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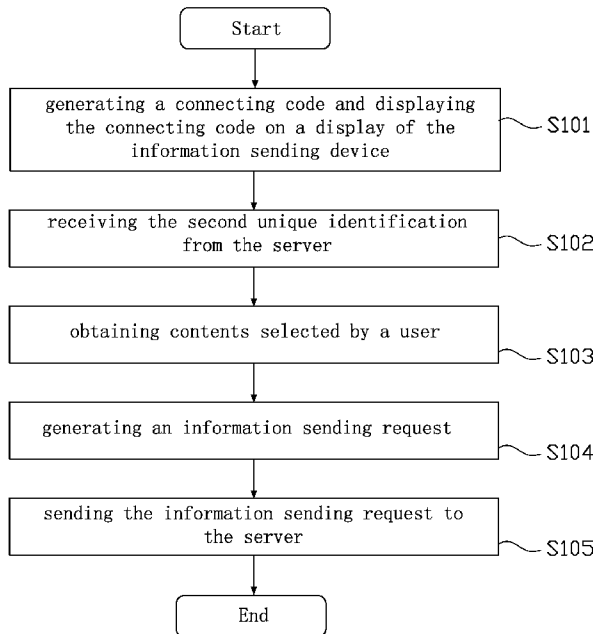


FIG. 13

(57) Abstract: In one embodiment, an information transmitting includes the following steps: generating a connecting code and displaying the connecting code on a display of the information sending device; receiving a second unique identity from the server; obtaining contents selected by a user; generating an information sending request; and sending the information sending request to the server. According to above information transmitting method, by establishing a connection between two terminals, or two browser applications, information of different categories can be efficiently transmitted from one terminal to the other terminal. In addition, this disclosure also publishes an information transmitting device and an information transmitting system.

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INFORMATION TRANSMITTING METHOD, DEVICE AND SYSTEM, AND STORAGE MEDIUM

PRORITY

5 [0001] This application claims priority of a CN patent application serial No. 201310023197.6, titled “information transmitting method, information sending device, information receiving device and system” and filed on January 22, 2012, which application is incorporated by reference herein in its entirety.

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TECHNICAL FIELD

[0002] The present invention relates to network communication technology, and more particularly to an information transmitting method, an information transmitting device, an information transmitting system and a
15 computer readable storage medium.

BACKGROUND OF THE INVENTION

[0003] With the rapid development of the network technology, people can use electronic devices, such as personal computers, mobile phones, to surf
20 the internet anywhere and anytime. Personal computers have the advantages of larger storage capacity, better user experience, and better compatibility of different operating systems and software, while the mobile terminals, such as mobile phones, have better portability. Currently, user demands on the internet are gradually changing. Users may want to
25 exchange information, such as contents in a web page opened in a browser, or contents stored in the disk, between personal computers and mobile terminals. For example, sometimes there is a partially read webpage in

the personal computer, but the user need to catch bus. Under this condition, the user may want to send the unread content to his mobile phone. Then, the user can continue the reading process on the bus. Sometimes the user may want to view photos or videos stored in his mobile
5 phone. Thus, the user needs to send the photos or videos in the mobile phone to his personal computer.

[0004] Thus, there is a desire to provide an efficient way for exchanging information between two different terminals.

10 SUMMARY

[0005] In one embodiment, an information transmitting method, for being executed by an information sending device, includes the following steps: generating a connecting code and displaying the connecting code on a display of the information sending device, wherein the connecting code at
15 least comprises a first unique identity of the information sending device, and is configured for being scanned by an information receiving device, thereby causing the information receiving device sends a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device, to a server; receiving the
20 second unique identity from the server after the first unique identity and the second unique identity being associated with each other in the server; obtaining contents selected by a user; generating an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity; and sending the
25 information sending request to the server, thereby causing the server forwards the contents selected by the user to the information receiving device and the information receiving device outputs the contents selected

by the user.

[0006] In one embodiment, an information transmitting method, for being executed by an information receiving device, includes the following steps: scanning a connecting code displayed on a display of an information
5 sending device with a camera, wherein the connecting code at least comprises a first unique identity of the information sending device; extracting the first unique identity from the connecting code; generating a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device; sending the
10 binding request to a server, thereby causing the server associating the first unique identity and the second identity with each other; receiving contents sent from the information sending device via the server.

[0007] In one embodiment, an information transmitting method, for being executed by an information transmitting system, which comprises an
15 information sending device, an information receiving device, and a server, is provided. The method includes the following steps:

[0008] generating a connecting code and displaying the connecting code on a display of the information sending device, wherein the connecting code at least comprises a first unique identity of the information sending device;

20 [0009] scanning the connecting code displayed on the display of the information sending device with a camera of the information receiving device;

[0010] extracting the first unique identity from the connecting code, generating a binding request, which at least comprises the first unique
25 identity and a second unique identity of the information receiving device; and sending the binding request to the server from the information receiving device;

[0011] generating an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity, and sending the information sending request to the server from the information sending device;

5 [0012] forwarding the contents selected by the user to the information receiving device according to the information sending request by the server; and

[0013] receiving the contents selected by the user from the server in the information receiving device.

10 [0014] In one embodiment, an information transmitting device includes: a display; memory; one or more processors; and one or more modules stored in the memory and configured for execution by the one or more processors, the one or more modules comprising instructions to:

[0015] generate a connecting code and display the connecting code on the
15 display, wherein the connecting code at least comprises a first unique identity of the information transmitting device, and is configured for being scanned by an information receiving device, thereby causing the information receiving device sends a binding request, which at least comprises the first unique identity and a second unique identity of the
20 information receiving device, to a server;

[0016] receive the second unique identity from the server after the first unique identity and the second unique identity being associated with each other in the server;

[0017] obtain contents selected by a user;

25 [0018] generate an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity; and

[0019] send the information sending request to the server, thereby causing the server forwards the contents selected by the user to the information receiving device and the information receiving device outputs the contents selected by the user.

5 [0020] In one embodiment, an information transmitting device includes: a camera; memory; one or more processors; and one or more modules stored in the memory and configured for execution by the one or more processors, the one or more modules comprising instructions to:

[0021] scan a connecting code displayed on a display of an information
10 sending device with the camera, wherein the connecting code at least comprises a first unique identity of the information sending device;

[0022] extract the first unique identity from the connecting code;

[0023] generate a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device;

15 [0024] send the binding request to a server, thereby causing the server associating the first unique identity and the second identity with each other;

[0025] receive contents sent from the information sending device via the server.

[0026] In one embodiment, an information transmitting system, includes:
20 an information sending device, an information receiving device, and a server.

[0027] The information sending device is configured for generating a connecting code and displaying the connecting code on a display of the information sending device, wherein the connecting code at least comprises
25 a first unique identity of the information sending device.

[0028] The information receiving device is configured for scanning the connecting code displayed on the display of the information sending device

with a camera of the information receiving device; extracting the first unique identity from the connecting code; generating a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device; and sending the binding request to the server from the information receiving device.

[0029] The server is configured for associating the first unique identity and the second unique identity with each other.

[0030] The information sending device is further configured for generating an information sending request, which at least comprises contents selected by a user, and the first unique identity or the second unique identity, and sending the information sending request to the server from the information sending device;

[0031] The server is further configured for forwarding the contents selected by the user to the information receiving device according to the information sending request.

[0032] The information receiving device is further configured for receiving the contents selected by the user from the server in the information receiving device.

[0033] In one embodiment, a computer readable storage medium storing one or more programs is provided. The one or more programs comprising instructions, which when executed by an information transmitting device, cause the information transmitting device to perform a method including:

[0034] generating a connecting code and displaying the connecting code on a display of the information sending device, wherein the connecting code at least comprises a first unique identity of the information sending device, and is configured for being scanned by an information receiving device, thereby causing the information receiving device sends a binding request,

which at least comprises the first unique identity and a second unique identity of the information receiving device, to a server;

[0035] receiving the second unique identity from the server after the first unique identity and the second unique identity being associated with each other in the server;

[0036] obtaining contents selected by a user;

[0037] generating an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity; and

[0038] sending the information sending request to the server, thereby causing the server forwards the contents selected by the user to the information receiving device and the information receiving device outputs the contents selected by the user.

[0039] In one embodiment, a computer readable storage medium storing one or more programs is provided. The one or more programs comprising instructions, which when executed by an information transmitting device, cause the information transmitting device to perform a method comprising:

[0040] scanning a connecting code displayed on a display of an information sending device with a camera, wherein the connecting code at least comprises a first unique identity of the information sending device;

[0041] extracting the first unique identity from the connecting code;

[0042] generating a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device;

[0043] sending the binding request to a server, thereby causing the server associating the first unique identity and the second identity with each other; and

[0044] receiving contents sent from the information sending device via the server.

[0045] According to above embodiments, by establishing a connection between two terminals, or two browser applications, information of different categories can be efficiently transmitted from one terminal to the other terminal.

BRIEF DESCRIPTION OF THE DRAWINGS

[0046] The drawings described herein are for illustrative purposes only of selected embodiments and not all possible implementations, and are not intended to limit the scope of the present disclosure.

[0047] FIG. 1 is a schematic view of an information transmitting system in accordance with an embodiment.

[0048] FIG. 2 is a block diagram of a server of the information transmitting system in FIG. 1.

[0049] FIG. 3 is a block diagram of an information sending device of the information transmitting system in FIG. 1.

[0050] FIG. 4 is a block diagram of an information receiving device of the information transmitting system in FIG. 1.

[0051] FIG. 5 is a schematic view of an interface of the information sending device of FIG. 3.

[0052] FIG. 6 is a schematic view of an interface of the information receiving device of FIG. 4.

[0053] FIG. 7 is another schematic view of an interface of the information receiving device of FIG. 4.

[0054] FIG. 8 is a schematic view of another interface of the information sending device of FIG. 3.

[0055] FIG. 9 is yet another schematic view of an interface of the information receiving device of FIG. 4.

[0056] FIG. 10 is a schematic view of an image selecting interface of the information sending device of FIG. 3.

5 [0057] FIG. 11 is a schematic view of a text selecting interface of the information sending device of FIG. 3.

[0058] FIG. 12 is a diagram illustrating a practical application of the information transmitting system of FIG. 1.

10 [0059] FIG. 13 is a flow chart of an information transmitting method in accordance with an embodiment.

[0060] FIG. 14 is a flow chart of an information transmitting method in accordance with another embodiment.

[0061] FIG. 15 is a block diagram of an information transmitting module.

15 [0062] FIG. 16 is a block diagram of another information transmitting module.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

20 [0063] To make the objective, the technical solutions and advantages of the present invention more clear and understandable, embodiments of the present invention will be described in detail accompanying with figures as follows.

[0064] FIG. 1 is a schematic view of an information transmitting system according to an embodiment. An information transmitting system
25 100 includes one or more servers 10, an information sending device 11, and an information receiving device 12. The information sending device 11 and the information receiving device 12 are connected to the server via

internet connection, respectively.

[0065] FIG. 2 illustrates the server 10, according to some embodiments of the disclosure. The server 10 includes a memory 102, a memory controller 104, one or more processing units (CPU's) 106, a peripherals interface 108, and a network interface controller 110. These components communicate over the one or more communication buses or signal lines 112. It should be appreciated that the server 10 is only one example of a server, and that the server 10 may have more or fewer components that shown, or a different configuration of components. The various components shown in FIG. 2 may be implemented in hardware, software or a combination of both hardware and software, including one or more signal processing and/or application specific integrated circuits.

[0066] The memory 102 may include high speed random access memory and may also include non-volatile memory, such as one or more magnetic disk storage devices, flash memory devices, or other non-volatile solid state memory devices. In some embodiments, the memory 102 may further include storage remotely located from the one or more processors 106, for instance network attached storage accessed via network interface controller 110 and a communications network (not shown) such as the Internet, intranet(s), Local Area Networks (LANs), Wireless Local Area Networks (WLANs), Storage Area Networks (SANs) and the like, or any suitable combination thereof. Access to the memory 102 by other components of the server 10, such as the CPU 106 and the peripherals interface 108 may be controlled by the memory controller 104.

[0067] The peripherals interface 108 couples the input and output peripherals of the device to the CPU 106 and the memory 102. The one or more processors 106 run various software programs and/or sets of

instructions stored in the memory 102 to perform various functions for the server 10 and to process data.

[0068] In some embodiments, the peripherals interface 108, the CPU 106, and the memory controller 104 may be implemented on a single chip, such as a chip 111. In some other embodiments, they may be implemented on separate chips.

[0069] The network interface controller 110 receives and sends network signals. The network interface controller 110 converts electrical signals/optical signals/electromagnetic waves and communicates with other devices such as other servers or routers. As such, the server 10 may receive a web request through the network interface controller 110 and send data to a client using the network interface controller 110.

[0070] In some embodiments, there are software components stored in the memory 102. For example, the software components include an operating system 122, a binding module 124, and a forwarding module 126.

[0071] The operating system 122 (e.g., Darwin, RTXC, LINUX, UNIX, OS X, WINDOWS) includes various software components and/or drivers for controlling and managing general system tasks (e.g., memory management, storage device control, power management, etc.) and facilitates communication between various hardware and software components.

[0072] The binding module 124 and the forwarding module 126 are the serve side programs run on the operating system 122. The binding module 124, for example, is configured for receiving a binding request from the information receiving device 12, and associating a unique identity of the information sending device 11 and a unique identity of the

information receiving device 12 with each other. In other words, the binding module stores a correspondence between the unique identity of the information sending device 11 and the unique identity of the information receiving device 12 in a file or a database. The forwarding module 126, for example, is configured for receiving an information sending request from the information sending device 11, and forwarding content in the information sending request to the information receiving device 12.

[0073] Examples of the information sending device 11 and the information receiving device 12 include, but are not limited to, a personal computer (including, but is not limited to, a desktop computer or a laptop computer running Microsoft Windows operating system or Linux operating system), a tablet PC (including, but is not limited to, Apple iPad and other touch-screen devices running Apple iOS, Microsoft Surface and other touch-screen devices running the Windows operating system, and tablet devices running the Android operating system), a mobile phone, a smartphone (including, but is not limited to, an Apple iPhone, a Windows Phone and other smartphones running Windows Mobile or Pocket PC operating systems, and smartphones running the Android operating system, the Blackberry operating system, or the Symbian operating system), an e-reader (including, but is not limited to, Amazon Kindle and Barnes & Noble Nook), a laptop computer (including, but is not limited to, computers running Apple Mac operating system, Windows operating system, Android operating system and/or Google Chrome operating system), or an on-vehicle device running any of the above-mentioned operating systems or any other operating systems, all of which are well known to those skilled in the art. In one embodiment, the first information sending device 11 is a personal computer, while the second

information receiving device 12 is a mobile phone.

[0074] FIG. 3 illustrates the information sending device 11, according to some embodiments. The information sending device 11 includes a memory 102, a memory controller 104, one or more processing units (CPU's) 106, a peripherals interface 108, and a network interface controller 110. These components communicate over the one or more communication buses or signal lines 112. It should be appreciated that the information sending device 11 is only one example of an information sending device, and that the information sending device 11 may have more or fewer components that shown, or a different configuration of components. The various components shown in FIG. 3 may be implemented in hardware, software or a combination of both hardware and software, including one or more signal processing and/or application specific integrated circuits.

[0075] In some embodiments, there are software components stored in the memory 102 of the information sending device 11. For example, the software components include an operating system 126, and a browser 128.

[0076] The operating system 122 (e.g., Darwin, RTXC, LINUX, UNIX, OS X, WINDOWS) includes various software components and/or drivers for controlling and managing general system tasks (e.g., memory management, storage device control, power management, etc.) and facilitates communication between various hardware and software components. In one embodiment, the operating system 122 is a personal edition.

[0077] The browser 128 is a user end application run on the operating system 126. Examples of the brows include, but are not limited to,

Internet Explorer, Safari, Chrome, Firefox, and etc. The main function of the browser 128 is to browse webpages on the internet. In addition, the browser 128 further provides an information sharing ability, which facilitates information transmitting between the information sending device 11 and the information receiving device 12.

[0078] FIG. 4 illustrates the information receiving device 12, according to some embodiments. The information receiving device 12 includes a memory 102, a memory controller 104, one or more processing units (CPU's) 106, a peripherals interface 108, a RF circuitry 120, and a camera 121. These components communicate over the one or more communication buses or signal lines 112. It should be appreciated that the information sending device 12 is only one example of an information receiving device, and that the information receiving device 12 may have more or fewer components that shown, or a different configuration of components. The various components shown in FIG. 4 may be implemented in hardware, software or a combination of both hardware and software, including one or more signal processing and/or application specific integrated circuits.

[0079] The RF circuitry (radio frequency) 120 receives and sends electromagnetic waves. The RF circuitry 120 converts electrical signals to/from electromagnetic waves and communicates with communications networks and other communications devices via the electromagnetic waves. The RF circuitry 120 may include well-known circuitry for performing these functions, including but not limited to an antenna system, an RF transceiver, one or more amplifiers, a tuner, one or more oscillators, a digital signal processor, a CODEC chipset, a subscriber identity module (SIM) card, memory, and so forth. The RF circuitry 120 may communicate

with the networks, such as the internet, also referred to as the World Wide Web (WWW), and Intranet and/or a wireless network, such as a cellular telephone network, a wireless local area network (WLAN) and/or a metropolitan area network (MAN), and other devices by wireless
5 communication. The wireless communication may use any of a plurality of communications standards, protocols and technologies, including but not limited to Global System for Mobile communications (GSM), Enhanced Data GSM Environment (EDGE), wideband code division multiple access (W-CDMA), code division multiple access (CDMA), time division
10 multiple access (TDMA), Bluetooth, Wireless Fidelity (Wi-Fi) (e.g., IEEE 802.11a, IEEE 802.11b, IEEE 802.11g and/or IEEE 80.11n), voice over Internet Protocol (VoIP), Wi-MAX, a protocol for email, instant messaging, and/or Short Message Services (SMS)), or any other suitable communication protocol, including communication protocols not yet
15 developed as of the filing date of this document.

[0080] In some embodiments, there are software components stored in the memory 102 of the information receiving device 12. For example, the software components include an operating system 132, and a browser 134.

20 [0081] The operating system 132 includes various software components and/or drivers for controlling and managing general system tasks (e.g., memory management, storage device control, power management, etc.) and facilitates communication between various hardware and software components. In one embodiment, the operating
25 system 132 is an operating system for mobile terminals, such as Apple iOS, Windows Mobile, and Android.

[0082] The browser 134 is similar to the browser 128 in the

information sending device 11. In one embodiment, the browser 134 is a mobile edition of the browser 128.

[0083] The information transmitting system 100 facilitates an information transmitting process between the information sending device 11 and the information receiving device 12, and the process is described as follows.

[0084] First, a correspondence or a connection between the information sending device 11 and the information receiving device 12 is established in the server 10. To establish the correspondence, the information sending device 11 generates a connecting code and displaying the connecting code on a display thereof. For example, as shown in FIG. 5, in the user interface of the browser 128, there is an interface object 201. The interface object 201, for example, is a menu item, a button, an icon or any combination thereof. When clicked or triggered by a user in other manners, the interface object 201 launches a process of displaying an interface of connecting code, such as a popup window 202. In the popup window 202, a connecting code 203 is displayed.

[0085] The connecting code 203 at least includes a first unique identity of the information sending device 11, and is configured for being scanned by the information receiving device 12. The connecting code, for example, can be a barcode, a two-dimensional barcode, encrypted code, plaintext, and etc. In the embodiment shown in FIG. 5, the connecting code is a two-dimensional barcode. According to some embodiments, except the first unique identity, the connecting code 203 further includes information for activating a binding process in a device that scans the connecting code 203.

[0086] Referring to FIG. 6, in a user interface, for example, a main

screen, of the browser 134, there is an interface object 301, which when clicked, pressed, or triggered with other manners launches a process of scanning two-dimensional barcode, as shown in FIG. 7. Accordingly, the information receiving device 12 starts its camera 131 to capture images.

5 After successfully detects a two-dimensional barcode, the scanning process can be stopped. Then, the two-dimensional barcode can be decoded to extract information contained therein. As described above, the information may include the first unique identity and information for activating a binding process. It is to be noted that the information for activating a binding process in not necessary when the interface object 301 is configured for launching a special process for performing the binding. However, the information for activating a binding process is required when the interface object 301 is of a multiple purpose.

[0087] According to the information for activating a binding process, the information receiving device 12 generates a binding request, which at least includes the first unique identity and a second unique identity of the information receiving device 12. After that, the information receiving device 12 sends the binding request to the server 10. Accordingly, the server 10 receives the binding request. Specifically, the binding request is processed by the binding module 124. The binding module 124 associates the first unique identity and the second unique identity with each other. In other words, the binding module 124 stores a correspondence between the first unique identity and the second unique identity in a file or a database, and this correspondence is used by the forwarding module 126 in a following information transmitting process.

25 [0088] The binding module 124 is further configured for pushing or returning according to a request, a binding result after storing the

correspondence between the first unique identity and the second unique identity.

[0089] For the information sending device 11, the binding result should at least include an identifier or nickname of the information receiving device 12. Accordingly, in a user interface of the browser 126, the binding result could be displayed to the user. According to some embodiments, if there isn't any information receiving device is connected to the information sending device, the interface object 201 is configured for displaying the popup window 202; and if there is an information receiving device is connected, the interface object 201 is configured for displaying an information transmitting interface 204, as shown in FIG. 8.

[0090] The information transmitting interface 204, for example, includes an interface object 205, an interface object 206, an interface object 207, and an interface object 208. The interface object 205, the interface object 206, the interface object 207, and the interface object 208, for example, are menu items according to some embodiments.

[0091] The interface object 205, for example, is configured for launching a process of sending URL of the current webpage to the information receiving device 12; the interface object 206, for example, is configured for launching a process of sending images in the current webpage to the information receiving device 12; the interface object 207, for example, is configured for launching a process of sending text in the current webpage to the information receiving device 12; and the interface object 208, for example, is configured for launching a process of disconnecting the information sending device 11 (or the browser 128) from the information receiving device 12 (or the browser 134).

[0092] For the information receiving device 12, the binding result

should at least include an identifier or nickname of the information sending device 11. Accordingly, in a user interface of the browser 134, the binding result could be displayed to the user, as shown in FIG. 9. Furthermore, the browser 134 can further provides an interface object 302
5 for disconnecting the binding with the information sending device 11. The interface object 302, for example, is a button or a link.

[0093] As shown in FIG. 8, using the interface objects 205, 206, and 207, information transmitting processes can be launched. For example, if the interface object 205 is clicked, pressed, or triggered by any other
10 suitable manners, a URL of the current webpage in the browser 128 is obtained. Then, the browser 128 generates an information sending request, which at least includes the URL of the current webpage. In addition, at least one of the first unique identity and the second unique identity should also be included in the information sending request. The
15 browser 128 further sends the information sending request to the server 10 using any suitable protocols such as hypertext transfer protocol (HTTP).

[0094] Accordingly, the server 10 would receive the information sending request from the information sending device 11. Then, the forwarding module 126 processes the information sending request. In
20 detail, the forwarding module 126 extracts the at least one of the first unique identity and the second unique identity. Then, the forwarding module 126 ascertains a transmitting target of contents in the information sending request, according to the stored correspondence of the first unique identity and the second unique identity. For example, if the information
25 sending request is sent from a terminal having an identity of the first unique identity. Obviously, the contents in the information sending request should be sent to the information receiving device 12. For

another example, if the information sending request includes the second unique identity, the contents in the information sending request should be sent to the information receiving device 12.

[0095] The processes of transmitting information of other categories, such as image, or texts, are similar to the process of transmitting the URL, as discussed above. However, there are some differences of getting the contents to be sent. For example, if the interface object 206 is clicked, pressed or triggered by any other suitable events, the browser 128 displays an image selecting interface 209, in which thumbnails of images in the current webpage are listed. By clicking or pressing the thumbnails, the corresponding images are selected. Accordingly, a mark, such as a border, can be displayed around the selected image. The image selecting interface also includes an interface object 210, which is configured for launching the process of generating the information sending request. The interface object 209, for example, is a button, a link or any other interface elements. It is to be understood that prior to displaying the image selecting interface 209, all the images in the current webpage should be extracted and thumbnails should be generated.

[0096] If the interface object 207 is clicked, pressed or triggered by any other suitable events, the browser 128 displays a text selecting interface 211, in which texts in the current webpage are listed. By pressing the left mouse and dragging, the corresponding texts are selected. Accordingly, a mark, such as a background color, can be displayed around the selected texts. The text selecting interface also includes an interface object 212, which is configured for launching the process of generating the information sending request. The interface object 212, for example, is a button, a link or any other interface elements. It is to be understood that

prior to displaying the text selecting interface 209, texts in the current webpage should be extracted.

[0097] The information sending request should include the contents need to be sent. The contents could include texts, images, multimedia contents, and URLs of webpages, images or multimedia contents. According to some embodiments, the contents are multimedia contents, and a current playing time of the multimedia contents could also be included in the information sending request.

[0098] After the server 10 sends the contents in the information sending request to the information receiving device 12, the information receiving device 12 receives the contents. Then, the information receiving device processes the contents according to different categories of information.

[0099] FIG. 12 illustrates a typical application of the information transmitting system. The information sending device 11 is a personal computer, while the information receiving device 12 is a mobile terminal. According to the process described above, the information can be transmitted from the personal computer to the mobile terminal. Then, the mobile terminal processes the contents according to different categories of information. For example, if a category of the information transmitted is URL, the browser 134 could load the URL and display a corresponding webpage; if a category of the information transmitted is image, the browser 134 could use the images, for example, set the image as the wallpaper, sharing the image in a social network system, or saving the image in an album. If a category of the information transmitted is text, link, or number, a corresponding application can be called to process the information. For example, if the number is a telephone number, the

browser 134 may call the dialing application to dial the number, or save the number as a contact. If the text is an email address, the browser 134 may start an email application and pass the email address to the email application. If a category of the information transmitted is multimedia content, a player could be started to play the multimedia content. In addition, when the current playing time of the multimedia content is also transmitted to the mobile terminal. The player could play the multimedia content starting from the current playing time.

[0100] According to above information transmitting system, by establishing a connection between two terminals, or two browser applications, information of different categories can be efficiently transmitted from one terminal to the other terminal.

[0101] FIG. 13 illustrates an information transmitting method according to an embodiment. The method is for being executed by the information sending device 11. As shown in FIG. 13, the method includes the following steps.

[0102] Step S101, generating a connecting code and displaying the connecting code on a display of the information sending device.

[0103] The connecting code at least includes a first unique identity of the information sending device 11, and is configured for being scanned by the information receiving device 12. The connecting code, for example, can be a barcode, a two-dimensional barcode, encrypted code, plaintext, and etc. The browser 134 or other program in the information receiving device 12 could provide an image scanning utility. Thus, the user of the information receiving device 12 could launch the image scanning utility to scan the displayed connecting code on the information sending device 11. Then, the information receiving device 12 can decode a captured image to extract

the first unique identity.

[0104] The first unique identity, for example, is a media access control (MAC) address of the information sending device 11, a unique identity of the browser 128, and any other unique identity that can be used to uniquely identify the information sending device 11.

[0105] After extracting the first unique identify, the information receiving device 12 generating a binding request, which at least includes the first unique identity and a second unique identity of the information receiving device 12, to the server 10.

[0106] The second unique identity, for example, is international mobile station equipment identity (IMEI), other unique identity of the information receiving device 12, a unique identity of the browser 134, and any other unique identity that can be used to uniquely identify the information receiving device 12.

[0107] Then, the information receiving device 12 sends the binding request to the server 10. Accordingly, the server 10 receives the binding request. Specifically, the binging request is processed by the binding module 124. The binding module 124 associates the first unique identity and the second unique identity with each other. In other words, the binding module 124 stores a correspondence between the first unique identity and the second unique identity in a file or a database, and this correspondence is used by the forwarding module 126.

[0108] Step S102, receiving the second unique identity from the server after the first unique identity and the second unique identity being associated with each other in the server;

[0109] The binding module 124 is further configured for pushing or returning according to a request, a binding result after storing the

correspondence between the first unique identity and the second unique identity.

[0110] Step S103, obtaining contents selected by a user.

[0111] For example, by using the interface objects 205, 206, 207, URL,
5 image, and text can be obtained, respectively.

[0112] Step S104, generating an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity.

[0113] Step S105, sending the information sending request to the
10 server, thereby causing the server forwards the contents selected by the user to the information receiving device and the information receiving device outputs the contents selected by the user.

[0114] According to above information transmitting method, by
15 establishing a connection between the information sending device and the information receiving device, information of different categories can be efficiently transmitted from the information sending device to the information receiving device.

[0115] FIG. 14 illustrates an information transmitting method according to an embodiment. The method is for being executed by the
20 information receiving device 12. As shown in FIG. 14, the method includes the following steps.

[0116] Step S601, scanning a connecting code displayed on a display of an information sending device with a camera, wherein the connecting code at least comprises a first unique identity of the information sending
25 device.

[0117] Step S602, extracting the first unique identity from the connecting code;

[0118] Step S603, generating a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device;

[0119] Step S604, sending the binding request to a server, thereby
5 causing the server associating the first unique identity and the second identity with each other;

[0120] Step S605, receiving contents sent from the information sending device via the server.

[0121] According to above information transmitting method, by
10 establishing a connection between the information sending device and the information receiving device, information of different categories can be efficiently transmitted from the information sending device to the information receiving device.

[0122] FIG. 15 illustrates an information transmitting module of the
15 browser 128. An information transmitting module includes an interface module 31, a connecting module 32, a content obtaining module 33, and a content sending module 34. It is to be understood that the information transmitting module can also be implemented in other applications.

[0123] The interface module 31 is configured for providing interface
20 for performing the information transmitting method as illustrated in FIG. 13. The interface for performing the information transmitting method, for example, includes the interface objects 201 through 212.

[0124] The connecting module 32 is configured for generating a
25 connecting code and providing the connecting code to the interface module 31 for displaying.

[0125] The content obtaining module 33 is configured for obtaining contents need to be sent. For example, the content obtaining module 33

extracts information of a selected category and provides the information to the interface object for displaying, and collects the contents selected by the user.

[0126] The content sending module 34 is configured for generating an information sending request according to contents obtained by the content obtaining module 33, and sends the information sending request to the server 10.

[0127] According to above information transmitting module, by establishing a connection between the information sending device and the information receiving device, information of different categories can be efficiently transmitted from the information sending device to the information receiving device.

[0128] FIG. 16 illustrates an information transmitting module of the browser 134. An information transmitting module includes an interface module 41, a connecting module 42, a receiving module 43, and an outputting module 44.

[0129] The interface module 41 is configured for providing interface for performing the information transmitting method as illustrated in FIG. 14. The interface for performing the information transmitting method, for example, includes the interface objects 301 and 302.

[0130] The connecting module 42 is configured for scanning a connecting code displayed on the display 114 of the information sending device 11 with the camera 121, wherein the connecting code at least comprises a first unique identity of the information sending device. The connecting module 42 further extracts the first unique identity from the connecting code; generates a binding request, which at least comprises the first unique identity and a second unique identity of the information

receiving device. Then the connecting module 42 send the binding request to the server 10, thereby causing the server 10 associating the first unique identity and the second identity with each other.

[0131] The receiving module 43 is configured for receiving contents
5 sent by the information sending device 11 via the server 10.

[0132] The outputting module 44 is configured for outputting the contents received by receiving module 43. For example, the outputting module 44 loads a webpage corresponding to a URL in the contents received by receiving module 43, and provide the loaded webpage to the
10 browser 134 for displaying.

[0133] According to above information transmitting module, by establishing a connection between the information sending device and the information receiving device, information of different categories can be efficiently transmitted from the information sending device to the
15 information receiving device.

[0134] As used herein, the term “module” may refer to, be part of, or include an Application Specific Integrated Circuit (ASIC); an electronic circuit; a combinational logic circuit; a field programmable gate array (FPGA); a processor (shared, dedicated, or group) that executes code; other
20 suitable hardware components that provide the described functionality; or a combination of some or all of the above, such as in a system-on-chip. The term module may include memory (shared, dedicated, or group) that stores code executed by the processor.

[0135] The above descriptions are only preferred embodiments of the
25 present invention, and are not intended to limit the present invention. Any amendments, replacement and modification made to the above embodiments under the principle of the present invention should be

included in the scope of the present invention.

WHAT IS CLAIMED IS:

1. An information transmitting method, for being executed by an information sending device, the method comprising:
generating a connecting code and displaying the connecting code on a
5 display of the information sending device, wherein the connecting code at
least comprises a first unique identity of the information sending device,
and is configured for being scanned by an information receiving device,
thereby causing the information receiving device sends a binding request,
which at least comprises the first unique identity and a second unique
10 identity of the information receiving device, to a server;
receiving the second unique identity from the server after the first unique
identity and the second unique identity being associated with each other in
the server;
obtaining contents selected by a user;
15 generating an information sending request, which at least comprises the
contents selected by the user, and the first unique identity or the second
unique identity; and
sending the information sending request to the server, thereby causing the
server forwards the contents selected by the user to the information
20 receiving device and the information receiving device outputs the contents
selected by the user.
2. The method of claim 1, wherein said generating a connecting code
comprises: generating a barcode comprising the first unique identity.
25
3. The method of claim 1, wherein said obtaining contents selected by the
user comprises:

obtaining a predefined category of information selected by the user;
extracting contents matched to the predefined category in a current user
interface;
displaying extracted contents for being selected by the user in a popup
5 window; and
collecting content selected in the popup window by the user.

4. The method of claim 3, wherein said obtaining a predefined category of
information selected by the user comprises:

10 providing a list on the current user interface;
detecting a selected list item of the list selected by the user; and
ascertaining the predefined category of information corresponding to the
selected list item.

15 5. The method of claim 1, wherein the contents selected by the user
comprise multimedia content, and said generating an information sending
request further comprises: generating an information sending request
comprising a current playing time of the multimedia content, the current
playing time being configured for causing the information receiving device
20 playing the multimedia content starting from the current playing time.

6. An information transmitting method, for being executed by an
information receiving device, the method comprising:

25 scanning a connecting code displayed on a display of an information
sending device with a camera, wherein the connecting code at least
comprises a first unique identity of the information sending device;
extracting the first unique identity from the connecting code;

generating a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device;
sending the binding request to a server, thereby causing the server associating the first unique identity and the second identity with each other;
5 receiving contents sent from the information sending device via the server.

7. The method of claim 6, further comprising: outputting the contents sent from the information sending device.

10 8. The method of claim 7, wherein the contents sent from the information sending device comprise multimedia content;
the method further comprising: extracting a current playing time of the multimedia content;
said outputting comprises: playing the multimedia content starting from the
15 current playing time.

9. An information transmitting method, for being executed by an information transmitting system, which comprises an information sending device, an information receiving device, and a server, the method
20 comprising:

generating a connecting code and displaying the connecting code on a display of the information sending device, wherein the connecting code at least comprises a first unique identity of the information sending device;
scanning the connecting code displayed on the display of the information
25 sending device with a camera of the information receiving device;
extracting the first unique identity from the connecting code, generating a binding request, which at least comprises the first unique identity and a

second unique identity of the information receiving device; and sending the binding request to the server from the information receiving device;
generating an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second
5 unique identity, and sending the information sending request to the server from the information sending device;
forwarding the contents selected by the user to the information receiving device according to the information sending request by the server; and
receiving the contents selected by the user from the server in the
10 information receiving device.

10. The method of claim 9, wherein said generating a connecting code comprises: generating a barcode comprising the first unique identity.

15 11. The method of claim 9, prior to sending an information sending request, the method further comprising:
obtaining a predefined category of information selected by the user;
extracting contents matched to the predefined category in a current user interface of the information sending device;
20 displaying extracted contents for being selected by the user in a popup window; and
collecting contents selected in the popup window by the user.

12. The method of claim 11, wherein said obtaining a predefined category
25 of information selected by the user comprises:
providing a list on the current user interface;
detecting a selected list item of the list selected by the user; and

ascertaining the predefined category of information corresponding to the selected list item.

13. The method of claim 1, wherein the contents selected by the user
5 comprise multimedia content, and said generating an information sending
request further comprises: generating an information sending request
comprising a current playing time of the multimedia content;
the method further comprising: playing the multimedia content starting
from the current playing time in the information receiving device.

10

14. An information transmitting device, comprising:

a display;

memory;

one or more processors; and

15 one or more modules stored in the memory and configured for execution by
the one or more processors, the one or more modules comprising
instructions to:

generate a connecting code and display the connecting code on the display,
wherein the connecting code at least comprises a first unique identity of the
20 information transmitting device, and is configured for being scanned by an
information receiving device, thereby causing the information receiving
device sends a binding request, which at least comprises the first unique
identity and a second unique identity of the information receiving device,
to a server;

25 receive the second unique identity from the server after the first unique
identity and the second unique identity being associated with each other in
the server;

obtain contents selected by a user;

generate an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity; and

5 send the information sending request to the server, thereby causing the server forwards the contents selected by the user to the information receiving device and the information receiving device outputs the contents selected by the user.

10 15. The device of claim 14, wherein the instructions to generate a connecting code comprise: instructions to generate a barcode comprising the first unique identity.

15 16. The device of claim 14, wherein the instructions to obtain contents selected by the user comprise instructions to:

obtain a predefined category of information selected by the user;

extract contents matched to the predefined category in a current user interface;

display extracted contents for being selected by the user in a popup window;

20 and

collect content selected in the popup window by the user.

17. The device of claim 16, wherein the instructions to obtain a predefined category of information selected by the user comprise instructions to:

25 provide a list on the current user interface;

detect a selected list item of the list selected by the user; and

ascertain the predefined category of information corresponding to the

selected list item.

18. The device of claim 14, wherein the contents selected by the user comprise multimedia content;

5 the instructions to generate the information sending request comprises instructions to generate an information sending request comprising a current playing time of the multimedia content, the current playing time being configured for causing the information receiving device playing the multimedia content starting from the current playing time.

10

19. An information transmitting method, comprising:

a camera;

memory;

one or more processors; and

15 one or more modules stored in the memory and configured for execution by the one or more processors, the one or more modules comprising instructions to:

scan a connecting code displayed on a display of an information sending device with the camera, wherein the connecting code at least comprises a

20 first unique identity of the information sending device;

extract the first unique identity from the connecting code;

generate a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device;

send the binding request to a server, thereby causing the server associating

25 the first unique identity and the second identity with each other;

receive contents sent from the information sending device via the server.

20. The device of claim 19, where the one or more modules further comprises instructions to: output the contents sent from the information sending device.

5 21. The device of claim 20, wherein the contents sent from the information sending device comprise multimedia content;
the one or more modules further comprising instructions to:
extract a current playing time of the multimedia content; and
playing the multimedia content starting from the current playing time.

10

22. An information transmitting system, comprising:
an information sending device, an information receiving device, and a server;
the information sending device being configured for generating a
connecting code and displaying the connecting code on a display of the
15 information sending device, wherein the connecting code at least comprises
a first unique identity of the information sending device;
the information receiving device being configured for scanning the
connecting code displayed on the display of the information sending device
20 with a camera of the information receiving device; extracting the first
unique identity from the connecting code; generating a binding request,
which at least comprises the first unique identity and a second unique
identity of the information receiving device; and sending the binding
request to the server from the information receiving device;
25 the server being configured for associating the first unique identity and the
second unique identity with each other;
the information sending device being further configured for generating an

information sending request, which at least comprises contents selected by a user, and the first unique identity or the second unique identity, and sending the information sending request to the server from the information sending device;

- 5 the server being further configured for forwarding the contents selected by the user to the information receiving device according to the information sending request; and
the information receiving device being further configured for receiving the contents selected by the user from the server in the information receiving
10 device.

23. The system of claim 22, wherein said generating a connecting code comprises: generating a barcode comprising the first unique identity.

- 15 24. The system of claim 22, prior to sending an information sending request, the information sending device being further configured for:
obtaining a predefined category of information selected by the user;
extracting contents matched to the predefined category in a current user interface of the information sending device;
20 displaying extracted contents for being selected by the user in a popup window; and
collecting contents selected in the popup window by the user.

- 25 25. The system of claim 24, wherein said obtaining a predefined category of information selected by the user comprises:
providing a list on the current user interface;
detecting a selected list item of the list selected by the user; and

ascertaining the predefined category of information corresponding to the selected list item.

26. The system of claim 22, wherein the contents selected by the user
5 comprise multimedia content, and the information sending device
generating an information sending request further comprises: generating an
information sending request comprising a current playing time of the
multimedia content;
the information receiving device being configured for playing the
10 multimedia content starting from the current playing time in the
information receiving device.

27. A computer readable storage medium storing one or more programs,
the one or more programs comprising instructions, which when executed
15 by an information transmitting device, cause the information transmitting
device to perform a method comprising:
generating a connecting code and displaying the connecting code on a
display of the information sending device, wherein the connecting code at
least comprises a first unique identity of the information sending device,
20 and is configured for being scanned by an information receiving device,
thereby causing the information receiving device sends a binding request,
which at least comprises the first unique identity and a second unique
identity of the information receiving device, to a server;
receiving the second unique identity from the server after the first unique
25 identity and the second unique identity being associated with each other in
the server;
obtaining contents selected by a user;

generating an information sending request, which at least comprises the contents selected by the user, and the first unique identity or the second unique identity; and

5 sending the information sending request to the server, thereby causing the server forwards the contents selected by the user to the information receiving device and the information receiving device outputs the contents selected by the user.

28. The computer readable storage medium of claim 27, wherein said
10 generating a connecting code comprises: generating a barcode comprising the first unique identity.

29. The computer readable storage medium of claim 27, wherein said
obtaining contents selected by the user comprises:
15 obtaining a predefined category of information selected by the user;
extracting contents matched to the predefined category in a current user interface;
displaying extracted contents for being selected by the user in a popup window; and
20 collecting content selected in the popup window by the user.

30. The computer readable storage medium of claim 29, wherein said
obtaining a predefined category of information selected by the user
comprises:
25 providing a list on the current user interface;
detecting a selected list item of the list selected by the user; and
ascertaining the predefined category of information corresponding to the

selected list item.

31. The computer readable storage medium of claim 27, wherein the contents selected by the user comprise multimedia content, and said
5 generating an information sending request further comprises: generating an information sending request comprising a current playing time of the multimedia content, the current playing time being configured for causing the information receiving device playing the multimedia content starting from the current playing time.

10

32. A computer readable storage medium storing one or more programs, the one or more programs comprising instructions, which when executed by an information transmitting device, cause the information transmitting device to perform a method comprising:

15 scanning a connecting code displayed on a display of an information sending device with a camera, wherein the connecting code at least comprises a first unique identity of the information sending device;

extracting the first unique identity from the connecting code;

20 generating a binding request, which at least comprises the first unique identity and a second unique identity of the information receiving device;

sending the binding request to a server, thereby causing the server associating the first unique identity and the second identity with each other; receiving contents sent from the information sending device via the server.

25 33. The computer readable storage medium of claim 32, further comprising: outputting the contents sent from the information sending device.

34. The computer readable storage medium of claim 33, wherein the contents sent from the information sending device comprise multimedia content;

the method further comprising: extracting a current playing time of the
5 multimedia content;

said outputting comprises: playing the multimedia content starting from the current playing time.

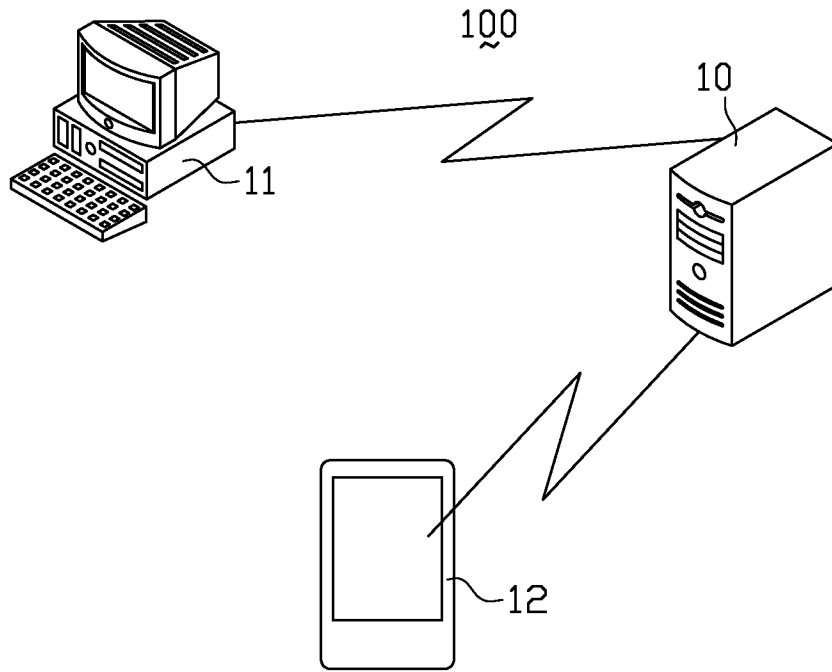


FIG. 1

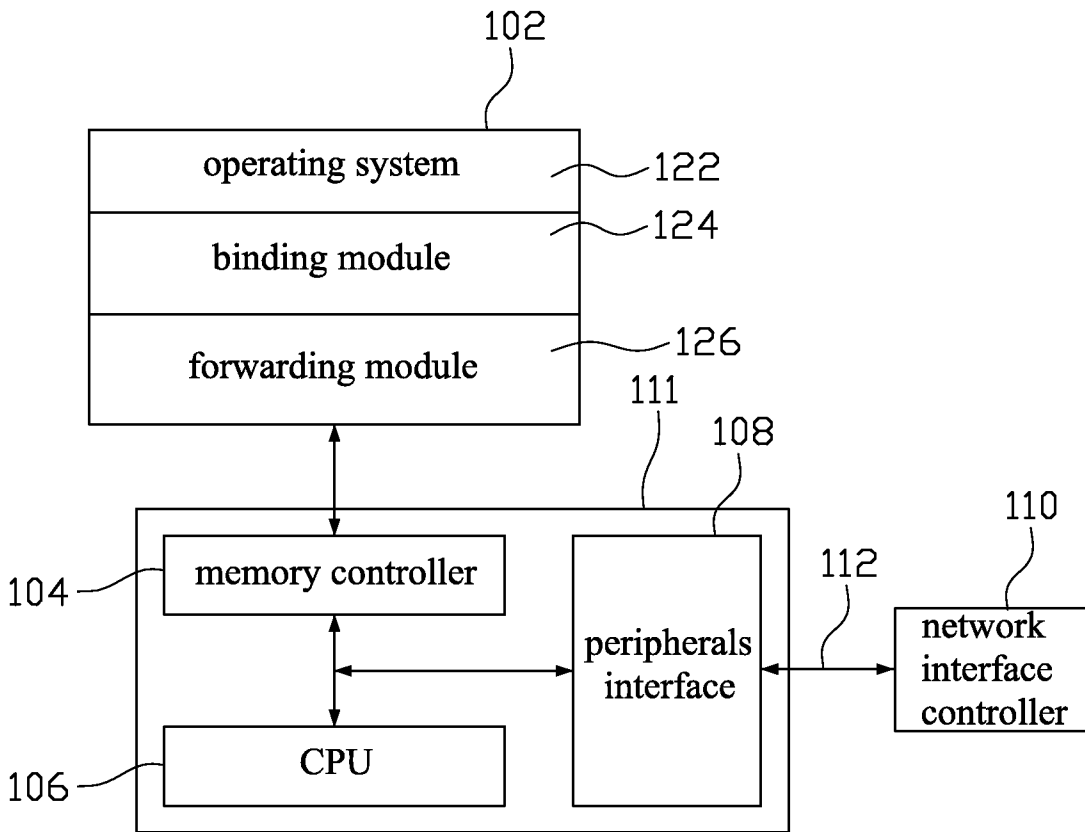


FIG. 2

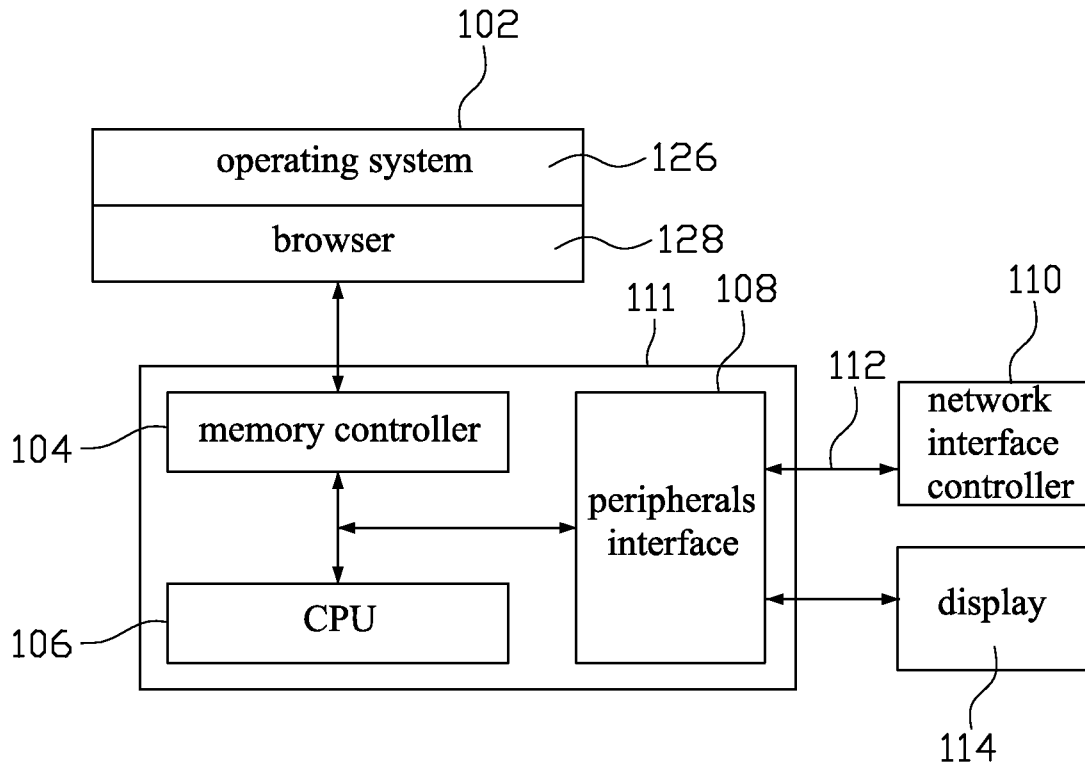


FIG. 3

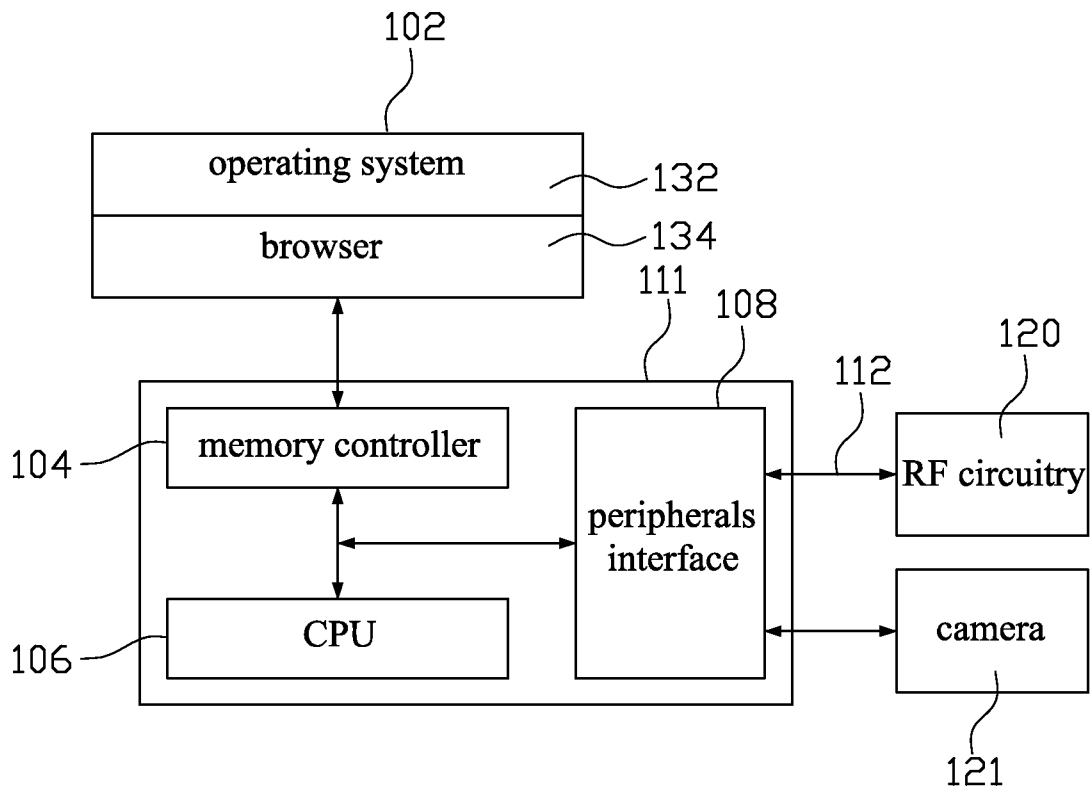


FIG. 4

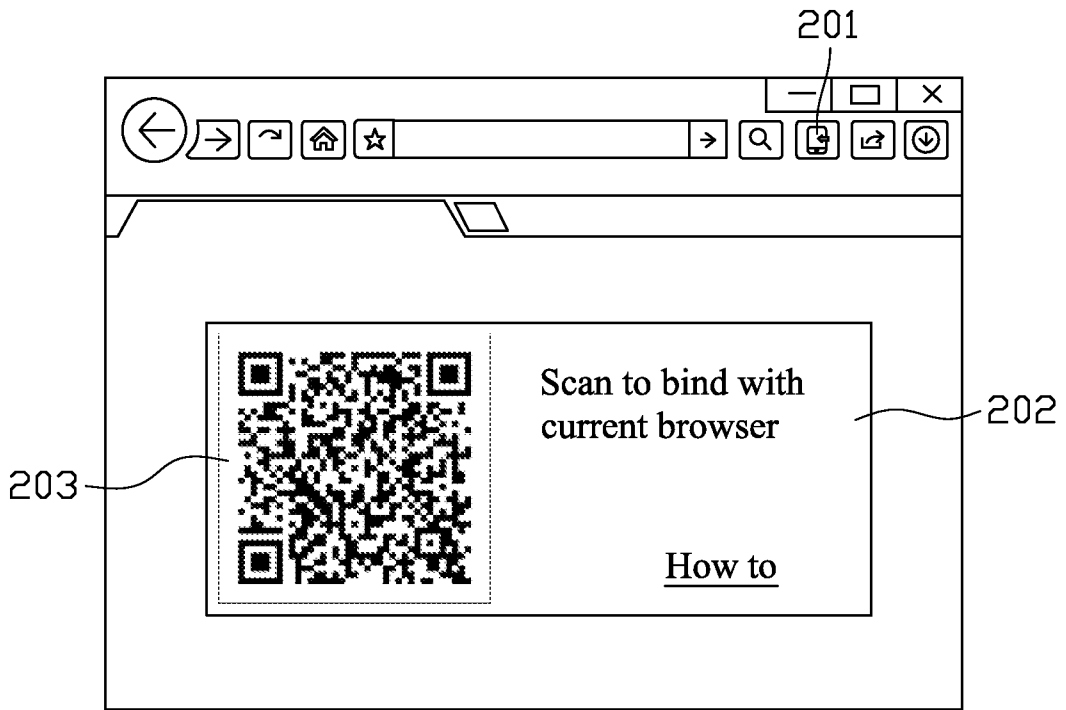


FIG. 5

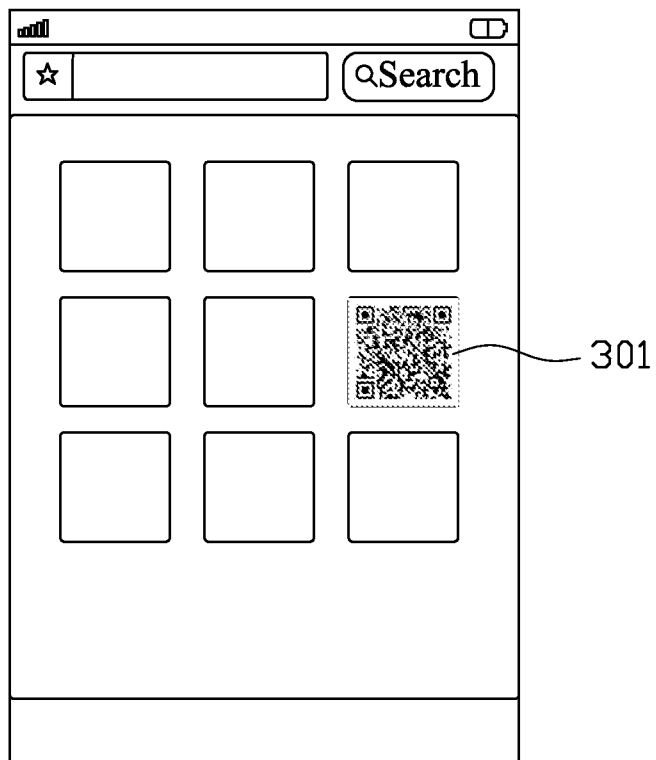


FIG. 6

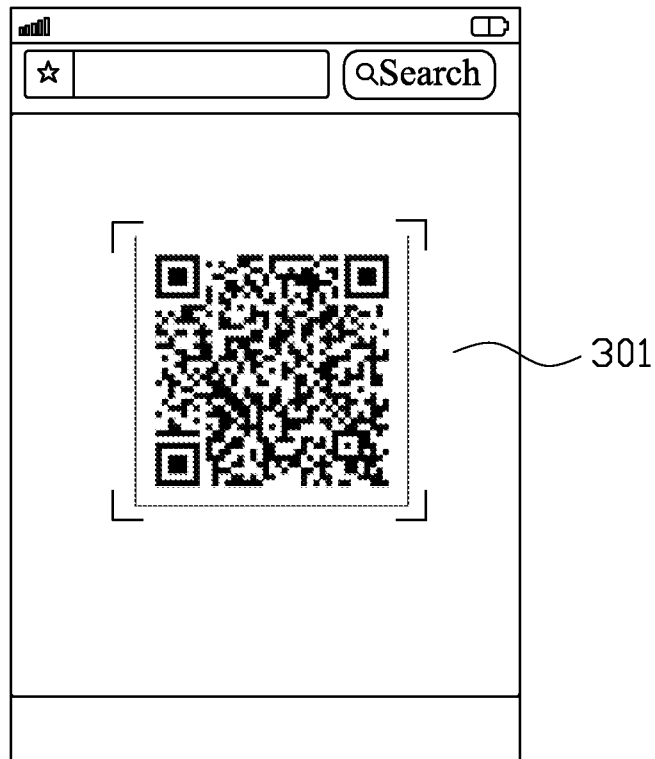


FIG. 7

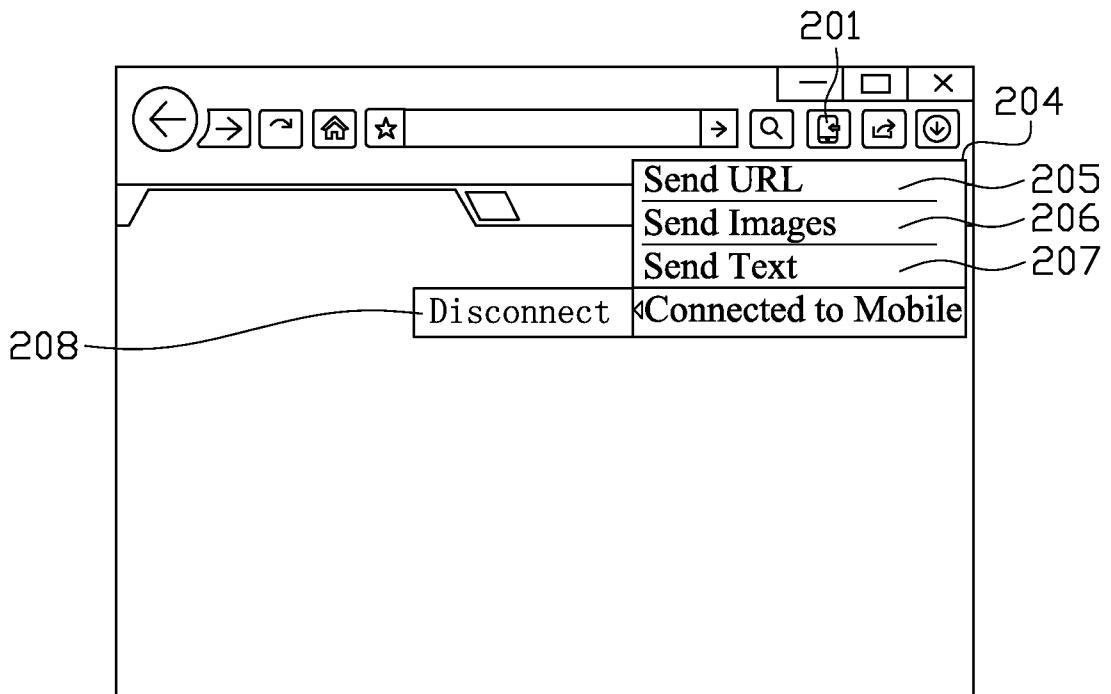


FIG. 8

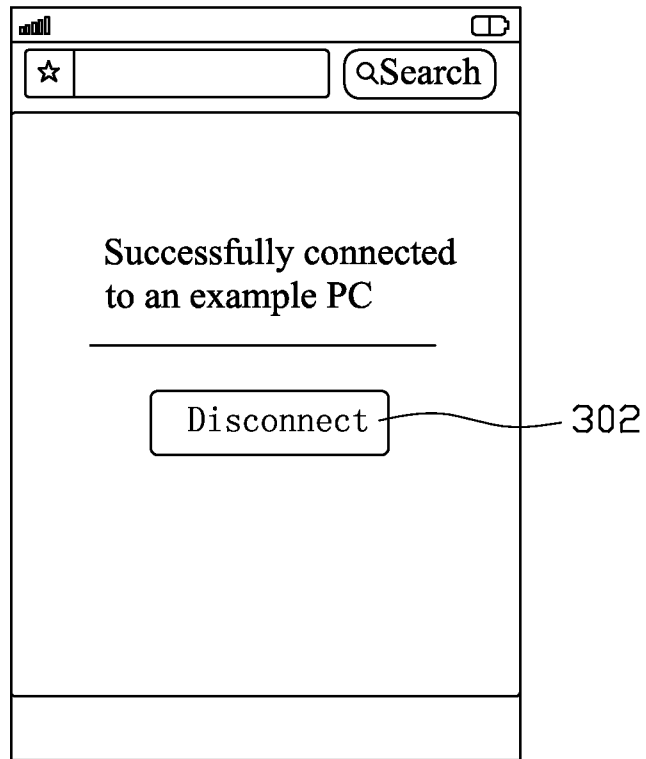


FIG. 9

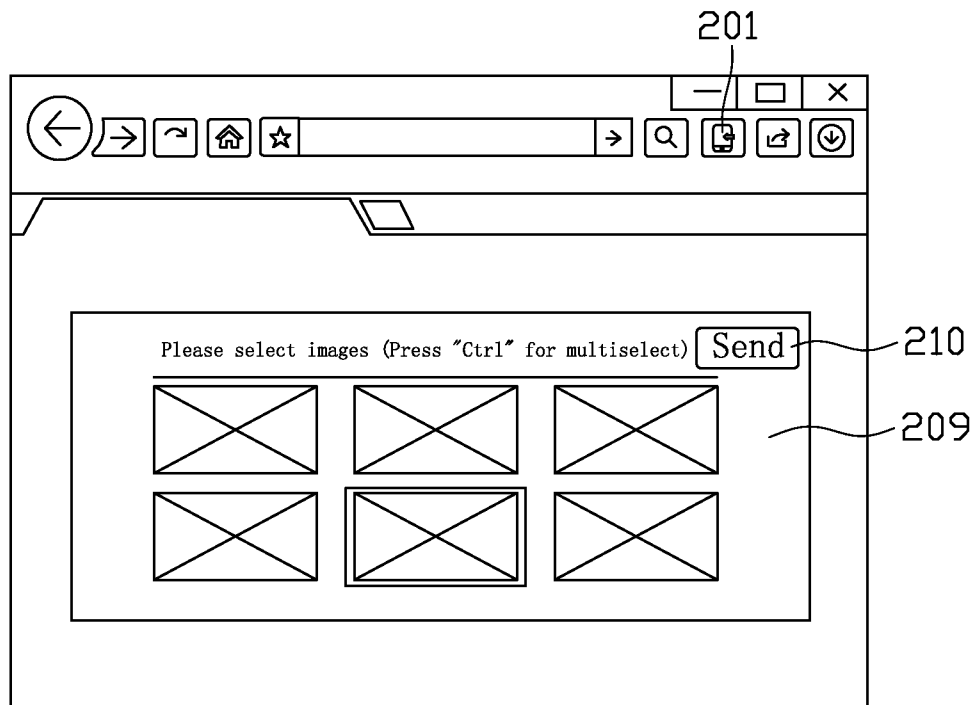


FIG. 10

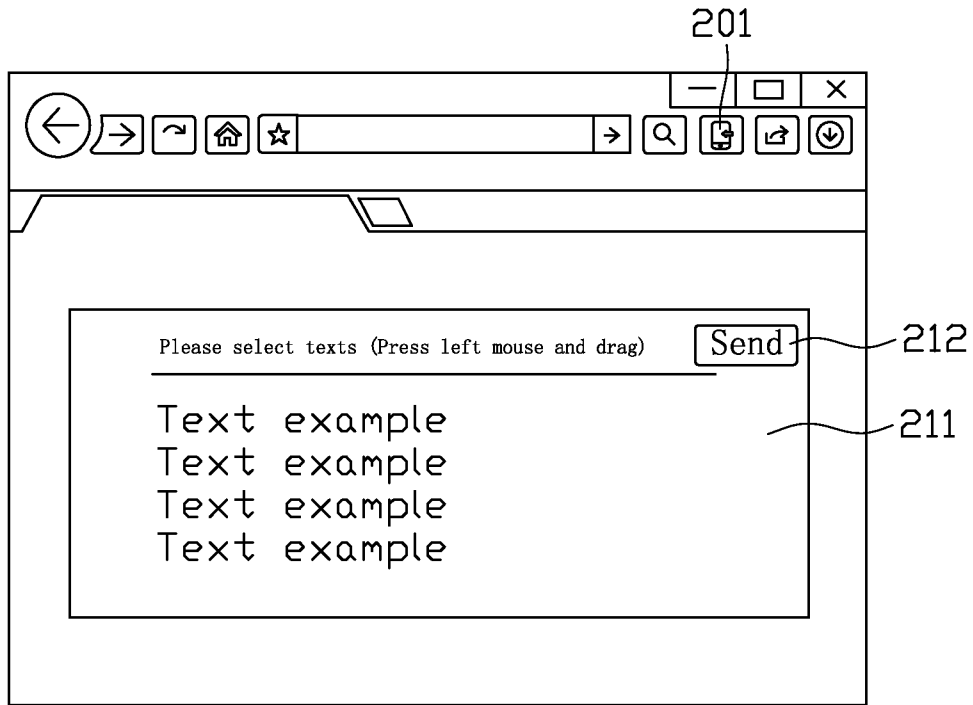


FIG. 11

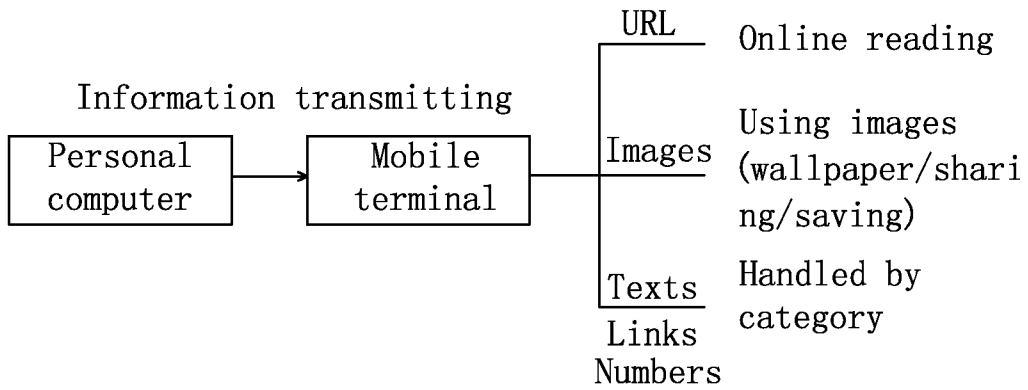


FIG. 12

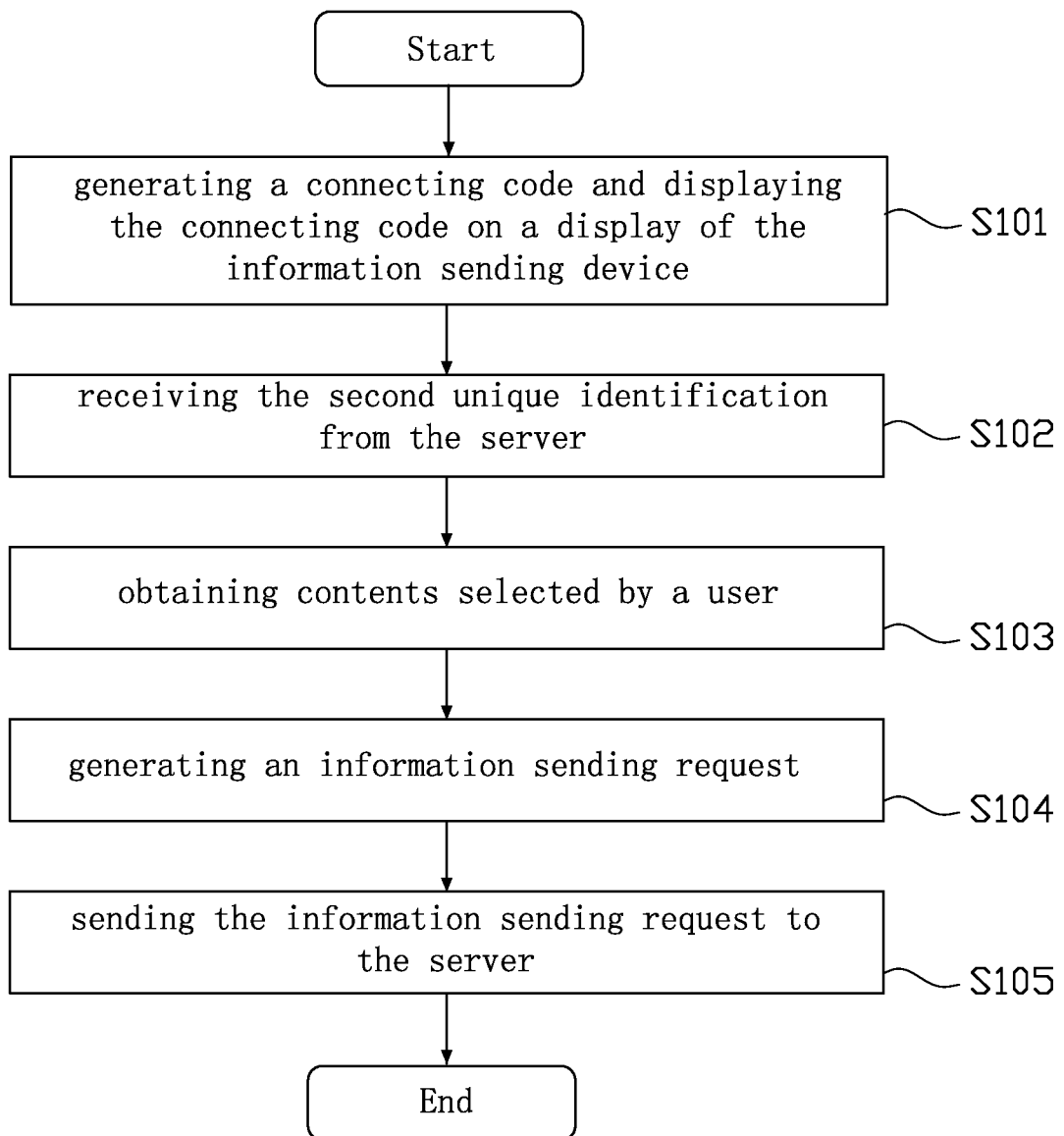


FIG. 13

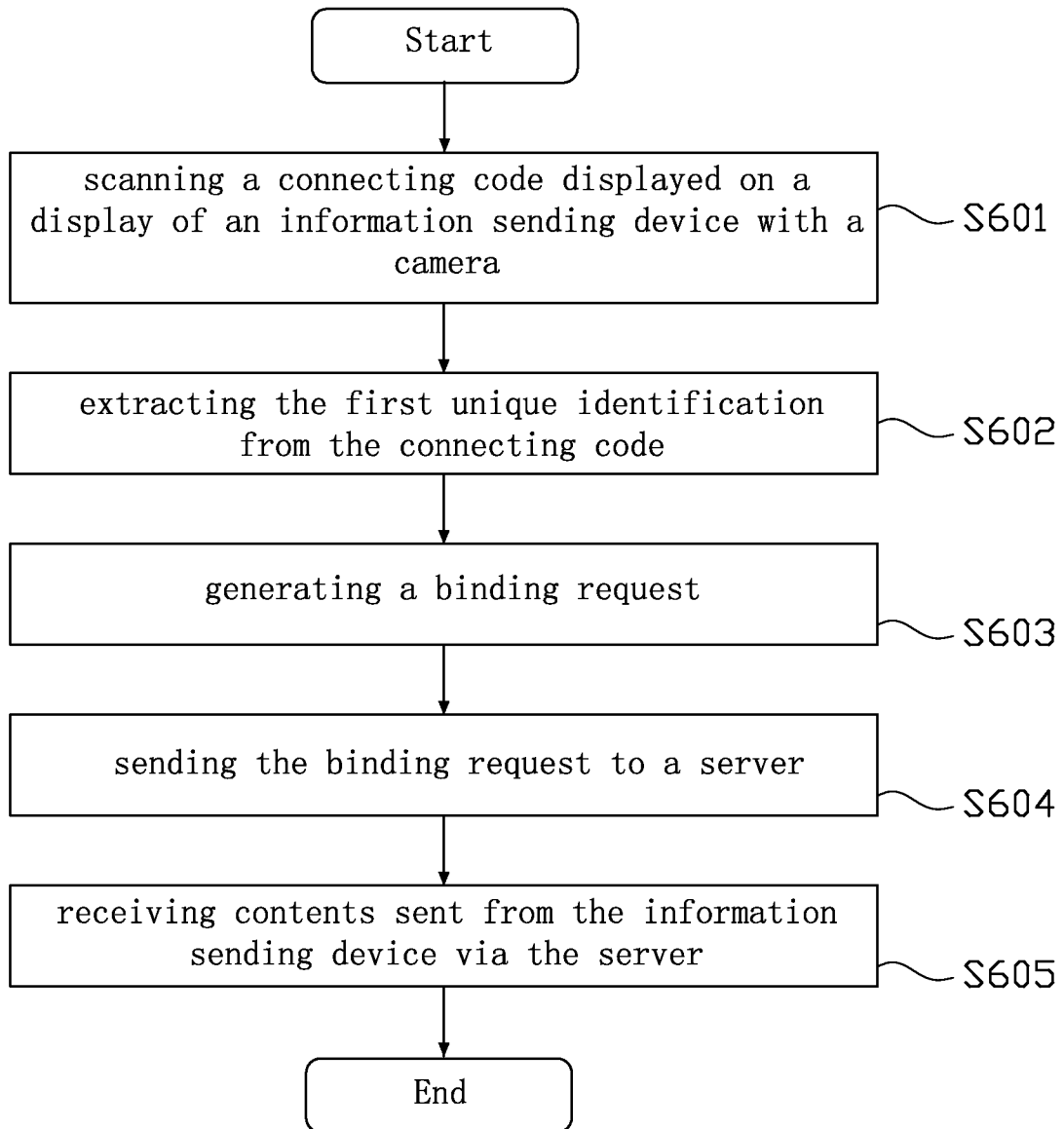


FIG. 14

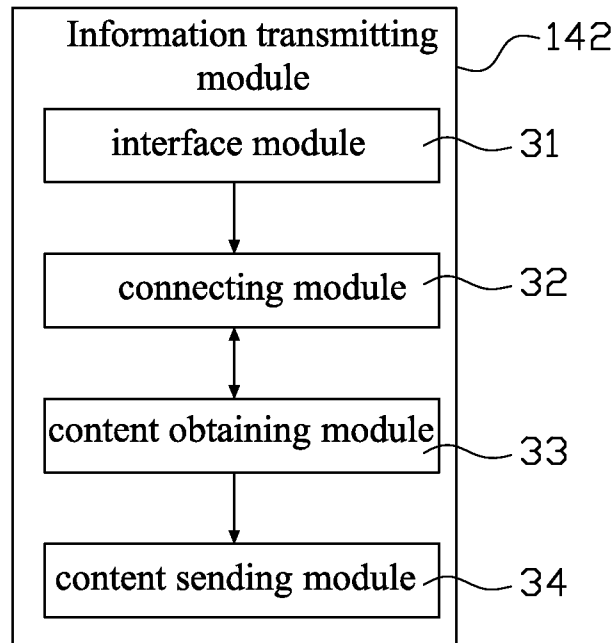


FIG. 15

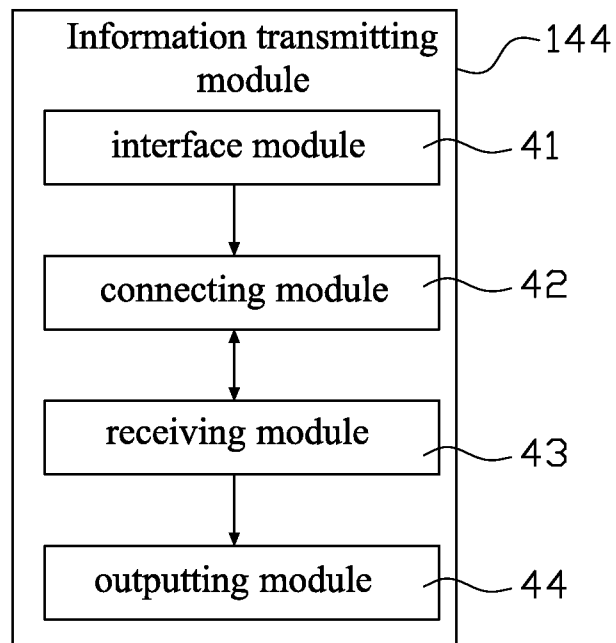


FIG. 16

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2014/071081

A. CLASSIFICATION OF SUBJECT MATTER

H04L 29/06(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

H04L; H04Q; H04W

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPODOC, WPI, CNPAT, 3GPP, IEEE:identity, identification, connecting code, scan, binding request, obtain, output, content, photo, video

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 1859357A (HUAWEI TECHNOLOGIES CO., LTD.) 08 November 2006 (2006-11-08) page 2 paragraph 4 to page 63 paragraph 1 of description, figures39-41	1-2, 6-7, 9-10, 14-15, 19-20, 22-23, 27-28, 32-33
X	CN 101917470A (HUAWEI TECHNOLOGIES CO., LTD.) 15 December 2010 (2010-12-15) paragraph [0014] to paragraph [0171] of description, figures39-41	1-2, 6-7, 9-10, 14-15, 19-20, 22-23, 27-28, 32-33
A	US 2003055868A1 (INTERNATIONAL BUSINESS MACHINES CORPORATION) 20 March 2003 (2003-03-20) the whole document	1-34
A	US 2012066501A1 (XIONG, CHUYU) 15 March 2012 (2012-03-15) the whole document	1-34

 Further documents are listed in the continuation of Box C. See patent family annex.

* Special categories of cited documents:

“A” document defining the general state of the art which is not considered to be of particular relevance	“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
“E” earlier application or patent but published on or after the international filing date	“X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
“L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	“Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
“O” document referring to an oral disclosure, use, exhibition or other means	“&” document member of the same patent family
“P” document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

02 April 2014

Date of mailing of the international search report

16 April 2014

Name and mailing address of the ISA/

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/CN2014/071081

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
CN 1859357A	08 November 2006	WO 2007104210A1	20 September 2007
CN 101917470A	15 December 2010	None	
US 2003055868A1	20 March 2003	None	
US 2012066501A1	15 March 2012	CN 101841418A	22 September 2010
		WO 2010107684A2	23 September 2010
		US 2010241850A1	23 September 2010
		US 2013066772A1	14 March 2013
		CN 103116842A	22 May 2013