



(51) International Patent Classification:

*H04M 3/56* (2006.01) *H04W 12/08* (2009.01)  
*H04L 9/32* (2006.01) *H04W 4/06* (2009.01)

(21) International Application Number:

PCT/CA201 1/05015 1

(22) International Filing Date:

23 March 2011 (23.03.2011)

(25) Filing Language:

English

(26) Publication Language:

English

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

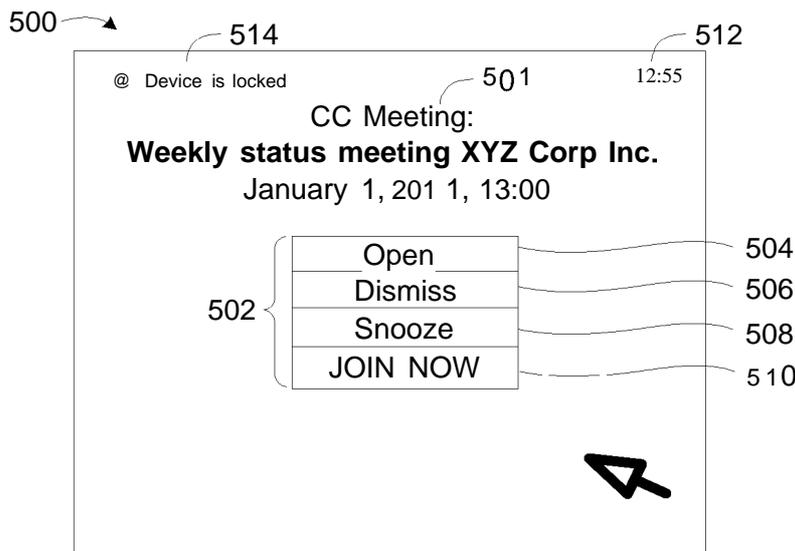
AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(54) Title: METHOD FOR CONFERENCE CALL PROMPTING FROM A LOCKED DEVICE



**FIG. 10**

(57) Abstract: A method for joining a conference call from a communication device, the communication device having a locked state and an unlocked state. The method includes displaying an interface on the communication device while the communication device is in the locked state, the interface including an option to join a scheduled conference call, receiving an input for selection of the option while the communication device is in the locked state, unlocking the communication device to the unlocked state, and sending a communication to a second communication device for establishing a conference call session.



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## METHOD FOR CONFERENCE CALL PROMPTING FROM A LOCKED DEVICE

### FIELD

- 5 [0001] Example embodiments relate to conference call systems and methods, and in particular to a method and communication device for joining a conference call.

### BACKGROUND

- 10 [0002] During a conference call, voice or media connections are typically made between two or more communication devices such as telephones or mobile phones.

- [0003] In some conventional devices, the user of a mobile device is himself responsible for keeping track of when to join a conference call. At the time of the conference call, the user typically first unlocks his mobile device, followed by dialing  
15 into the conference call. Further, additional functions and commands may also need to be performed onto the mobile device after unlocking in order to join the conference call.

- [0004] Another difficulty is that unauthorized participants may attempt to join a conference call. The participants of a conference call are sometimes loosely  
20 defined wherein original invitees can forward invitations to others who can then participate. With only rudimentary security procedures such as a conference call dial-in number and access code almost anyone from any location can be a conference call participant, which could compromise security.

- [0005] Other difficulties with existing teleconferencing systems will be  
25 apparent to those skilled in the art in view of the detailed description below.

### BRIEF DESCRIPTION OF THE DRAWINGS

- [0006] Reference will now be made, by way of example, to the accompanying drawings which show example embodiments, and in which:

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[0007] Figure 1 shows, in block diagram form, an example system for managing enterprise-related mobile calls, including an enterprise communications platform, to which example embodiments may be applied;

5 [0008] Figure 2 shows, in block diagram form, further details of an embodiment of the enterprise communications platform;

[0009] Figure 3 shows another embodiment of the enterprise communications platform;

[0010] Figure 4 shows yet another embodiment of the enterprise communications platform;

10 [0011] Figure 5 shows further details of the enterprise communications platform of Figure 3;

[0012] Figure 6 shows, in block diagram form, a conference call system including the enterprise communications platform shown in Figure 1 and client devices;

15 [0013] Figure 7 shows a block diagram illustrating a mobile communication device in accordance with an example embodiment;

[0014] Figure 8 shows a user interface as displayed on a mobile communication device, for scheduling of a conference call, in accordance with an example embodiment;

20 [0015] Figure 9 shows a user interface for displaying a received invitation message on a mobile communication device, in accordance with an example embodiment;

[0016] Figure 10 shows an example user interface displayed on a locked mobile communication device in accordance with an example embodiment;

25 [0017] Figure 11 shows an example user interface with a join now option selected, in accordance with an example embodiment;

[0018] Figure 12 shows another user interface displayed on a locked mobile communication device in accordance with another example embodiment;

30 [0019] Figure 13 shows another user interface displayed on a locked mobile communication device in accordance with another example embodiment; and

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**[0020]** Figure 14 shows an example flow diagram of a method for joining a conference call in accordance with an example embodiment.

**[0021]** Similar reference numerals may have been used in different figures to denote similar components.

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### **DESCRIPTION OF EXAMPLE EMBODIMENTS**

**[0022]** Some example embodiments generally relate to conference call prompting from a locked device.

10 **[0023]** In some example embodiments, at or before the time of a conference call, a locked device may display a prompt that shows that a conference call is starting. This prompt may allow the user to join or snooze the scheduled conference call. If the user elects to join the conference call, the device may further require password entry to unlock the device. Once unlocked, the device may then contact a conference call server, for joining of the conference call.

15 **[0024]** In some further example embodiments, the client device may join a conference in a secure fashion so that only authenticated devices can join. This may provide a mechanism for a secure join. A unique identifier that is tied to a device, such as a device PIN (personal identification number) or mobile identifier may be used to authenticate the user.

20 **[0025]** In one aspect, there is provided a method for joining a conference call from a communication device, the communication device having a locked state and an unlocked state. The method includes displaying an interface on the communication device while the communication device is in the locked state, the interface including an option to join a scheduled conference call, receiving an input  
25 for selection of the option while the communication device is in the locked state, unlocking the communication device to the unlocked state, and sending a communication to a second communication device for establishing a conference call session.

30 **[0026]** In another aspect, there is provided a communication device including a controller configured for operating the communication device in a locked state or an unlocked state, a communications subsystem, a display for displaying an

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interface on the communication device while the communication device is in the locked state, the interface including an option to join a scheduled conference call, and an input device for receiving an input for selection of the option while the communication device is in the locked state. The controller is further configured for  
5 unlocking the communication device to the unlocked state, and sending a communication to a second communication device for establishing a conference call session.

**[0027]** In another aspect, there is provided a non-transitory computer readable medium having recorded thereon statements and instructions for execution  
10 by a communication device for joining a conference call, said statements and instructions comprising code means for performing the method.

**[0028]** Example embodiments relate to the control and management of conference call communications. Although reference may be made to "calls" and "talk" in the description of example embodiments below, it will be appreciated that  
15 some of the described systems and methods may be applicable to session-based communications in general and not limited to voice calls. Reference to calls may for example include shared data (e.g. presentation content) as well as media sessions which may for example include video and/or audio. The various communications may include both synchronous and asynchronous communications to implement  
20 such "calls".

**[0029]** Reference is now made to Figure 1, which shows, in block diagram form, an example system, generally designated 10, for the control and management of communications. The system 10 includes an enterprise or business system 20, which in many embodiments includes a local area network (LAN). In the description  
25 below, the enterprise or business system 20 may be referred to as an enterprise network 20. It will be appreciated that the enterprise network 20 may include more than one network and may be located in multiple geographic areas in some embodiments.

**[0030]** The enterprise network 20 may be connected, often through a firewall  
30 22, to a wide area network (WAN) 30, such as the Internet. The enterprise network 20 may also be connected to a public switched telephone network (PSTN) 40 via direct inward dialing (DID) trunks or primary rate interface (PRI) trunks.

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**[0031]** The enterprise network 20 may also communicate with a public land mobile network (PLMN) 50, which may also be referred to as a wireless wide area network (WWAN) or, in some cases, a cellular network. The connection with the PLMN 50 may be made via a relay 26, as understood in the art.

5 **[0032]** The enterprise network 20 may also provide a wireless local area network (WLAN) 32a featuring wireless access points. Other WLANs 32 may exist outside the enterprise network 20. For example, WLAN 32b may be connected to WAN 30.

10 **[0033]** The system 10 may include a number of enterprise-associated mobile devices 11 (only one shown). The mobile devices 11 may include devices equipped with communications modules for cellular communication through the PLMN 50, mobile devices equipped for Wi-Fi communications over one of the WLANs 32, or dual-mode devices capable of both cellular and data communications. WLANs 32 may be configured in accordance with one of the IEEE 802.11 specifications.

15 **[0034]** It will be understood that the mobile devices 11 include one or more radio transceivers and associated processing hardware and software to enable wireless communications with the PLMN 50 and/or one of the WLANs 32. In various embodiments, the PLMN 50 and mobile devices 11 may be configured to operate in compliance with any one or more of a number of wireless protocols, including GSM,  
20 GPRS, CDMA, EDGE, UMTS, EvDO, HSPA, 3GPP, or a variety of others. It will be appreciated that the mobile device 11 may roam within the PLMN 50 and across PLMNs, in known manner, as the user moves. In some instances, the dual-mode mobile devices 11 and/or the enterprise network 20 are configured to facilitate roaming between the PLMN 50 and a WLAN 32, and are thus capable of seamlessly  
25 transferring sessions (such as voice calls) from a connection with the cellular interface of the dual-mode device 11 to the WLAN 32 interface of the dual-mode device 11, and vice versa.

**[0035]** The mobile devices 11 may be various types of communication devices. Such mobile devices 11 may include "Class A" devices, which are able to function  
30 continuously as dual-mode devices, capable of both media and data communications. Mobile devices 11 may also include "non-Class A" devices, which may function as dual-mode devices for initialization or prior to connection with the

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enterprise communications platform 14, but may lose data functionality once a media session (e.g., voice call) is established. The enterprise network 20 may also include additional client devices which are voice-only or media-only devices, which may be digital or analog for communication with the PSTN or PLMN, and which may not have data capabilities (herein referred to as "voice-only" or "media-only" devices). In other embodiments, the mobile devices 11 may include any suitable client device configured with the communications functionality described herein, and may for example include computer devices, relays, proxies, gateways and any appropriate User Agents (as defined in SIP).

10 **[0036]** The enterprise network 20 typically includes a number of networked servers, computers, and other devices. For example, the enterprise network 20 may connect one or more desktop or laptop computers 15 (one shown). The connection may be wired or wireless in some embodiments. The enterprise network 20 may also connect to one or more digital telephone sets 17 (one shown).

15 **[0037]** The enterprise network 20 may include one or more mail servers, such as mail server 24, for coordinating the transmission, storage, and receipt of electronic messages for client devices operating within the enterprise network 20. Typical mail servers include the Microsoft Exchange Server™ and the IBM Lotus Domino™ server. Each user within the enterprise typically has at least one user account within the enterprise network 20. Associated with each user account is message address information, such as an e-mail address. Messages addressed to a user message address are stored on the enterprise network 20 in the mail server 24. The messages may be retrieved by the user using a messaging application, such as an e-mail client application. The messaging application may be operating on a user's computer 15 connected to the enterprise network 20 within the enterprise. In some embodiments, the user may be permitted to access stored messages using a remote computer, for example at another location via the WAN 30 using a VPN connection. Using the messaging application, the user may also compose and send messages addressed to others, within or outside the enterprise network 20. The messaging application causes the mail server 24 to send a composed message to the addressee, often via the WAN 30.

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**[0038]** The relay 26 serves to route messages received over the PLMN 50 from the mobile device 11 to the corresponding enterprise network 20. The relay 26 also pushes messages from the enterprise network 20 to the mobile device 11 via the PLMN 50.

5 **[0039]** The enterprise network 20 also includes an enterprise server 12. Generally, the enterprise server 12 is configured to collectively serve the needs of the enterprise network 20, for example to provide and/or synchronize messaging, contacts and calendaring information between servers, desktop workstations 15, and mobile devices 11. Together with the relay 26, the enterprise server 12  
10 functions to redirect or relay incoming e-mail messages addressed to a user's e-mail address within the enterprise network 20 to the user's mobile device 11 and to relay incoming e-mail messages composed and sent via the mobile device 11 out to the intended recipients within the WAN 30 or elsewhere. The enterprise server 12 and relay 26 together facilitate "push" e-mail service for the mobile device 11 enabling  
15 the user to send and receive e-mail messages using the mobile device 11 as though the user were connected to an e-mail client within the enterprise network 20 using the user's enterprise-related e-mail address, for example on computer 15.

**[0040]** As is typical in many enterprises, the enterprise network 20 includes a Private Branch exchange (although in various embodiments the PBX may be a  
20 standard PBX or an IP-PBX, for simplicity the description below uses the term PBX to refer to both) 16 having a connection with the PSTN 40 for routing incoming and outgoing voice calls for the enterprise. The PBX 16 is connected to the PSTN 40 via DID trunks or PRI trunks, for example. The PBX 16 may use ISDN signaling protocols for setting up and tearing down circuit-switched connections through the  
25 PSTN 40 and related signaling and communications. In some embodiments, the PBX 16 may be connected to one or more conventional analog telephones 19. The PBX 16 is also connected to the enterprise network 20 and, through it, to telephone terminal devices, such as digital telephone sets 17, softphones operating on computers 15, etc. Within the enterprise, each individual may have an associated  
30 extension number, sometimes referred to as a PNP (private numbering plan), or direct dial phone number. Calls outgoing from the PBX 16 to the PSTN 40 or incoming from the PSTN 40 to the PBX 16 are typically circuit-switched calls. Within

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the enterprise, e.g. between the PBX 16 and terminal devices, voice calls are often packet-switched calls, for example Voice-over-IP (VoIP) calls.

**[0041]** The enterprise network 20 may further include a Service Management Platform (SMP) 18 for performing some aspects of messaging or session control, like call control and advanced call processing features. The SMP 18 may, in some cases, also perform some media handling. Collectively the SMP 18 and PBX 16 may be referred to as the enterprise communications platform, generally designated 14. It will be appreciated that the enterprise communications platform 14 and, in particular, the SMP 18, is implemented on one or more servers having suitable communications interfaces for connecting to and communicating with the PBX 16 and/or DID/PRI trunks. Although the SMP 18 may be implemented on a stand-alone server, it will be appreciated that it may be implemented into an existing control agent/server as a logical software component. As will be described below, the SMP 18 may be implemented as a multi-layer platform.

**[0042]** The enterprise communications platform 14 implements the switching to connect session legs and may provide the conversion between, for example, a circuit-switched call and a VoIP call, or to connect legs of other media sessions. In some embodiments, in the context of voice calls the enterprise communications platform 14 provides a number of additional functions including automated attendant, interactive voice response (IVR), call forwarding, voice mail, etc. It may also implement certain usage restrictions on enterprise users, such as blocking international calls or 1-900 calls. In many embodiments, Session Initiation Protocol (SIP) may be used to set-up, manage, and terminate media sessions for voice calls. Other protocols may also be employed by the enterprise communications platform 14, for example, Web Services, Computer Telephony Integration (CTI) protocol, Session Initiation Protocol for Instant Messaging and Presence Leveraging Extensions (SIMPLE), and various custom Application Programming Interfaces (APIs), as will be described in greater detail below.

**[0043]** One of the functions of the enterprise communications platform 14 is to extend the features of enterprise telephony to the mobile devices 11. For example, the enterprise communications platform 14 may allow the mobile device 11 to perform functions akin to those normally available on a standard office telephone,

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such as the digital telephone set 17 or analog telephone set 15. Example features may include direct extension dialing, enterprise voice mail, conferencing, call transfer, call park, etc.

**[0044]** Reference is now made to Figures 2 to 4, which show example  
5 embodiments of the enterprise communications system 14. Figure 2 illustrates an embodiment intended for use in a circuit-switched TDM context. The PBX 16 is coupled to the SMP 18 via PRI connection 60 or other suitable digital trunk. In some embodiments, the PRI connection 60 may include a first PRI connection, a second PRI connection, and a channel service unit (CSU), wherein the CSU is a  
10 mechanism for connecting computing devices to digital mediums in a manner that allows for the retiming and regeneration of incoming signals. It will be appreciated that there may be additional or alternative connections between the PBX 16 and the SMP 18.

**[0045]** In this embodiment, the SMP 18 assumes control over both call  
15 processing and the media itself. This architecture may be referred to as "First Party Call Control". Many of the media handling functions normally implemented by the PBX 16 are handled by the SMP 18 in this architecture. Incoming calls addressed to any extension or direct dial number within the enterprise, for example, are always first routed to the SMP 18. Thereafter, a call leg is established from the SMP 18 to  
20 the called party within the enterprise, and the two legs are bridged. Accordingly, the SMP 18 includes a digital trunk interface 62 and a digital signal processing (DSP) conferencing bridge 64. The DSP conferencing bridge 64 performs the bridging of calls for implementation of various call features, such as conferencing, call transfer, etc. The digital trunk interface 62 may be implemented as a plurality of telephonic  
25 cards, e.g. Intel Dialogic cards, interconnected by a bus and operating under the control of a processor. The digital trunk interface 62 may also be partly implemented using a processor module such as, for example, a Host Media Processing (HMP) processor.

**[0046]** The SMP 18 may include various scripts 66 for managing call  
30 processing. The scripts 66 are implemented as software modules, routines, functions, etc., stored in non-volatile memory and executed by the processor of the

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SMP 18. The scripts 66 may implement call flow logic, business logic, user preferences, call service processes, and various feature applications.

**[0047]** Figure 3 shows another embodiment in which the PBX 16 performs the functions of terminating and/or bridging media streams, but call control functions are largely handled by the SMP 18. In this embodiment, the SMP 18 may be referred to as a call control server 18. This architecture may be referred to as "Third-Party Call Control".

**[0048]** The call control server 18 is coupled to the PBX 16, for example through the LAN, enabling packet-based communications and, more specifically, IP-based communications. In one embodiment, communications between the PBX 16 and the call control server 18 are carried out in accordance with SIP. In other words, the call control server 18 uses SIP-based communications to manage the set up, tear down, and control of media handled by the PBX 16. In one example embodiment, the call control server 18 may employ a communications protocol conforming to the ECMA-269 or ECMA-323 standards for Computer Supported Telecommunications Applications (CSTA).

**[0049]** Figure 4 shows yet another embodiment of the enterprise communications system 14. This embodiment reflects the adaptation of an existing set of call processing scripts to an architecture that relies on third-party call control, with separate call control and media handling. The SMP 18 includes a call processing server 74. The call processing server 74 includes the scripts or other programming constructs for performing call handling functions. The SMP 18 also includes a SIP server 72 and a media server 76. The separate SIP server 72 and media server 76 logically separate the call control from media handling. The SIP server 72 interacts with the call processing server 74 using a computer-implemented communications handling protocol, such as one of the ECMA-269 or ECMA-323 standards. These standards prescribe XML based messaging for implementing Computer Supported Telecommunications Applications (CSTA).

**[0050]** The SIP server 72 interacts with the media server 76 using SIP-based media handling commands. For example, the SIP server 72 and media server 76 may communicate using Media Server Markup Language (MSML) as defined in IETF document Saleem A., "Media Server Markup Language", Internet Draft, draft-

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saleem-msml-07, August 7, 2008. The media server 76 may be configured to perform Host Media Processing (HMP).

**[0051]** Other architectures or configurations for the enterprise communications system 14 will be appreciated by those ordinarily skilled in the art. For example, in example embodiments the service management platform 18 may be separate from the PBX 16; or the service management platform 18 may include a cloud-based system.

**[0052]** Reference is now made to Figure 5, which shows another embodiment of the enterprise communications system 14 with a Third Party Call Control architecture. In this embodiment, the SMP 18 is a multi-layer platform that includes a protocol layer 34, a services layer 36 and an application layer 38. The protocol layer 34 includes a plurality of interface protocols configured for enabling operation of corresponding applications in the application layer 38. The services layer 36 includes a plurality of services that can be leveraged by the interface protocols to create richer applications. Finally, the application layer 38 includes a plurality of applications that are exposed out to the communication devices and that leverage corresponding ones of the services and interface protocols for enabling the applications.

**[0053]** Specifically, the protocol layer 34 preferably includes protocols which allow media to be controlled separate from data. For example, the protocol layer 34 can include, among other things, a Session Initiation Protocol or SIP 80, a Web Services protocol 82, an Application Programming Interface or API 84, a Computer Telephony Integration protocol or CTI 86, and a Session Initiation Protocol for Instant Messaging and Presence Leveraging Extensions or SIMPLE protocol 88. It is contemplated that the interface protocols 80-88 are plug-ins that can interface directly with corresponding servers in the enterprise network 20, which will be further described below.

**[0054]** Although SIP 80 may be utilized, it is appreciated that the system 10 can operate using the above disclosed or additional protocols. As known by those of ordinary skill in the art, SIP is the IETF (Internet Engineering Task Force) standard for multimedia session management, and more specifically is an application-layer control protocol for establishing, maintaining, modifying and terminating multimedia

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sessions between two or more endpoints. As further known by those of ordinary skill in the art, the SIP protocol 80 includes two interfaces for signaling: SIP-Trunk (hereinafter referred to as "SIP-T") and SIP-Line (hereinafter referred to as "SIP-L"). Specifically, the SIP-T interface is utilized when the endpoint is a non-specific entity or not registered (i.e., when communicating between two network entities).  
5 In contrast, the SIP-L interface is utilized when the endpoint is registered (i.e., when dialing to a specific extension). SIP is defined in J. Rosenberg et al., "RFC 3261 - Session Initiation Protocol" (June 2002), the contents of which are herein incorporated by reference.

10 **[0055]** The SMP 18 also includes a plurality of enablers, among other things, a VoIP enabler 90, a Fixed Mobile Convergence or FMC enabler 92, a conference services enabler 94, a presence enabler 96 and an Instant Messaging or IM enabler 98. Each of the enablers 90-98 are used by corresponding services in the services layer 36 that combine one or more of the enablers. Each of the applications in the  
15 application layer 38 is then combined with one or more of the services to perform the desired application. For example, a phone call service may use the VoIP or PBX enabler, and an emergency response application may use the phone call service, an Instant Messenger service, a video call service, and email service and/or a conference service.

20 **[0056]** The application layer 38 may include a conference services application 63 that, together with the conference services enabler 94, enables multiple communication devices (including desk telephones and personal computers) to participate in a conference call through use of a centralized conference server 55. As seen in Figure 5, the conference server 55 is provided in the enterprise network  
25 20 and is in communication with the conference services enabler 94 preferably through the SIP protocol 80, although it is recognized that additional protocols that control media separate from data may be appropriate, such as the Web Services protocol 82 or the CTI protocol 86. As will be described in further detail below, the conference call server 55 is configured for directing media and data streams to and  
30 from one or more communication devices (i.e., mobile devices 11, telephones 17, and computers 15).

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**[0057]** Example conference call systems and methods in accordance with example embodiments will now be described, referring now to Figure 6, which shows the system 10 when used or configured as a conference call system. As shown, the enterprise communications platform 14 includes the conference server 55 for providing conference call services for a number of client devices such as mobile devices 11, illustrated as one designated host device 11a and one or more participant devices 11b, 11c, 11d. The mobile devices 11 may collectively form a conference call group. The host device 11a is generally the mobile device 11 or associated user who schedules and hosts a conference call session, and may for example be permitted to perform such hosting functions as roll call, mute all, broadcast only, conference lock, etc.

**[0058]** In some example embodiments, during a conference call session, the enterprise communications platform 14 can receive Global Positioning System (GPS) information from at least some of the participant devices 11, and can send the received GPS information to the devices 11, to provide location based positioning services between the devices 11.

**[0059]** The enterprise communications platform 14 and the associated conference server 55 may be used for generally executing conference call functions. As described above, in example embodiments, the enterprise communications platform 14 may include or be coupled to the media server 76 (Figure 4), wherein the enterprise communications platform 14 controls the media handling and media sessions of the media server 76.

**[0060]** Referring still to Figure 6, in order to implement some of the conference call functions described herein, the enterprise communications platform 14 may communicate with the mobile devices 11 by way of media sessions and/or control sessions. Specifically, as shown in Figure 6, the mobile devices 11 communicate via media sessions 126 (shown as solid lines) and control sessions 124 (shown as dashed lines to distinguish from the media sessions 126). For example, the designated host device 11a communicates via media session 126a and control session 124a. Participant device 11b communicates via media session 126b and control session 124b. Participant device 11c communicates via media session 126c and control session 124c. In some embodiments, as shown, the participant

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device 11 may merely communicate via media session 126d over the PLMN 50 (Figure 1) or PSTN 40 (Figure 1) only (without an associated control session).

**[0061]** In some example embodiments, the media sessions may be facilitated by the enterprise communications platform 14 by way of Real-time Transport Protocol (RTP) media sessions, and may include voice calls, video calls, circuit-switched calls or VoIP calls. In order to generate or establish a conference call session, the enterprise communications platform 14 connects or links at least some of the call legs of each media session 126. The particular methods and processes for connecting of media sessions 126 into a conference call session would be understood by those skilled in the art, which may for example be implemented by media shuffling or SDP (Session Description Protocol) media shuffling, etc.

**[0062]** In some example embodiments, a data connection (e.g. the same data connection as used by the control sessions 124) can be further used to provide additional data sharing between mobile devices 11. For example, during a conference call, the host mobile device 11a may provide or transfer a data file to the remaining mobile devices 11. Data sharing may also include Web Services or sharing of presentation content.

**[0063]** Reference is now made to Figure 7 which illustrates in detail a mobile device 11 in which example embodiments can be applied. The mobile device 11 is a two-way communication device having data and voice communication capabilities, and the capability to communicate with other computer systems, for example, via the Internet. Depending on the functionality provided by the mobile device 11, in various embodiments the mobile device 11 may be a handheld device, a multiple-mode communication device configured for both data and voice communication, a smartphone, a mobile telephone or a PDA (personal digital assistant) enabled for wireless communication.

**[0064]** The mobile device 11 includes a rigid case (not shown) housing the components of the mobile device 11. The internal components of the mobile device 11 may, for example, be constructed on a printed circuit board (PCB). The description of the mobile device 11 herein mentions a number of specific components and subsystems. Although these components and subsystems may be realized as discrete elements, the functions of the components and subsystems may

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also be realized by integrating, combining, or packaging one or more elements in any suitable fashion. The mobile device 11 includes a controller comprising at least one processor 240 (such as a microprocessor) which controls the overall operation of the mobile device 11. The processor 240 interacts with device subsystems such as a wireless communication subsystem 211 for exchanging radio frequency signals with the wireless network (e.g. WAN 30 and/or PLMN 50) to perform communication functions. The processor 240 interacts with additional device subsystems including a display 204 such as a liquid crystal display (LCD) screen or any other appropriate display, input devices 206 such as a keyboard and control buttons, persistent memory 244, random access memory (RAM) 246, read only memory (ROM) 248, auxiliary input/output (I/O) subsystems 250, data port 252 such as a conventional serial data port or a Universal Serial Bus (USB) data port, speaker 256, microphone 258, short-range communication subsystem 262 (which may employ any appropriate a wireless (e.g., RF), optical, or other short range communications technology), and other device subsystems generally designated as 264. Some of the subsystems shown in Figure 2 perform communication-related functions, whereas other subsystems may provide "resident" or on-device functions.

**[0065]** Display 204 may be realized as a touch-screen display in some embodiments. The touch-screen display may be constructed using a touch-sensitive input surface connected to an electronic controller and which overlays the visible element of display 204. The touch-sensitive overlay and the electronic controller provide a touch-sensitive input device and the processor 240 interacts with the touch-sensitive overlay via the electronic controller.

**[0066]** The wireless communication subsystem 211 includes one or more communication systems for communicating with wireless WAN base stations 30 and wireless LAN access points 32 within the wireless network. The particular design of the wireless communication subsystem 211 depends on the wireless network in which mobile device 11 is intended to operate. The mobile device 11 may send and receive communication signals over the wireless network after the required network registration or activation procedures have been completed.

**[0067]** The processor 240 operates under stored program control and executes software modules 221 stored in memory such as persistent memory 244 or ROM

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248. The processor 240 can execute code means or instructions. ROM 248 may contain data, program instructions or both. Persistent memory 244 may contain data, program instructions or both, in some embodiments is rewritable under control of processor 240, and may be realized using any appropriate persistent memory  
5 technology, including EEPROM, EAROM, FLASH, and the like. As illustrated in Figure 2, the software modules 221 comprise operating system software 223 and software applications 225.

**[0068]** Software modules 221 or parts thereof may be temporarily loaded into volatile memory such as the RAM 246. The RAM 246 is used for storing runtime  
10 data variables and other types of data or information, as will be apparent to those skilled in the art. Although specific functions are described for various types of memory, this is merely one example, and those skilled in the art will appreciate that a different assignment of functions to types of memory could also be used.

**[0069]** The software applications 225 may further include a range of  
15 applications, including, for example, an e-mail messaging application, address book, calendar application, notepad application, Internet browser application, voice communication (i.e., telephony) application, mapping application, or a media player application, or any combination thereof. Each of the software applications 225 may include layout information defining the placement of particular fields and graphic  
20 elements (e.g., text fields, input fields, icons, etc.) in the user interface (i.e., the display 204) according to the application.

**[0070]** The modules 221 may further include a security module or application which is configured for operating the device 11 in a locked state or an unlocked state. In the locked state, typically numerous functions of the device 11 are  
25 restricted, for example to prevent other users from accessing the device 11 or to prevent accidental typing or dialing out from the keyboard. For example, access to at least some applications such as e-mail, web browsing, or media player may be restricted from the device 11. The device 11 would typically need to be unlocked for subsequent operation of the device 11, for example by entering a password or other  
30 user identifier. In some example embodiments, the device 11 may be unlocked by typing in a non-random specified keyboard sequence such as ASTERISK (\*) SEND, or the like.

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**[0071]** The modules 221 may further include a Global Positioning System (GPS) module or application which is configured for detection of a geographical position of the device 11, for example by correlating existing satellites. The GPS module may also receive from the enterprise communications platform 14 the  
5 geographical positions of the other devices 11.

**[0072]** In some embodiments, the auxiliary input/output (I/O) subsystems 250 may comprise an external communication link or interface, for example, an Ethernet connection. The auxiliary I/O subsystems 250 may further comprise one  
10 or more input devices, including a pointing or navigational tool such as a clickable trackball or scroll wheel or thumbwheel, or one or more output devices, including a mechanical transducer such as a vibrator for providing vibratory notifications in response to various events on the mobile device 11 (e.g., receipt of an electronic message or incoming phone call), or for other purposes such as haptic feedback (touch feedback).

**[0073]** In some embodiments, the mobile device 11 also includes one or more removable memory modules 230 (typically comprising FLASH memory) and one or more memory module interfaces 232. Among possible functions of the removable memory module 230 is to store information used to identify or authenticate a user or the user's account to wireless network (e.g. WAN 30 and/or PLMN 50). For  
20 example, in conjunction with certain types of wireless networks, including GSM and successor networks, the removable memory module 230 is referred to as a Subscriber Identity Module or SIM. The memory module 230 is inserted in or connected to the memory module interface 232 of the mobile device 11 in order to operate in conjunction with the wireless network.

**[0074]** The mobile device 11 stores data 227 in a persistent memory 244. In various embodiments, the data 227 includes service data comprising information required by the mobile device 11 to establish and maintain communication with the wireless network (e.g. WAN 30 and/or PLMN 50). The data 227 can also include, for example, scheduling and connection information for connecting to a scheduled  
30 conference call.

**[0075]** The mobile device 11 also includes a battery 238 which furnishes energy for operating the mobile device 11. The battery may be coupled to the

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electrical circuitry of mobile device 11 through a battery interface 236, which may manage such functions as charging the battery from an external power source (not shown) and the distribution of energy to various loads within or connected to the mobile device 11. Short-range communication subsystem 262 is an additional  
5 optional component which provides for communication between the mobile device 11 and different systems or devices, which need not necessarily be similar devices. For example, the short-range communication subsystem 262 may include an infrared device and associated circuits and components, or a wireless bus protocol compliant communication mechanism such as a BLUETOOTH communication module  
10 to provide for communication with similarly-enabled systems and devices.

**[0076]** A predetermined set of applications that control basic device operations, including data and possibly voice communication applications will normally be installed on the mobile device 11 during or after manufacture. Additional applications and/or upgrades to the operating system software 223 or  
15 software applications 225 may also be loaded onto the mobile device 11 through the wireless network (e.g. WAN 30 and/or PLMN 50), the auxiliary I/O subsystem 250, the data port 252, the short-range communication subsystem 262, or other suitable subsystem such as 264. The downloaded programs or code modules may be permanently installed, for example, written into the program memory (e.g., the  
20 persistent memory 244), or written into and executed from the RAM 246 for execution by the processor 240 at runtime.

**[0077]** The mobile device 11 may provide two principal modes of communication: a data communication mode and an optional voice communication mode. In the data communication mode, a received data signal such as a text  
25 message, an e-mail message, Web page download, or an image file will be processed by the wireless communication subsystem 211 and input to the processor 240 for further processing. For example, a downloaded Web page may be further processed by a browser application or an e-mail message may be processed by an e-mail message messaging application and output to the display 204. A user of the  
30 mobile device 11 may also compose data items, such as e-mail messages, for example, using the input devices in conjunction with the display 204. These composed items may be transmitted through the wireless communication subsystem 211 over the wireless network (e.g. WAN 30 and/or PLMN 50). In the voice

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communication mode, the mobile device 11 provides telephony functions and operates as a typical cellular phone.

**[0078]** Generally, in some example embodiments, at the time of a conference call, or a specified time beforehand, the locked device 11 may display a prompt that shows that a conference call is starting. This prompt may allow the user to join or snooze the scheduled conference call. If the user elects to join the conference call, the device 11 may further require password entry to unlock the device 11. Once unlocked, the device 11 may then contact the enterprise communications platform 14, for joining of the conference call.

10 **[0079]** Reference is now made to Figure 8, which shows a user interface 300 displayed on the display 204 for scheduling a conference call, in accordance with an example embodiment. In the example embodiment shown, the user interface 300 is for example implemented by a conference call application (as a stand-alone or in combination with other applications) resident on the mobile device 11 for specifically communicating with the enterprise communications platform 14. The user interface 15 300 may form part of a conference call session scheduling process.

**[0080]** Still referring to Figure 8, the user interface 300 relates to scheduling of a conference call session having a subject and which is to occur at a scheduled time and date. For example, the time and date of the scheduled conference call session may be stored within the conference call application or a calendar 20 application. For example, the scheduled conference call has a subject field of "Weekly status meeting XYZ Corp Inc." and has a scheduled date field of "January 1, 2011 at 13:00". The user interface 300 may be manually triggered by launching and subsequently operating the conference call application.

25 **[0081]** As shown in Figure 8, the user interface 300 also includes an options menu 306 to perform functions such as editing the existing scheduled conference call, scheduling new conference calls, and inviting new participants. Conference call scheduling information is sent from the device 11 to the enterprise communications platform 14, which stores the information in a memory and sends an invitation 30 message to the specified participants with the conference call scheduling information.

**[0082]** At the time of the scheduled conference call, or a specified time

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beforehand, the enterprise communications platform 14 may contact each of the devices 11 to join the media sessions together. In example embodiments, the devices 11 may also dial or link into the enterprise communications platform 14 using dialing or address link information received during scheduling.

5 **[0083]** As shown in Figure 8, the user interface 300 includes a title bar 302, a status icon 304, an options menu 306, and participant icons (each or individually 310) which represent the status of each participant for the conference call. The participant icons 310 can, for example, be a photo or avatar of the individual. A cursor 312 is also shown for indicating which item(s) on the user interface 300 are  
10 to be selected (e.g., controllable by a user input device such as a touchscreen, touch scrollball or mouse). The status icon 304 displays the present status of the conference call, for example "Scheduled CC" (Conference Call) as shown.

**[0084]** Referring now to the participant icons 310, in the example shown, the user interface 300 is displayed on the host device 11a, indicated as "You - Host" as  
15 shown in icon 310b. Another participant icon 310a can be designated as the leader device 11, typically for the participant individual who will be doing the majority of the speaking, for example "John - Leader" as shown. The remaining participant icons 310c, 310d represent additional participant devices 11 ("Sally" and "David", respectively, as shown). Contact information such as e-mail address or phone  
20 number for the participants can be pre-stored in association with the participant names (or can be manually entered, as appropriate). The status of each participant icon 310 can also be shown, for example, as Accepted, Tentative, or Declined.

**[0085]** As shown in Figure 8, in some example embodiments the host device 11a can also select a menu 314 to designate the scheduled conference call as a  
25 "closed" conference call. In a "closed" call, only the specified or eligible participant devices 11 designated by the host device 11a may join the call. In some example embodiments, in a "closed" call further authentication of those participant devices 11 may be performed when attempting to access the scheduled conference call. As shown, the host device 11a also has the option to use the menu 314 to set the  
30 scheduled conference call as an "open" conference call, wherein any participant device 11 (designated as eligible or not) may join.

**[0086]** Generally, in some example embodiments, as part of the conference

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call session scheduling process, after the conference call scheduling information is configured by the host device 11a, the enterprise communications platform 14 subsequently communicates with each device 11 for inviting to the scheduled conference call and for provisioning at least some of the conference call scheduling information. Each device 11 has an option to Accept, Decline, or Tentative. If the device 11 selects Accept, this means that the device 11 will participate in the scheduled conference call. If the device 11 selects Decline, for example, the host device 11a is notified by the enterprise communications platform 14 that the scheduled conference call has been declined by the particular device 11. The notification may be made by phone call, data message, email, etc. If the host device 11a Declines, then the entire scheduled conference call may be cancelled and the other devices 11 notified accordingly. If the device 11 selects Tentative, then the enterprise communications platform 14 notifies the host device 11a accordingly.

**[0087]** Thus, reference is now made to Figure 9, which shows a user interface 400 for displaying a received invitation message 402 on a non-host participant device 11. The device 11 first receives the invitation message 402 from the enterprise communications platform 14 with respect to a scheduled conference call. As shown, the message 402 as displayed can include a number of fields 404 which relate to conference call scheduling information. The fields 404 include Subject, Start time, End time, Recurrence, Host/Organizer, Web Information, and Audio Conference Information.

**[0088]** The invitation message 402 may be received as an e-mail message designating the participant's e-mail address, but can also be in other forms such as short message service (SMS), SIP message, instant messaging, or calendar invite. Note that, in other example embodiments, the message 402 may alternatively be received directly or indirectly from the host device 11a, rather than from the enterprise communications platform 14.

**[0089]** As shown on the interface 400, a number of response options 406 may be selected in order to respond to the invitation message 402. As shown, the response options 406 include Accept, Tentative, or Decline, as described above. Upon selection, the response is sent to the enterprise communications platform 14. In further example embodiments, selection of the Accept option may result in the

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5 details of the invitation message 402 being stored in a calendar application of the device 11. As shown, the response options 406 can also include an option to Forward 414 to a new participant client device. In some example embodiments, the Forward 414 function can be restricted depending on whether the new participant client device is permitted to join the conference call (for a closed call).

**[0090]** As shown in Figure 9, the invitation message 402 also includes Web Information which includes an option to select an address link 408 to activate a "Join Now" or "Meet Now" function. At the scheduled date and time of the conference call, the device 11 may receive a user input selecting the address link  
10 408 to request joining the conference call session. If the conference call is a closed call, the enterprise communications platform 14 may then authenticate the device 11, for example by authenticating the particular persistent device identifier of the device 11. Upon authentication, a conference call session can be established between the device 11 and the enterprise communications platform 14, which can  
15 include a media session 126 (Figure 6).

**[0091]** As can be appreciated, in some example embodiments the address link 408 identifies the enterprise communications platform 14 as well as the scheduled conference call session, and can include a Uniform Resource Locator (URL), a Uniform Resource Identifier (URI), or other suitable address.

20 **[0092]** Reference is now made to Figure 10, which shows an example user interface 500 displayed on the display 204 of a mobile communication device 11 in accordance with an example embodiment. Generally, in some example embodiments, the interface 500 may display a notification 501 while the device 11 is in a locked state that shows that a conference call is starting now, along with  
25 corresponding conference call scheduling information. This interface 500 may allow the user to provide instructions to the device 11 while locked to join the scheduled conference call.

**[0093]** Referring to Figure 7, the memory 244 may contain the conference call scheduling information in relation to the scheduled conference call. Referring again  
30 to Figure 10, the details in the notification 501 can be retrieved from the memory 244 for display within the interface 500.

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**[0094]** Referring again to Figure 10, in example embodiments, the interface 500 may be displayed at the scheduled time of the conference call, wherein the scheduled time is known from the conference call scheduling information stored in the memory 244 (Figure 7). In other example embodiments, the interface 500 may be displayed at a specified time prior to the schedule time of the conference call, for example five minutes prior. The current time is indicated by time icon 512.

**[0095]** As indicated by locked icon 514, the device 11 may be in a locked state. If this is the case, the device 11 is configured to still display the interface 500 so as to "break through" the locked state, so as to alert the user while in the locked state. The displaying of the interface 500 may be accompanied by outputting an additional alert through the device 11, for example an audible ringtone, a vibration, or a flashing LED (light emitting diode), etc.

**[0096]** As shown in Figure 10, the interface 500 includes a number of user-selectable options 502 in relation to the scheduled conference call. The options 502 include open 504, dismiss 506, snooze 508, and join now 510. Selection of dismiss 506 dismisses the notification for the scheduled conference call. In other words, the interface 500 is no longer displayed. Selection of snooze 508 causes the interface 500 to no longer be displayed, but will be re-displayed after a specified period of time, for example five minutes. In either case, if the device 11 is in a locked state, the device 11 remains in the locked state.

**[0097]** Selection of open 504 will open the conference call scheduling information with respect to the subject scheduled conference call. Referring to Figure 9, for example, the interface 400 may be displayed in response. Alternatively, a corresponding calendar event record (not shown) may be displayed. The user may then join the scheduled conference call by selecting the address link 408 or by following the Audio Conference Information. In some example embodiments, should a device password be required, an additional device password may be required to be entered to unlock the device 11 along with selection of the open 504 option.

**[0098]** Referring again to Figure 10, selection of the join now 510 option instructs the device 11 to join the conference call by contacting the enterprise communications platform 14, with the connection information obtained from the

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conference call scheduling information stored in the memory 244. In some example embodiments, should a device password be required, an additional device password may be required to be entered to unlock the device 11 along with selection of the join now 510 option.

5 [0099] Thus, reference is now made to Figure 11, wherein selection of the join now 510 option results in a second interface 520 being displayed. The second interface 520 includes a password interface 516. As shown, the password interface 516 includes a field 518 for entering of the device password. After input of the device password, the user can select ENTER or other suitable selection or clicking  
10 mechanism. In response, the device 11 authenticates the device password and unlocks the device 11 if successful. The device 11 then automatically implements the join now function by automatically sending a communication to the enterprise communications platform 14, for establishing the conference call session. The enterprise communications platform 14 then answers the communication and  
15 authenticates the device 11, and a conference call session is thereafter established with the device 11. The authentication may be made by using a persistent device identifier of the device 11. Further, if the conference call is a closed call, the device 11 may be authenticated by the enterprise communications platform 14 by checking a whitelist of permissible devices. In other example embodiments, the device 11  
20 contacts another participant device such as the host device, and directly or indirectly establishes a conference call session with that device.

[00100] Referring briefly to Figure 9, when sending the communication to the enterprise communications platform 14, the device 11 can automatically connect to the link contained in the address link 408 or by following the Audio Conference  
25 Information (e.g., by dialing the telephone number and providing the conference password). Further, the device 11 may be authenticated by checking the conference password (if dialling in).

[00101] It can be appreciated that in example embodiments which authenticate using the device identifier, the identifier is unique for a mobile device and unique to  
30 the associated user. A deskphone, for example, is typically not personal to a user as anyone could sit at a desk and attempt to join a conference call. However, it is uncommon for a user to have a mobile device and join a conference call from a

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different mobile device of a different user; or for a different user attempt to join a conference call using an authorized mobile device.

[00102] In some example embodiments, a specified key sequence such as ASTERISK (\*) SEND may be used to unlock the device to prevent accidental  
5 launching of the join now feature and dialing into the conference call.

[00103] Reference is now made to Figure 12, which shows another user interface 600 displayed on a locked mobile communication device 11 in accordance with another example embodiment. The interface 600 may display a notification 601 while the device 11 is in a locked state that shows that a conference call is  
10 starting, along with corresponding conference call scheduling information. The interface 600 may allow the user to provide instructions to the device 11 while locked to join the scheduled conference call.

[00104] As shown in Figure 12, the interface 600 includes a number of user-selectable options 602 in relation to the scheduled conference call. The options 602  
15 include open 604, dismiss 606, snooze 608, and join now 610. The interface 600 also includes a password interface 616, which includes a field 618 for entering of a device password. After input of the device password, the device 11 in response authenticates the device password and unlocks the device 11. If the join now 610 option is selected, the device 11 then automatically sends a communication to the  
20 enterprise communications platform 14, for establishing the conference call session. If the open 604 option is selected, the device 11 displays an interface for displaying the conference call scheduling information.

[00105] Reference is now made to Figure 13, which shows another user interface 700 displayed on a locked mobile communication device 11 in accordance  
25 with another example embodiment. In the example embodiment shown, an additional specified key sequence is required to prevent accidental joining. The interface 700 may display a notification 701 while the device 11 is in a locked state that shows that a conference call is starting, along with corresponding conference call scheduling information. The interface 700 may allow the user to provide  
30 instructions to the device 11 while locked to join the scheduled conference call.

[00106] As shown in Figure 13, the interface 700 includes a number of user-selectable options 702 in relation to the scheduled conference call. The options 702

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include open 704, dismiss 706, snooze 708, and join now 710. The interface 600 also includes a popup prompt interface 716 which is displayed in response to selection of one of the options, such as join now 710. As shown, the popup prompt interface 716 includes a prompt to for an additional specified key sequence to be input, which may be required to prevent accidentally joining. For example and without limitation, the prompt interface 716 may display the prompt to "Please enter 'ASTERISK (\*) SEND' to join the conference call". An input field (not shown) may also be provided to, for example, receive a specified alphanumeric input such as a basic keyword. After input of the specified key sequence, the device 11 in response unlocks the device 11. If the join now 710 option is selected, the device 11 then automatically sends a communication to the enterprise communications platform 14, for establishing the conference call session. If the open 704 option is selected, the device 11 displays an interface for displaying the conference call scheduling information.

15 **[00107]** Reference is now made to Figure 14, which shows an example flow diagram 800 of a method for joining a conference call in accordance with an example embodiment. Reference is also made to the example interface 500 shown in Figure 10 and the second interface 520 shown in Figure 11. The method shown in Figure 13 is for joining a conference call from a communication device 11, the communication device 11 configured for being in a locked state or an unlocked state. The memory 244 of the device 11 may include conference call scheduling information with respect to a scheduled conference call, for example an address link or audio information for communicating with the enterprise communications platform 14. At step 802, the method displays an interface 500 on the communication device 11 while the communication device 11 is in the locked state. The interface 500 includes an option to join a scheduled conference call, shown as join now 510 (Figure 10). At step 804, by way of a user input device, the device 11 receives an input for selection of the join now 510 option while the communication device 11 is in the locked state. At step 806, it is determined whether a device password is required to unlock the device 11. If so (if "yes"), the flow diagram 800 proceeds to step 808 for receiving the device password. This includes displaying a password interface 516. The flow diagram 800 then proceeds to step 810 to unlock the device 11 to the unlocked state. In some example embodiments, if a password

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is not required (if "no"), at step 812 an interface (e.g. interface 716 Figure 13) may be displayed which prompts for an additional specified key sequence to be input, which may be required to prevent accidentally joining. For example and without limitation, the interface may display the prompt to "Please enter 'ASTERISK (\*) SEND' to join the conference call". At step 814, the specified key sequence is received via user input. The flow diagram 800 then proceeds to step 810 to unlock the device 11.

[00108] At step 816, in response to the selection of the join now 510 option, the device 11 sends a communication to the enterprise communications platform 14 for establishing a conference call session, using the contact information stored in memory 244. At step 818, the enterprise communications platform 14 answers the communication and establishes a conference call session with the device 11.

[00109] In some other example embodiments, at step 806 if a password is not required (if "no"), the flow diagram 800 may proceed directly (not shown) to step 810 to unlock the device 11, without the specified key sequence prompt.

[00110] Referring still to the flow diagram 800 of Figure 14, note that, a similar process can be followed with respect to the interface 600 shown in Figure 12. For example, the password interface 616 would be included within the same interface 600 having the join now 610 option.

[00111] It can be appreciated that the specific words as shown in the various user interfaces are intended to be illustrative only. For example, any suitable words or phrases may be used, and would not be limited to the English language. For example, any number of multi-lingual variations in different languages may be displayed or output from the device.

[00112] Variations of the above example methods may be used. While some of the above examples have been described as occurring in a particular order, it will be appreciated to persons skilled in the art that some of the messages or steps or processes may be performed in a different order provided that the result of the changed order of any given step will not prevent or impair the occurrence of subsequent steps. Furthermore, some of the messages or steps described above may be removed or combined in other embodiments, and some of the messages or steps described above may be separated into a number of sub-messages or sub-

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steps in other embodiments. Even further, some or all of the steps of the conversations may be repeated, as necessary. Elements described as methods or steps similarly apply to systems or subcomponents, and vice-versa.

**[00113]** For example, referring to Figure 10, the displaying of the join now 510 option is not limited to the words "JOIN NOW", but can be any suitable text such as "MEET NOW". In other example embodiments, the join now 510 option displays the actual link address (e.g. URL address) of the enterprise communications platform 14 for joining the conference call.

**[00114]** Variations may be made to some example embodiments, which may include combinations and sub-combinations of any of the above. The various embodiments presented above are merely examples and are in no way meant to limit the scope of this disclosure. Variations of the innovations described herein will be apparent to persons of ordinary skill in the art having the benefit of the present disclosure, such variations being within the intended scope of the present disclosure.

15 In particular, features from one or more of the above-described embodiments may be selected to create alternative embodiments comprised of a sub-combination of features which may not be explicitly described above. In addition, features from one or more of the above-described embodiments may be selected and combined to create alternative embodiments comprised of a combination of features which may not be explicitly described above. Features suitable for such combinations and sub-combinations would be readily apparent to persons skilled in the art upon review of the present disclosure as a whole. The subject matter described herein intends to cover and embrace all suitable changes in technology.

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WHAT IS CLAIMED IS:

1. A method for joining a conference call from a communication device (11), the communication device (11) having a locked state and an unlocked state, the method comprising:
  - 5 displaying an interface (500) on the communication device while the communication device is in the locked state, the interface (500) including an option (510) to join a scheduled conference call;  
receiving an input for selection of the option (510) while the communication device (11) is in the locked state;
  - 10 unlocking the communication device (11) to the unlocked state; and  
sending a communication to a second communication device for establishing a conference call session.
2. The method as claimed in claim 1 wherein the communication device (11) includes a memory for storing conference call scheduling information, wherein said  
15 sending includes automatically retrieving contact information of the second communication device from the conference call scheduling information.
3. The method as claimed in claims 1 or 2 further comprising:
  - displaying a password interface on the communication device (11); and  
receiving a device password through the password interface, wherein said  
20 unlocking is performed in response to receiving the device password.
4. The method as claimed in claim 3 wherein the password interface is displayed on a second interface in response to receiving the input.
5. The method as claimed in claim 3 wherein the password interface is displayed within the interface (500).
- 25 6. The method as claimed in any one of claims 1 to 5 further comprising, after receiving the input, displaying a key sequence interface for prompting receiving a specified key sequence.
7. The method as claimed in any one of claims 1 to 6 wherein the second communication device authenticates the communication device based on an

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identifier of the communication device.

8. The method as claimed any one of claims 1 to 7 wherein the second communication device answers the communication in response, the method further comprising establishing the conference call session.

5 9. The method as claimed in any one of claims 1 to 8 wherein the second communication device includes a conference call server (14).

10. The method as claimed in any one of claims 1 to 9 wherein the displaying is performed at a specified time prior to a time of the scheduled conference call.

10 11. The method as claimed in any one of claims 1 to 10 further comprising outputting an alert through the communication device (11) when displaying the interface (500).

12. A communication device (11) comprising:

a controller (240) configured for operating the communication device (11) in a locked state or an unlocked state;

15 a communications subsystem (211);

a display (204) for displaying an interface (500) on the communication device (11) while the communication device (11) is in the locked state, the interface (500) including an option (510) to join a scheduled conference call;

20 an input device (206) for receiving an input for selection of the option (510) while the communication device (11) is in the locked state; and

wherein the controller (240) is further configured for unlocking the communication device (11) to the unlocked state, and sending a communication to a second communication device for establishing a conference call session.

25 13. The communication device (11) as claimed in claim 12 further comprising a memory (244) for storing conference call scheduling information, wherein said sending includes automatically retrieving contact information of the second communication device from the conference call scheduling information.

30 14. The communication device (11) as claimed in claims 12 or 13 wherein the controller (240) is further configured for displaying a password interface on the display, and receiving a device password through the password interface, wherein

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said unlocking is performed in response to receiving the device password.

15. The communication device (11) as claimed in claim 14 wherein the password interface is displayed on a second interface in response to receiving the input.

16. The communication device (11) as claimed in claim 14 wherein the password  
5 interface is displayed within the interface (500).

17. The communication device (11) as claimed in any one of claims 12 to 16 wherein the controller (240) is further configured for, after receiving the input, displaying a key sequence interface for prompting receiving a specified key sequence.

10 18. The communication device (11) as claimed in any one of claims 12 to 17 wherein the second communication device authenticates the communication device based on an identifier of the communication device (11).

15 19. The communication device (11) as claimed in any one of claims 12 to 18 wherein the second communication device answers the communication in response, the controller being further configured for establishing the conference call session.

20. The communication device (11) as claimed in any one of claims 12 to 19 wherein the second communication device includes a conference call server.

20 21. The communication device (11) as claimed in any one of claims 12 to 20 wherein the displaying is performed at a specified time prior to a time of the scheduled conference call.

22. The communication device (11) as claimed in any one of claims 12 to 21 further comprising outputting an alert through the communication device when displaying the interface (500).

25 23. A non-transitory computer readable medium having recorded thereon statements and instructions for execution by a communication device for joining a conference call, said statements and instructions comprising code means for performing the method as claimed in any one of claims 1 to 11.

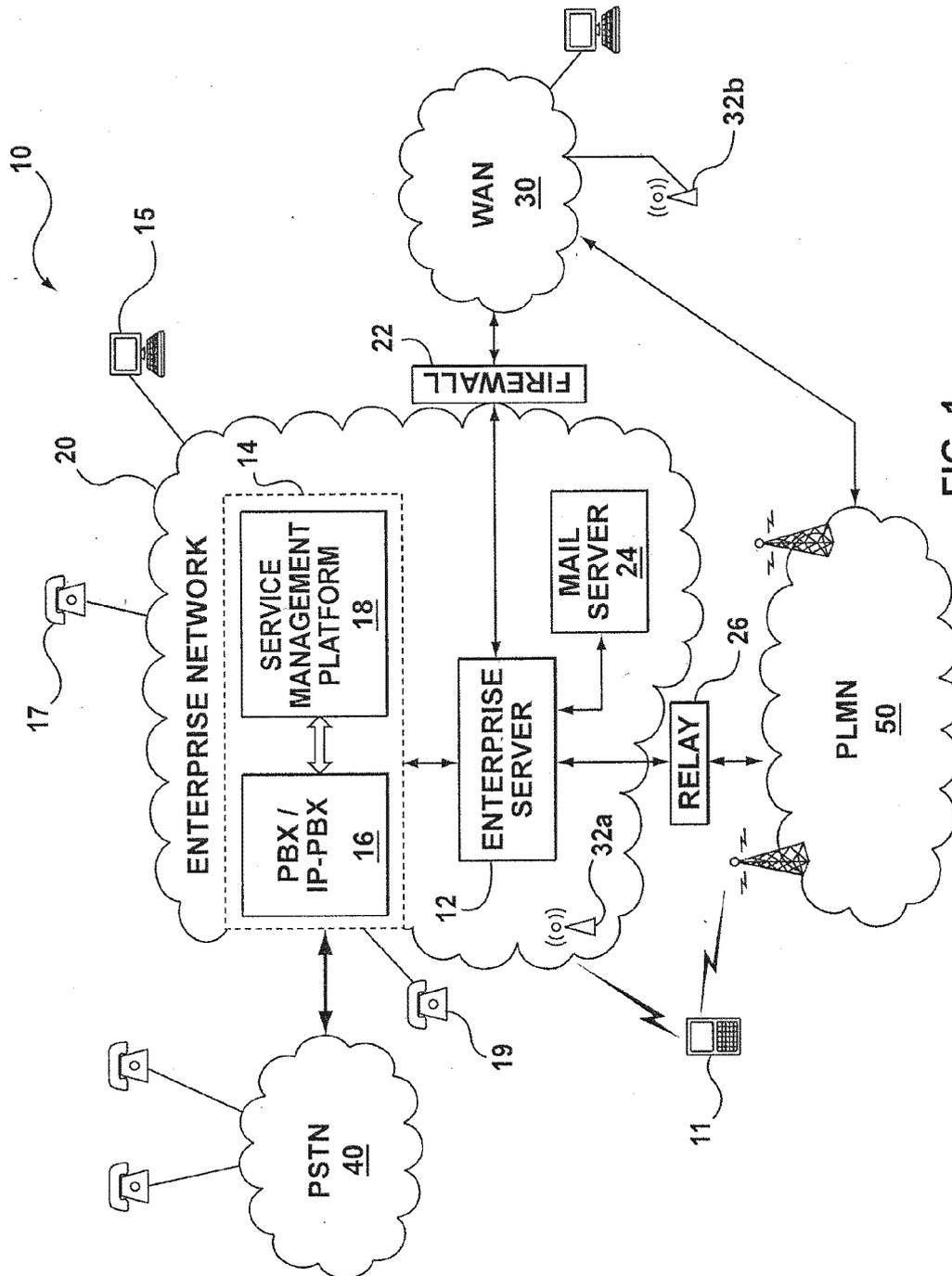


FIG. 1

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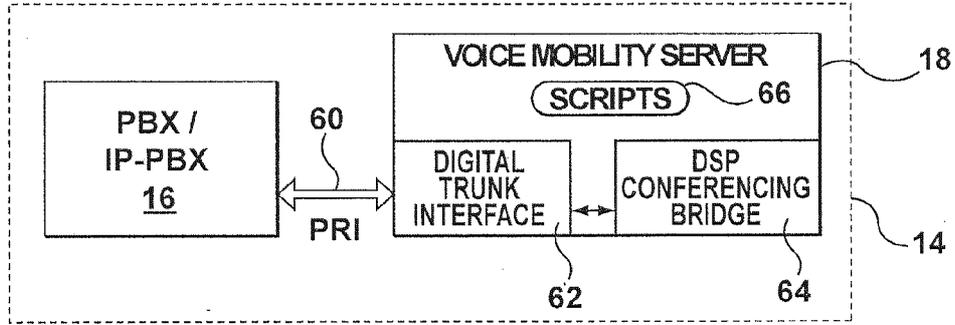


FIG. 2

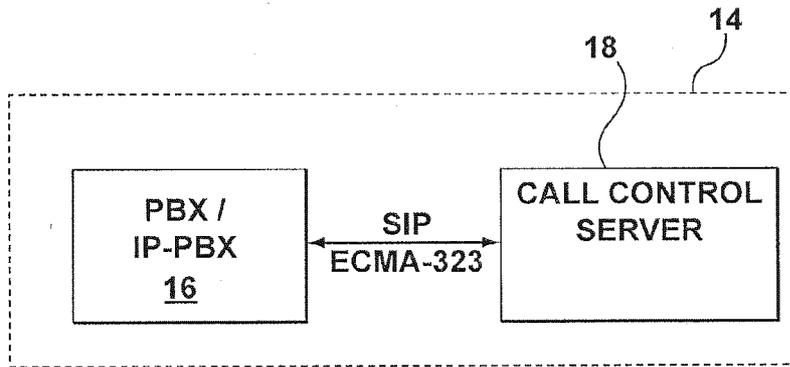


FIG. 3

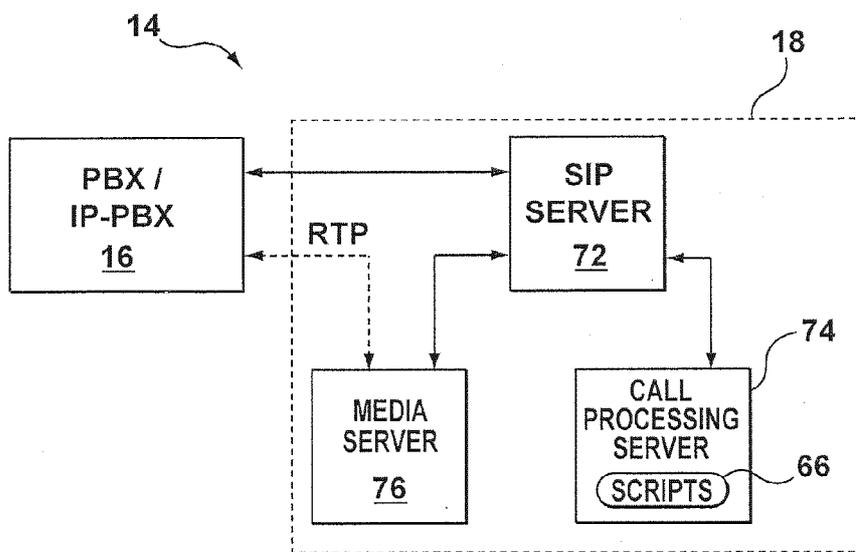
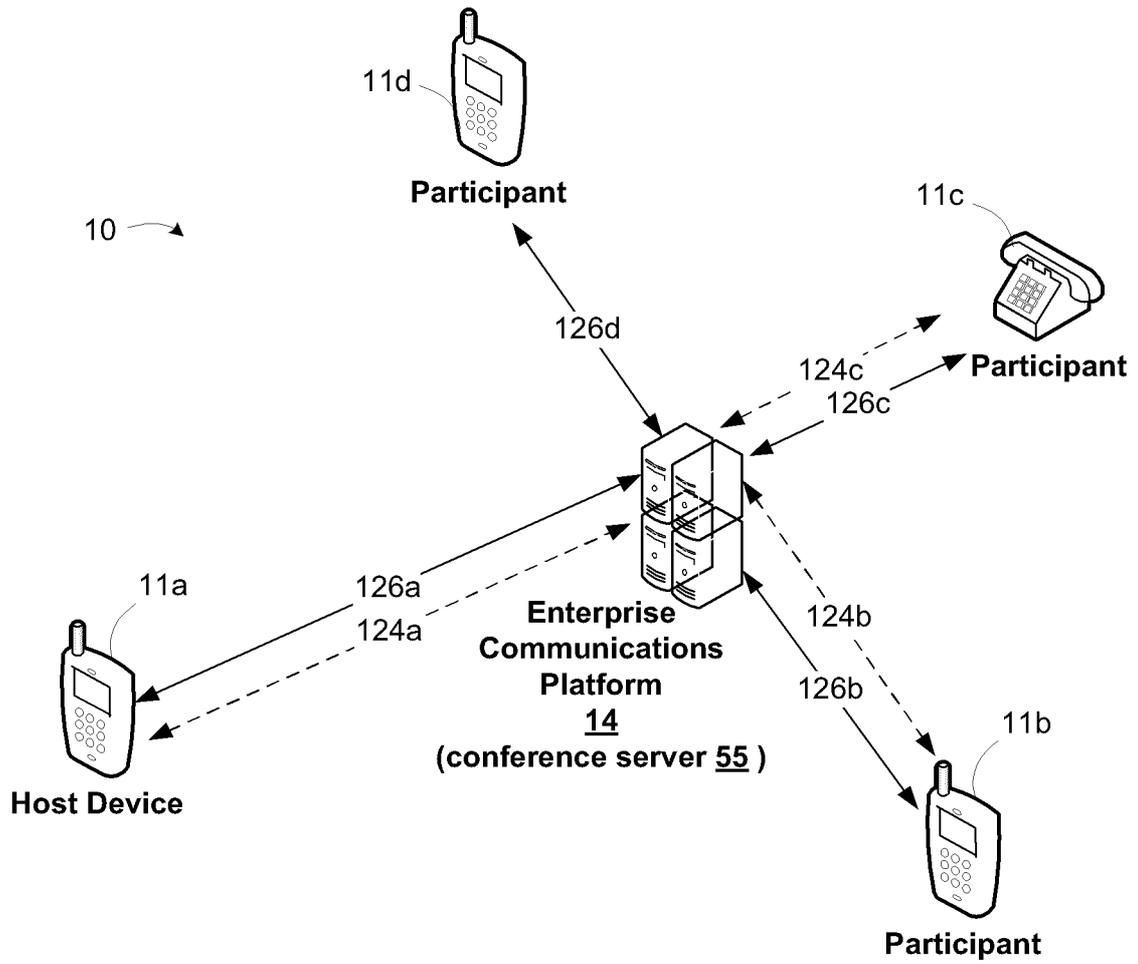
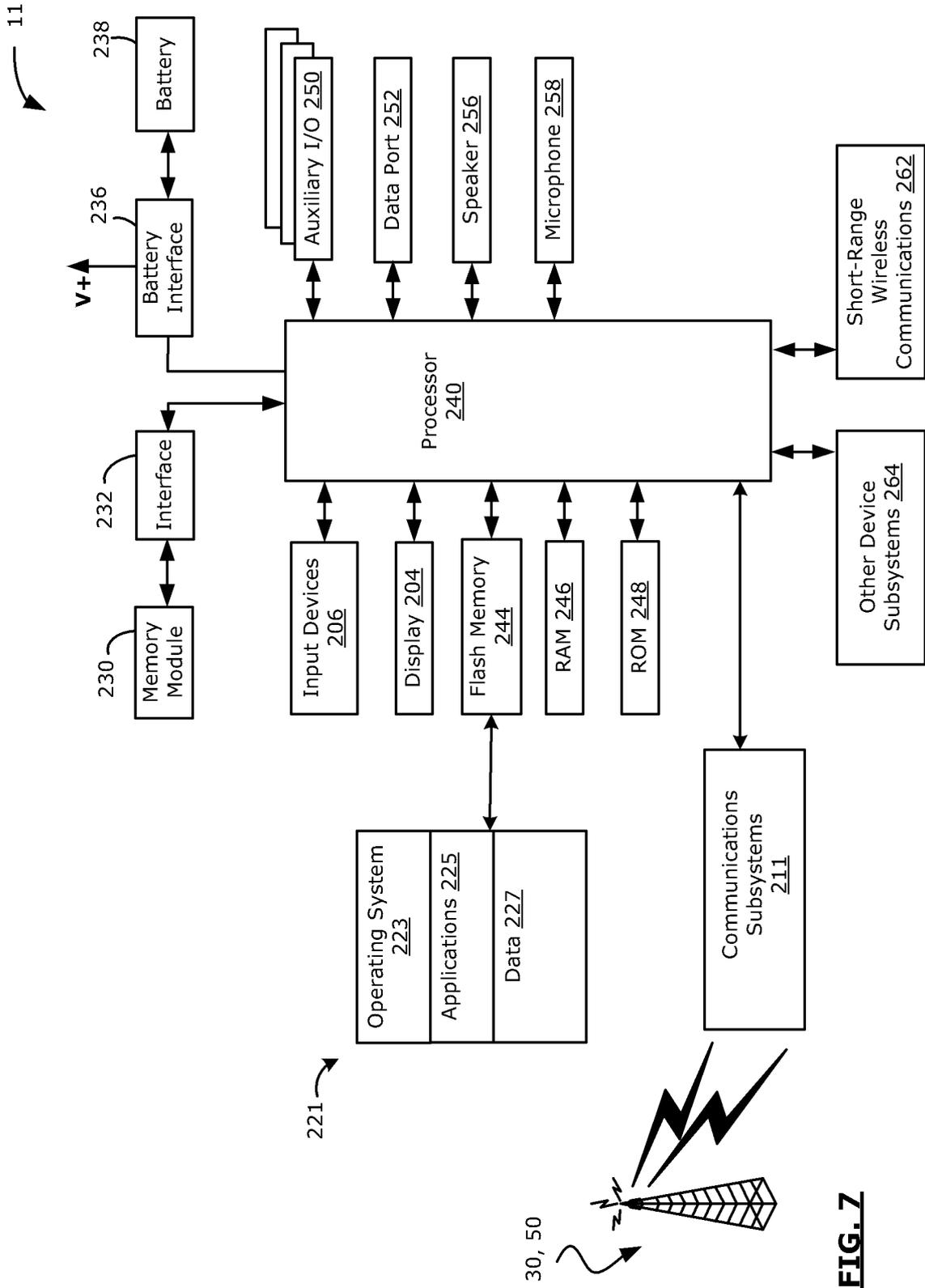


FIG. 4





**FIG. 6**



**FIG. 7**

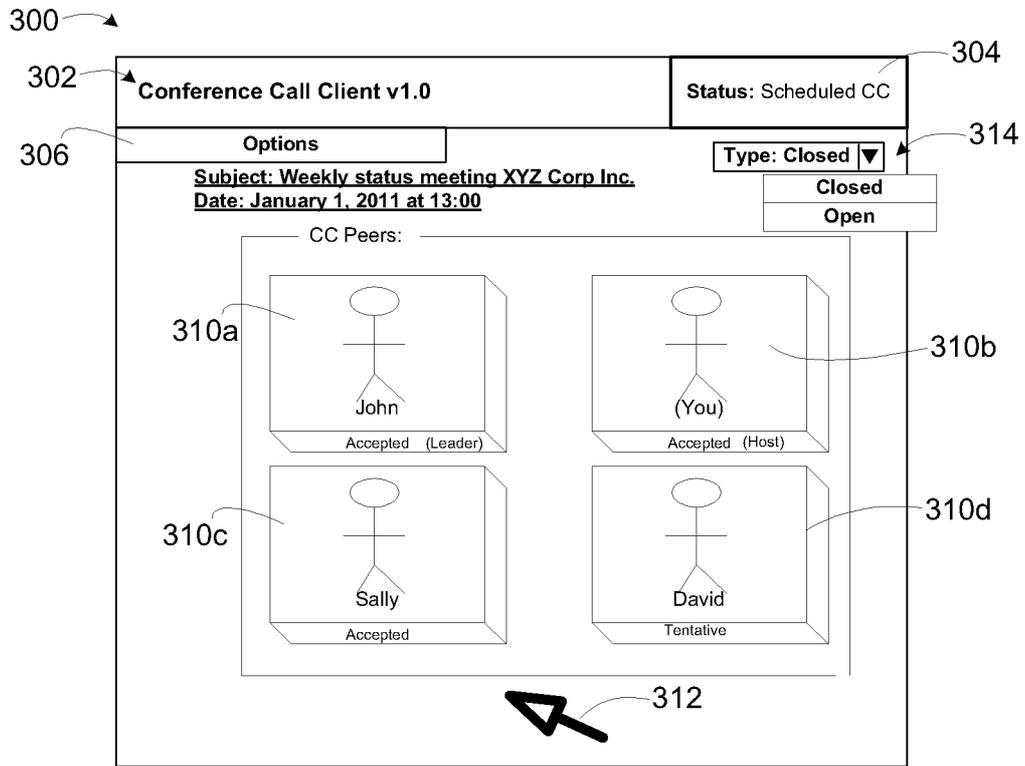


FIG. 8

The image shows a user interface for a conference call invite. At the top, there is a header bar (400) with four buttons: "Accept" (406), "Decline", "Tentative", and "Forward" (414). Below the header is the main content area (402) containing the following text:

**CONFERENCE CALL INVITE**

**Subject:** Weekly status meeting XYZ Corp Inc.

**Start:** January 1, 2011 at 13:00  
**End:** January 1, 2011 at 14:00

**Recurrence:** Weekly

**Host/Organizer:** Logan

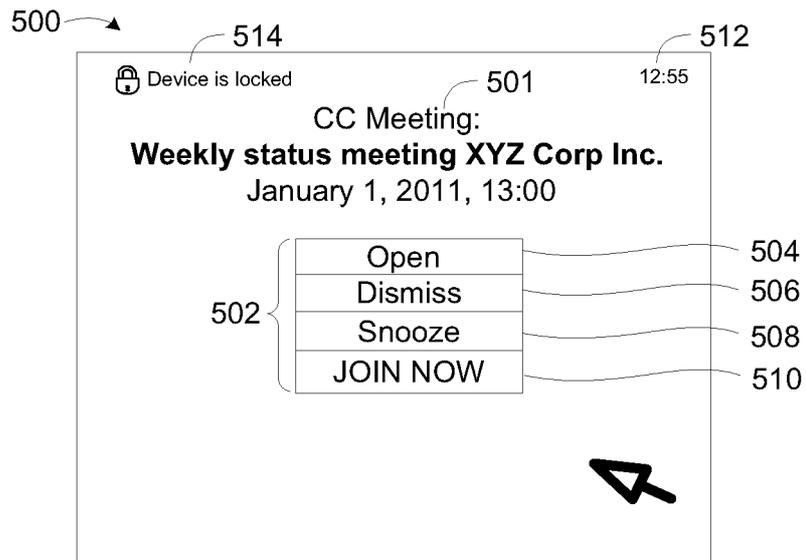
**Web Information:**

**TO JOIN NOW:** click on <https://LINK> (408)

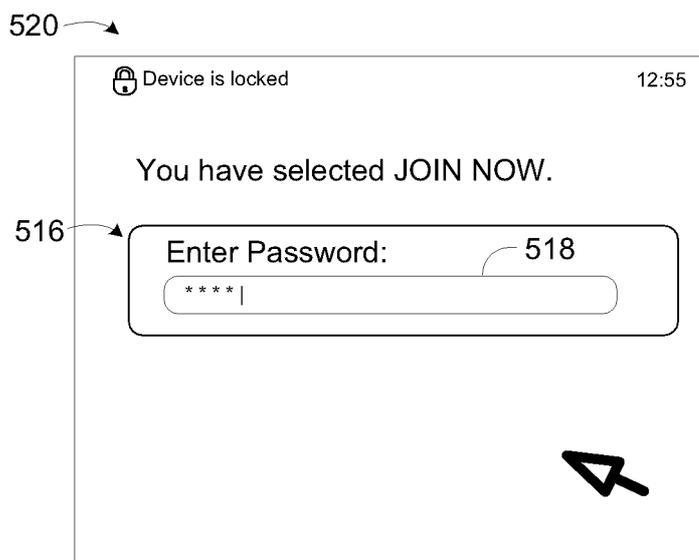
**Audio Information:**  
**Dialing information:** 1-800-999-9999  
**Participant code:** 5555  
**Password:** 12345

A bracket (404) on the right side of the content area groups the "Web Information" and "Audio Information" sections. A mouse cursor is visible at the bottom right of the content area.

**FIG. 9**

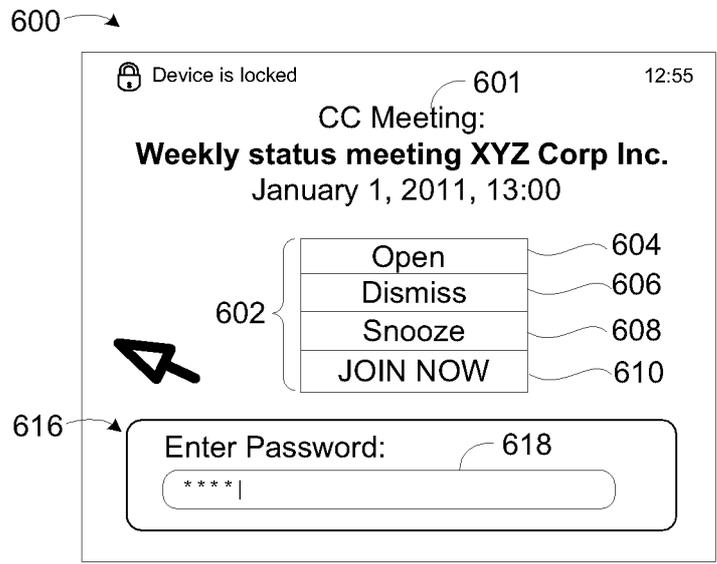


**FIG. 10**

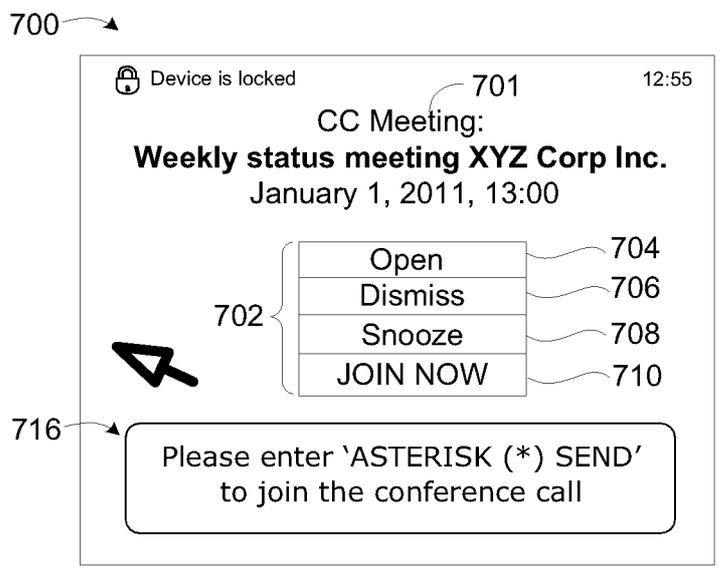


**FIG. 11**

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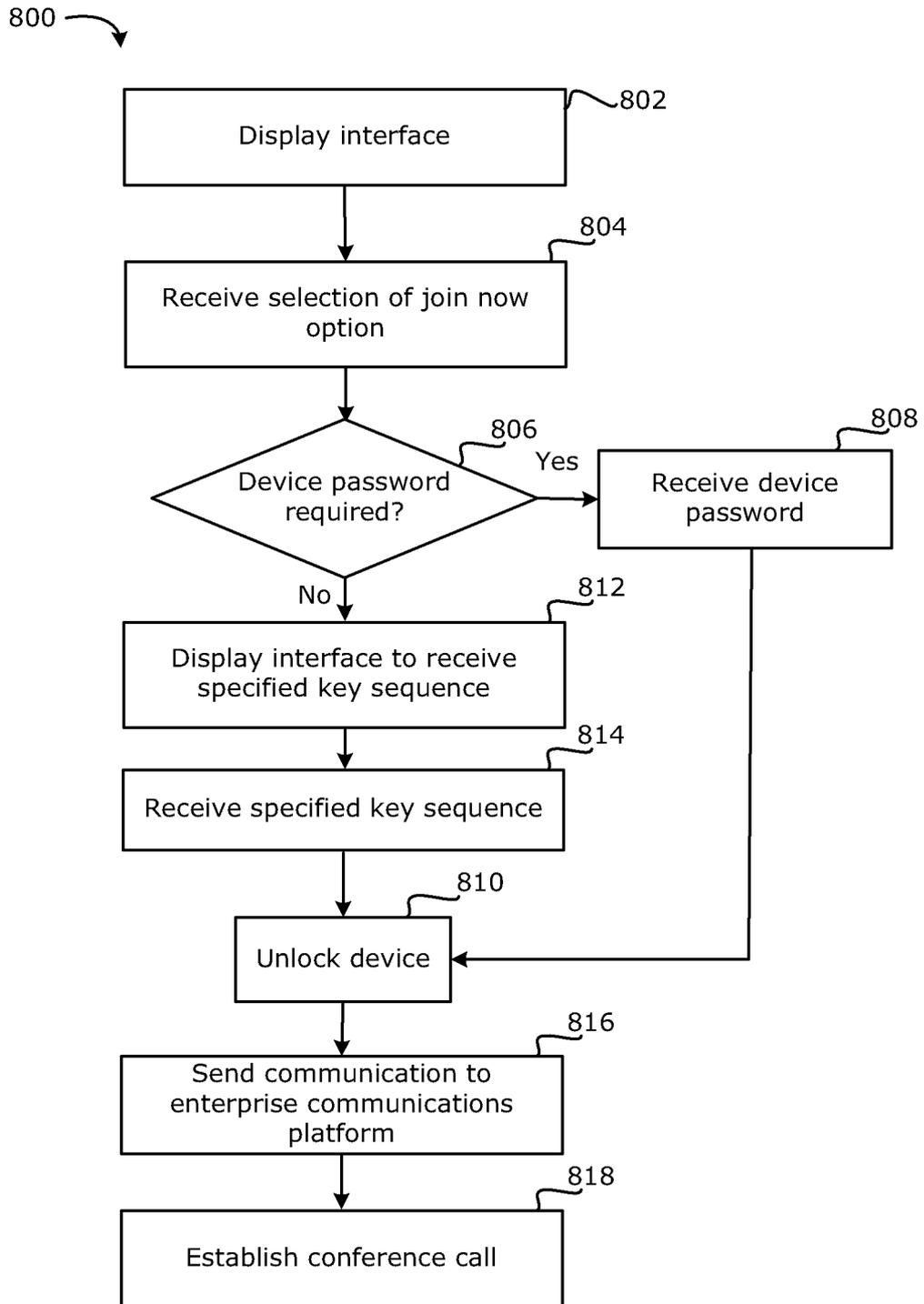


**FIG. 12**



**FIG. 13**

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**FIG. 14**

## INTERNATIONAL SEARCH REPORT

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PCT/CA201 1/0501 5 1

A. CLASSIFICATION OF SUBJECT MATTER IPC: <b>H04M 3/56</b> (2006.01) , <b>H04L 9/32</b> (2006.01) , <b>H04W 12/08</b> (2009.01) , <b>H04W 4/06</b> (2009 .01) 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) IPC: <b>H04M 3/56</b> (2006.01) , <b>H04L 9/32</b> (2006.01) , <b>H04W 12/08</b> (2009.01) , <b>H04W 4/06</b> (2009 .01)		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) Epoque, CPD (using keywords): conference, lock, cellular, wireless, mobile, handheld, lock w device, alert, schedule, alarm, reminder, message		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2008/0168361 A1 (Forstall et al.) 10 July 2008 (10-07-2008) Abstract Paragraphs [0008] - [0013], [0034], [0037], [0092] - [0100], [0139], [0141], [0149], [0169] - [0174], [0180] - [0182] Figure 3	1-23
Y	US 2010/0248688 A1 (Teng et al.) 30 September 2010 (30-09-2010) Abstract Paragraphs [0004], [0024], [0042] - [0046], [0057] - [0060], [0065], [0068] - [0071], [0086] Figures 7, 8	1-23
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents :	"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
"A" document defining the general state of the art which is not considered to be of particular relevance	"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
E " earlier application or patent but published on or after the international filing date	"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
"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)	"&"	document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means		
"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 17 October 2011 (17-10-2011)	Date of mailing of the international search report 10 November 2011 (10-11-2011)	
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, CI 14 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001-819-953-2476	Authorized officer <b>Kristy Hyam (819) 934-2673</b>	

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International application No.  
PCT/CA201 1/0501 5 1

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US2008168361A1	10-07-2008	US2008168361A1	10-07-2008
		US7975242B2	05-07-2011
		AT483196T	15-10-2010
		AT506648T	15-05-2011
		AU759440B2	17-04-2003
		AU2467399A	09-08-1999
		AU2006291338A1	22-03-2007
		AU2006291338B2	20-01-2011
		AU2006295353A1	05-04-2007
		AU2006295354A1	05-04-2007
		AU2006295354B2	21-10-2010
		AU2007283771A1	03-04-2008
		AU2007283771 B2	01-10-2009
		AU2007283771 B8	28-01-2010
		AU2007283771 C 1	03-06-2010
		AU2007286532A1	03-04-2008
		AU2007286532A8	05-03-2009
		AU2007286532B2	06-08-2009
		AU2007286532B8	22-10-2009
		AU2007286532C1	27-05-2010
		AU2007289019A1	01-05-2008
		AU2007289019B2	04-02-2010
		AU2007292383A1	13-03-2008
		AU2007292384A1	13-03-2008
		AU2007292473A1	13-03-2008
		AU2007292473B2	20-05-2010
		AU2007342102A1	17-07-2008
		AU2007342102B2	21-04-2011
		AU2008100004A4	14-02-2008
		AU2008100004B4	05-06-2008
		AU2008100010A4	14-02-2008
		AU2008100010B4	05-06-2008
		AU200810001 1A4	14-02-2008
		AU200810001 1B4	05-06-2008
		AU2008100085A4	06-03-2008
		AU2008100174A4	08-05-2008
		AU2008100174B4	06-11-2008
		AU2008100174C4	11-06-2009
		AU2008100176A4	01-05-2008
		AU2008100176B4	02-10-2008
		AU2008100179A4	01-05-2008
		AU2008100179B4	17-07-2008
		AU2008100283A4	03-07-2008
		AU2008100283B4	20-11-2008
		AU2008100283C4	30-07-2009
		AU2008100372A4	22-05-2008
		AU2008100372B4	02-10-2008
		AU2008201540A1	05-06-2008
		AU2008201540A8	05-03-2009
		AU2008201540B2	03-09-2009
		AU2008203349A1	20-11-2008
		AU2008204988A1	17-07-2008
		AU2008204988B2	21-04-2011
		AU2008210864A1	07-08-2008
		AU200827101 1A1	08-01-2009
		AU2009100352A4	28-05-2009
		AU2009100722A4	27-08-2009
		AU2009100722B4	10-12-2009
		AU2009100723A4	03-09-2009
		AU2009100723B4	07-01-2010
		AU2009100760A4	10-09-2009
		AU2009100760B4	28-01-2010
		AU2009100792A4	17-09-2009
		AU2009100792B4	08-10-2009
		AU2009200366A1	19-02-2009
		AU2009200366B2	09-04-2009
		AU2009200372A1	19-02-2009
		AU2009200372B2	02-04-2009
		AU2009204252A1	16-07-2009

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2011/050151

AU2009200372A1	19-02--2009
AU2009200372B2	02-04--2009
AU2009204252A1	16-07--2009
AU2009208099A1	03-09--2009
AU2009208103A1	03-09--2009
AU2009208103B2	28-04--2011
AU2009212904A1	24-09--2009
AU2009233675A1	26-11--2009
AU2011201639A1	28-04--2011
AU2011201887A1	19-05--2011
CA2318815A1	29-07--1999
CA2318815C	10-08--2004
CA2627118A1	13-03--2008
CA2658177A1	17-07--2008
CA2658413A1	13-03--2008
CA2661856A1	13-03--2008
CA2661886A1	13-03--2008
CA2662134A1	13-03--2008
CA2662137A1	13-03--2008
CA2666438A1	02-05--2008
CA2735309A1	13-03--2008
CN101052939A	10-10--2007
CN101198925A	11-06--2008
CN101263443A	10-09--2008
CN101263448A	10-09--2008
CN101356492A	28-01--2009
CN101356493A	28-01--2009
CN101384977A	11-03--2009
CN101384977B	08-12--2010
CN101390039A	18-03--2009
CN101482794A	15-07--2009
CN101482795A	15-07--2009
CN101529367A	09-09--2009
CN101529368A	09-09--2009
CN101529874A	09-09--2009
CN101529878A	09-09--2009
CN101535938A	16-09--2009
CN101535939A	16-09--2009
CN101535940A	16-09--2009
CN101542424A	23-09--2009
CN101558372A	14-10--2009
CN101563667A	21-10--2009
CN101617288A	30-12--2009
CN101627359A	13-01--2010
CN101627361A	13-01--2010
CN101627617A	13-01--2010
CN101636711A	27-01--2010
CN101641946A	03-02--2010
CN101682585A	24-03--2010
CN101727275A	09-06--2010
CN101796478A	04-08--2010
CN101802817A	11-08--2010
CN101861562A	13-10--2010
CN101893992A	24-11--2010
DE112007000067T5	18-09--2008
DE112007000122T5	29-01--2009
DE112007001109T5	28-10--2010
DE112007002088T5	02-07--2009
DE112007002090T5	09-07--2009
DE112007002107T5	02-07--2009
DE112008000144T5	26-11--2009
DE202005021427U1	14-02--2008
DE202005021492U1	08-05--2008
DE202007018413U1	05-06--2008
DE202007018420U1	19-06--2008
DE202007018421U1	26-06--2008
DE202008000259U1	29-05--2008
DE202008000260U1	26-06--2008
DE202008000262U1	19-06--2008
DE202008000268U1	19-06--2008
DE202008001338U1	10-07--2008
DE212007000015U1	24-07--2008

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2011/050151

DE202008001338U1	10-07-2008
DE212007000015U1	24-07-2008
DE212007000039U1	08-01-2009
DE212007000076U1	02-07-2009
DE212008000001 U 1	21-08-2008
DE602007009551 D 1	11-11-2010
DE602007014071 D 1	01-06-2011
EP1058924A1	13-12-2000
EP1058924A4	24-08-2005
EP1621989A2	01-02-2006
EP1621989A3	17-05-2006
EP1717677A2	02-11-2006
EP1717677A3	02-01-2008
EP1717678A2	02-11-2006
EP1717678A3	21-01-2009
EP1717679A2	02-11-2006
EP1717679A3	04-02-2009
EP1717680A2	02-11-2006
EP1717680A3	24-03-2010
EP1717681A2	02-11-2006
EP1717681A3	14-01-2009
EP1717682A2	02-11-2006
EP1717682A3	16-04-2008
EP1717683A2	02-11-2006
EP1717683A3	17-03-2010
EP1717684A2	02-11-2006
EP1717684A3	23-01-2008
EP1774427A2	18-04-2007
EP1774429A2	18-04-2007
EP1934685A1	25-06-2008
EP1934686A1	25-06-2008
EP1934693A2	25-06-2008
EP1969453A2	17-09-2008
EP2000893A2	10-12-2008
EP2000893A3	14-01-2009
EP2000894A2	10-12-2008
EP2000894A3	14-01-2009
EP2059868A2	20-05-2009
EP2059868B1	29-09-2010
EP2060096A1	20-05-2009
EP2067094A1	10-06-2009
EP2067094B1	20-04-2011
EP2069895A1	17-06-2009
EP2069898A1	17-06-2009
EP2069899A1	17-06-2009
EP2069982A2	17-06-2009
EP2074500A2	01-07-2009
EP2078239A2	15-07-2009
EP2080087A2	22-07-2009
EP2082313A2	29-07-2009
EP2095214A2	02-09-2009
EP2095616A1	02-09-2009
EP2106652A1	07-10-2009
EP2115560A2	11-11-2009
EP2118728A1	18-11-2009
EP2118729A2	18-11-2009
EP2118730A2	18-11-2009
EP2119199A1	18-11-2009
EP2126676A1	02-12-2009
EP2126678A2	02-12-2009
EP2160877A1	10-03-2010
EP2166438A1	24-03-2010
EP2227738A2	15-09-2010
EP2256605A2	01-12-2010
EP2256606A2	01-12-2010
EP2256607A2	01-12-2010
EP2282275A1	09-02-2011
EP2296078A2	16-03-2011
EP2336869A1	22-06-2011
ES2361784T3	22-06-2011

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2011/050151

HK1 109013A2	23--05--2008
HK1 109023A2	30--05--2008
HK1 134885A2	14--05--2010
HK1 134886A2	14--05--2010
HK1 134887A2	14--05--2010
HK1 141941A2	19--11--2010
HK1 143497A2	31--12--2010
IL137478D0	24--07--2001
IL137478A	20--11--2005
IL197385D0	24--12--2009
JP4743919B2	10--08--2011
JP4763695B2	31--08--2011
JP2007184008A	19--07--2007
JP4767901 B2	07--09--2011
JP2002501271A	15--01--2002
JP2007184006A	19--07--2007
JP2007184007A	19--07--2007
JP2007193840A	02--08--2007
JP2007213599A	23--08--2007
JP2007226820A	06--09--2007
JP2007242035A	20--09--2007
JP2008508600A	21--03--2008
JP2008508601A	21--03--2008
JP2009509234A	05--03--2009
JP2009509235A	05--03--2009
JP2009509236A	05--03--2009
JP2009522697A	11--06--2009
JP2010170573A	05--08--2010
JP2010503082A	28--01--2010
JP2010503121A	28--01--2010
JP2010503124A	28--01--2010
JP2010503125A	28--01--2010
JP2010503126A	28--01--2010
JP2010503127A	28--01--2010
JP2010503332A	28--01--2010
JP2010507870A	11--03--2010
JP2010515978A	13--05--2010
JP2010515980A	13--05--2010
JP2010517197A	20--05--2010
JP201 1023004A	03--02--2011
JP201 1023005A	03--02--2011
JP201 1065654A	31--03--2011
JP201 1146067A	28--07--2011
KR20060053010A	19--05--2006
KR10059591 1B1	07--07--2006
KR20060058784A	30--05--2006
KR100595912B1	07--07--2006
KR20060059263A	01--06--2006
KR100595915B1	05--07--2006
KR2006005301 1A	19--05--2006
KR100595917B1	05--07--2006
KR20060059264A	01--06--2006
KR100595920B1	05--07--2006
KR20060059265A	01--06--2006
KR100595922B1	05--07--2006
KR20060053012A	19--05--2006
KR100595924B1	05--07--2006
KR20060058731A	30--05--2006
KR100595925B1	05--07--2006
KR20060058732A	30--05--2006
KR100595926B1	05--07--2006
KR20090073084A	02--07--2009
KR100950120B1	30--03--2010
KR20090029307A	20--03--2009
KR1 00950831 B1	02--04--2010
KR20070040821A	17--04--2007
KR100958490B1	17--05--2010
KR20090050109A	19--05--2009
KR1 00958491 B1	17--05--2010
KR20080045213A	22--05--2008
KR100974986B1	09--08--2010
KR20070039613A	12--04--2007
KR100984596B1	30--09--2010

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2011/050151

TWM350737U	11-02-2009
TW200844837A	16-11-2008
US6323846B1	27-11-2001
US2002015024A1	07-02-2002
US6888536B2	03-05-2005
US2005104867A1	19-05-2005
US7339580B2	04-03-2008
US2008168404A1	10-07-2008
US7469381 B2	23-12-2008
US2008174570A1	24-07-2008
US7479949B2	20-01-2009
US2006290921A1	28-12-2006
US7599044B2	06-10-2009
US2006053387A1	09-03-2006
US7614008B2	03-11-2009
US2006238521A1	26-10-2006
US7619618B2	17-11-2009
US2007075965A1	05-04-2007
US7633076B2	15-12-2009
US2006161871A1	20-07-2006
US7653883B2	26-01-2010
US2006238519A1	26-10-2006
US7656394B2	02-02-2010
US2008165022A1	10-07-2008
US7671756B2	02-03-2010
US2007152978A1	05-07-2007
US7694231 B2	06-04-2010
US2008006762A1	10-01-2008
US7714265B2	11-05-2010
US2007085157A1	19-04-2007
US7728316B2	01-06-2010
US2006022955A1	02-02-2006
US7760187B2	20-07-2010
US2006232567A1	19-10-2006
US7764274B2	27-07-2010
US2007070052A1	29-03-2007
US7782307B2	24-08-2010
US2007139395A1	21-06-2007
US7812828B2	12-10-2010
US2008094356A1	24-04-2008
US7843427B2	30-11-2010
US2006085757A1	20-04-2006
US7844914B2	30-11-2010
US2008259040A1	23-10-2008
US7856605B2	21-12-2010
US2008094368A1	24-04-2008
US7864163B2	04-01-2011
US2007247442A1	25-10-2007
US7900156B2	01-03-2011
US2008094371A1	24-04-2008
US7934156B2	26-04-2011
US2008055273A1	06-03-2008
US7940250B2	10-05-2011
US2008082934A1	03-04-2008
US7941760B2	10-05-2011
US2008055272A1	06-03-2008
US7956849B2	07-06-2011
US2008168405A1	10-07-2008
US7966578B2	21-06-2011
US2008165144A1	10-07-2008
US7978176B2	12-07-2011
US200821 1778A1	04-09-2008
US7978182B2	12-07-2011
US2008055264A1	06-03-2008
US7996792B2	09-08-2011
US201 1074677A1	31-03-2011
US8013839B2	06-09-2011
US2008057926A1	06-03-2008
US8014760B2	06-09-2011

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2011/050151

US2006022956A1	02-02-2006
US2006026521A1	02-02-2006
US2006026535A1	02-02-2006
US2006026536A1	02-02-2006
US2006033724A1	16-02-2006
US2006161870A1	20-07-2006
US2006238518A1	26-10-2006
US2006238520A1	26-10-2006
US2006238522A1	26-10-2006
US2007070050A1	29-03-2007
US2007070051A1	29-03-2007
US2007078919A1	05-04-2007
US2007081726A1	12-04-2007
US2007152980A1	05-07-2007
US2007171210A1	26-07-2007
US2007174788A1	26-07-2007
US2007268273A1	22-11-2007
US2007268274A1	22-11-2007
US2007268275A1	22-11-2007
US2008036743A1	14-02-2008
US2008041639A1	21-02-2008
US2008042986A1	21-02-2008
US2008042987A1	21-02-2008
US2008042988A1	21-02-2008
US2008042989A1	21-02-2008
US2008052945A1	06-03-2008
US2008055263A1	06-03-2008
US2008055269A1	06-03-2008
US2008082930A1	03-04-2008
US2008094369A1	24-04-2008
US2008094370A1	24-04-2008
US2008098331A1	24-04-2008
US2008122796A1	29-05-2008
US2008128182A1	05-06-2008
US2008165136A1	10-07-2008
US2008165142A1	10-07-2008
US2008165143A1	10-07-2008
US2008165145A1	10-07-2008
US2008165146A1	10-07-2008
US2008165147A1	10-07-2008
US2008165148A1	10-07-2008
US2008165149A1	10-07-2008
US2008165151A1	10-07-2008
US2008165152A1	10-07-2008
US2008165153A1	10-07-2008
US2008165160A1	10-07-2008
US2008168349A1	10-07-2008
US2008168353A1	10-07-2008
US2008168365A1	10-07-2008
US2008168379A1	10-07-2008
US2008168395A1	10-07-2008
US2008168396A1	10-07-2008
US2008180408A1	31-07-2008
US2008201650A1	21-08-2008
US2008204426A1	28-08-2008
US200821 1775A1	04-09-2008
US200821 1783A1	04-09-2008
US200821 1784A1	04-09-2008
US200821 1785A1	04-09-2008
US2008218535A1	11-09-2008
US2008220752A1	11-09-2008
US2008222545A1	11-09-2008
US2008231610A1	25-09-2008
US2008320391A1	25-12-2008
US2008320419A1	25-12-2008
US200900501 1A1	01-01-2009
US2009006570A1	01-01-2009
US2009006644A1	01-01-2009
US2009007017A1	01-01-2009

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2011/050151

US2009021489A1	22-01--2009
US2009058830A1	05-03--2009
US2009066728A1	12-03--2009
US2009070704A1	12-03--2009
US2009070705A1	12-03--2009
US2009073194A1	19-03--2009
US2009077488A1	19-03--2009
US2009160816A1	25-06--2009
US2009174680A1	09-07--2009
US2009177981A1	09-07--2009
US2009178007A1	09-07--2009
US2009178008A1	09-07--2009
US2009244031A1	01-10--2009
US2009244032A1	01-10--2009
US2009244033A1	01-10--2009
US2009249236A1	01-10--2009
US2009251435A1	08-10--2009
US2009251438A1	08-10--2009
US2009251439A1	08-10--2009
US2010048256A1	25-02--2010
US2010149092A1	17-06--2010
US2010149134A1	17-06--2010
US2010177056A1	15-07--2010
US2010188357A1	29-07--2010
US2010188358A1	29-07--2010
US2010192086A1	29-07--2010
US2010207879A1	19-08--2010
US2010259500A1	14-10--2010
US201 1080364A1	07-04--201 1
US201 1154188A1	23-06--201 1
US201 1202882A1	18-08--201 1
US201 1210933A1	01-09--201 1
US201 1219303A1	08-09--201 1
US201 1235990A1	29-09--201 1
US201 1254800A1	20-10--201 1
WO9938149A1	29-07--1999
WO2006020304A2	23-02--2006
WO2006020304A3	31-05--2007
WO2006020305A2	23-02--2006
WO2006020305A3	24-05--2007
WO2007032843A2	22-03--2007
WO2007032843A3	24-05--2007
WO2007037808A1	05-04--2007
WO2007037809A1	05-04--2007
WO2007082139A2	19-07--2007
WO2007082139A3	29-05--2008
WO2008030762A2	13-03--2008
WO2008030762A3	18-09--2008
WO2008030776A2	13-03--2008
WO2008030776A3	07-08--2008
WO2008030778A1	13-03--2008
WO2008030779A2	13-03--2008
WO2008030779A3	26-06--2008
WO2008030780A1	13-03--2008
WO2008030874A1	13-03--2008
WO2008030875A2	13-03--2008
WO2008030875A3	02-10--2008
WO2008030878A2	13-03--2008
WO2008030878A3	26-06--2008
WO2008030879A2	13-03--2008
WO2008030879A3	24-07--2008
WO2008030880A1	13-03--2008
WO2008030970A2	13-03--2008
WO2008030970A3	31-07--2008

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US2010248688A1	30-09-2010	US2010248688A1	30-09-2010
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