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Application Number	not yet known
Filing Date	April 11, 2014
First Named Inventor	Alan G. Carlton
Title	DATA TRANSFER BETWEEN WIRELESS DEVICES
Art Unit	not yet known
Examiner Name	not yet known
Attorney Docket Number	IPH-2-2235US05

SIGNATURE of Applicant or Patent Practitioner

Signature	/Harry Vartanian/	Date (Optional)	April 11, 2014
Name	Harry Vartanian	Registration Number	56,787
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)	InterDigital Patent Holdings, Inc.		

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I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

InterDigital Patent Holdings, Inc.



Inventor or Joint Inventor (title not required below)



Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)



Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)



Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

SIGNATURE of Applicant for Patent

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

Signature

Date (Optional)

13 March 2014

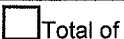
Name

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Patent Executive; InterDigital Patent Holdings, Inc.

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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:	Harry Vartanian/Elizabeth McGinty			
Attorney Docket Number:	IPH-2-2235US05			
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	280	280
Utility Search Fee	1111	1	600	600
Utility Examination Fee	1311	1	720	720
Pages:				
Claims:				
Claims in Excess of 20	1202	24	80	1920
Miscellaneous-Filing:				
Petition:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				3520

Electronic Acknowledgement Receipt

EFS ID:	18743257
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Elizabeth McGinty
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	11-APR-2014
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Payment was successfully received in RAM	\$ 3520
RAM confirmation Number	4747
Deposit Account	090435
Authorized User	

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File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		IPH-2-2235US05_application. PDF	108399 ef002881072349c14f3d0bd5db31f6789b9a62e	yes	29
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	19	
	Claims		20	28	
	Abstract		29	29	
Warnings:					
Information:					
2	Drawings-only black and white line drawings	IPH_2_2235US05_Drawings. PDF	3784424 f16a2141fead459b9e6863bcde3858fdad8416e2	no	9
Warnings:					
Information:					
3	Application Data Sheet	IPH-2-2235US05_ADS.PDF	1561773 4c380e51e4b824ca1cb2350f2fc9641363a971a9	no	7
Warnings:					
Information:					
4	Oath or Declaration filed	IPH-2-2235US05- ParentExecutedDeclaration. PDF	259449 3b4509a87361a9984e66e62b42b3d834ef441f46	no	2
Warnings:					
Information:					
5	Power of Attorney	IPH-2-2235US05_POA.PDF	297115 ac65add8e828a69e52557806c1569a887ede84c7	no	2
Warnings:					
Information:					
6	Fee Worksheet (SB06)	fee-info.pdf	36743 18e0f76c7441c8cffaab9c19c581f3c5669c65b1	no	2
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Total Files Size (in bytes):	6047903
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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. 13/930,743, filed June 28, 2013, which is a continuation of U.S. Patent Application Serial No. 13/493,650, filed June 11, 2012, which issued as U.S. Patent No. 8,478,207 on July 2, 2013, which is a continuation of U.S. Patent Application Serial No. 12/644,948, filed December 22, 2009, which issued as U.S. Patent No. 8,200,265 on June 12, 2012, 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 DRAWING(S)

[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 OF THE PREFERRED EMBODIMENT(S)

[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 101c,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 101c 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 101c operating within the local areas 211, 213.

[0021] WTRUs 101c operating within the local areas 211, 213 of WTRU 101 are referred to as candidate WTRUs 101c 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 101c as indicated by the WTRUs denoted with a “c”. Candidate WTRUs 101c may be WTRUs similarly equipped like WTRU 101. From the candidate WTRUs 101c, at least one target WTRU 101c,t will be selected. Figure 2 shows only one target WTRU 101c,t, but there may be more than one target WTRU 101c,t selected from the candidate WTRUs 101c. 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 101c.

[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 101c,t), the user may provide a gesture via the UI 109 that is representative of the distance and direction of the selected target WTRU 101c,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 101c,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 101c,t is determined and a data communication from the WTRU 101 may be transmitted to the identified target WTRU 101c.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 101c,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 101c 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 101c 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 101c, 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 101c 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 101c or set of candidate WTRUs 101c in a local proximity. When a set of

candidate WTRUs 101c 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 101c. In addition to the SDP information directly discoverable by the WTRU 101, each candidate WTRU 101c may exchange additional locally gathered information (e.g. GPS, or other location information gathered via a localization scheme) with other candidate WTRUs 101c. On a condition that a sufficient number of candidate WTRUs 101c are identified by the SDP, triangulation mechanisms may be implemented to establish a view of relative locations between a set of identified candidate WTRUs 101c. The entire environment discovery procedure may be implemented continuously and in real-time while the TapAPP is running on all the candidate WTRUs 101c 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 101c,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 101c,t user may touch and hold the touchscreen of the target WTRU 101c,t for all or part of the transfer process. The user input of the target WTRU 101c,t may result in the target WTRU 101c,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 101c,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 101c,t from the identified group of candidate WTRUs 101c to establish a one-to-one communication between the transmitting WTRU 101 and the target WTRU 101c,t or a selected one-to-many communication to a plurality of target WTRUs 101c,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 101c,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 101c,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 101c,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 101c,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 101c,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 101c,t for a data communication with multiple WTRUs. Environment information 301 is solicited and information related to at least one candidate WTRU 101c 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 101c. The user input and the environment information relating to the candidate WTRUs 101c is processed simultaneously 405. For example, in a target discrimination algorithm 313 as described in Figure 3. At least one target WTRU 101c,t is identified from the set of candidate WTRUs 407. The target WTRU 101c,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 101c,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 101c,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 101c,t may receive the data, because only the target WTRU 101c,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 101c,t may be identified from an available listing of candidate WTRUs 101c 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 101c,t as the recipient(s) of the data communication. Transmission instructions 517 are generated to facilitate the data transfer to the target WTRUs 101c,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 101c,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 101c,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 WTRU 103 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 performed by a wireless transmit/receive unit (WTRU), the method comprising:

processing, by the WTRU from a multi-touch display, a first input to select media in a mobile application;

detecting, by the WTRU over Bluetooth, a plurality of WTRUs;

processing, by the WTRU, a second input from the multi-touch display to select a target WTRU from the plurality of WTRUs;

sending, by the WTRU to the selected target WTRU, a message to transfer the selected media;

receiving, by the WTRU, an acceptance to transfer the selected media; and

transferring, by the WTRU to the selected target WTRU over WiFi, the selected media.

2. The method of claim 1 wherein the first input or the second input is a multi-touch input.

3. The method of claim 1 further comprising:

displaying, by the WTRU, a progress of the transfer to the selected target WTRU.

4. The method of claim 1 wherein the media is any one of a photograph, video, or a document.

5. The method of claim 1 wherein the first input or the second input is a tap.

6. The method of claim 1 wherein the message to transfer is a request.

7. The method of claim 1 wherein the transferring by the WTRU over WiFi is over a WiFi link.

8. The method of claim 1 wherein the transferring by the WTRU or Bluetooth is provided by a communication peripheral.

9. The method of claim 1 wherein Bluetooth discovery is used to detect one of the plurality of WTRUs in proximity to the WTRU.

10. The method of claim 9 wherein the Bluetooth discovery is provided using a service discovery protocol.

11. The method of claim 1 further comprising:

processing, by the WTRU, release of a touch contact to initiate transfer of the

selected media to the selected target WTRU.

12. The method of claim 1 further comprising:

determining, by the WTRU, that the selected target WTRU is compatible to receive the selected media.

13. The method of claim 1 wherein a real time map is maintained of the plurality of WTRUs in proximity to the WTRU.

14. The method of claim 1 further comprising:

determining, by the WTRU, environment information that lists the plurality of WTRUs in proximity to the WTRU.

15. The method of claim 1 wherein the WTRU processes the first input or the second input based on information from the multi-touch display.

16. The method of claim 1 further comprising:

initiating, by the WTRU, transfer of media based on a gesture on a visual representation, displayed on the multi-touch display, of the media; and

wherein the gesture is in a direction of an intended receiving WTRU.

17. The method of claim 1 wherein the first input or the second input is a

gesture input.

18. The method of claim 1 wherein the first input or the second input is a multi-finger input.

19. The method of claim 1 wherein the first input or the second input is a multi-finger gesture.

20. The method of claim 1 further comprising:
transferring, by the WTRU to the selected target WTRU, additional display information; and
wherein the additional display information is displayed before the selected media is substantially entirely transferred.

21. The method of claim 1 further comprising:
receiving, by the WTRU from another WTRU, a request to transfer other media;
receiving, in response to accepting the request by the WTRU, the other media; and
displaying, by the WTRU, the other media substantially entirely to a user of the WTRU.

22. The method of claim 1 wherein the first input or the second input is a gesture input.

23. A wireless transmit/receive unit (WTRU) comprising:

circuitry configured to process, from a multi-touch display, a first input to select media in a mobile application;

circuitry configured to detect, by the WTRU over Bluetooth, a plurality of WTRUs;

the circuitry further configured to process a second input from the multi-touch display to select a target WTRU from the plurality of WTRUs;

circuitry configured to send, by the WTRU to the selected target WTRU, a message to transfer the selected media;

circuitry configured to receive, by the WTRU, an acceptance to transfer the selected media; and

circuitry configured to transfer, by the WTRU to the selected target WTRU over WiFi, the selected media.

24. The WTRU of claim 23 wherein the first input or the second input is a multi-touch input.

25. The WTRU of claim 23 further comprising:

circuitry configured to display a progress of the transfer to the selected target

WTRU.

26. The WTRU of claim 23 wherein the media is any one of a photograph, video, or a document.

27. The WTRU of claim 23 wherein the first input or the second input is a tap.

28. The WTRU of claim 23 wherein the message to transfer is a request.

29. The WTRU of claim 23 wherein the circuitry configured to transfer over WiFi is over a WiFi link.

30. The WTRU of claim 23 wherein the circuitry configured to transfer or Bluetooth is provided by a communication peripheral.

31. The WTRU of claim 23 wherein Bluetooth discovery is used to detect one of the plurality of WTRUs in proximity to the WTRU.

32. The WTRU of claim 31 wherein the Bluetooth discovery is provided using a service discovery protocol.

33. The WTRU of claim 23 further comprising:

the circuitry further configured to process release of a touch contact to initiate transfer of the selected media to the selected target WTRU.

34. The WTRU of claim 23 further comprising:

circuitry configured to determine that the selected target WTRU is compatible to receive the selected media.

35. The WTRU of claim 23 wherein a real time map is maintained of the plurality of WTRUs in proximity to the WTRU.

36. The WTRU of claim 23 further comprising:

circuitry configured to determine environment information that lists the plurality of WTRUs in proximity to the WTRU.

37. The WTRU of claim 23 wherein the WTRU processes the first input or the second input based on information from the multi-touch display.

38. The WTRU of claim 23 further comprising:

circuitry configured to initiate, by the WTRU, transfer of media based on a gesture on a visual representation, displayed on the multi-touch display, of the

media; and

wherein the gesture is in a direction of an intended receiving WTRU.

39. The WTRU of claim 23 wherein the first input or the second input is a gesture input.

40. The WTRU of claim 23 wherein the first input or the second input is a multi-finger input.

41. The WTRU of claim 23 wherein the first input or the second input is a multi-finger gesture.

42. The WTRU of claim 23 further comprising:
the circuitry further configured to transfer, by the WTRU to the selected target WTRU, additional display information; and
wherein the additional display information is displayed before the selected media is substantially entirely transferred.

43. The WTRU of claim 23 further comprising:
the circuitry further configured to receive, by the WTRU from another WTRU, a request to transfer other media;
the circuitry further configured to receive, in response to accepting the

request by the WTRU, the other media; and

circuitry configured to display, by the WTRU, the other media substantially entirely to a user of the WTRU.

44. The WTRU of claim 23 wherein the first input or the second input is a gesture input.

ABSTRACT

Detecting wireless transmit/receive units (WTRUs), by a WTRU over Bluetooth, is disclosed. An input from a multi-touch display to select a target WTRU from the detected WTRUs is processed. The WTRU transfers to the selected target WTRU over WiFi a selected media.

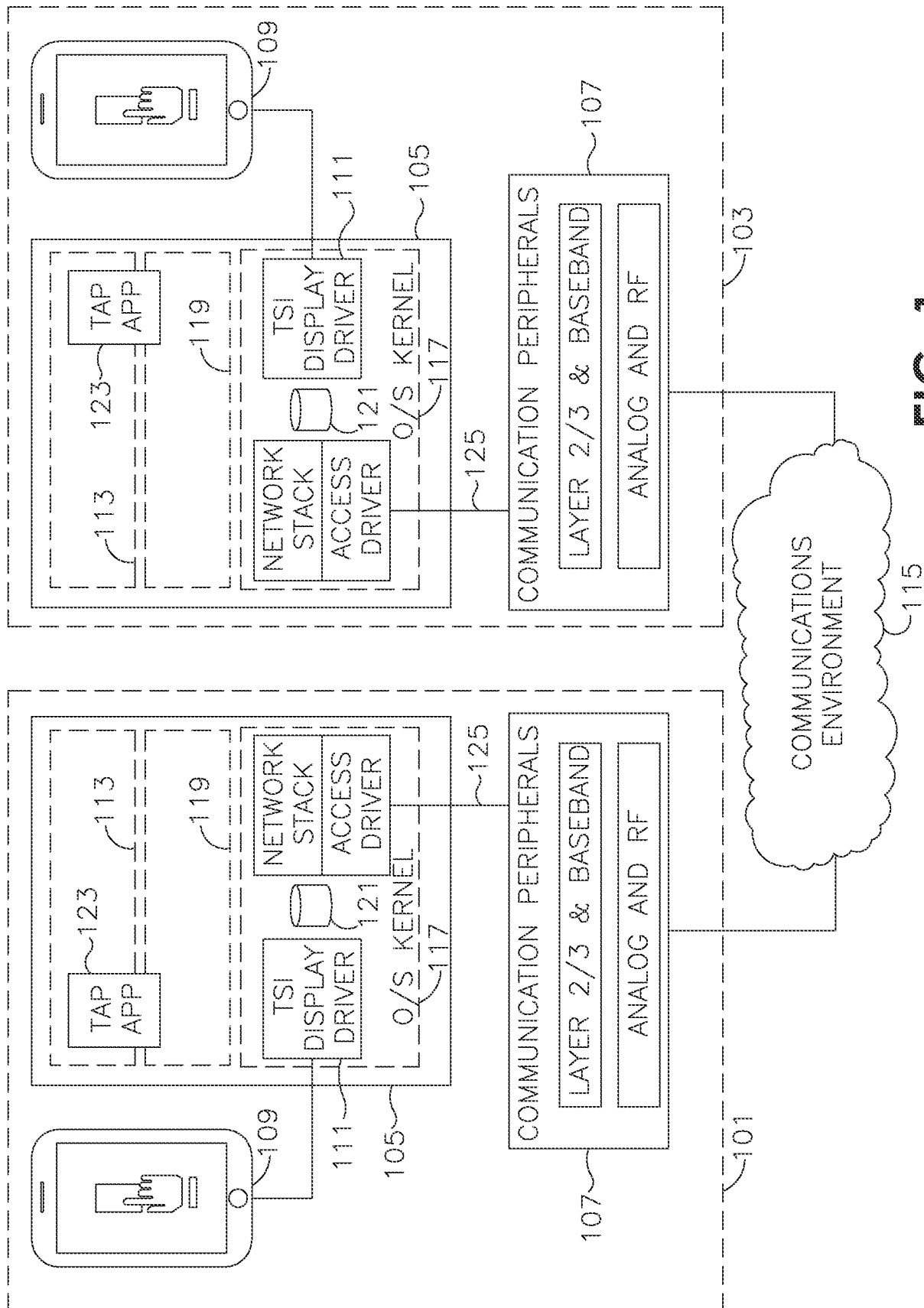


FIG. 1

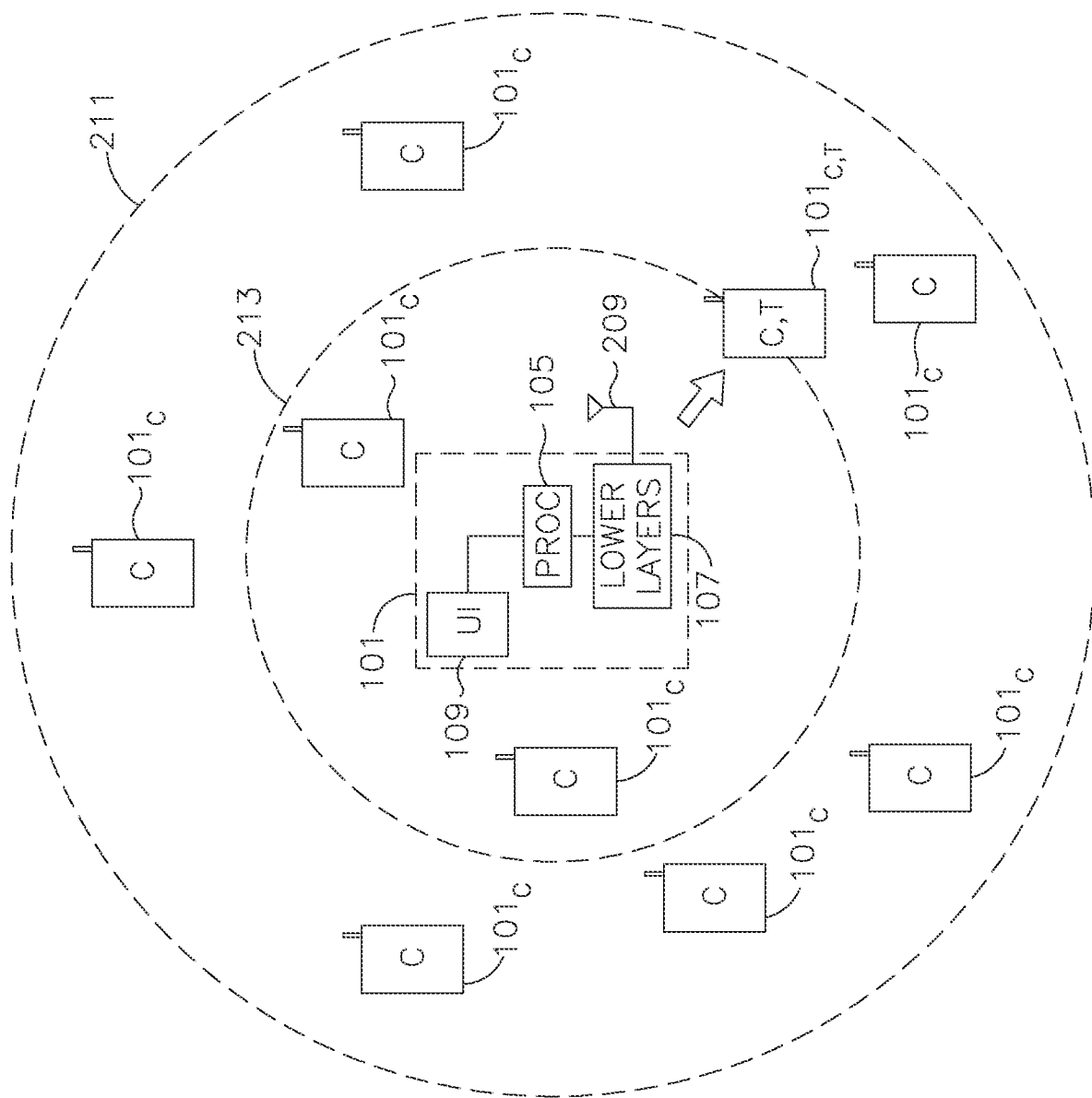


FIG. 2

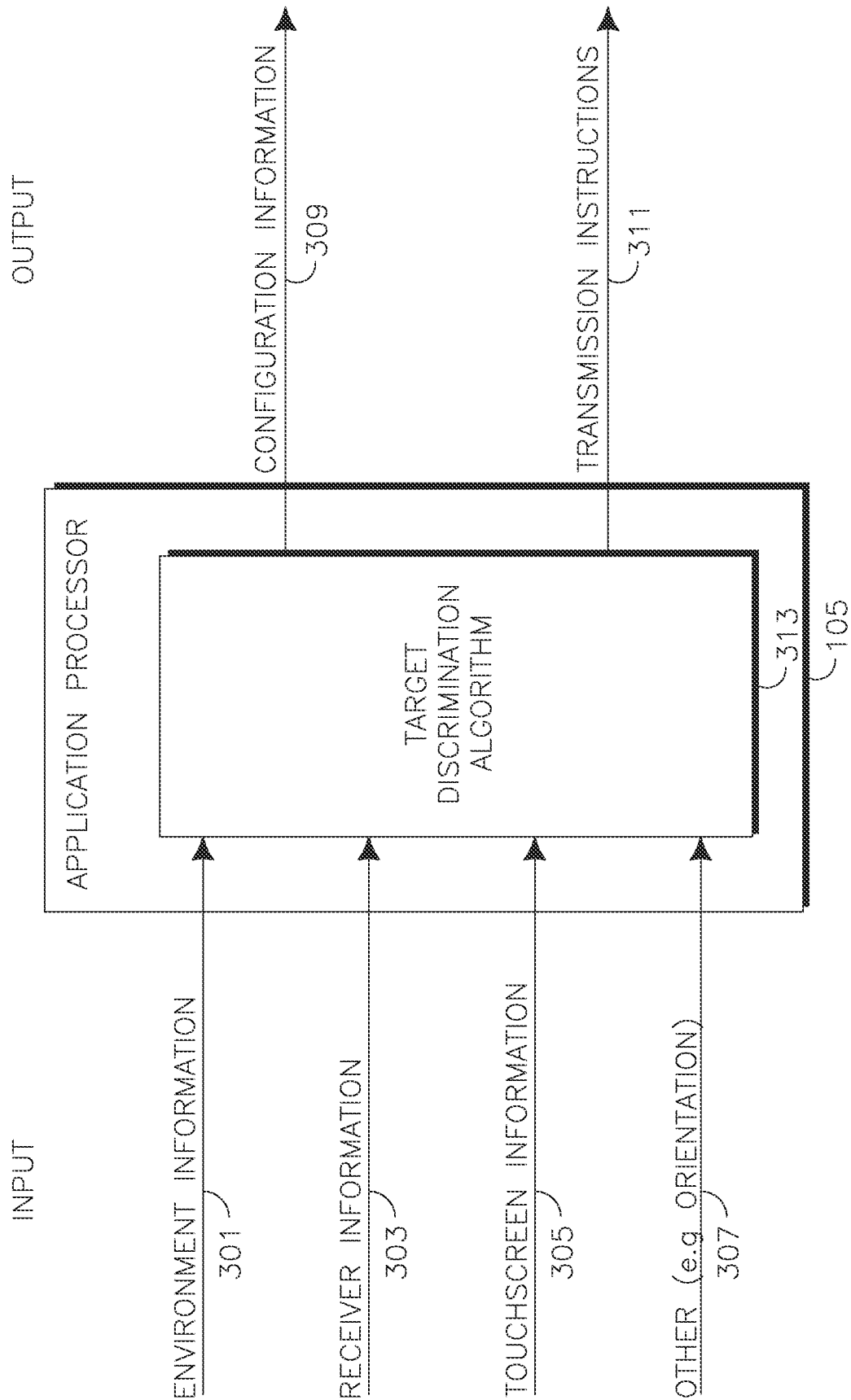
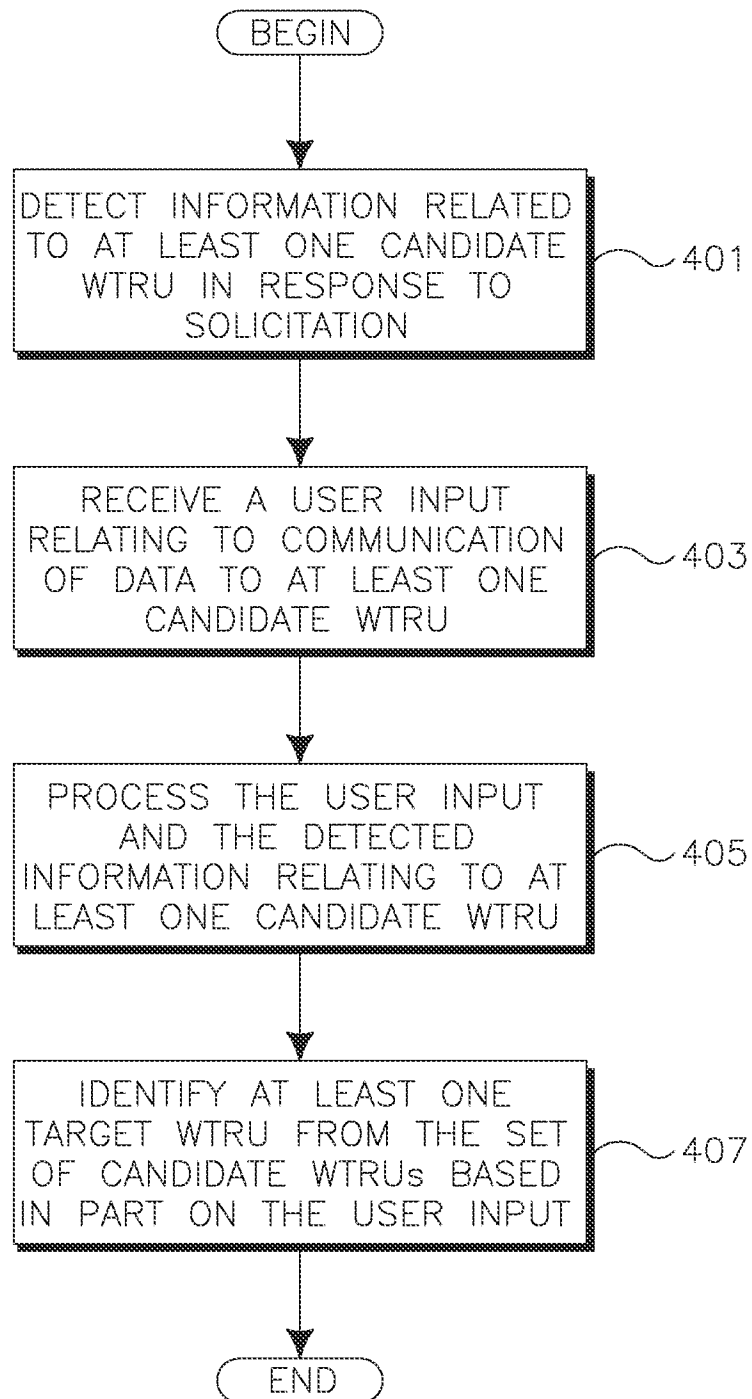


FIG. 3

**FIG. 4**

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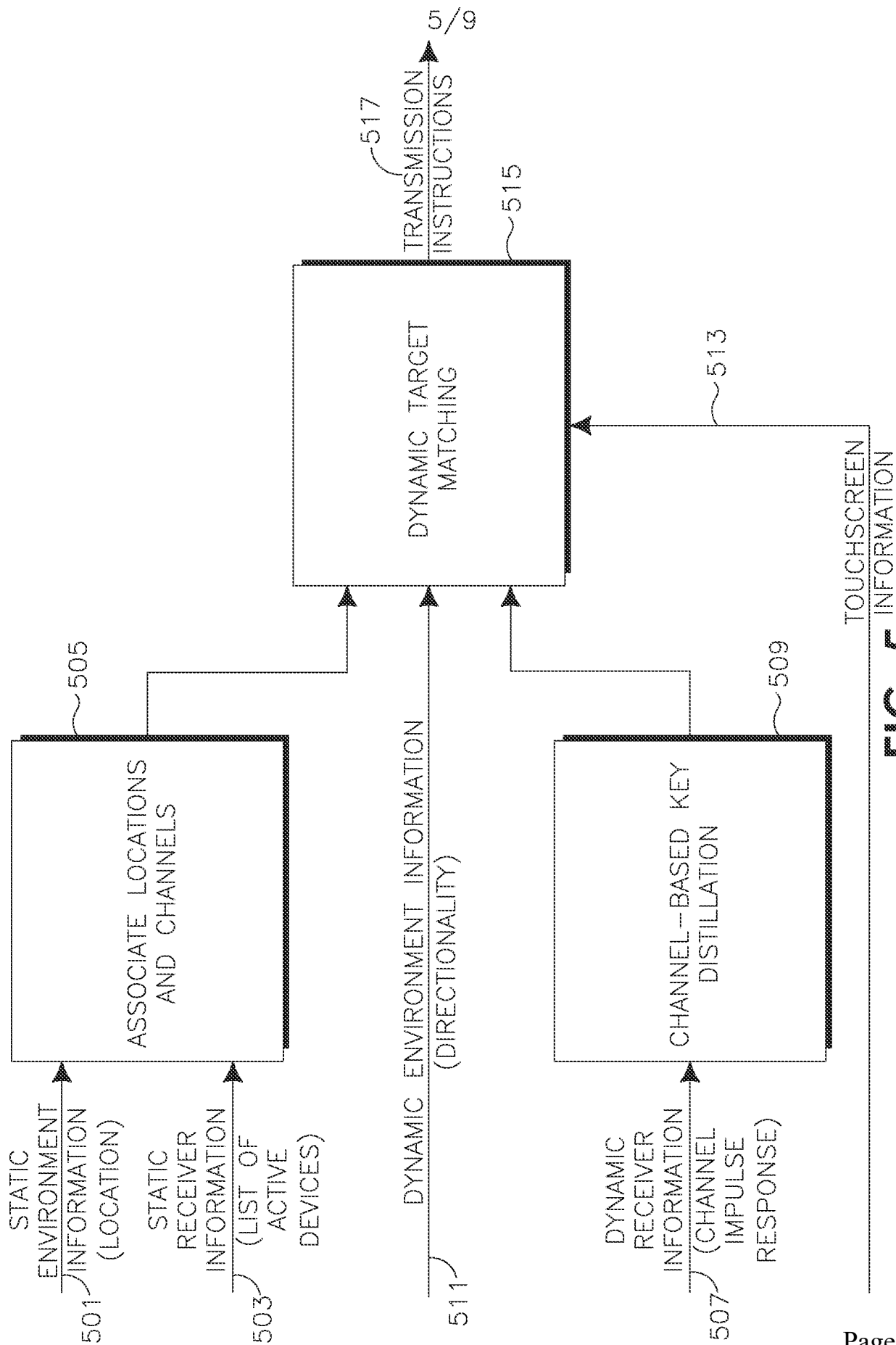


FIG. 5

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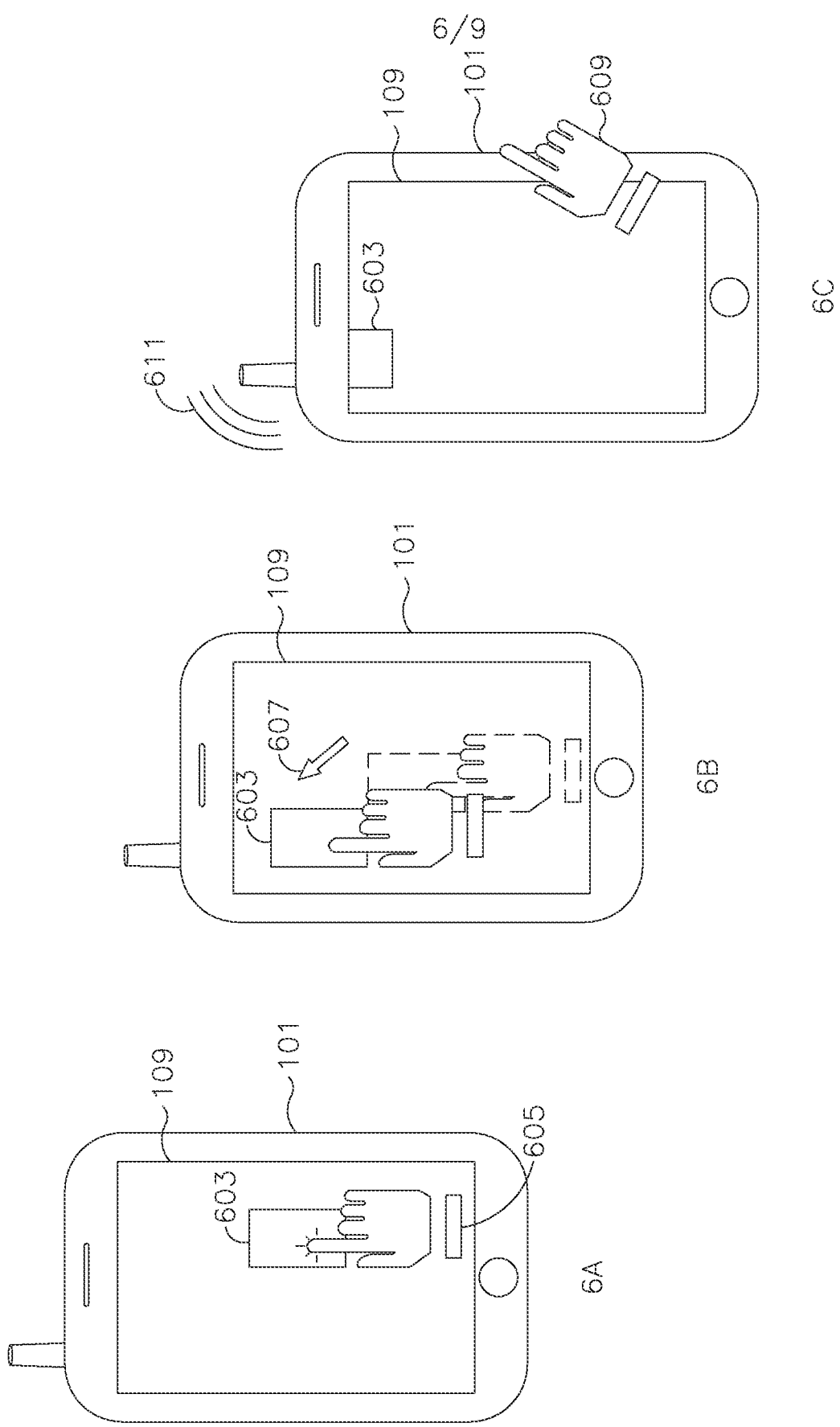


FIG. 6

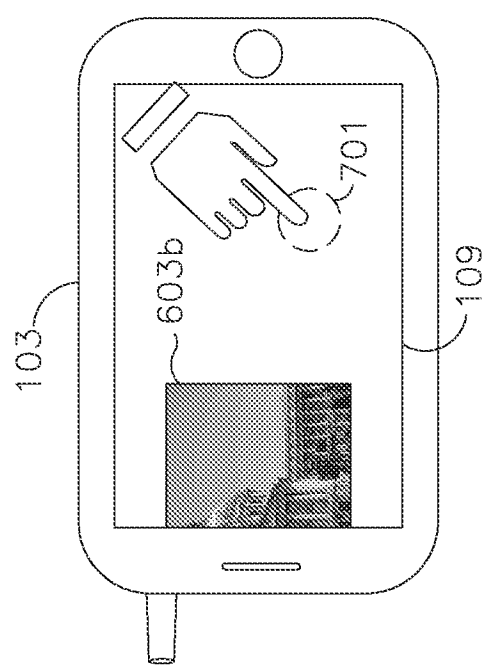


FIG. 7A

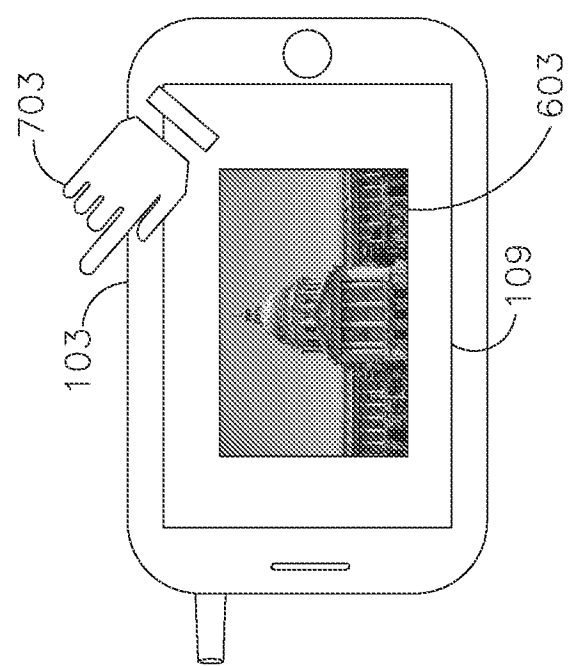
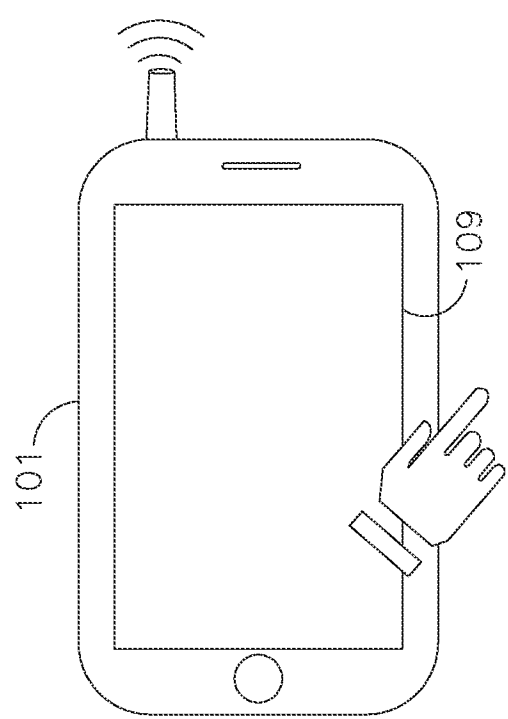
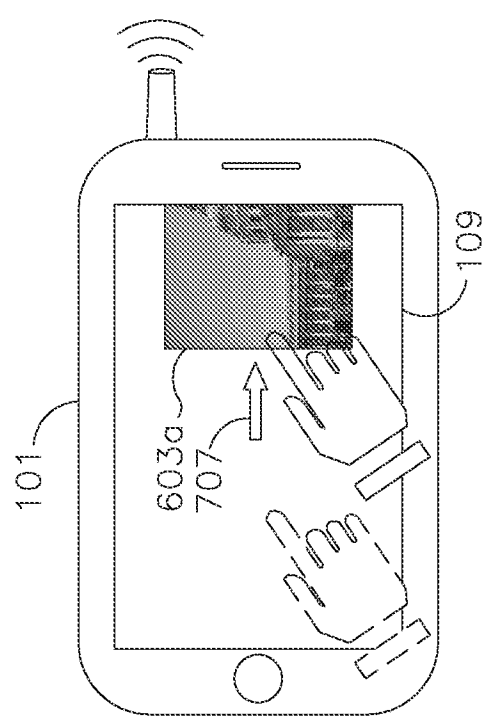


FIG. 7B



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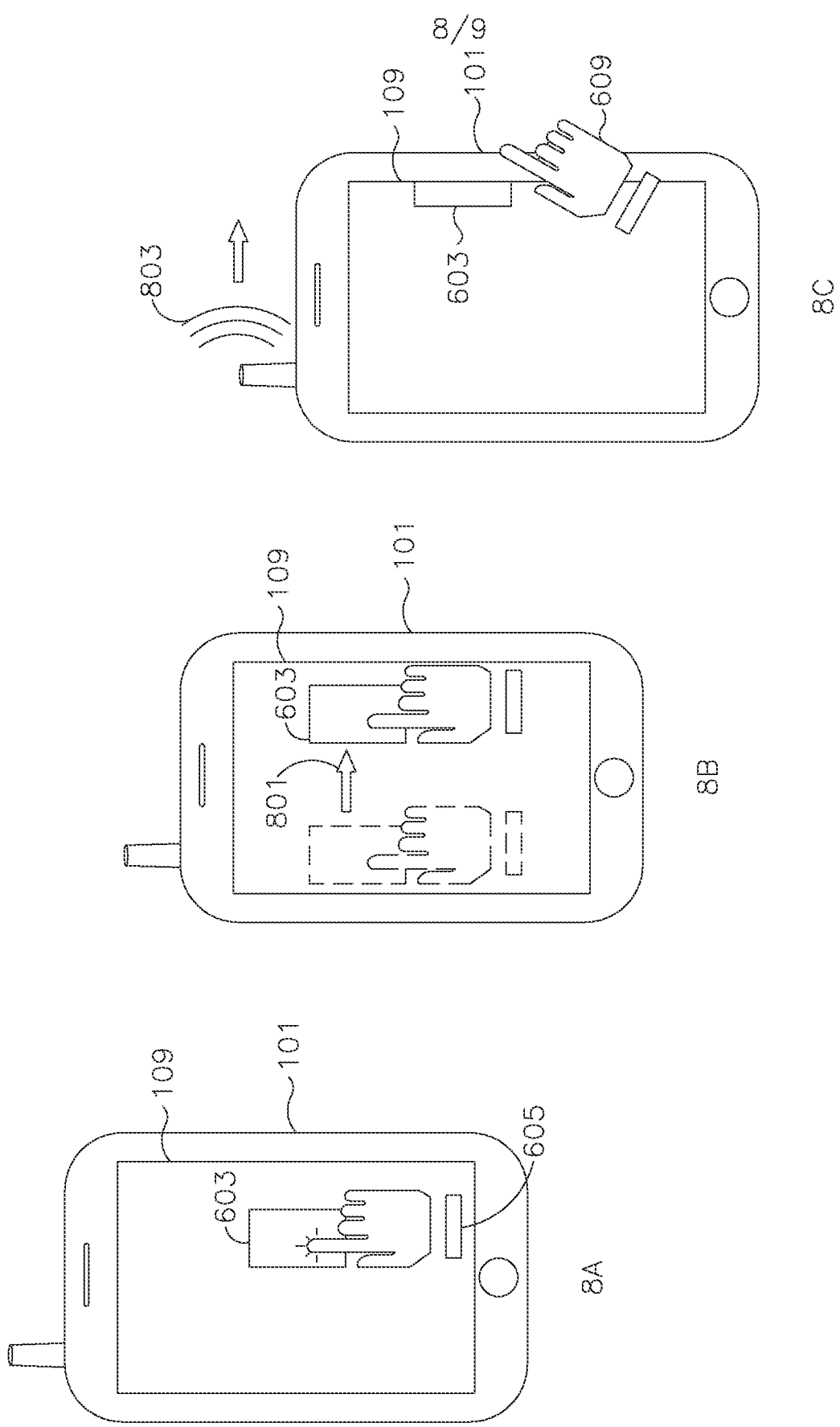


FIG. 8

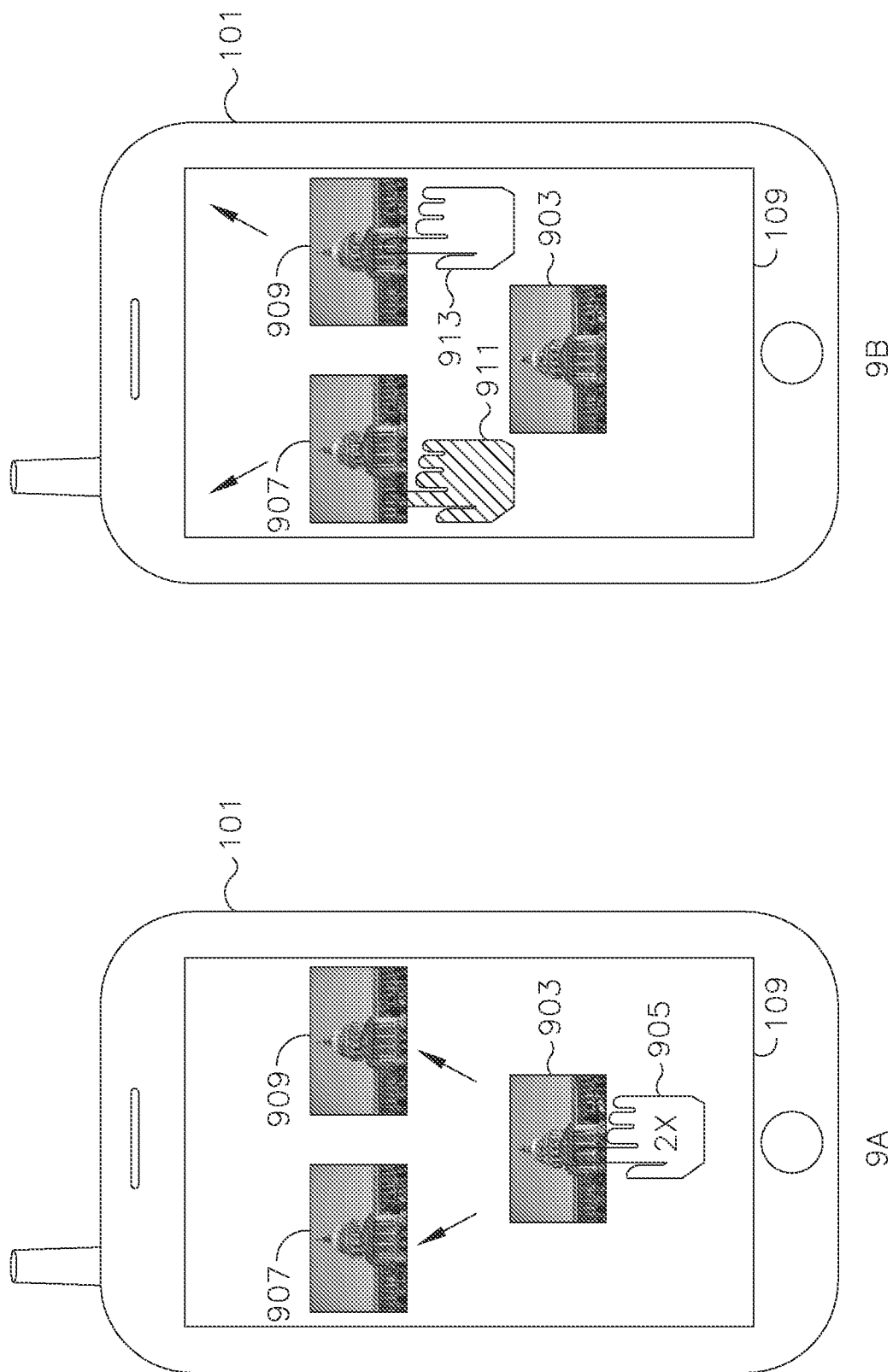


FIG. 9

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Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US05
		Application Number	
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

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Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	9	Suggested Figure for Publication (if any)	5

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Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

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☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

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		Application Number	
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		

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When referring to the current application, please leave the application number blank.

Prior Application Status	Pending	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
	Continuation of	13930743	2013-06-28		
Prior Application Status	Patented	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13930743	Continuation of	13493650	2012-06-11	8478207	2013-07-02
Prior Application Status	Patented	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
13493650	Continuation of	12644948	2009-12-22	8200265	2012-06-12
Prior Application Status	Expired	Remove			
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)		
12644948	Claims benefit of provisional	61140126	2008-12-23		
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Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013. ☐ NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.
--

Authorization to Permit Access:

☒ Authorization to Permit Access to the Instant Application by the 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 instant patent application is filed access to the instant 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 instant patent application is filed to have access to the instant patent application. In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the instant patent application with respect to: 1) the instant patent application-as-filed; 2) any foreign application to which the instant patent application claims priority under 35 U.S.C. 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 instant patent application; and 3) any U.S. application-as-filed from which benefit is sought in the instant patent application. In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing this Authorization.

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.
--

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US05
		Application Number	
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		

Applicant 1				Remove	
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section.					
Clear					
☒ Assignee		☐ Legal Representative under 35 U.S.C. 117		☐ Joint Inventor	
☐ Person to whom the inventor is obligated to assign.			☐ Person who shows sufficient proprietary interest		
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:					
Name of the Deceased or Legally Incapacitated Inventor :					
If the Applicant is an Organization check here. ☒					
Organization Name		InterDigital Patent Holdings, Inc.			
Mailing Address Information:					
Address 1		200 Bellevue Parkway			
Address 2		Suite 300			
City		Wilmington	State/Province	DE	
Country ⁱ	US	Postal Code	19809		
Phone Number			Fax Number		
Email Address					
Additional Applicant Data may be generated within this form by selecting the Add button. Add					

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.	
Assignee 1	
Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.	
Remove	
If the Assignee or Non-Applicant Assignee is an Organization check here. ☒	

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	IPH-2-2235US05
		Application Number	
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES		

Organization Name	InterDigital Patent Holdings, Inc.
-------------------	------------------------------------

Mailing Address Information For Assignee including Non-Applicant Assignee:

Address 1	200 Bellevue Parkway		
Address 2	Suite 300		
City	Wilmington	State/Province	DE
Country i	US	Postal Code	19809
Phone Number		Fax Number	
Email Address			

Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.

Signature:

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications					
Signature	/Harry Vartanian/			Date (YYYY-MM-DD)	2014-04-11
First Name	Harry	Last Name	Vartanian	Registration Number	56787
Additional Signature may be generated within this form by selecting the Add button.					Add

This collection of information is required by 37 CFR 1.76. 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 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet 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.**

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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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 of information is required by 35 U.S.C. 115 and 37 CFR 1.63. 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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 14/251,383				
APPLICATION AS FILED - PART I										
(Column 1)		(Column 2)		SMALL ENTITY		OR 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	280			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	600			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	720			
TOTAL CLAIMS (37 CFR 1.16(j))	44	minus 20 = *	24			x 80 =	1920			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *				x 420 =	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))										
* If the difference in column 1 is less than zero, enter "0" in column 2.				TOTAL		TOTAL	3520			
APPLICATION AS AMENDED - PART II										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR 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	=		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	
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	=		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 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
14/251,383	04/11/2014	2414	3520	IPH-2-2235US05	44	2

CONFIRMATION NO. 7086

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

FILING RECEIPT



Date Mailed: 05/02/2014

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**

Inventor(s)

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

Applicant(s)

InterDigital Patent Holdings, Inc., Wilmington, DE

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 13/930,743 06/28/2013
which is a CON of 13/493,650 06/11/2012 PAT 8478207
which is a CON of 12/644,948 12/22/2009 PAT 8200265
which claims benefit of 61/140,126 12/23/2008

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

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: 04/30/2014

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 14/251,383**

Projected Publication Date: 08/07/2014

Non-Publication Request: No

Early Publication Request: No

Title

DATA TRANSFER BETWEEN WIRELESS DEVICES

Preliminary Class

370

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

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 (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

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The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

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.

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

NOT GRANTED

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

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	14/251,383
	Filing Date	2014-04-11
	First Named Inventor	Carlton et al.
	Art Unit	2645
	Examiner Name	Diane D. Mizrahi
	Attorney Docket Number	IPH-2-2235US05

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:	19527812
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Carey Kulp
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	09-JUL-2014
Filing Date:	11-APR-2014
Time Stamp:	13:18:44
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	IDS.pdf	58039 3f0e975c11dae73fec7530f9fdbb1f014832b848	no	2

Warnings:

Information:

2	Information Disclosure Statement (IDS) Form (SB08)	MasterList.pdf	66781 21df6f1eba7dfd622abb52cecf6ba0a642b2e3a2	no	1
Warnings:					
Information:					
This is not an USPTO supplied IDS fillable form					
Total Files Size (in bytes):				124820	
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.					

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Carlton et al.

Application No.: 14/251,383

Confirmation No.: 7086

Filed: April 11, 2014

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Group: 2645

Examiner: Diane D. Mizrahi

Our File: IPH-2-2235US05

Date: July 9, 2014

INFORMATION DISCLOSURE STATEMENT

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

Madam:

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 Information Disclosure Statement Form.

This Application is a continuation of U.S. Patent Application No. 13/930,743, filed June 28, 2013, which issued May 27, 2014 as U.S. Patent No. 8,737,933, which is a continuation of U.S. Patent Application No. 13/493,650, filed June 11, 2012, which issued July 2, 2013 as U.S. Patent No. 8,478,207, which is a continuation of U.S. Patent Application No. 12/644,948, filed December 22, 2009, which issued June 12, 3143253-1

2012 as U.S. Patent No. 8,200,265, which claims priority from Provisional Application No. 61/140,126, which was filed 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.

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the Form Information Disclosure Statement Form indicating consideration of the cited materials.

Respectfully submitted,

Carlton et al.

By /Harry Vartanian/
Harry Vartanian
Registration No. 56,787
(215) 568-6400

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

HV/PCK
Enclosure



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UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
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www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
14/251,383	04/11/2014	Alan G. Carlton	IPH-2-2235US05

CONFIRMATION NO. 7086

PUBLICATION NOTICE



OC000000070056492

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-2014-0220900-A1

Publication Date:08/07/2014

NOTICE OF PUBLICATION OF APPLICATION

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

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

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

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

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

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

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		14251383
	Filing Date		2014-04-11
	First Named Inventor	InterDigital Patent Holdings, Inc.	
	Art Unit	2645	
	Examiner Name	Diane D. Mizrahi	
	Attorney Docket Number	IPH-2-2235US05	

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
	1	7813697	B2	2010-10-12	McKillop			
	2	8611317	B2	2013-12-17	Banerjea et al.			
If you wish to add additional U.S. Patent citation information please click the Add button.							Add	
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	14251383
Filing Date	2014-04-11
First Named Inventor	InterDigital Patent Holdings, Inc.
Art Unit	2645
Examiner Name	Diane D. Mizrahi
Attorney Docket Number	IPH-2-2235US05

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
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EXAMINER SIGNATURE

Examiner Signature	Date Considered
--------------------	-----------------

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

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	14251383
Filing Date	2014-04-11
First Named Inventor	InterDigital Patent Holdings, Inc.
Art Unit	2645
Examiner Name	Diane D. Mizrahi
Attorney Docket Number	IPH-2-2235US05

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

- ☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

- ☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

- ☐ See attached certification statement.
- ☐ The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.
- ☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Harry Vartanian/	Date (YYYY-MM-DD)	2014-10-16
Name/Print	Harry Vartanian	Registration Number	56,787

This collection of information is required by 37 CFR 1.97 and 1.98. 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 1 hour 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.**

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 the Freedom of Information Act requires disclosure of these records.
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 inspections 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.

Electronic Acknowledgement Receipt

EFS ID:	20430798
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Carey Kulp
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	16-OCT-2014
Filing Date:	11-APR-2014
Time Stamp:	16:38:09
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	58813 a463c01df7d0180038599d720a545570f6c73a4a	no	2

Warnings:

Information:

2	Information Disclosure Statement (IDS) Form (SB08)	SB08.pdf	631711 5d1d56f86a890f108a2b001ca5848963bdc ebca0	no	4
Warnings:					
Information:					
Total Files Size (in bytes):				690524	
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.					

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

InterDigital Patent Holdings, Inc.

Application No.: 14/251,383

Confirmation No.: 7086

Filed: April 11, 2014

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Group: 2645

Examiner: Diane D. Mizrahi

Our File: IPH-2-2235US05

Date: October 16, 2014

INFORMATION DISCLOSURE STATEMENT

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

Madam:

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 PTO Form SB-08. Pursuant to 37 C.F.R. §1.98(a)(2)(ii), copies of the newly cited U.S. publications and/or patent documents have not been included.

This Application is a continuation of U.S. Patent Application No. 13/930,743, filed June 28, 2013, which issued May 27, 2014 as U.S. Patent No. 8,737,933, which is a continuation of U.S. Patent Application No. 13/493,650, filed June 11, 2012, which issued July 2, 2013 as U.S. Patent No. 8,478,207, which is a continuation of U.S.

3341119-1

Applicant: InterDigital Patent Holdings, Inc.
Application No.: 14/251,383

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

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO Form SB-08 indicating consideration of the cited materials.

Respectfully submitted,

InterDigital Patent Holdings, Inc.

By /Harry Vartanian/
Harry Vartanian
Registration No. 56,787
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1800
30 South 17th Street
Philadelphia, PA 19103

HV/PCK
Enclosure



UNITED STATES PATENT AND TRADEMARK OFFICE

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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.
14/251,383	04/11/2014	Alan G. Carlton	IPH-2-2235US05	7086

24374 7590 04/14/2015

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

EXAMINER

MIZRAHI, DIANE D

ART UNIT	PAPER NUMBER
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2645

NOTIFICATION DATE	DELIVERY MODE
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04/14/2015

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. 14/251,383	Applicant(s) CARLTON ET AL.	
	Examiner DIANE MIZRAHI	Art Unit 2645	AIA (First Inventor to File) Status No

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

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS FROM THE MAILING DATE OF THIS COMMUNICATION.

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

Status

- 1) ☐ Responsive to communication(s) filed on _____.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ An election was made by the applicant in response 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) 1-44 is/are pending in the application.
5a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 6) ☐ Claim(s) _____ is/are allowed.
- 7) ☒ Claim(s) 1-44 is/are rejected.
- 8) ☐ Claim(s) _____ is/are objected to.
- 9) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

* If any claims have been determined allowable, you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

Application Papers

- 10) ☐ The specification is objected to by the Examiner.
- 11) ☒ The drawing(s) filed on 4-11-14 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).

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

- a) ☐ All b) ☐ Some** c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

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

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 3) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☒ Information Disclosure Statement(s) (PTO/SB/08a and/or PTO/SB/08b)
Paper No(s)/Mail Date _____ | 4) ☐ Other: _____ |

DETAILED ACTION

The present application is being examined under the pre-AIA first to invent provisions.

Claims 1-44 are examined.

Information Disclosure Statement

As required by M.P.E.P. 609(c), the Applicant's submissions 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.

Claim Objections

Claims 1-44 are objected to because of the following informalities: Claims 1 and 23 (for example) contain abbreviations, such as WiFi, which should be formally spelled out in the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

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

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

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

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

Claims 1-44 are rejected under 35 U.S.C. 112(b) or 35 U.S.C. 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention.

Examiner is unclear as to what is Applicant's claimed, "second input". After a complete review of the specification, Examiner could not determine what is Applicant's particular, "second input". Further clarification 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

Art Unit: 2645

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

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

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

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

Art Unit: 2645

applicant could not have filed the conflicting claims in a single (i.e., the earlier filed) application.

Claims 1-44 are rejected on the ground of nonstatutory obviousness- type double patenting as being unpatentable over claims 1-44 in US Patent Application 8,737,933.

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. The invention is also commonly owned by Google at the time of invention.

This is a obviousness-type double patenting rejection.

Claim 1-44 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent 8,737,933.

Although the conflicting claims are not identical, they are not patentably distinct from each other because, the claim(s) in the continuation and/or divisional are broader than the ones in patent and/or the patent application, **In re VanOrnum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982).** Broad claims in continuation and/or division application are rejected as obvious double patenting over previously patented narrow claims. The claims are both exhibiting similar method of receiving an incoming SMS text message, pushing a Busy key and launching a Busy application.

The Claims 1-44 of current application and U.S. Patent No. 8,737,933 are compared as follows, showing the obviousness of the teachings of the patent to the claimed invention:

Current Application	US Patent No. 8,737,933
Claim 1:	Claim 1:
A method performed by a wireless transmit/receive unit (WTRU), the method comprising: processing, by the WTRU from a multi-touch display, a first input to select media in a mobile application; detecting, by the WTRU over Bluetooth, a plurality of	A method performed by a wireless transmit/receive unit (WTRU), the method comprising: processing, by the WTRU, a touchscreen input to select a media element; detecting, by the WTRU using Bluetooth, a plurality of WTRUs

WTRUs; processing, by the WTRU, a second input from the multi-touch display to select a target WTRU from the plurality of WTRUs; sending, by the WTRU to the selected target WTRU, a message to transfer the selected media; receiving, by the WTRU, an acceptance to transfer the selected media; and transferring, by the WTRU to the selected target WTRU over WiFi, the selected media	in proximity to the WTRU; processing, by the WTRU, another touchscreen input to select a WTRU of the plurality of WTRUs; sending, by the WTRU, a message to transfer the selected media element to the selected WTRU; receiving, by the WTRU, an acceptance to transfer the selected media element to the selected WTRU; and transferring, by the WTRU using a WiFi communication, the selected media element to the selected WTRU.

Allowable Subject Matter

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure [see USPTO 892]:

Claims 1-44 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:

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 particularly, the claimed invention advantageously provides a finer level of detail that includes "wireless transmit/receive unit with multi-touch one and second input, with message transfer of selected media over the WIFI" 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.

The dependent claims, being further limiting to the independent claims, definite and enabled by the Specification are also allowed.

The Examiner asserts that the claims overcome the prior art of record as describes above when the limitations are read in combination with the respective claimed limitations in their entirety.

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

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, George Eng, can be reached on **(571) 272-7495**. 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: 2645

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

April 1, 2015

Notice of References Cited	Application/Control No. 14/251,383	Applicant(s)/Patent Under Reexamination CARLTON ET AL.	
	Examiner DIANE MIZRAHI	Art Unit 2645	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
*	A	US-8,737,933	05-2014	Carlton et al.	455/73
*	B	US-8,478,207	07-2013	Carlton et al.	455/73
*	C	US-8,200,265	06-2012	Carlton et al.	455/509
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
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	K	US-			
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	M	US-			

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	Q					
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1 [Modern Embedded Computing: Designing Connected, Pervasive, Media-Rich Systems, 1st edition](#)

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BIB DATA SHEET

CONFIRMATION NO. 7086

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.	
14/251,383	04/11/2014	455	2645	IPH-2-2235US05	
RULE					
APPLICANTS InterDigital Patent Holdings, Inc., Wilmington, DE, Assignee (with 37 CFR 1.172 Interest); INVENTORS Alan G. Carlton, Mineola, NY; Alexander Reznik, Titusville, NJ; ** CONTINUING DATA ***** This application is a CON of 13/930,743 06/28/2013 PAT 8737933 which is a CON of 13/493,650 06/11/2012 PAT 8478207 which is a CON of 12/644,948 12/22/2009 PAT 8200265 which claims benefit of 61/140,126 12/23/2008 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 04/30/2014					
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and Acknowledged <u>/DIANE D MIZRAHI/</u> Examiner's Signature	☐ Met after Allowance Initials	STATE OR COUNTRY NY	SHEETS DRAWINGS 9	TOTAL CLAIMS 44	INDEPENDENT CLAIMS 2
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 3520	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		

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		14251383	
	Filing Date		2014-04-11	
	First Named Inventor	InterDigital Patent Holdings, Inc.		
	Art Unit	2645		
	Examiner Name	Diane D. Mizrahi		
	Attorney Docket Number	IPH-2-2235US05		

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Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear		
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/D.M./	2	8611317	B2	2013-12-17	Banerjea et al.			
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		14251383	14251383 - GAU: 2645
	Filing Date		2014-04-11	
	First Named Inventor	InterDigital Patent Holdings, Inc.		
	Art Unit	2645		
	Examiner Name	Diane D. Mizrahi		
	Attorney Docket Number	IPH-2-2235US05		

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
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¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

PATENT**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the **PATENT APPLICATION** of:

InterDigital Patent Holdings, Inc.

Application No.: 14/251,383

Confirmation No.: 7086

Filed: April 11, 2014

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Group: 2645

Examiner: Diane D. Mizrahi

Our File: IPH-2-2235US05

Date: October 16, 2014

INFORMATION DISCLOSURE STATEMENT

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

Madam:

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 PTO Form SB-08. Pursuant to 37 C.F.R. §1.98(a)(2)(ii), copies of the newly cited U.S. publications and/or patent documents have not been included.

This Application is a continuation of U.S. Patent Application No. 13/930,743, filed June 28, 2013, which issued May 27, 2014 as U.S. Patent No. 8,737,933, which is a continuation of U.S. Patent Application No. 13/493,650, filed June 11, 2012, which issued July 2, 2013 as U.S. Patent No. 8,478,207, which is a continuation of U.S.

3341119-1

Applicant: InterDigital Patent Holdings, Inc.
Application No.: 14/251,383

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

It is respectfully requested that the Examiner consider these documents and return an initialed copy of the PTO Form SB-08 indicating consideration of the cited materials.

Respectfully submitted,

InterDigital Patent Holdings, Inc.

By /Harry Vartanian/
Harry Vartanian
Registration No. 56,787
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza, Suite 1800
30 South 17th Street
Philadelphia, PA 19103

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Enclosure

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		14/251,383
	Filing Date		2014-04-11
	First Named Inventor	Carlton et al.	
	Art Unit	2645	
	Examiner Name	Diane D. Mizrahi	
	Attorney Docket Number	IPH-2-2235US05	

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EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
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		7,877,494	01/2011	Carlton et al.				
		2006/0234762	10/2006	Ozluturk				
		2006/0293063	12/2006	Corrion				
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		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				
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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/	DATE CONSIDERED 04/05/2015
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Patent US20140220900 - Data transfer between wireless ...

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Detecting wireless transmit/receive units (WTRUs), by a WTRU over Bluetooth, ... The WTRU transfers to the selected target WTRU over WIFI a selected media ... WTRU from a multi-touch display, a first input to select media in a mobile application; ... The method of claim 1 wherein the first input or the second input is a tap. 6.

Data transfer between wireless devices - FAQs.org

www.faqs.org/patents/app/20140220900 ▾

Aug 7, 2014 · Detecting wireless transmit/receive units (WTRUs), by a WTRU over ... The WTRU transfers to the selected target WTRU over WIFI a selected media ... by the WTRU from a multi-touch display, a first input to select media in a mobile ... The method of claim 1 wherein the first input or the second input is a tap.

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www.ambiesense.com/.../webinos-phase_II_device,network,and_server-sid...

Sep 4, 2012 · sending/receiving message between the peers in a trusted manner. ... Group develops specifications for physical multi-touch interface ... second one is the Application Context Vocabulary, which contains the ... maintain some control over the services selected (e.g., specifying ... browsers, and transmit.

Verizon Wireless Support | Glossary

www.verizonwireless.com/support/glossary/ ▾ Verizon Wireless ▾

Activation Fee A one-time fee for initiating service on a mobile device. ... you have recent notifications anytime you touch your phone while it's in sleep mode. ... over an existing network, such as from your phone to your computer via Wi-Fi. ... GHz (Gigahertz) A unit of frequency equal to one billion cycles per second (hertz).

MIDI - Wikipedia, the free encyclopedia

en.wikipedia.org/wiki/MIDI ▾ Wikipedia ▾

MIDI allows multiple instruments to be played from a single controller, which makes ... and combining a program change message with a bank select message. ... can only carry messages in one direction, so a second cable is necessary for ... transmitters allow wireless transmission of MIDI and OSC signals over Wi-Fi ...

[PDF] WD TV Media Player User Manual - Western Digital

www.wdc.com/.../4779-7051... WESTERN DIGITAL TECHNOLOGIES INC ▾

Registration - Register your WD product to get the latest updates and special ... keyboard or attach your wired or wireless USB keyboard for easy text input. ... Customize your media experience - Select a background from beautiful, high ... Press for one second to reset to factory defaults (see "Device ... Infrared transmitter. 2.

[PDF] WD TV Live Streaming Media Player User Manual - Fine ...

finearts.uvic.ca/.../western_digital_4779-705062.p... ▾ University of Victoria ▾

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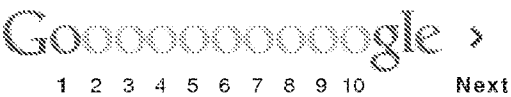
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Patent US20130238702 - Wireless display with multiscreen ...
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initiate a Wi-Fi display (WFD) connection with a second wireless computing device; 7A and 7B show example message transfer sequences for performing Wi-Fi receive/transmit user input commands to the source device that select media Using one or more input and output devices of a client device, such as a touch

[PDF] iW1 User Manual - iHome
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Jan 15, 2011 · embrace Wi-Fi connectivity and AirPlay, Apple's new wireless ... audio over Wi-Fi from iTunes, iPad, iPhone and iPod touch. ... Add Multiple iW1 speakers to enjoy multi-room audio anywhere in the home ... Place the unit on a level surface away from sources of direct ... Select the iHome iW1 as your AirPlay.



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WEST Search History for Application 14251383

Creation Date: 2015040515:05

Prior Art Searches

Query	DB	Op.	Plur.	Thes.	Date
(wireless near5 transmit near55 receive near5 unit or WTRU)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(multi enar5 touch near5 screen or display)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(Bluetooth)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(messag\$6 near5 transfer\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU)) and ((multi enar5 touch near5 screen or display))	PGPB, USPT, USOC, EPAB, JPAB, DWPI,	ADJ	YES		04-05-2015

	TDBD, FPRS				
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display)) and ((Bluetooth))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth)) and ((messag\$6 near5 transfer\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3)) and media	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media) and WIFI	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI) and (digital file\$3 or media)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3	PGPB, USPT, USOC, EPAB,	ADJ	YES		04-05-2015

or media)) and (mobile near5 application)	JPAB, DWPI, TDBD, FPRS				
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and (second near5 input\$5)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04W4/021 H04W12/02 H04W8/10).CPC.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(multi-touch\$3 near5 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((multi-touch\$3 near5 input\$6)) and ((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04L67/18 H04L63/0407 H04L63/10).CPC.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04L67/18 H04L63/0407 H04L63/10).CPC.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015

display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04M2203/353 H04M2242/15 H04M2250/10 H04M3/42348 H04M3/4878).CPC.)	USOC, EPAB, JPAB, DWPI, TDBD, FPRS				
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi near5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and (multi-touch\$3 near5 input\$6) and (mobile near5 application)).clms.	PGPB, USPT, USOC	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi near5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and (multi-touch\$3 near5 input\$6) and (mobile near5 application)).clms.	PGPB, USPT, USOC	ADJ	YES		04-05-2015

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Data transfer between wireless devices



www.google.com/patents/US20140220900

App. - Filed Apr 11, 2014 - Published Aug 7, 2014 - Alan G. Carlton - Interdigital Patent Holdings, Inc.

Detecting wireless transmit/receive units (WTRUs), by a WTRU over ... The WTRU transfers to the selected target WTRU over WiFi a selected media. ... processing, by the WTRU from a multi-touch display, a first input to select media in a ... the selected target WTRU, a message to transfer the selected media.

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Data transfer between wireless devices



www.google.com/patents/US8737933

Grant - Filed Jun 26, 2013 - Issued May 27, 2014 - Alan G. Carlton - Interdigital Patent Holdings, Inc.

Detecting, with Bluetooth, wireless transmit/receive units (WTRUs) in proximity to a WTRU is disclosed. The WTRU may send a message to transfer of a selected media to a ... transferring, by the WTRU using a WiFi communication, the selected ... input based on information from a multi-touch touchscreen.

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Data transfer between wireless devices



www.google.com/patents/US8200265

Grant - Filed Dec 22, 2009 - Issued Jun 12, 2012 - Alan G. Carlton - Interdigital Patent Holdings, Inc.

A method of data transfer between wireless transmit/receive units (WTRUs) is ... transmitting the selected media element to the selected target WTRU ... or multimedia message services (MMS) with the data being transmitted from one ... the emergence of touch screen and multi-touch technology), the user ...

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Wireless display with multiscreen service



www.google.com/patents/US20130238702

App. - Filed Sep 7, 2012 - Published Sep 12, 2013 - Soham V. Sheth - Qualcomm Incorporated

Initiate a Wi-Fi display (WFD) connection with a second wireless computing device, and ... 7A and 7B show example message transfer sequences for performing Wi-Fi ... The input device of the sink may comprise a touch screen and/or a ... for the selected media items to transmit/receive unit 126 over ...

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Data transfer between wireless devices



www.google.com/patents/WO2010075378A2?cl=en

App. - Filed Dec 22, 2009 - Published Jul 1, 2010 - Alan G. Carlton - Interdigital Patent Holdings, Inc.

A method of data transfer between wireless transmit/receive units (WTRUs) is ... the target receiving device for transmitting the selected media element. ... message services (MMS) with the data being transmitted from one device to ... the emergence of touch screen and multi-touch technology), the user ...

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Search Notes 	Application/Control No. 14251383	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2645

CPC- SEARCHED		
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CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
H04W4/021,H04W12/02,H04W8/10	4-1-15	dm
H04L67/18,H04L63/0407,H04L63/10	4-1-15	dm
H04M2203/353,H04M2242/15,H04M2250/10,H04M3/42348,H04M3/4878	4-1-15	dm

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Databases searched WEST: US Patents; US Publications; European and Japanese Patent Office (Abstracts); Derwent; IBM Technical Disclosures; OCR, Foreign Patent Retrieval.	4-1-15	dm
Performed Google Patents Search (see attached search strategy report attached).Performed ACM Search (see attached search strategy report attached).Performed IEEE Search (see attached search strategy report attached).Performed Google Search (see attached search strategy report attached).Performed Google Scholar Search (see attached search strategy report attached).	4-1-15	dm
Performed text search using Co-operative Patent Classification, (CPC). (See attached search history strategy report).	4-1-15	dm
Examined claims and the disclosure for possible 35 USC 101 and 112 issues. Searched for double patenting using inventors names listed in the instant application.	4-1-15	dm

INTERFERENCE SEARCH

	/DIANE MIZRAHI/ Primary Examiner.Art Unit 2645
--	---

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner

	/DIANE MIZRAHI/ Primary Examiner.Art Unit 2645
--	---

<i>Index of Claims</i> 	Application/Control No. 14251383	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2645

✓	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	04/01/2015							
	1	✓							
	2	✓							
	3	✓							
	4	✓							
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	35	✓							
	36	✓							

<i>Index of Claims</i> 	Application/Control No. 14251383	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2645

✓	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	04/01/2015							
	37	✓							
	38	✓							
	39	✓							
	40	✓							
	41	✓							
	42	✓							
	43	✓							
	44	✓							



wireless transmit/receive unit with multi-touch one and second input, with message transfer of selected media over the WIFI



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Data transfer between wireless devices

AG Carlton, A Reznik - US Patent 8,797,933, 2014 - Google Patents

... **wireless** devices US 8737933 B2. Abstract. Detecting, with Bluetooth, **wireless transmit/receive units** (WTRUs) in ... for example, the emergence of touch screen and **multi-touch** technology), the ... a radio frequency transceiver for use in a **wireless transmit receive unit** (WTRU), user ...

Related articles All 6 versions Cite Save

Data transfer between wireless devices

AG Carlton, A Reznik - US Patent App. 14/251,383, 2014 - Google Patents

... between **wireless** devices US 20140220900 A1. Abstract. Detecting **wireless transmit/receive units** (WTRUs), by a ... for example, the emergence of touch screen and **multi-touch** technology), the ... a radio frequency transceiver for use in a **wireless transmit receive unit** (WTRU), user ...

All 2 versions Cite Save

Mobile terminal and method for controlling the same

M Yunjueng, J Choi, NA Yeonsuk, J Choi... - US Patent App. 13/ ..., 2012 - Google Patents

... The mobile communication module 112 may **transmit/receive** a **wireless** signal to/from at least **one** ... may be various forms of **messages** transmitted and received **through** the **wireless** communication **unit** ... That is, when a specific key button of the user **input unit** 130 is manipulated ...

Cited by 2 Related articles All 2 versions Cite Save

Mobile terminal and icon collision controlling method thereof

KIM Jonghwan - US Patent 8,793,606, 2014 - Google Patents

... The mobile communication module 112 may **transmit/receive wireless** signals to/from at least **one** network ... for example, wired/**wireless** headset ports, external charger ports, wired/**wireless** data ports ... the output window 151 a. Upon manipulating the first manipulation **unit** 131, a ...

Cited by 13 Related articles All 4 versions Cite Save

APPARATUS AND METHOD FOR SELECTING OBJECT BY USING MULTI-TOUCH, AND COMPUTER READABLE RECORDING MEDIUM

S Kimn - US Patent 20,140,362,003, 2014 - freepatentsonline.com

... The mobile communication module 121 may **transmit/receive** a **wireless** signal for a voice call, a ... which is wirelessly **input** from an external power source **through** a **wireless** charging technology, to ... in the art to which the present disclosure pertains that the functional **unit** does not ...

Cite Save More

Display device and method of controlling operation thereof

J.Park, BT SETHUMADAVAN, S Chailagali... - US Patent App. 13/ ..., 2012 - Google Patents

... terminal according to a communication standard such as **WiFi** or Bluetooth, and **transmit/receive** content data ... a camcorder, or a computer (for example, a notebook computer) in a **wireless** way or ... More specifically, when the display **unit** 180 is configured with a touch screen and ...

Cited by 6 Related articles All 2 versions Cite Save

Unified communications with a cloud client device

CJ Schwebke, KR Rao, RG Cook... - US Patent App. 14/ ..., 2013 - Google Patents

... of instrumentalities operable to compute, calculate, determine, classify, process, **transmit, receive**, retrieve, originate ... or more processing resources such as a central processing **unit** (CPU) or ... access other devices **over** BLUETOOTH, IEEE 802.11, ad-hoc **wireless** networking, IP ...

All 2 versions Cite Save

Mobile terminal and method for displaying message thereof

M Chang, Y Kwon, S Yoon, J Choi, J Choi... - US Patent App. 13/ ..., 2012 - Google Patents

... The mobile communication module 112 may **transmit/receive** a **wireless** signal to/from at least **one** of a base station, an ... even to a case where the **message** is various forms of **messages** transmitted or received **through** the **wireless** communication **unit** 110, such ...

Related articles All 2 versions Cite Save

Input redirection with a cloud client device

CJ Schwebke, KR Rao, RG Cook... - US Patent App. 14/ ..., 2013 - Google Patents

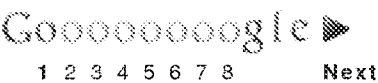
... of instrumentalities operable to compute, calculate, determine, classify, process, **transmit, receive**, retrieve, originate ... or more processing resources such as a central processing **unit** (CPU) or ... access

other devices **over** BLUETOOTH, IEEE 802.11, ad-hoc **wireless** networking, IP ...
All 2 versions Cite Save

Method of controlling 3 dimensional object and mobile terminal using the same

JH Kim - US Patent App. 12/568,289, 2009 - Google Patents
... The mobile communication module 112 may **transmit/receive wireless** signals to/from **one** or more network entities (eg ... include a wired/**wireless** headset port, an external charger port, a wired/**wireless** data port ... touch pad 135 may be identical to or smaller than the display **unit** 151 ...
Cited by 20 Related articles All 2 versions Cite Save

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Doc Code: DIST.E.FILE Document Description: Electronic Terminal Disclaimer - Filed		PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce
Electronic Petition Request	TERMINAL DISCLAIMER TO OBIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	
Application Number	14251383	
Filing Date	11-Apr-2014	
First Named Inventor	Alan Carlton	
Attorney Docket Number	IPH-2-2235US05	
Title of Invention	DATA TRANSFER BETWEEN WIRELESS DEVICES	
☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action ☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.		
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InterDigital Patent Holdings, Inc.	100%	
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☐ I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.	
Applicant claims the following fee status: ☐ Small Entity ☐ Micro Entity ☒ Regular Undiscounted	
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.	
THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES I certify, in accordance with 37 CFR 1.4(d)(4) that I am: ☒ An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application Registration Number <u>56787</u> ☐ A sole inventor ☐ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application ☐ A joint inventor; all of whom are signing this request	
Signature	/Harry Vartanian/
Name	Harry Vartanian

*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.

Electronic Patent Application Fee Transmittal

Application Number:	14251383			
Filing Date:	11-Apr-2014			
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES			
First Named Inventor/Applicant Name:	Alan G. Carlton			
Filer:	Harry Vartanian/Elizabeth McGinty			
Attorney Docket Number:	IPH-2-2235US05			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Statutory or Terminal Disclaimer	1814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				160

Doc Code: DISQ.E.FILE

Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 14251383

Filing Date: 11-Apr-2014

Applicant/Patent under Reexamination: Carlton et al.

Electronic Terminal Disclaimer filed on May 20, 2015

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt

EFS ID:	22398338
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Elizabeth McGinty
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	20-MAY-2015
Filing Date:	11-APR-2014
Time Stamp:	14:19:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$ 160
RAM confirmation Number	578
Deposit Account	090435
Authorized User	VARTANIAN, HARRY

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Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Electronic Terminal Disclaimer-Filed	eTerminal-Disclaimer.pdf	33515	no	2
			c0d765a2090f5d838a7cd16934041f280c16540a		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	30641	no	2
			de3587e8e2b5449c1375f5026ca127f407f06a03		

Warnings:

Information:

Total Files Size (in bytes):			64156
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT APPLICATION** of:

Carlton et al.

Application No.: 14/251,383

Confirmation No.: 7086

Filed: April 11, 2014

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Group: 2645

Examiner: Diane D. Mizrahi

Our File: IPH-2-2235US05

Date: May 20, 2015

RESPONSE PURSUANT TO 37 C.F.R. § 1.111

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

This Response and Terminal Disclaimer are being timely filed in response to the Non-Final Office Action dated April 14, 2015.

Please amend the application without prejudice or disclaimer as follows:

Amendments to the Claims:

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

1. (Currently Amended) A method performed by a wireless transmit/receive unit (WTRU), the method comprising:

processing, by the WTRU from a ~~multi-touch~~ touch display, ~~a first~~ an input to select media in ~~a mobile~~ an application;

detecting, by the WTRU over bluetooth ~~Bluetooth~~, ~~a plurality of WTRUs~~ another WTRU;

processing, by the WTRU, ~~a second~~ another input from the ~~multi-touch~~ touch display to select ~~a target~~ the another WTRU ~~from the plurality of WTRUs~~;

sending, by the WTRU to the selected ~~target~~ another WTRU, a message to transfer the selected media;

receiving, by the WTRU, an acceptance to transfer the selected media; and

transferring, by the WTRU to the selected ~~target~~ another WTRU over WiFi, the selected media.

2. (Currently Amended) The method of claim 1, wherein the ~~first~~ input or the ~~second~~ another input is a multi-touch input.

3. (Currently Amended) The method of claim 1 further comprising:

displaying, by the WTRU, a progress of the transfer to the selected ~~target~~
another WTRU.

4. (Currently Amended) The method of claim 1, wherein the media is any one of a photograph, video, or a document.

5. (Currently Amended) The method of claim 1, wherein the ~~first~~ input or the ~~second~~ another input is a tap.

6. (Currently Amended) The method of claim 1, wherein the message to transfer is a request.

7. (Currently Amended) The method of claim 1, wherein the transferring by the WTRU over WiFi uses a WiFi link.

8. (Currently Amended) The method of claim 1, wherein the transferring by the WTRU ~~or Bluetooth~~ is provided by a communication peripheral.

9. (Currently Amended) The method of claim 1 ~~wherein Bluetooth discovery is used~~ further comprising using bluetooth to detect one of ~~[[the]]~~ a plurality of WTRUs in proximity to the WTRU.

10. (Currently Amended) The method of claim 9, wherein the ~~Bluetooth~~ discovery is provided using detection of the plurality of WTRUs utilizes a service discovery protocol.

11. (Currently Amended) The method of claim 1 further comprising:
processing, by the WTRU, release of a touch contact to initiate transfer of the selected media to the selected ~~target~~ another WTRU.

12. (Currently Amended) The method of claim 1 further comprising:
determining, by the WTRU, that the selected ~~target~~ another WTRU is compatible to receive the selected media.

13. (Currently Amended) The method of claim 1, wherein a real time map is maintained of ~~[[the]]~~ a plurality of WTRUs in proximity to the WTRU.

14. (Currently Amended) The method of claim 1 further comprising:
determining, by the WTRU, environment information that lists ~~[[the]]~~ a plurality of WTRUs in proximity to the WTRU.

15. (Currently Amended) The method of claim 1, wherein the WTRU processes the ~~first~~ input or the ~~second~~ another input based on information from the ~~multi-touch~~ touch display.

16. (Currently Amended) The method of claim 1 further comprising:
initiating, by the WTRU, transfer of media based on a gesture on a visual representation, displayed on the ~~multi-touch~~ touch display, of the media; and
wherein the gesture is in a direction of an intended receiving WTRU.

17. (Currently Amended) The method of claim 1, wherein the ~~first~~ input or the ~~second~~ another input is a gesture input.

18. (Currently Amended) The method of claim 1, wherein the ~~first~~ input or the ~~second~~ another input is a multi-finger input.

19. (Currently Amended) The method of claim 1, wherein the ~~first~~ input or the ~~second~~ another input is a multi-finger gesture.

20. (Currently Amended) The method of claim 1 further comprising:
transferring, by the WTRU to the selected ~~target~~ another WTRU, additional display information; and

wherein the additional display information is displayed before the selected media is ~~substantially entirely~~ completely transferred.

21. (Currently Amended) The method of claim 1 further comprising:
receiving, by the WTRU from ~~another~~ a different WTRU, a request to transfer other media;
receiving, in response to accepting the request by the WTRU, the other media; and
displaying, by the WTRU, the other media substantially ~~entirely~~ completely to a user of the WTRU.

22. (Currently Amended) The method of claim 1, wherein the ~~first~~ input or the ~~second~~ another input is a gesture input.

23. (Currently Amended) A wireless transmit/receive unit (WTRU) comprising:
circuitry configured to process, from a ~~multi-touch~~ touch display, a ~~first~~ an input to select media in a ~~mobile~~ an application;
circuitry configured to detect, by the WTRU over bluetooth ~~Bluetooth~~, a ~~plurality of WTRUs~~ another WTRU;

the circuitry further configured to process ~~a second~~ another input from the ~~multi-touch~~ touch display to select ~~a target~~ the another WTRU ~~from the plurality of~~ WTRUs;

circuitry configured to send, by the WTRU to the selected ~~target~~ another WTRU, a message to transfer the selected media;

circuitry configured to receive, by the WTRU, an acceptance to transfer the selected media; and

circuitry configured to transfer, by the WTRU to the selected ~~target~~ another WTRU over WiFi, the selected media.

24. (Currently Amended) The WTRU of claim 23, wherein the ~~first~~ input or the ~~second~~ another input is a multi-touch input.

25. (Currently Amended) The WTRU of claim 23 further comprising:
circuitry configured to display, by the WTRU, a progress of the transfer to the selected ~~target~~ another WTRU.

26. (Currently Amended) The WTRU of claim 23, wherein the media is any one of a photograph, video, or a document.

27. (Currently Amended) The WTRU of claim 23, wherein the ~~first~~ input or the ~~second~~ another input is a tap.

28. (Currently Amended) The WTRU of claim 23, wherein the message to transfer is a request.

29. (Currently Amended) The WTRU of claim 23, wherein the circuitry configured to transfer over WiFi uses a WiFi link.

30. (Currently Amended) The WTRU of claim 23, wherein the circuitry configured to transfer ~~or Bluetooth~~ is provided by a communication peripheral.

31. (Currently Amended) The WTRU of claim 23 ~~wherein Bluetooth discovery is used~~ further comprising using bluetooth to detect one of [[the]] a plurality of WTRUs in proximity to the WTRU.

32. (Currently Amended) The WTRU of claim 31, wherein the ~~Bluetooth discovery is provided using~~ detection of the plurality of WTRUs utilizes a service discovery protocol.

33. (Currently Amended) The WTRU of claim 23 further comprising:

the circuitry further configured to process, by the WTRU, release of a touch contact to initiate transfer of the selected media to the selected ~~target~~ another WTRU.

34. (Currently Amended) The WTRU of claim 23 further comprising:
circuitry configured to determine, by the WTRU, that the selected ~~target~~ another WTRU is compatible to receive the selected media.

35. (Currently Amended) The WTRU of claim 23, wherein a real time map is maintained of ~~[[the]]~~ a plurality of WTRUs in proximity to the WTRU.

36. (Currently Amended) The WTRU of claim 23 further comprising:
circuitry configured to determine, by the WTRU, environment information that lists ~~[[the]]~~ a plurality of WTRUs in proximity to the WTRU.

37. (Currently Amended) The WTRU of claim 23, wherein the WTRU processes the ~~first~~ input or the ~~second~~ another input based on information from the ~~multi-touch~~ touch display.

38. (Currently Amended) The WTRU of claim 23 further comprising:

circuitry configured to initiate, by the WTRU, transfer of media based on a gesture on a visual representation, displayed on the ~~multi-touch~~ touch display, of the media; and

wherein the gesture is in a direction of an intended receiving WTRU.

39. (Currently Amended) The WTRU of claim 23, wherein the ~~first~~ input or the ~~second~~ another input is a gesture input.

40. (Currently Amended) The WTRU of claim 23, wherein the ~~first~~ input or the ~~second~~ another input is a multi-finger input.

41. (Currently Amended) The WTRU of claim 23, wherein the ~~first~~ input or the ~~second~~ another input is a multi-finger gesture.

42. (Currently Amended) The WTRU of claim 23 further comprising:
the circuitry further configured to transfer, by the WTRU to the selected ~~target~~ another WTRU, additional display information; and

wherein the additional display information is displayed before the selected media is ~~substantially entirely~~ completely transferred.

43. (Currently Amended) The WTRU of claim 23 further comprising:

the circuitry further configured to receive, by the WTRU from ~~another~~ a different WTRU, a request to transfer other media;

the circuitry further configured to receive, in response to accepting the request by the WTRU, the other media; and

circuitry configured to display, by the WTRU, the other media substantially ~~entirely~~ completely to a user of the WTRU.

44. (Currently Amended) The WTRU of claim 23, wherein the ~~first~~ input or the ~~second~~ another input is a gesture input.

45. (NEW) The method of claim 7, wherein the WiFi link operates using 802.21.

46. (NEW) The method of claim 7, wherein the WiFi link utilizes peer-to-peer communication.

47. (NEW) The method of claim 46, wherein the peer-to-peer communication operates in WiFi ad-hoc mode.

48. (NEW) The WTRU of claim 29, wherein the WiFi link operates using 802.21.

49. (NEW) The WTRU of claim 29, wherein the WiFi link utilizes peer-to-peer communication.

50. (NEW) The WTRU of claim 49, wherein the peer-to-peer communication operates in WiFi ad-hoc mode.

Applicant: InterDigital Patent Holdings, Inc.
Application No.: 14/251,383

Amendments to the Specification:

Please substitute the Abstract with the following new Abstract:

ABSTRACT

A wireless transmit/receive unit (WTRU) may detect another WTRU over bluetooth. The WTRU may send to the another WTRU a message to transfer selected media. The WTRU may transfer the selected media to the another WTRU over WiFi.

REMARKS/ARGUMENTS

After the foregoing Amendment, claims 1-50 are currently pending in this application. Claims 1-44 are amended. New claims 45-50 are added. In the specification, a new Abstract is submitted.

Allowable Subject Matter

Applicant thanks the Examiner for indicating that claims 1-44 contain allowable subject matter.

Claim Objections

The Examiner objected to claims 1-44 because claims 1 and 23 (for example) contain abbreviations, such as WiFi, which should be formally spelled out in the claims. Applicant appreciates the Examiner's note but respectfully disagrees with the objection. One of ordinary skill in the art at the time of filing would understand that WiFi is not an abbreviation as explained by the Oxford Dictionary:

“Definition of *Wi-Fi* in English:

...

Origin

1990s: from wireless + an apparently arbitrary second element, after hi-fi; sometimes incorrectly interpreted as a shortening of *Wireless Fidelity*.”
(http://www.oxforddictionaries.com/us/definition/american_english/Wi-Fi)

Therefore, withdrawal of the objection to claims 1-44 is respectfully requested.

Double Patenting Rejection

Claims 1-44 are rejected under the judicially created doctrine of non-statutory obviousness-type double patenting as being unpatentable over claims 1-44 of U.S. Patent No. 8,737,933. A Terminal Disclaimer is submitted herewith to overcome the non-statutory obviousness-type double patenting rejection. Accordingly, withdrawal of the non-statutory obviousness-type double patenting rejection is respectfully requested.

Claim Rejections - 35 U.S.C. § 112

Claims 1-44 are rejected under 35 U.S.C. § 112(b) or 35 U.S.C. § 112 (pre-AIA), second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the inventor or a joint inventor, or for pre-AIA the applicant regards as the invention. Examiner states that it is unclear as to the meaning of the "second input" in the claims. Without any concessions, the claims are amended to expedite prosecution by removing the phrase "second input."

Based on the arguments presented above, withdrawal of the 35 U.S.C. § 112 rejection of claims 1-44 is respectfully requested.

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, Applicant respectfully submits that the present application, including claims 1-50, is in condition for allowance and a notice to that effect is respectfully requested.

Respectfully submitted,

InterDigital Patent Holdings, Inc.

By: /Harry Vartanian/
Harry Vartanian
Registration No. 56,787

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

HV/eam

Electronic Patent Application Fee Transmittal

Application Number:	14251383			
Filing Date:	11-Apr-2014			
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES			
First Named Inventor/Applicant Name:	Alan G. Carlton			
Filer:	Harry Vartanian/Elizabeth McGinty			
Attorney Docket Number:	IPH-2-2235US05			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Claims in Excess of 20	1202	6	80	480
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				480

Electronic Acknowledgement Receipt

EFS ID:	22398600
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Elizabeth McGinty
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	20-MAY-2015
Filing Date:	11-APR-2014
Time Stamp:	14:28:02
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$480
RAM confirmation Number	731
Deposit Account	090435
Authorized User	VARTANIAN, HARRY

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)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

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

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

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		IPH-2-2235US05- NonFinalResponse-20150520. PDF	110593 76599a9c6686106ca0b28966f1c567d22aab9e41	yes	17
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
	Claims		2	12	
	Specification		13	13	
	Abstract		14	14	
	Applicant Arguments/Remarks Made in an Amendment		15	17	
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30799 676fb9d38a567dad33cffb3dce2f991942622777	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			141392		

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.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875	Application or Docket Number 14/251,383	Filing Date 04/11/2014	☐ To be Mailed
---	---	----------------------------------	---------------------------------------

ENTITY: ☒ LARGE ☐ SMALL ☐ MICRO

APPLICATION AS FILED – PART I

(Column 1)

(Column 2)

FOR	NUMBER FILED	NUMBER EXTRA	RATE (\$)	FEE (\$)
☐ BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A	
☐ SEARCH FEE (37 CFR 1.16(k), (i), or (m))	N/A	N/A	N/A	
☐ EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A	
TOTAL CLAIMS (37 CFR 1.16(i))	minus 20 =	*	X \$ =	
INDEPENDENT CLAIMS (37 CFR 1.16(h))	minus 3 =	*	X \$ =	
☐ APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			
☐ MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))				
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL	

APPLICATION AS AMENDED – PART II

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	05/20/2015	CLAIMS REMAINING AFTER AMENDMENT	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	* 50	Minus	** 44	= 6	X \$80 =	480
	Independent (37 CFR 1.16(h))	* 2	Minus	***3	= 0	X \$420 =	0
	☐ Application Size Fee (37 CFR 1.16(s))						
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))						
TOTAL ADD'L FEE							480

(Column 1)

(Column 2)

(Column 3)

AMENDMENT	CLAIMS REMAINING AFTER AMENDMENT	Minus	HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE (\$)	ADDITIONAL FEE (\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	X \$ =
	Independent (37 CFR 1.16(h))	*	Minus	***	=	X \$ =
	☐ Application Size Fee (37 CFR 1.16(s))					
	☐ FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))					
TOTAL ADD'L FEE						

* If the entry in column 1 is less than the entry in column 2, write "0" in column 3.

** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20".

*** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3".

The "Highest Number Previously Paid For" (Total or Independent) is the highest number found in the appropriate box in column 1.

LIE
/KIMBERLY PANNELL/

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

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



UNITED STATES 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 06/22/2015
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: 06/22/2015

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

14/251,383

04/11/2014

Alan G. Carlton

IPH-2-2235US05

7086

TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	09/22/2015

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

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

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

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

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

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

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 06/22/2015
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.
14/251,383	04/11/2014	Alan G. Carlton	IPH-2-2235US05	7086

TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	09/22/2015

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, 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 credits any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

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

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
☐ Applicant asserting small entity status. See 37 CFR 1.27
☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____ Date _____
Typed or printed name _____ Registration No. _____



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.
14/251,383	04/11/2014	Alan G. Carlton	IPH-2-2235US05	7086

24374 7590 06/22/2015
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: 06/22/2015

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

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

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

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

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

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

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

Notice of Allowability	Application No. 14/251,383	Applicant(s) CARLTON ET AL.	
	Examiner DIANE MIZRAHI	Art Unit 2645	AIA (First Inventor to File) Status No

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

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included 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 5-20-15.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.
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 1-50. 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).

Certified copies:

- a) ☐ All b) ☐ Some *c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* 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)

- | | |
|--|---|
| 1. ☐ Notice of References Cited (PTO-892) | 5. ☐ Examiner's Amendment/Comment |
| 2. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 6. ☐ Examiner's Statement of Reasons for Allowance |
| 3. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 7. ☐ Other _____ |
| 4. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____ | |

/DIANE MIZRAHI/
Primary Examiner, Art Unit 2645

WEST Search History for Application 14251383

Creation Date: 2015061415:22

Prior Art Searches

Query	DB	Op.	Plur.	Thes.	Date
(wireless near5 transmit near55 receive near5 unit or WTRU)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(multi enar5 touch near5 screen or display)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(Bluetooth)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(messag\$6 near5 transfer\$3)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU)) and ((multi enar5 touch near5 screen or display))	PGPB, USPT, USOC, EPAB, JPAB, DWPI,	ADJ	YES		04-05-2015

	TDBD, FPRS				
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display)) and ((Bluetooth))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth)) and ((messag\$6 near5 transfer\$3))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3)) and media	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media) and WIFI	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI) and (digital file\$3 or media)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3	PGPB, USPT, USOC, EPAB,	ADJ	YES		04-05-2015

or media)) and (mobile near5 application)	JPAB, DWPI, TDBD, FPRS				
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and (second near5 input\$5)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04W4/021 H04W12/02 H04W8/10).CPC.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
(multi-touch\$3 near5 input\$6)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((multi-touch\$3 near5 input\$6)) and ((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application))	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04L67/18 H04L63/0407 H04L63/10).CPC.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi enar5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04L67/18 H04L63/0407 H04L63/10).CPC.)	PGPB, USPT, USOC, EPAB, JPAB, DWPI, TDBD, FPRS	ADJ	YES		04-05-2015

display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and media and WIFI and (digital file\$3 or media) and (mobile near5 application)) and ((H04M2203/353 H04M2242/15 H04M2250/10 H04M3/42348 H04M3/4878).CPC.)	USOC, EPAB, JPAB, DWPI, TDBD, FPRS				
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi near5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and (multi-touch\$3 near5 input\$6) and (mobile near5 application)).clms.	PGPB, USPT, USOC	ADJ	YES		04-05-2015
((wireless near5 transmit near55 receive near5 unit or WTRU) and (multi near5 touch near5 screen or display) and (Bluetooth) and (messag\$6 near5 transfer\$3) and (multi-touch\$3 near5 input\$6) and (mobile near5 application)).clms.	PGPB, USPT, USOC	ADJ	YES		04-05-2015



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
 United States Patent and Trademark Office
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 Alexandria, Virginia 22313-1450
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BIB DATA SHEET

CONFIRMATION NO. 7086

SERIAL NUMBER	FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.		
14/251,383	04/11/2014	455	2645	IPH-2-2235US05		
RULE						
APPLICANTS InterDigital Patent Holdings, Inc., Wilmington, DE; INVENTORS Alan G. Carlton, Mineola, NY; Alexander Reznik, Titusville, NJ; ** CONTINUING DATA ***** This application is a CON of 13/930,743 06/28/2013 PAT 8737933 which is a CON of 13/493,650 06/11/2012 PAT 8478207 which is a CON of 12/644,948 12/22/2009 PAT 8200265 which claims benefit of 61/140,126 12/23/2008 ** FOREIGN APPLICATIONS ***** ** IF REQUIRED, FOREIGN FILING LICENSE GRANTED ** 04/30/2014						
Foreign Priority claimed ☐ Yes ☒ No 35 USC 119(a-d) conditions met ☐ Yes ☒ No Verified and Acknowledged <u>/DIANE D MIZRAHI/</u> Examiner's Signature		☒ Met after Allowance <u>/dm/</u> Initials	STATE OR COUNTRY NY	SHEETS DRAWINGS 9	TOTAL CLAIMS 44	INDEPENDENT CLAIMS 2
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 4000	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		

Issue Classification 	Application/Control No. 14251383	Applicant(s)/Patent Under Reexamination CARLTON ET AL.	
	Examiner DIANE MIZRAHI	Art Unit 2645	

CPC						
Symbol					Type	Version
H04W		4	/	008	F	2013-01-01
H04W		4	/	02	I	2013-01-01
H04L		67	/	16	I	2013-01-01
H04L		67	/	18	I	2013-01-01
G06F		3	/	0482	I	2013-01-01
G06F		3	/	0488	I	2013-01-01
			/			
			/			
			/			
			/			
			/			
			/			
			/			
			/			
			/			
			/			

CPC Combination Sets				
Symbol	Type	Set	Ranking	Version

NONE		Total Claims Allowed:	
		50	
(Assistant Examiner)	(Date)		
/DIANE MIZRAHI/ Primary Examiner.Art Unit 2645	06/14/2015	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	1	5

Search Notes 	Application/Control No. 14251383	Applicant(s)/Patent Under Reexamination CARLTON ET AL.
	Examiner DIANE MIZRAHI	Art Unit 2645

CPC- SEARCHED		
Symbol	Date	Examiner
H04W	6-12-15	dm

CPC COMBINATION SETS - SEARCHED		
Symbol	Date	Examiner
H04W4/021,H04W12/02,H04W8/10	4-1-15	dm
H04L67/18,H04L63/0407,H04L63/10	4-1-15	dm
H04M2203/353,H04M2242/15,H04M2250/10,H04M3/42348,H04M3/4878	4-1-15	dm

US CLASSIFICATION SEARCHED			
Class	Subclass	Date	Examiner

SEARCH NOTES		
Search Notes	Date	Examiner
Databases searched WEST: US Patents; US Publications; European and Japanese Patent Office (Abstracts); Derwent; IBM Technical Disclosures; OCR, Foreign Patent Retrieval.	4-1-15	dm
Performed Google Patents Search (see attached search strategy report attached).Performed ACM Search (see attached search strategy report attached).Performed IEEE Search (see attached search strategy report attached).Performed Google Search (see attached search strategy report attached).Performed Google Scholar Search (see attached search strategy report attached).	4-1-15	dm
Performed text search using Co-operative Patent Classification, (CPC). (See attached search history strategy report).	4-1-15	dm
Examined claims and the disclosure for possible 35 USC 101 and 112 issues. Searched for double patenting using inventors names listed in the instant application.	4-1-15	dm
Performed text search using US Patents and US Publications.(See attached search history strategy report).	6-12-15	dm
Updated WEST database searches, supra for databases	6-12-15	dm

	/DIANE MIZRAHI/ Primary Examiner.Art Unit 2645
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INTERFERENCE SEARCH

US Class/ CPC Symbol	US Subclass / CPC Group	Date	Examiner
H04W	4/00	6-12-15	dm
Performed text search using US Patents and US Publications.(See attached search history strategy report).		6-12-15	dm

/DIANE MIZRAHI/
Primary Examiner.Art Unit 2645

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 7596 06/22/2015
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.
14/251,383	04/11/2014	Alan G. Carlton	IPH-2-2235US05	7086

TITLE OF INVENTION: DATA TRANSFER BETWEEN WIRELESS DEVICES

APPL. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$960	\$0	\$0	\$960	09/22/2015

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, Delaware

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 credits any overpayment, to Deposit Account Number **090435** (enclose an extra copy of this form).

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

- ☐ Applicant certifying micro entity status. See 37 CFR 1.29
☐ Applicant asserting small entity status. See 37 CFR 1.27
☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Harry Vartanian/

Date September 22, 2015

Typed or printed name Harry Vartanian

Registration No. 56,787

Electronic Patent Application Fee Transmittal

Application Number:	14251383			
Filing Date:	11-Apr-2014			
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES			
First Named Inventor/Applicant Name:	Alan G. Carlton			
Filer:	Harry Vartanian/Elizabeth McGinty			
Attorney Docket Number:	IPH-2-2235US05			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
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:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Utility Appl Issue Fee	1501	1	960	960
Publ. Fee- Early, Voluntary, or Normal	1504	1	0	0
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				960

Electronic Acknowledgement Receipt

EFS ID:	23565749
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Elizabeth McGinty
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	22-SEP-2015
Filing Date:	11-APR-2014
Time Stamp:	16:32:45
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	Deposit Account
Payment was successfully received in RAM	\$960
RAM confirmation Number	3222
Deposit Account	090435
Authorized User	VARTANIAN, HARRY

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)

Charge any Additional Fees required under 37 C.F.R. Section 1.19 (Document supply fees)

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

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

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	IPH-2-2235US05- IssueFeePayment-20150922. PDF	1023502	no	1
			9ba36c7a2fb4f5d5284d8036f04c8794ecc 5d6d		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	32450	no	2
			3a519eac3ab70e2459aa972150e0bb4b021 b7017		

Warnings:

Information:

Total Files Size (in bytes):			1055952
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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.



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APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
14/251,383	10/27/2015	9173054	IPH-2-2235US05	7086

24374 7590 10/07/2015
VOLPE AND KOENIG, P.C.
DEPT. ICC
UNITED PLAZA
30 SOUTH 17TH STREET
PHILADELPHIA, PA 19103

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):

Alan G. Carlton, Mineola, NY;
InterDigital Patent Holdings, Inc., Wilmington, DE;
Alexander Reznik, Titusville, NJ;

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

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the **PATENT** of:

Carlton et al.

Patent No.: 9,173,054

Issued: October 27, 2015

Appln. No.: 14/251,383

Filed: April 11, 2014

For: DATA TRANSFER BETWEEN
WIRELESS DEVICES

Our File: IPH-2-2235US05

Date: October 5, 2016

REQUEST FOR CERTIFICATE OF CORRECTION

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

A Certificate of Correction under 35 U.S.C. § 254 and 37 C.F.R. §1.322 is requested for U.S. Patent No. 9,173,054. The following error was made during printing by the United States Patent and Trademark Office.

Patentee: InterDigital Patent Holdings, Inc.
Patent No.: 9,173,054

IN THE CLAIMS

In claim 27, at column 12, line 15, after "wherein the", delete "first".

Patentee: InterDigital Patent Holdings, Inc.
Patent No.: 9,173,054

REMARKS

Patentee believes that the above error is of such a nature as to justify the issuance of a Certificate of Correction. Patentee has enclosed a completed Certificate of Correction Form PTO/SB/44.

Patentee respectfully requests that the Certificate of Correction be issued.

Respectfully submitted,

InterDigital Patent Holdings, Inc.

By /Harry Vartanian/
Harry Vartanian
Registration No. 56,787
(215) 568-6400

Volpe and Koenig, P.C.
United Plaza
30 South 17th Street
Philadelphia, PA 19103-4009

HV/eam

UNITED STATES PATENT AND TRADEMARK OFFICE CERTIFICATE OF CORRECTION

Page 1 of 1

PATENT NO. : 9,173,054

APPLICATION NO.: 14/251,383

ISSUE DATE : October 27, 2015

INVENTOR(S) : Carlton et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS

In claim 27, at column 12, line 15, after "wherein the", delete "first".

MAILING ADDRESS OF SENDER (Please do not use customer number below):

Volpe and Koenig, P.C.
30 So. 17th Street, Suite 1800
Philadelphia, PA 19103

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. 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 1.0 hour 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: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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

Privacy Act Statement

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

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

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.

Electronic Acknowledgement Receipt

EFS ID:	27125071
Application Number:	14251383
International Application Number:	
Confirmation Number:	7086
Title of Invention:	DATA TRANSFER BETWEEN WIRELESS DEVICES
First Named Inventor/Applicant Name:	Alan G. Carlton
Customer Number:	24374
Filer:	Harry Vartanian/Elizabeth McGinty
Filer Authorized By:	Harry Vartanian
Attorney Docket Number:	IPH-2-2235US05
Receipt Date:	05-OCT-2016
Filing Date:	11-APR-2014
Time Stamp:	11:15:59
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	Request for Certificate of Correction	IPH-2-2235US05- Request_for_Certificate_of_Cor rection-20161005.PDF	67777 76b49fe6faad6bca6ab3875bc332300d497 8b213	no	3

Warnings:

Information:					
2	Request for Certificate of Correction	IPH-2-2235US05- Request_for_Certificate_of_Cor rection_SB44-20161004.PDF	164316 871a6c4345325981ded933738315ffe18e8c5d10	no	2
Warnings:					
Information:					
Total Files Size (in bytes):			232093		
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.					

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : 9,173,054 B2
APPLICATION NO. : 14/251383
DATED : October 27, 2015
INVENTOR(S) : Carlton et al.

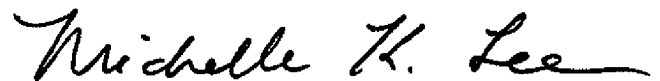
Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

IN THE CLAIMS

In claim 27, at column 12, line 15, after “wherein the”, delete “first”.

Signed and Sealed this
Eighth Day of November, 2016

A handwritten signature in black ink that reads "Michelle K. Lee". The signature is written in a cursive, flowing style.

Michelle K. Lee
Director of the United States Patent and Trademark Office