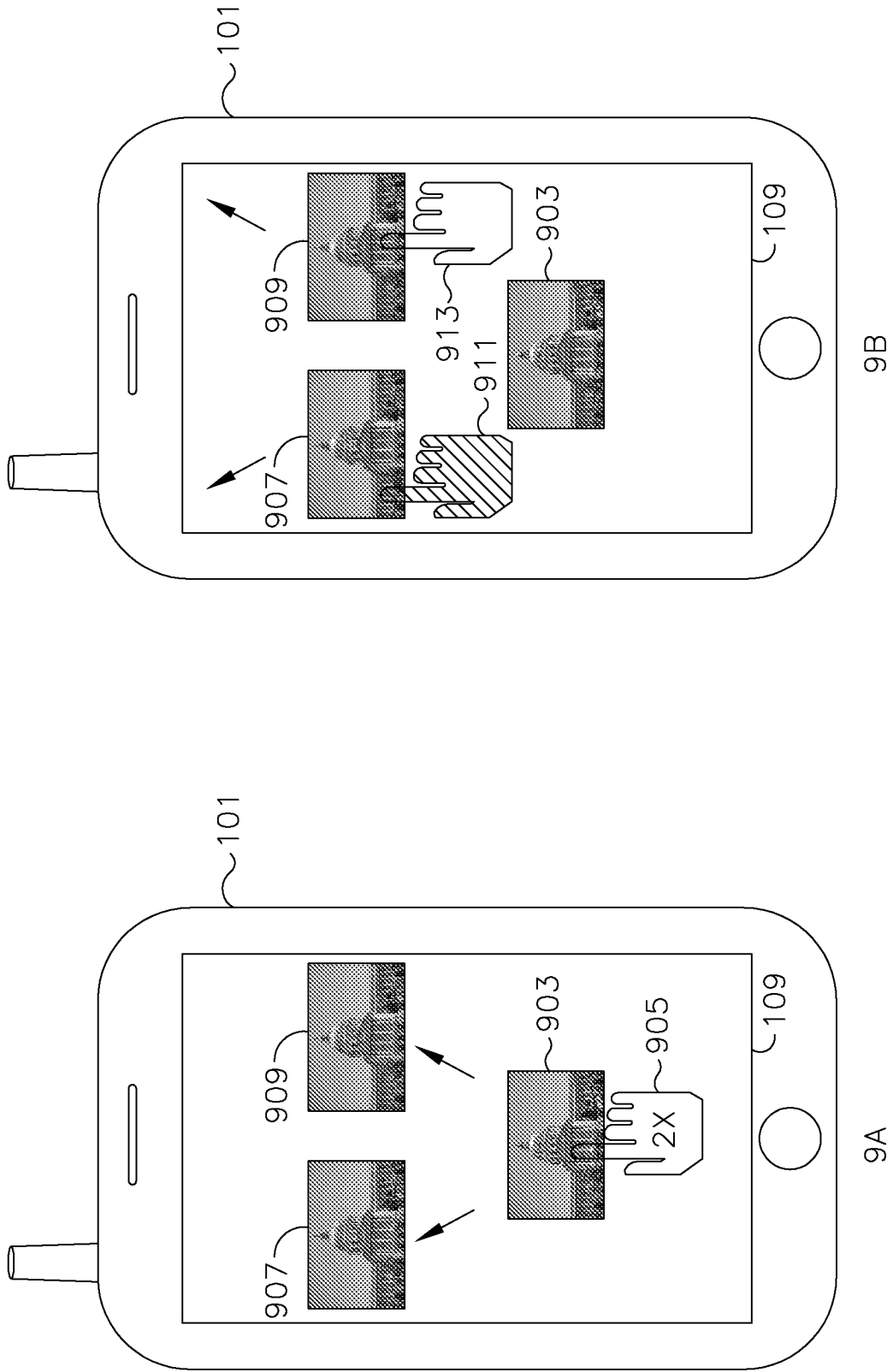


FIG. 9

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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)	Attorney Docket Number	IPH-2-2235US02
	First Named Inventor	Carlton et al.
	COMPLETE IF KNOWN	
	Application Number	12/644,948
	Filing Date	December 22, 2009
	Group Art Unit	2617
☐ Declaration Submitted with Initial Filing	OR	☒ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)
Examiner Name		Not Yet Known

As a below named inventor, I hereby declare that:

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

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

DATA TRANSFER BETWEEN WIRELESS DEVICES

the specification of which (Title of the Invention)

☐ is attached hereto

☒ was filed on (MM/DD/YYYY) 12/22/2009 as United States Application Number or PCT International Application Number 12/644,948 and was amended on (MM/DD/YYYY) (if applicable).

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

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

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Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			☐ ☐ ☐ ☐	☐ ☐ ☐ ☐	☐ ☐ ☐ ☐

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

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Application Number(s)	Filing Date (MM/DD/YYYY)	☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.
61/140,126	12/23/2008	

[Page 1 of 3]

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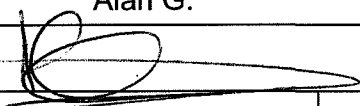
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Given Name (first and middle [if any])		Family Name or Surname	
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Inventor's Signature 		Date <u>25 February 2010</u>	
Residence: City	Mineola	State	NY
Country	US	Citizenship	GB
Mailing Address 12 Wisteria Avenue			
Mailing Address			
City	Mineola	State	NY
ZIP	11501	Country	US
Name of Additional Joint Inventor, if any:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Alexander		Reznik	
Inventor's Signature		Date	
Residence: City	Titusville	State	NJ
Country	US	Citizenship	US
Mailing Address 1212 River Road			
Mailing Address			
City	Titusville	State	NJ
ZIP	08560	Country	US
Name of Additional Joint Inventor, if any:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City		State	
Country		Citizenship	
Mailing Address			
Mailing Address			
City		State	
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DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)	Attorney Docket Number	IPH-2-2235US02		
	First Named Inventor	Carlton et al.		
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	Group Art Unit	2617		
☐ Declaration Submitted with Initial Filing	OR	☒ Declaration Submitted after Initial Filing (surcharge (37 CFR 1.16 (e)) required)	Examiner Name	Not Yet Known

As a below named inventor, I hereby declare that:

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

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

DATA TRANSFER BETWEEN WIRELESS DEVICES

the specification of which
☐ is attached hereto
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I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(d) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

Prior Foreign Application Number(s)	Country	Foreign Filing Date (MM/DD/YYYY)	Priority Not Claimed	Certified Copy Attached?	
				YES	NO
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐
			☐	☐	☐

☐ Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto:

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

Application Number(s)	Filing Date (MM/DD/YYYY)	
61/140,126	12/23/2008	☐ Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

[Page 1 of 3]

Burden Hour Statement: This form is estimated to take 0.4 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. 1450, Alexandria, VA 22313-1450.

Please type a plus sign (+) inside this box → ☐

PTO SB/01 (Modified)

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

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

DECLARATION — Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

U.S. Parent Application or PCT Parent Number	Parent Filing Date (MM/DD/YYYY)	Parent Patent Number (if applicable)

☐

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith: ☒ Customer Number **24374** → ☐ Registered practitioner(s) name/registration number listed below

Place Customer
Number Bar Code
Label here

Name	Registration Number	Name	Registration Number
Namely, the Attorneys of Volpe and Koenig, P.C.			

☐

Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to: ☒ Customer Number **24374** OR ☐

Name	VOLPE AND KOENIG, P.C. DEPT ICC				
Address					
Address					
City		State		ZIP	
Country		Telephone		Fax	

Authorization To Permit Access To Application by Participating Offices

☒ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified patent application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, WIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified patent application is filed to have access to the above-identified patent application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the above-identified patent application with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified patent application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Offices.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Please type a plus sign (+) inside this box → ☐

PTO/SB/02A (Modified)

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

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

DECLARATIONPage 3 of 3

Name of Sole or First Inventor:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Alan G.		Carlton	
Inventor's Signature		Date	
Residence: City	Mineola	State	NY
Country	US	Citizenship	GB
Mailing Address 12 Wisteria Avenue			
Mailing Address			
City	Mineola	State	NY
ZIP	11501	Country	US
Name of Additional Joint Inventor, if any:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Alexander		Reznik	
Inventor's Signature		Date Mar-01-10	
Residence: City	Titusville	State	NJ
Country	US	Citizenship	US
Mailing Address 1212 River Road			
Mailing Address			
City	Titusville	State	NJ
ZIP	08560	Country	US
Name of Additional Joint Inventor, if any:		☐ A petition has been filed for this unsigned inventor	
Given Name (first and middle [if any])		Family Name or Surname	
Inventor's Signature		Date	
Residence: City		State	
Country		Citizenship	
Mailing Address			
Mailing Address			
City		State	
ZIP		Country	

Burden Hour Statement: This form is estimated to take 21 minutes to complete. Time will vary depending upon the needs of the individual case.

Electronic Patent Application Fee Transmittal				
Application Number:				
Filing Date:				
Title of Invention:		DATA TRANSFER BETWEEN WIRELESS DEVICES		
First Named Inventor/Applicant Name:		Alan G. Carlton		
Filer:		John Porrazza/Janice Nightlinger		
Attorney Docket Number:		IPH-2-2235US03		
Filed as Large Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Utility application filing	1011	1	380	380
Utility Search Fee	1111	1	620	620
Utility Examination Fee	1311	1	250	250
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1250

Electronic Acknowledgement Receipt

EFS ID:	12984701
Application Number:	13493650
International Application Number:	
Confirmation Number:	6422
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	John Porrazza/Janice Nightlinger
Filer Authorized By:	John Porrazza
Attorney Docket Number:	IPH-2-2235US03
Receipt Date:	11-JUN-2012
Filing Date:	
Time Stamp:	17:12:56
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 1250
RAM confirmation Number	4496
Deposit Account	090435
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.16 (National application filing, search, and examination fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Application Data Sheet	2235US03_ADS_Form_SB_14.PDF	1135679	no	5
			2e47e378b5b52fa07c7346fd4056810706622792		
Warnings:					
Information:					
2		20120611_IPH_2_2235US03_Application_EFS.pdf	113905	yes	22
			31468c8fc75e09fcaab6fa03ba0f6596b5c47f22		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	17	
	Claims		18	21	
	Abstract		22	22	
Warnings:					
Information:					
3	Drawings-only black and white line drawings	20120611_IPH_2_2235US03_Drawings_EFS.pdf	818365	no	9
			2d537c1d2ff3830cbf40595d2db4e96bb9028278		
Warnings:					
Information:					
4	Oath or Declaration filed	20110611_IPH_2_2235US03_ExecutedDeclaration_EFS.PDF	403166	no	6
			84ea22122d5ffcb5b42ce241f27815ca219ffc9f		
Warnings:					
Information:					
5	Fee Worksheet (SB06)	fee-info.pdf	32892	no	2
			dc96132411db224150d39a2f85588193c1fe0f1e		
Warnings:					
Information:					
Total Files Size (in bytes):			2504007		

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

SCORE Placeholder Sheet for IFW Content

Application Number: 13493650

Document Date: 6/11/2012

The presence of this form in the IFW record indicates that the following document type was received in electronic format on the date identified above. This content is stored in the SCORE database.

- Drawings – Other than Black and White Line Drawings

Since this was an electronic submission, there is no physical artifact folder, no artifact folder is recorded in PALM, and no paper documents or physical media exist. The TIFF images in the IFW record were created from the original documents that are stored in SCORE.

To access the documents in the SCORE database, refer to instructions developed by SIRA.

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- Examiners may access SCORE content via the eDAN interface.
- Other USPTO employees can bookmark the current SCORE URL (<http://es/ScoreAccessWeb/>).
- External customers may access SCORE content via the Public and Private PAIR interfaces.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 13/493,650				
APPLICATION AS FILED - PART I										
(Column 1)		(Column 2)		SMALL ENTITY		OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)			
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	380			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	620			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	250			
TOTAL CLAIMS (37 CFR 1.16(j))	20	minus 20 = *			OR	x 60 =	0.00			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	3	minus 3 = *				x 250 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s)) If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).							0.00			
							0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00			
			TOTAL			TOTAL	1250			
* If the difference in column 1 is less than zero, enter "0" in column 2.										
APPLICATION AS AMENDED - PART II										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)	RATE(\$)	ADDITIONAL FEE(\$)	
	Total (37 CFR 1.16(i))	*	Minus	**	=	x =		OR	x =	
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x =		OR	x =	
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.										



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www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
13/493,650	06/11/2012	2472	1250	IPH-2-2235US03	20	3

CONFIRMATION NO. 6422

24374
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

FILING RECEIPT



Date Mailed: 06/25/2012

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

Applicant(s)

Alan G. Carlton, Mineola, NY;
Alexander Reznik, Titusville, NJ;

Assignment For Published Patent Application

INTERDIGITAL PATENT HOLDINGS, INC., Wilmington, DE

Power of Attorney: The patent practitioners associated with Customer Number 24374

Domestic Priority data as claimed by applicant

This application is a CON of 12/644,948 12/22/2009 PAT 8200265 *
which claims benefit of 61/140,126 12/23/2008

(*)Data provided by applicant is not consistent with PTO records.

Foreign Applications (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.)

Permission to Access - A proper **Authorization to Permit Access to Application by Participating Offices** (PTO/SB/39 or its equivalent) has been received by the USPTO.

If Required, Foreign Filing License Granted: 06/20/2012

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 13/493,650**

Projected Publication Date: 10/04/2012

Non-Publication Request: No

Early Publication Request: No

Title

DATA TRANSFER BETWEEN WIRELESS DEVICES

Preliminary Class

370

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

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

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

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

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

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

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set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

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FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. IPH-2-2235US03	SERIAL NO. 13/493,650
	APPLICANT Carlton et al.	
	FILING DATE June 11, 2012	GROUP 2617

U.S. PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
		5,544,321	08/1996	Theimer et al.				
		7,877,494	01/2011	Carlton et al.				
		2006/0234762	10/2006	Ozluturk				
		2006/0293063	12/2006	Corrion				
		2007/0146347	06/2007	Rosenberg				
		2007/0177729	08/2007	Reznik et al.				
		2007/0271379	11/2007	Carlton et al.				
		2011/0119702	05/2011	Jang et al.				
		2011/0119710	05/2011	Jang et al.				
		2011/0126237	05/2011	Lee et al.				
		2011/0138334	06/2011	Jung				
FOREIGN PATENT DOCUMENTS								
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
							YES	NO
		1 513 262	03/2005	EP				
		03/081373	10/2003	WO				
OTHER DOCUMENTS								
EXAMINER INITIAL		DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)						
		HAZAS ET AL., "A Relative Positioning System for Co-located Mobile Devices," International Conference on Mobile Systems, Proceedings of the 3 rd International Conference on Mobile Systems, Applications and Services, Seattle, Washington, 2005, pages 177-190						

EXAMINER	DATE CONSIDERED
----------	-----------------

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

Electronic Acknowledgement Receipt

EFS ID:	13203507
Application Number:	13493650
International Application Number:	
Confirmation Number:	6422
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	John Porrazza/Carey Kulp
Filer Authorized By:	John Porrazza
Attorney Docket Number:	IPH-2-2235US03
Receipt Date:	09-JUL-2012
Filing Date:	11-JUN-2012
Time Stamp:	15:24:35
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	ids.pdf	52113 ddeb728bf2ab4755e8cfaddacfcf141d815dff 23e	no	2

Warnings:

Information:

2	Information Disclosure Statement (IDS) Form (SB08)	pto1449.pdf	47623 e383ec539053087c1406af8ff7b25bf783f59ed1	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
Total Files Size (in bytes):				99736	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Carlton et al.

Application No.: 13/493,650

Confirmation No.: 6422

Filed: June 11, 2012

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Group: 2617

Examiner: Diane Mizrahi

Our File: IPH-2-2235US03

Date: July 9, 2012

INFORMATION DISCLOSURE STATEMENT

Mail Stop Amendment (via EFS)
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Examiner:

Further to Applicants' Duty of Disclosure pursuant to 37 C.F.R. §1.56, Applicants wish to bring to the Examiner's attention the material cited on the enclosed Form PTO-1449.

This Application is a continuation of Non-Provisional Application No. 12/644,948, filed on December 22, 2009, which issued on June 12, 2012 as U.S. Patent No. 8,200,265, which claims priority from Provisional Application No. 61/140,126, which was filed on December 23, 2008.

Pursuant to 37 C.F.R. §1.98(d) copies of documents cited in the parent application are not enclosed, but copies will be provided upon request.

Applicant: Carlton et al.
Application No.: 13/493,650

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the Form PTO-1449 indicating his consideration of the cited materials.

Respectfully submitted,

Carlton et al.

By /John Porrazza/
John Porrazza
Registration No. 68,126
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1600
30 South 17th Street
Philadelphia, PA 19103

JP/PCK
Enclosure



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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13/493,650

06/11/2012

Alan G. Carlton

IPH-2-2235US03

6422

24374 7590 09/04/2012

VOLPE AND KOENIG, P.C.

DEPT. ICC

UNITED PLAZA

30 SOUTH 17TH STREET

PHILADELPHIA, PA 19103

EXAMINER

MIZRAHI, DIANE D

ART UNIT

PAPER NUMBER

2617

NOTIFICATION DATE

DELIVERY MODE

09/04/2012

ELECTRONIC

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

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

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

eoffice@volpe-koenig.com

Office Action Summary	Application No. 13/493,650	Applicant(s) CARLTON ET AL.	
	Examiner DIANE MIZRAHI	Art Unit 2617	

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
- 4) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 5) ☒ Claim(s) 1-20 is/are pending in the application.
- 5a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) ____ is/are allowed.
- 7) ☒ Claim(s) 1-20 is/are rejected.
- 8) ☐ Claim(s) ____ is/are objected to.
- 9) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 11 June 2012 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 12) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413) |
| 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) ☒ Information Disclosure Statement(s) (PTO/SB/08) | 5) ☐ Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____. | 6) ☐ Other: ____. |

Art Unit: 2617

DETAILED ACTION

Claims 1-20 are pending.

Information Disclosure Statement

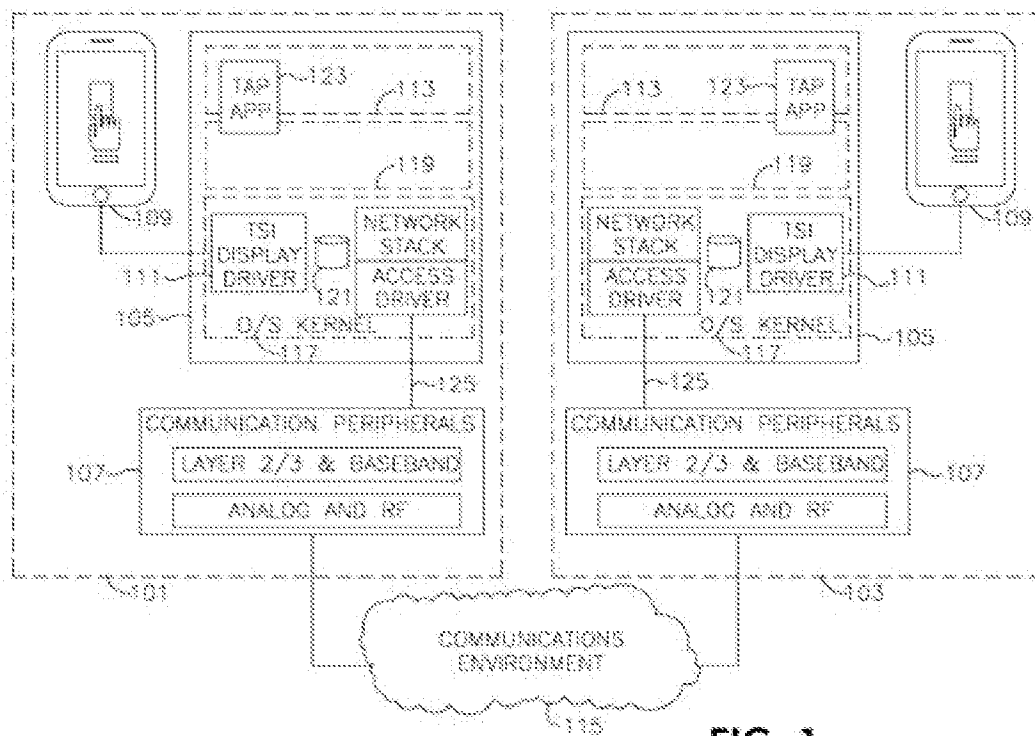
As required by M.P.E.P. 609(c), the Applicant's submission of the Information Disclosure Statement is acknowledged by the examiner and the cited references have been considered in the examination of the claims now pending. As required by M.P.E.P. 609 C(2), a copy of the PTOL-1449 initialed and dated by the examiner is attached to the instant office action.

Applicant's Information Disclosure Statement has been received, entered into the record, and considered. See attached form PTO-1449.

Consideration of Claim Rejections under 35 USC § 101

Examiner considered claim rejections under 35 USC § 101 for Claims 1-20. Applicant's particular "wireless transmit/receive unit, (WTRU)" is according to Applicant Figure 1, whole figure, infra:

Art Unit: 2617

**FIG. 1**

and “The WTRU 101 comprises a user interface (UI) 109, a processor 105, a communication peripheral 107, and an antenna 209.” (Specification, Paragraph [0019]). Therefore, Examiner believes that no rejection under 35 USC § 101 is required.

Double Patenting

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

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

Art Unit: 2617

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

MPEP 804(II.B)(1)(2B)(a) states:

Similarly, even if the application at issue is the earlier filed application, only a one-way determination of obviousness is needed to support a double patenting rejection in the absence of a finding: (A) of administrative delay on the part of the Office causing delay in prosecution of the earlier filed application; and (B) that applicant could not have filed the conflicting claims in a single (i.e., the earlier filed) application.

Claims 1- 20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-23 in US Patent No. 8,200,265.

It is obvious to a person having ordinary skill in the art to remove steps or elements from a previously filed claim absent evidence of criticality of the step. See MPEP 2143.0 I(V) which explains the rationale why a modification such as removal of steps does not appear to render the prior art unsatisfactory for its intended purpose. As such the removal is obvious.

In accordance with MPEP 801 (Chart II-B), the claims are rejected under obvious type double patenting because although different they are alleged not patentably distinct, they have a common inventor.

Art Unit: 2617

The invention is also commonly owned by inventors, Alan Carlton and Alexander Reznik, at the time of invention.

This is a obviousness-type double patenting rejection. Further claim tables are provided below.

Independent claims 1-10 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over 1-23 in US Patent No. 8,200,265. Although the conflicting claims are not identical, they are not patentably distinct from each other because they are both exhibiting similar method use in a wireless transmit/receive unit (WTRU) user input and data transfer between on WTRU and one target or candidate WTRU.

This is a obviousness-type double patenting rejection.

Claims 1-20, of current application and U.S. Patent No. 8,200,265 are compared as follows, showing the obviousness of the teachings of the patent to the claimed invention:

Current Application	US Patent No. 8,200,265
Claim 1:	Claim 1:

Art Unit: 2617

A method for use in a wireless transmit/receive unit (WTRU), the method comprising:

detecting, at the WTRU, information relating to at least one candidate WTRU in a geographic area associated with the WTRU;

receiving, at the WTRU,

user input that includes a gestural input and a selection of data for transfer between the WTRU and a target WTRU;

processing, at the WTRU, the user input and the information;

identifying, at the WTRU, the target WTRU from the at least one candidate WTRU based at least in part on the user input; and

transmitting the selected data to the target WTRU.

implemented in a wireless transmit/receive unit (WTRU), the method comprising:

detecting, at the WTRU, environment information relating to at least one candidate WTRU operating in a local area associated with the WTRU;

receiving, at the WTRU, user input that indicates at least a direction and a selection of data for transfer between the WTRU and a target WTRU;

processing, at the WTRU, the user input and the environment information;

identifying, at the WTRU, at least one candidate WTRU as the target WTRU based at least in part on the user input; and,

transmitting the data to the target WTRU

Art Unit: 2617

In addition, although the conflicting claims are not identical, they are not patentably distinct from each other because the scope of each claim in the present application is essentially identical to the scope of a corresponding claims in US Patent No. 8,200,265 , as indicated in the above claim diagram (see above for details).

Also, it is noted, that the claims of the instant application and claims 1-23 of U.S. Patent No. 8,200,265 are exhibiting similar method use in a wireless transmit/receive unit (WTRU) user input and data transfer between on WTRU and one target or candidate WTRU, similarly.

Allowable Subject Matter

Claims 1-20 would be allowable if rewritten or amended to overcome the rejection(s) under Double Patenting, set forth in this Office action.

The following is an examiner's statement of reasons for allowance: The following is an examiner's statement of reasons for allowance:

Art Unit: 2617

Interpreting the claims in light of the specification, Examiner finds the claimed invention is patentably distinct from the prior art of record, which sets forth in the following: the prior art of record does not teach the combination of claimed elements including and under the broadest reasonable interpretation of the claimed limitation consistence with the Applicant's Specification. The prior art cited above fails to teach all of the Applicant's claimed limitation. In particular, the claimed invention advantageously provides a finer level of detail that includes "in a wireless transmit/receive unit (WTRU), detecting, at the WTRU, information relating to a candidate WTRU in a geographic area associated with the WTRU, receiving, at the WTRU, user input that includes a gestural input and a selection of data for transfer between the WTRU and a target WTRU, processing, at the WTRU, the user input and the information, identifying, at the WTRU, the target WTRU from a candidate WTRU based part on the user input, and transmitting the selected data to the target WTRU" in combination with the other limitations of the claims, was not disclosed by, would not have been obvious over, nor would have been fairly suggested by the prior art of record in context to the claims and the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2617

Thus, prior art of record neither render obvious nor anticipates the combination of claimed elements in light of the specification.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D. Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday (8:30 - 4:30 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meless Zewdu can be reached on (571) 272-7873. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communication.

Art Unit: 2617

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll free).

/Diane Mizrahi/

Diane.Mizrahi@USPTO.gov
Primary Patent Examiner

August 10, 2012

Notice of References Cited	Application/Control No. 13/493,650	Applicant(s)/Patent Under Reexamination CARLTON ET AL.	
	Examiner DIANE MIZRAHI	Art Unit 2617	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,200,265	06-2012	Carlton et al.	455/509
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

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data transfer between wireless transmit receive units or WTRU within a geographical location by using gestural inputs and data transfer between candidate and target WTRU

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IEEE

<i>Index of Claims</i> 	Application/Control No. 13493650	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2617

✓	Rejected	-	Cancelled	N	Non-Elected	A	Appeal
=	Allowed	÷	Restricted	I	Interference	O	Objected

☐ Claims renumbered in the same order as presented by applicant		☐ CPA		☐ T.D.		☐ R.1.47			
CLAIM		DATE							
Final	Original	08/10/2012							
	1	✓							
	2	✓							
	3	✓							
	4	✓							
	5	✓							
	6	✓							
	7	✓							
	8	✓							
	9	✓							
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	13	✓							
	14	✓							
	15	✓							
	16	✓							
	17	✓							
	18	✓							
	19	✓							
	20	✓							

FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. IPH-2-2235US03	SERIAL NO. 13/493,650
	APPLICANT Carlton et al.	
	FILING DATE June 11, 2012	GROUP 2617

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
/D.M./		5,544,321	08/1996	Theimer et al.			
		7,877,494	01/2011	Carlton et al.			
		2006/0234762	10/2006	Ozluturk			
		2006/0293063	12/2006	Corrion			
		2007/0146347	06/2007	Rosenberg			
		2007/0177729	08/2007	Reznik et al.			
		2007/0271379	11/2007	Carlton et al.			
		2011/0119702	05/2011	Jang et al.			
		2011/0119710	05/2011	Jang et al.			
		2011/0126237	05/2011	Lee et al.			
		2011/0138334	06/2011	Jung			
FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
/D.M./		1 513 262	03/2005	EP			
/D.M./		03/081373	10/2003	WO			
OTHER DOCUMENTS							
EXAMINER INITIAL		DESCRIPTION (Including Author, Title, Date, Pertinent Pages, Etc.)					
/D.M./		HAZAS ET AL., "A Relative Positioning System for Co-located Mobile Devices," International Conference on Mobile Systems, Proceedings of the 3 rd International Conference on Mobile Systems, Applications and Services, Seattle, Washington, 2005, pages 177-190					

EXAMINER /Diane Mizrahi/ (08/22/2012)	DATE CONSIDERED
--	-----------------

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

1990066 ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /D.M./

WEST Search History for Application 13493650

Creation Date: 2012082212:08

Prior Art Searches

Query	DB	Op.	Plur.	Thes.	Date
455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.	PGPB, USPT, USOC	ADJ	YES		08-22-2012
(wireless near5 transmit near5 receive near5 unit or (WTRU))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10 (touch near5screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10(touch near5screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10(touch near5 screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10(touch near5 screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((user near5 input) and (visual near10(touch near5 screen))) and ((user near5 input) and (visual near10(touch near5 screen)))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((user near5 input) and (visual near10(touch near5 screen)) and (user near5 input) and (visual near10(touch near5 screen))) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.)	PGPB, USPT, USOC	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.) and ((user near5 input) and (visual near10(touch near5 screen)))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012

(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.) and ((wireless near5 transmit near5 receive near5 unit or (WTRU))))	PGPB, USPT, USOC	ADJ	YES		08-22-2012
user near5 input\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(geographic near5 location\$3 or position\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
gestural near8 input\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)))) and ((geographic near5 location\$3 or position\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3)) and (gestural near8 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3) and gestural near8 input\$6) and (user near5 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
finger near5 drag\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(finger near5 drag\$6) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit	PGPB, USPT, USOC, EPAB, JPAB,	ADJ	YES		08-22-2012

or (WTRU)) and (geographic near5 location\$3 or position\$3)) and gester\$3	DWPI, TDBD				
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3)) and data near5 transfer\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
finger near5 slid\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(finger near5 slid\$6) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3) and data near5 transfer\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012

WEST Search History for Application 13493650

Creation Date: 2012082212:11

Prior Art Searches

Query	DB	Op.	Plur.	Thes.	Date
455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.	PGPB, USPT, USOC	ADJ	YES		08-22-2012
(wireless near5 transmit near5 receive near5 unit or (WTRU))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10 (touch near5screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10(touch near5screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10(touch near5 creen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual near10(touch near5 screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((user near5 input) and (visual near10(touch near5 screen))) and ((user near5 input) and (visual near10(touch near5 screen)))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((user near5 input) and (visual near10(touch near5 screen)) and (user near5 input) and (visual near10(touch near5 screen))) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338,	PGPB, USPT, USOC	ADJ	YES		08-22-2012

350.ccls. or 375/146.ccls.)					
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.) and ((user near5 input) and (visual near10(touch near5 screen))))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.) and ((wireless near5 transmit near5 receive near5 unit or (WTRU))))	PGPB, USPT, USOC	ADJ	YES		08-22-2012
user near5 input\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(geographic near5 location\$3 or position\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
gestural near8 input\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)))) and ((geographic near5 location\$3 or position\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3)) and (gestural near8 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3) and gestural near8 input\$6) and (user near5 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
finger near5 drag\$6	PGPB, USPT, USOC, EPAB, JPAB,	ADJ	YES		08-22-2012

	DWPI, TDBD				
(finger near5 drag\$6) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3)) and gester\$3	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3)) and data near5 transfer\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
finger near5 slid\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(finger near5 slid\$6) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3) and data near5 transfer\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3) and (gestural near8 input\$6) and (candidate\$3) and (user near5 input\$6) and (data near5 transfer\$6) and (target\$6)).clms.	PGPB, USPT, USOC	ADJ	YES		08-22-2012

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1

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2

A Novel Method for Optimal Placement of STATCOM in Distribution Networks Using Sensitivity Analysis by DigSILENT Software

A. Samimi, M. A. Golkar

March 2011 APPEEC '11: Proceedings of the 2011 Asia-Pacific Power and Energy Engineering Conference

Publisher: IEEE Computer Society

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3

Proceedings of the 2012 Workshop on Dynamic Analysis

July 2012 WODA 2012: Proceedings of the 2012 Workshop on Dynamic Analysis

Publisher: ACM

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4

A Novel Method to Improve the Location Accuracy of a Category of Fault Locators

Jianbo Xin, Xiangning Lin

March 2011 APPEEC '11: Proceedings of the 2011 Asia-Pacific Power and Energy Engineering Conference

Publisher: IEEE Computer Society

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

NA

5

ω -Process Languages for Place/Transition Nets

Ludwik Czaia, Manfred Kudlek

October 2001 Fundamenta Informaticae , Volume 47 Issue 3-4

Publisher: IOS Press

Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

The definition of process admitted here follows the line developed for elementary (1-safe) Petri nets and published in [Cza 99], [Cza 2000a], [Cza-Kud 2000]. It pertains not to any particular net, thus allows for collecting processes into arbitrary sets, ...

Keywords: ω -process language, Place/Transition Petri net, analysis, iteration lemmata, process, synthesis

6

On the rate distortion functions of spherically invariant vectors and sequences

Hoi Leung, S. Cambanis

May 1978 IEEE Transactions on Information Theory , Volume 24 Issue 3

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The Shannon lower bound on the rate distortion function of spherically invariant random vectors and sequences is found, and a condition for its tightness is given. Under this condition, simple upper bounds which are valid over a certain range of distortions ...

7 [Proceedings of the 2012 Workshop on Parallel and Distributed Systems: Testing, Analysis, and Debugging](#)
 July 2012 **PADTAD 2012**: Proceedings of the 2012 Workshop on Parallel and Distributed Systems: Testing, Analysis, and Debugging
Publisher: ACM
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8 [A Novel Multilevel Arc Management Strategy Based on SOPC for UMS Power Supply](#)
[Qiang Sun](#), [Shaohai Chen](#), [Guitao Chen](#), [Xiaoping Huang](#)
March 2011 **APPEEC '11**: Proceedings of the 2011 Asia-Pacific Power and Energy Engineering Conference
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9 [Improving Real-Time Performance of a Virtual Machine Monitor Based System](#)
[Masumi Ito](#), [Shuichi Okawa](#)
October 2008 **SEUS '08**: Proceedings of the 6th IFIP WG 10.2 international workshop on Software Technologies for Embedded and Ubiquitous Systems
Publisher: Springer-Verlag
Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

This paper describes our approach to enable Gandalf VMM (Virtual Machine Monitor) to be interruptible. Although Gandalf is shown to be a lightweight VMM, the detailed performance analysis using PMC (Performance Monitoring Counters) showed Gandalf executes ...

10 [Degree of multiprogramming in page-on-demand systems](#)
 [V. L. Wallace](#), [D. L. Mason](#)
June 1969 **Communications of the ACM** , Volume 12 Issue 6
Publisher: ACM [Request Permissions](#)
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A simple stochastic model is described which offers a base for understanding the relationship between the number of programs permitted to share memory (the degree of multiprogramming), drum traffic rates, and central processing unit utilization in page-on-demand, ...

Keywords: Markovian computer models, demand paging, memory management, operating systems, page-on-demand, scheduling strategies, time-sharing multiprogramming

11 [A subjective view of Lisp](#)
 [Christian Queinnee](#)
July 1989 **SIGPLAN Lisp Pointers** , Volume III Issue 1
Publisher: ACM
Full text available:  Pdf (143.89 KB)
Bibliometrics: Downloads (6 Weeks): 39, Downloads (12 Months): 803, Downloads (Overall): 944, Citation Count: 0

12 [An outer bound to the capacity region of broadcast channels \(Corresp.\)](#)
[H. Sato](#)
May 1978 **IEEE Transactions on Information Theory** , Volume 24 Issue 3
Publisher: IEEE Press
Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

An outer bound to the capacity region of broadcast channels for the transmission of separate messages is derived. This bound improves upon Cover's outer bound by taking into consideration the total throughput information rate and the fact that the capacity ...

13 [Mastering HD Video with Your DSLR, 1st edition](#)
[Helmut Kraus, Uwe Steinmueller](#)
March 2010 Mastering HD Video with Your DSLR, 1st edition
Publisher: Rocky Nook
Full text available: [Safari](#); [Online Book](#)
Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

Many of the newest DSLRs include HD video capability, and while the interest from the photography community was initially cool, we have seen a recent shift. Photographers are beginning to explore the video capabilities of their cameras and want to learn ...

14 [MobiCom poster on distributed, adaptive, and fair QoS enabling mechanism in wireless LANs](#)
[Wasan Pattara-Atikom, Sujata Banerjee, Prashant Krishnamurthy](#)
 January 2003 **SIGMOBILE Mobile Computing and Communications Review** , Volume 7 Issue 1
Publisher: ACM
Full text available:  [Pdf](#) (226.92 KB)
Bibliometrics: Downloads (6 Weeks): , Downloads (12 Months): 1, Downloads (Overall): 298, Citation Count: 0

The existing DCF mode of IEEE 802.11 MAC protocol does not suitable for multimedia and QoS-sensitive applications. In this paper, we proposed a novel mechanism based on Deficit Round Robin to calculate various lengths of IFS to support QoS in Wireless ...

15 [Integration, the VLSI Journal: Volume 1 Issue 4](#)
[L. Spaenenburg](#)
March 1984 Integration, the VLSI Journal
Publisher: Elsevier Science Publishers B. V.
Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

16 [A Novel Power Quality Compensator for Negative-Sequence and Harmonic Currents in High-Speed Electric Railway](#)
[Fang Lu, Luo An, Xianrong Xu, Houhui Fang](#)
March 2011 **APPEEC '11: Proceedings of the 2011 Asia-Pacific Power and Energy Engineering Conference**
Publisher: IEEE Computer Society
Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 0

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17 [Equational type logic](#)
[V. Manca, A. Salibra, G. Scollo](#)
December 1990 Conference proceedings on Algebraic methodology and software technology
Publisher: Elsevier Science Publishers Ltd.
Bibliometrics: Downloads (6 Weeks): n/a, Downloads (12 Months): n/a, Downloads (Overall): n/a, Citation Count: 3

Also published in:
December 1990 **Theoretical Computer Science** Volume 77 Issue 1-2

18 [Improvement of Small Signal Stability Early Warning Based on OAPID and CBR Theory](#)
[Yuxi Gao, Tao Lin, Fan Zhang, Wei Hu, Jisheng Li, Yong Huang, Xialing Xu](#)
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Publisher: IEEE Computer Society
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19 [A Two-Layered Management Architecture for Building Adaptive Real-Time Systems](#)

[Florian Kluge](#), [Sascha Uhrig](#), [Jörg Mische](#), [Theo Ungerer](#)

October 2008 **SEUS '08**: Proceedings of the 6th IFIP WG 10.2 international workshop on Software Technologies for Embedded and Ubiquitous Systems

Publisher: Springer-Verlag

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The concepts of Autonomic and Organic Computing (AC/OC) promise to make modern computer systems more secure and easier to manage. In this paper, we extend the observer/controller architecture typically used in AC/OC systems towards a new target area ...

20 [Three-dimensional computer display](#)

[D. Gohit](#), [R. J. Spinnrad](#)



June 1969

Communications of the ACM, Volume 12 Issue 6

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A stereographic display terminal has been produced using the raster display (BRAD) recently developed at Brookhaven. The system uses a rotating refresh memory to feed standard television monitors. To produce a stereographic display the computer calculates ...

Keywords: color separation, computer graphics, interactive stereographic terminal, swept raster display, three-dimensional display, video map

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CONFIRMATION NO. 6422

SERIAL NUMBER 13/493,650	FILING or 371(c) DATE 06/11/2012 RULE	CLASS 455	GROUP ART UNIT 2617	ATTORNEY DOCKET NO. IPH-2-2235US03		
APPLICANTS Alan G. Carlton, Mineola, NY; Alexander Reznik, Titusville, NJ; ** CONTINUING DATA ***** This application is a CON of 12/644,948 12/22/2009 PAT 8,200,265 * which claims benefit of 61/140,126 12/23/2008 (*)Data provided by applicant is not consistent with PTO records. ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 06/20/2012						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and /DIANE D MIZRAHI/ Acknowledged Examiner's Signature		☐ Met after Allowance Initials	STATE OR COUNTRY NY	SHEETS DRAWINGS 9	TOTAL CLAIMS 20	INDEPENDENT CLAIMS 3
ADDRESS VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103 UNITED STATES						
TITLE DATA TRANSFER BETWEEN WIRELESS DEVICES						
FILING FEE RECEIVED 1250	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:		☐ All Fees ☐ 1.16 Fees (Filing) ☐ 1.17 Fees (Processing Ext. of time) ☐ 1.18 Fees (Issue) ☐ Other _____ ☐ Credit			

Search Notes 	Application/Control No. 13493650	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2617

SEARCHED			
Class	Subclass	Date	Examiner
455	73,75,436,509,522	8-10-12	dm
370	311,328, 330,331,335,338,350	8-10-12	dm
375	146	8-10-12	dm

SEARCH NOTES		
Search Notes	Date	Examiner
Searched the Manual of Patent Classification	8-10-12	dm
Searched for double patenting using inventors names listed in the instant application.	8-10-12	dm
Examined claims and the disclosure for possible 35 USC 101 and 112 issues.	8-10-12	dm
Databases searched WEST: US Patents; US Publications; European and Japanese Patent Office (Abstracts); Derwent; IBM Technical Disclosures; OCR.	8-10-12	dm
Performed NPL ACM Search (see attached search strategy report attached) Performed NPL Google Search (see attached search strategy report attached).Performed NPL IEEE Search (see attached search strategy report attached).Performed Google Patents Search (see attached search strategy report attached).	8-10-12	dm
Performed text search using US Publications and US Patents. (See attached search history strategy report).	8-10-12	dm

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Class	Subclass	Date	Examiner

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APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
13/493,650	06/11/2012	Alan G. Carlton	IPH-2-2235US03

CONFIRMATION NO. 6422

PUBLICATION NOTICE



OC000000056916950

24374
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

Title:DATA TRANSFER BETWEEN WIRELESS DEVICES

Publication No.US-2012-0252512-A1

Publication Date:10/04/2012

NOTICE OF PUBLICATION OF APPLICATION

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

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

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PATENT

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In the **PATENT APPLICATION** of:

Alan G. Carlton, et al.

Application No.: 13/493,650

Confirmation No.: 6422

Filed: June 11, 2012

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Group: 2617

Examiner: Mizrahi, Diane D.

Our File: IPH-2-2235US03

Date: February 4, 2012

REPLY PURSUANT TO 37 C.F.R. §1.111

Mail Stop Amendment (Via EFS)
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply and Terminal Disclaimer are being filed in response to the Office Action dated September 4, 2012. A Petition for Extension of Time is also being filed.

Please amend the application without prejudice or disclaimer as follows:

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A method for use in a wireless transmit/receive unit (WTRU), the method comprising:
 - detecting, at the WTRU, information relating to at least one candidate WTRU in a geographic area associated with the WTRU;
 - receiving, at the WTRU, user input that includes a gestural input and a selection of data for transfer between the WTRU and a target WTRU;
 - processing, at the WTRU, the user input and the information;
 - identifying, at the WTRU, the target WTRU from the at least one candidate WTRU based at least in part on the user input; and
 - transmitting the selected data to the target WTRU.
2. (Original) The method of claim 1, wherein the gestural input identifies the target WTRU.
3. (Original) The method of claim 1, wherein the user input is received via a touchscreen display.
4. (Original) The method of claim 1, further comprising receiving data from the target WTRU.

5. (Original) The method of claim 1, wherein the detecting information further includes detecting a location of the at least one candidate WTRU.

6. (Original) The method of claim 5, wherein the gestural input is directed towards the target WTRU.

7. (Original) A wireless transmit/receive unit (WTRU) comprising:
a processor configured to detect information relating to at least one candidate WTRU in a geographic area associated with the WTRU;
a display configured to receive user input that includes a gestural input and a selection of data for transfer between the WTRU and a target WTRU;
the processor configured to:
 process the user input and the information; and
 identify the target WTRU from the at least one candidate WTRU based at least in part on the user input; and
a transmitter configured to transmit the selected data to the target WTRU.

8. (Original) The WTRU of claim 7, wherein the gestural input identifies the target WTRU.

9. (Original) The WTRU of claim 7, wherein the display receives user input via a touchscreen display.

10. (Original) The WTRU of claim 7, further comprising a receiver configured to receive data from the target WTRU.

11. (Original) The WTRU of claim 7, wherein the processor is further configured to detect information by detecting a location of the at least one candidate WTRU.

12. (Original) The WTRU of claim 11, wherein the gestural input is directed towards the target WTRU.

13. (Original) A method for use in a wireless transmit/receive unit (WTRU), the method comprising:

determining, at the WTRU, location information relating to at least one candidate WTRU;

receiving input, at the WTRU, that includes a selection of a target WTRU of the at least one candidate WTRU and a selected action;

associating, at the WTRU, the target WTRU with one of the at least one candidate WTRUs based at least in part on the input and the location information;

generating, at the WTRU, data to be transmitted to the target WTRU based at least in part on the input; and

transmitting the data to the target WTRU.

14. (Original) The method of claim 13, wherein the selected action indicates a selected file to be transferred to the target WTRU and the data includes the selected file.

15. (Original) The method of claim 13, wherein the input that includes a selection of a target WTRU is a gestural user input.

16. (Original) The method of claim 15, wherein the gestural user input is directed towards a physical location of the target WTRU.

17. (Original) The method of claim 15, wherein the gestural user input is directed towards a graphical representation of the target WTRU.

18. (Original) The method of claim 13, wherein the determining location information includes identifying the at least one candidate WTRU based on physical location.

19. (Original) The method of claim 13, wherein the determining location information includes identifying the at least one candidate WTRU based on an ability to communicate with a same network as the WTRU.

20. (Original) The method of claim 13, further comprising receiving data from the target WTRU.

REMARKS/ARGUMENTS

Claims 1-20 are currently pending in this application.

Allowable Subject Matter

Applicants thank the Examiner for indicating that claims 1-20 would be allowed if rewritten or amended to overcome the double-patenting rejection.

Double Patenting Rejection

Claims 1-20 are rejected under the judicially created doctrine of non-statutory obviousness-type double patenting as being unpatentable over claims 1-23 of U.S. Patent No. 8,200,265. A Terminal Disclaimer is submitted herewith. The withdrawal of the obviousness-type double patenting rejection is respectfully requested.

Applicant: Alan G. Carlton, et al.
Application No.: 13/493,650

Conclusion

If the Examiner believes that any additional minor formal matters need to be addressed in order to place this application in condition for allowance, or that a telephonic interview will help to materially advance the prosecution of this application, the Examiner is invited to contact the undersigned by telephone at the Examiner's convenience.

In view of the foregoing remarks, Applicants respectfully submit that the present application is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

Alan G. Carlton, et al.

By /John Porrazza/
John Porrazza
Registration No. 68,126

Volpe and Koenig, P.C.
United Plaza
30 South 17th Street
Philadelphia, PA 19103-4009
Telephone: (215) 568-6400
Facsimile: (215) 568-6499

JP/jmn
Enclosure

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

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) IPH-2-2235US03
Application Number 13/493,650	Filed June 11, 2012	
For DATA TRANSFER BETWEEN WIRELESS DEVICES		
Art Unit 2617	Examiner Mizrahi, Diane D.	

This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application.

The requested extension and fee are as follows (check time period desired and enter the appropriate fee below):

	Fee	Small Entity Fee	
☐ One month (37 CFR 1.17(a)(1))	\$150	\$75	\$ _____
☒ Two months (37 CFR 1.17(a)(2))	\$570	\$285	\$ 570
☐ Three months (37 CFR 1.17(a)(3))	\$1,290	\$645	\$ _____
☐ Four months (37 CFR 1.17(a)(4))	\$2,010	\$1,005	\$ _____
☐ Five months (37 CFR 1.17(a)(5))	\$2,730	\$1,365	\$ _____

☐ Applicant claims small entity status. See 37 CFR 1.27.

☐ A check in the amount of the fee is enclosed.

☐ Payment by credit card. Form PTO-2038 is attached.

☐ The Director has already been authorized to charge fees in this application to a Deposit Account.

☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number 09-0435.

☒ Payment made via EFS-Web.

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

I am the

- ☐ applicant.
- ☒ attorney or agent of record. Registration number 68,126.
- ☐ attorney or agent acting under 37 CFR 1.34. Registration number _____.

/John Porrazza/February 4, 2013

Signature

Date

John Porrazza215-568-6400

Typed or printed name

Telephone Number

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.☒ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

**TERMINAL DISCLAIMER TO OBIATE A DOUBLE PATENTING
REJECTION OVER A "PRIOR" PATENT**

Docket Number (Optional)
IPH-2-2235US03

In re Application of: Alan G. Carlton, et al.

Application No.: 13/493,650

Filed: June 11, 2012

For: DATA TRANSFER BETWEEN WIRELESS DEVICES

The owner*, InterDigital Technology Corporation, of 100 percent interest in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term **prior patent** No. 8,200,265 as the term of said prior patent is defined in 35 U.S.C. 154 and 173, and as the term of said **prior patent** is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the **prior patent** are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns.

In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term as defined in 35 U.S.C. 154 and 173 of the **prior patent**, "as the term of said **prior patent** is presently shortened by any terminal disclaimer," in the event that said **prior patent** later:

expires for failure to pay a maintenance fee;
is held unenforceable;
is found invalid by a court of competent jurisdiction;
is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321;
has all claims canceled by a reexamination certificate;
is reissued; or
is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.

Check either box 1 or 2 below, if appropriate.

1. ☐ For submissions on behalf of a business/organization (e.g., corporation, partnership, university, government agency, etc.), the undersigned is empowered to act on behalf of the business/organization.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

2. ☒ The undersigned is an attorney or agent of record. Reg. No. 68,126

/John Porrazza/
Signature

February 4, 2013
Date

John Porrazza
Typed or printed name

215-568-6400
Telephone Number

- ☒ Terminal disclaimer fee under 37 CFR 1.20(d) included.

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

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

This collection of information is required by 37 CFR 1.321. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Electronic Patent Application Fee Transmittal

Application Number:	13493650			
Filing Date:	11-Jun-2012			
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES			
First Named Inventor/Applicant Name:	Alan G. Carlton			
Filer:	John Porrazza/Janice Nightlinger			
Attorney Docket Number:	IPH-2-2235US03			
Filed as Large Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Extension - 2 months with \$0 paid	1252	1	570	570

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Miscellaneous:				
Statutory or terminal disclaimer	1814	1	160	160
Total in USD (\$)				730

Electronic Acknowledgement Receipt

EFS ID:	14868978
Application Number:	13493650
International Application Number:	
Confirmation Number:	6422
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	John Porrazza/Janice Nightlinger
Filer Authorized By:	John Porrazza
Attorney Docket Number:	IPH-2-2235US03
Receipt Date:	04-FEB-2013
Filing Date:	11-JUN-2012
Time Stamp:	16:23:11
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$730
RAM confirmation Number	3731
Deposit Account	090435
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.17 (Patent application and reexamination processing fees)

Charge any Additional Fees required under 37 C.F.R. Section 1.21 (Miscellaneous fees and charges)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		20130204_IPH_2_2235US03_Reply.pdf	102801 f58f2e30f4f0d421476d59a3ae1c4a42dcf4b ccb	yes	7
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	5	
	Applicant Arguments/Remarks Made in an Amendment		6	7	
Warnings:					
Information:					
2	Extension of Time	20130204_IPH_2_2253US03_PetitionForExtensionOfTime.pdf	132019 10498303edc9c982a8ea89fda2c3263c884c 3918	no	1
Warnings:					
Information:					
3	Terminal Disclaimer Filed	20130204_IPH_2_2235US03_Terminal_Disclaimer.pdf	81433 5189794ec63d01d8cb2298ee7cac5755b73 a8d59	no	1
Warnings:					
Information:					
4	Fee Worksheet (SB06)	fee-info.pdf	32192 5ebf87bd01269a53bbfc5191d0d70846f26 6ccca	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			348445		

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

New Applications Under 35 U.S.C. 111

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

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

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

New International Application Filed with the USPTO as a Receiving Office

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

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

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875					Application or Docket Number 13/493,650		Filing Date 06/11/2012		☐ To be Mailed	
APPLICATION AS FILED – PART I										
(Column 1)			(Column 2)			SMALL ENTITY ☐ OR		OTHER THAN SMALL ENTITY		
FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)	OR	RATE (\$)	FEE (\$)			
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A				
☐ SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A				
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A				
TOTAL CLAIMS (37 CFR 1.16(j))	minus 20 =	*	X \$	=		X \$	=			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$	=		X \$	=			
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).									
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))										
* If the difference in column 1 is less than zero, enter "0" in column 2.					TOTAL		TOTAL			
APPLICATION AS AMENDED – PART II										
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT	02/04/2013	CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
Total (37 CFR 1.16(i))	* 20	Minus	** 20	= 0	X \$	=		X \$62=	0	
Independent (37 CFR 1.16(h))	* 3	Minus	***3	= 0	X \$	=		X \$250=	0	
☐ Application Size Fee (37 CFR 1.16(s))										
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
					TOTAL ADD'L FEE			TOTAL ADD'L FEE	0	
(Column 1)			(Column 2)			SMALL ENTITY OR		OTHER THAN SMALL ENTITY		
AMENDMENT		CLAIMS REMAINING AFTER AMENDMENT	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)	OR	RATE (\$)	ADDITIONAL FEE (\$)	
Total (37 CFR 1.16(i))	*	Minus	**	=	X \$	=		X \$	=	
Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$	=		X \$	=	
☐ Application Size Fee (37 CFR 1.16(s))										
☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))										
					TOTAL ADD'L FEE			TOTAL ADD'L FEE		
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.										

Legal Instrument Examiner:
/TONI HAKIM/

This collection of information is required by 37 CFR 1.16. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Application Number 	Application/Control No. 13/493,650	Applicant(s)/Patent under Reexamination CARLTON ET AL.	
Document Code - DISQ		Internal Document – DO NOT MAIL	

TERMINAL DISCLAIMER	☒ APPROVED	☐ DISAPPROVED
Date Filed : 2/4/13	This patent is subject to a Terminal Disclaimer	

Approved/Disapproved by:

ANDRE ROBINSON



UNITED STATES PATENT AND TRADEMARK OFFICE

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

NOTICE OF ALLOWANCE AND FEE(S) DUE

24374 7590 03/04/2013
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

MIZRAHI, DIANE D

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 03/04/2013

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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13/493,650

06/11/2012

Alan G. Carlton

IPH-2-2235US03

6422

TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1770	\$300	\$0	\$2070	06/04/2013

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

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

PART B - FEE(S) TRANSMITTAL

**Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885**

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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

24374 7590 03/04/2013
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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

13/493,650 06/11/2012 Alan G. Carlton IPH-2-2235US03 6422

TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
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nonprovisional NO \$1770 \$300 \$0 \$2070 06/04/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
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MIZRAHI, DIANE D 2645 455-073000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, 1 _____
(2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed. 2 _____
3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE (B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☐ Issue Fee
☐ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s); (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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

Authorized Signature _____ Date _____

Typed or printed name _____ Registration No. _____

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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



UNITED STATES PATENT AND TRADEMARK OFFICE

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

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/493,650	06/11/2012	Alan G. Carlton	IPH-2-2235US03	6422

24374 7590 03/04/2013
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

EXAMINER

MIZRAHI, DIANE D

ART UNIT PAPER NUMBER

2645

DATE MAILED: 03/04/2013

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No.	Applicant(s)	
	13/493,650	CARLTON ET AL.	
	Examiner	Art Unit	
	DIANE MIZRAHI	2645	

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2-4-13.
2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on ____; the restriction requirement and election have been incorporated into this action.
3. ☒ The allowed claim(s) is/are 1-20. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: ____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| <ol style="list-style-type: none"> 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ 3. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material 4. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____ | <ol style="list-style-type: none"> 5. ☐ Examiner's Amendment/Comment 6. ☐ Examiner's Statement of Reasons for Allowance 7. ☐ Other _____ |
|---|--|

/Diane Mizrahi/
Primary Examiner, Art Unit 2645

Issue Classification 	Application/Control No. 13493650	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2645

CPC		
Symbol	Type	Version

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

US ORIGINAL CLASSIFICATION						INTERNATIONAL CLASSIFICATION															
CLASS			SUBCLASS			CLAIMED					NON-CLAIMED										
455			73			H	0	4	W	88 / 02 (2009.01.01)					H	0	4	W	88 / 02 (2009.01.01)		
CROSS REFERENCE(S)																					
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)																				
455	75																				

NONE		Total Claims Allowed:	
		20	
(Assistant Examiner)	(Date)		
/DIANE MIZRAHI/ Primary Examiner.Art Unit 2645	2-20-13	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	4

Search Notes 	Application/Control No. 13493650	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2617

CPC- SEARCHED		
Symbol	Date	Examiner

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner
455	73,75,436,509,522	8-10-12	dm
370	311,328, 330,331,335,338,350	8-10-12	dm
375	146	8-10-12	dm
Updated search		2-20-13	dm

SEARCH NOTES		
Search Notes	Date	Examiner
Searched the Manual of Patent Classification	8-10-12	dm
Searched for double patenting using inventors names listed in the instant application.	8-10-12	dm
Examined claims and the disclosure for possible 35 USC 101 and 112 issues.	8-10-12	dm
Databases searched WEST: US Patents; US Publications; European and Japanese Patent Office (Abstracts); Derwent; IBM Technical Disclosures; OCR.	8-10-12	dm
Performed NPL ACM Search (see attached search strategy report attached) Performed NPL Google Search (see attached search strategy report attached).Performed NPL IEEE Search (see attached search strategy report attached).Performed Google Patents Search (see attached search strategy report attached).	8-10-12	dm
Performed text search using US Publications and US Patents. (See attached search history strategy report).	8-10-12	dm
Updated Search	2-20-13	dm

	/DIANE MIZRAHI/ Primary Examiner.Art Unit 2617
--	---

SEARCH NOTES

Search Notes	Date	Examiner
Performed text search using US Publications and US Patents. (See attached search history strategy report).	2-20-13	dm

INTERFERENCE SEARCH

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
455	73,75	2-20-13	dm
Performed text search using US Publications and US Patents. (See attached search history strategy report).		2-20-13	dm

/DIANE MIZRAHI/
Primary Examiner.Art Unit 2617



UNITED STATES PATENT AND TRADEMARK OFFICE

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

BIB DATA SHEET

CONFIRMATION NO. 6422

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
13/493,650	06/11/2012	455	2645	IPH-2-2235US03		
RULE						
APPLICANTS Alan G. Carlton, Mineola, NY; Alexander Reznik, Titusville, NJ; ** CONTINUING DATA ***** This application is a CON of 12/644,948 12/22/2009 PAT 8,200,265 * which claims benefit of 61/140,126 12/23/2008 (*)Data provided by applicant is not consistent with PTO records. ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 06/20/2012						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and /DIANE D MIZRAHI/ Acknowledged Examiner's Signature		☒ Met after Allowance /dm/ Initials	STATE OR COUNTRY	SHEETS DRAWINGS	TOTAL CLAIMS	INDEPENDENT CLAIMS
			NY	9	20	3
ADDRESS VOLPE AND KOENIG, P.C. DEPT. ICC UNITED PLAZA 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103 UNITED STATES						
TITLE DATA TRANSFER BETWEEN WIRELESS DEVICES						
FILING FEE RECEIVED 1250	FEES: Authority has been given in Paper No. _____ to charge/credit DEPOSIT ACCOUNT No. _____ for following:			☐ All Fees		
				☐ 1.16 Fees (Filing)		
				☐ 1.17 Fees (Processing Ext. of time)		
				☐ 1.18 Fees (Issue)		
				☐ Other _____		
				☐ Credit		

WEST Search History for Application 13493650

Creation Date: 2013022511:17

Prior Art Searches

Query	DB	Op.	Plur.	Thes.	Date
455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.	PGPB, USPT, USOC	ADJ	YES		08-22-2012
(wireless near5 transmit near5 receive near5 unit or (WTRU))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual nearlO (touch near5screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual nearl0(touch near5screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual nearl0(touch near5 creen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(user near5 input) and (visual nearl0(touch near5 screen))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((user near5 input) and (visual nearl0(touch near5 screen))) and ((user near5 input) and (visual nearl0(touch near5 screen)))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((user near5 input) and (visual nearl0(touch near5 screen)) and (user near5 input) and (visual nearl0(touch near5 screen))) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338,	PGPB, USPT, USOC	ADJ	YES		08-22-2012

350.ccls. or 375/146.ccls.)					
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.) and ((user near5 input) and (visual near10(touch near5 screen))))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls.) and ((wireless near5 transmit near5 receive near5 unit or (WTRU))))	PGPB, USPT, USOC	ADJ	YES		08-22-2012
user near5 input\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(geographic near5 location\$3 or position\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
gestural near8 input\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)))) and ((geographic near5 location\$3 or position\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3)) and (gestural near8 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU))) and (geographic near5 location\$3 or position\$3) and gestural near8 input\$6) and (user near5 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
finger near5 drag\$6	PGPB, USPT, USOC, EPAB, JPAB,	ADJ	YES		08-22-2012

	DWPI, TDBD				
(finger near5 drag\$6) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3)) and gester\$3	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3)) and data near5 transfer\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
finger near5 slid\$6	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
(finger near5 slid\$6) and (455/73, 75, 436, 509, 522.ccls. or 370/311, 328, 330, 331, 335, 338, 350.ccls. or 375/146.ccls. and (wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3) and data near5 transfer\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD	ADJ	YES		08-22-2012
((wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3) and (gestural near8 input\$6) and (candidate\$3) and (user near5 input\$6) and (data near5 transfer\$6) and (target\$6)).clms.	PGPB, USPT, USOC	ADJ	YES		08-22-2012
((wireless near5 transmit near5 receive near5 unit or (WTRU)) and (geographic near5 location\$3 or position\$3) and (gestural near8 input\$6) and (candidate\$3) and (user near5 input\$6) and (data near5 transfer\$6) and (target\$6)).clms.	PGPB, USPT, USOC	ADJ	YES		02-25-2013

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VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103



**Courtesy Reminder for
Application Serial No: 13/493,650**

Attorney Docket No: IPH-2-2235US03

Customer Number: 24374

Date of Electronic Notification: 03/04/2013

This is a courtesy reminder that new correspondence is available for this application. If you have not done so already, please review the correspondence. The official date of notification of the outgoing correspondence will be indicated on the form PTOL-90 accompanying the correspondence.

An email notification regarding the correspondence was sent to the following email address(es) associated with your customer number:

eoffice@volpe-koenig.com

To view your correspondence online or update your email addresses, please visit us anytime at <https://sportal.uspto.gov/secure/myportal/privatepair>. If you have any questions, please email the Electronic Business Center (EBC) at EBC@uspto.gov or call 1-866-217-9197.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail** Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

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

24374 7590 03/04/2013
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (571) 273-2885, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
13/493,650	06/11/2012	Alan G. Carlton	IPH-2-2235US03	6422

TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1770	\$300	\$0	\$2070	06/04/2013

EXAMINER	ART UNIT	CLASS-SUBCLASS
MIZRAHI, DIANE D	2645	455-073000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
 (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 Volpe and Koenig, P.C.

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

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

InterDigital Patent Holdings, Inc.

Wilmington, DE

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. The following fee(s) are submitted:

- ☒ Issue Fee
☒ Publication Fee (No small entity discount permitted)
☐ Advance Order - # of Copies _____

4b. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)

- ☐ A check is enclosed.
☐ Payment by credit card. Form PTO-2038 is attached.
☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number 09-0435 (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is no longer claiming SMALL ENTITY status. See 37 CFR 1.27(g)(2).

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

Authorized Signature /John Porrazza/

Date June 4, 2013

Typed or printed name John Porrazza

Registration No. 68,126

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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

Electronic Patent Application Fee Transmittal				
Application Number:		13493650		
Filing Date:		11-Jun-2012		
Title of Invention:		DATA TRANSFER BETWEEN WIRELESS DEVICES		
First Named Inventor/Applicant Name:		Alan G. Carlton		
Filer:		John Porrazza/Janice Nightlinger		
Attorney Docket Number:		IPH-2-2235US03		
Filed as Large Entity				
Utility under 35 USC 111(a) Filing Fees				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Utility Appl Issue Fee	1501	1	1780	1780
Publ. Fee- Early, Voluntary, or Normal	1504	1	300	300

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				2080

Electronic Acknowledgement Receipt

EFS ID:	15946216
Application Number:	13493650
International Application Number:	
Confirmation Number:	6422
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	John Porrazza/Janice Nightlinger
Filer Authorized By:	John Porrazza
Attorney Docket Number:	IPH-2-2235US03
Receipt Date:	04-JUN-2013
Filing Date:	11-JUN-2012
Time Stamp:	16:08:30
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 2080
RAM confirmation Number	3210
Deposit Account	090435
Authorized User	

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

Charge any Additional Fees required under 37 C.F.R. Section 1.20 (Post Issuance fees)

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	20130604_IPH_2_2235US03_Is sue_Fee_Transmittal_EFS.PDF	1766654 87d9de18b0ca242949cd1826023bb6ceb 649016	no	1
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	32067 372156563a26d1c4db2e18b8cd0130fc26f a4da	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			1798721		
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ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

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