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(71) Applicant (for all designated States except US): WEBEX COMMUNICATIONS, INC. [US/US]; 3979 Freedom Circle, Santa Clara, California 95054 (US).

(72) Inventors; and

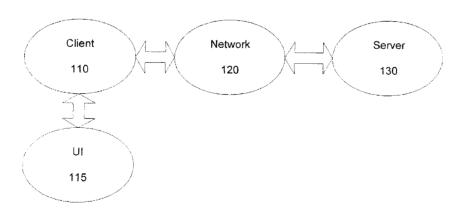
(75) Inventors/Applicants (for US only): WEIDONG, Chen [US/US]; 3979 Freedom Circle, Santa Clara, California 95054 (US). ZHU, Lei [US/US]; 3979 Freedom Circle, Santa Clara, California 95054 (US). ZHU, Min [CN/US];

3979 Freedom Circle, Santa Clara, California 95054 (US). KANGAS, Chris [US/US]; 3979 Freedom Circle, Santa Clara, California 95054 (US). SHEPPARD, Matthew [US/US]; 3979 Freedom Circle, Santa Clara, California 95054 (US). KNIGHT, David [US/US]; 3979 Freedom Circle, Santa Clara, California 95054 (US).

- (74) Agent: ORRICK HERRINGTON & SUTCLIFFE LLP; 4 Park Plaza, Suite 1600, Irvine, California 92614-2558 (US).
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(54) Title: METHODS AND APPARATUSES FOR SELECTIVELY PROCESSING, DYNAMICALLY SUGGESTING, AND AUTOMATICALLY INITIATING AN APPLICATION, AND MANAGING THE DISTRIBUTION AND INSTALLATION OF APPLICATIONS



(57) Abstract: In one embodiment, the methods and apparatuses request an application; detect a user requesting the application; detect a profile associated with the user; and grant permission to access the application based on an access parameter. In another embodiment, the methods and apparatuses detect shared content during a collaboration session; detect a content type based on the shared content; suggest an application based on the content type; and initiate the application during the collaboration session. In another embodiment, the methods and apparatuses detect an application associated with a requester; suggest the application based on a requester parameter; select the application by the requester; and automatically initiate the application for the requester. In another embodiment, the methods and apparatuses request an installation of an application; detect a user requesting the application; detect a profile associated with the user; and grant permission to install the application based on an installation permission.



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METHODS AND APPARATUSES FOR SELECTIVELY PROCESSING, DYNAMICALLY
SUGGESTING, AND AUTOMATICALLY INITIATING AN APPLICATION, AND MANAGING
THE DISTRIBUTION AND INSTALLATION OF APPLICATIONS

#### FIELD OF INVENTION

**[0001]** The present invention relates generally to selectively accessing, dynamically suggesting, and automatically initiating an application, and to managing the distribution and installation of applications.

#### **BACKGROUND**

[0002] There has been an increased use in collaboration sessions that are Internet or webbased to communicate with employees, vendors, and clients. During these collaboration sessions, information is typically exchanged between multiple participants. This exchanged information may include audio, graphical, and/or textual information.

[0003] There has also been an increased use of social networks such as Friendster, LinkedIn, and Spooke to facilitate connections between the respective community members.

### **SUMMARY**

**[0004]** In one embodiment, the methods and apparatuses request an application; detect a user requesting the application; detect a profile associated with the user; and grant permission to access the application based on an access parameter.

[0005] In another embodiment, the methods and apparatuses detect shared content during a collaboration session; detect a content type based on the shared content; suggest an application based on the content type; and initiate the application during the collaboration session.

[0006] In another embodiment, the methods and apparatuses detect an application associated with a requester; suggest the application based on a requester parameter; select the application by the requester; and automatically initiate the application for the requester.

**[0007]** In another embodiment, the methods and apparatuses request an installation of an application; detect a user requesting the application; detect a profile associated with the user; and grant permission to install the application based on an installation permission.

# BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The accompanying drawings, which are incorporated in and constitute a part of this specification, illustrate and explain the embodiments of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications. In the drawings,

**[0009]** Figure 1 is a diagram illustrating an environment within which the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications are implemented;

- **[0010]** Figure 2 is a simplified block diagram illustrating one embodiment in which the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications are implemented;
- **[0011]** Figure 3 is a simplified block diagram illustrating a system, consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0012]** Figure 4 is a simplified block diagram illustrating a system, consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0013]** Figure 5 is an exemplary record for use with the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0014]** Figure 6 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0015]** Figure 7 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0016]** Figure 8 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;

[0017] Figure 9 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;

- [0018] Figure 10 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- [0019] Figure 11 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0020]** Figure 12 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0021]** Figure 13 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- [0022] Figure 14 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications;
- **[0023]** Figure 15 is a flow diagram consistent with one embodiment of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications.

### **DETAILED DESCRIPTION**

[0024] The following detailed description of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications refers to the accompanying drawings. The detailed description is not intended to limit the methods and apparatuses for selectively accessing an application, for

dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications. Instead, the scope of the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications is defined by the appended claims and equivalents. Those skilled in the art will recognize that many other implementations are possible, consistent with the present invention.

- [0025] References to a device include a device utilized by a user such as a desktop computer, a portable computer, a personal digital assistant, a video phone, a landline telephone, a cellular telephone, and a device capable of receiving/transmitting an electronic signal.
- [0026] References to a collaboration session include a plurality of devices that are configured to view content submitted by one of the devices. For example, the collaboration session may include a data conference or a video conference through a network, a phone line, and/or the Internet. Further, the communications between participants may be through text messaging, audio conferencing, video conferencing, email, short messaging service, and the like.
- [0027] References to a participant include a user of a device.
- [0028] Reference to an application include application software for use by the participant.
- [0029] References to a presenter include a participant that shares content shared with other participants.
- **[0030]** References to an attendee include a participant that receives content shared by another participant. The attendees are capable of viewing content that is offered by the presenter. In some instances, the attendee is capable of modifying the content shared by the presenter.
- [0031] Figure 1 is a diagram illustrating an environment within which the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications are implemented. The environment includes an electronic device 110 (e.g., a computing platform configured to act as a client device, such as a computer, a personal digital assistant, and the like), a user interface 115, a network 120 (e.g., a local area network, a home network, the Internet), and a server 130 (e.g., a computing platform configured to act as a server).
- [0032] In one embodiment, one or more user interface 115 components are made integral with the electronic device 110 (e.g., keypad and video display screen input and output

interfaces in the same housing such as a personal digital assistant. In other embodiments, one or more user interface 115 components (e.g., a keyboard, a pointing device such as a mouse, a trackball, etc.), a microphone, a speaker, a display, a camera are physically separate from, and are conventionally coupled to, electronic device 110. In one embodiment, the user utilizes interface 115 to access and control content and applications stored in electronic device 110, server 130, or a remote storage device (not shown) coupled via network 120.

- **[0033]** In accordance with the invention, embodiments below for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications are executed by an electronic processor in electronic device 110, in server 130, or by processors in electronic device 110 and in server 130 acting together. Server 130 is illustrated in Figure 1 as being a single computing platform, but in other instances are two or more interconnected computing platforms that act as a server.
- [0034] Figure 2 is a simplified diagram illustrating an exemplary architecture in which the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications are implemented. The exemplary architecture includes a plurality of electronic devices 202, a server device 210, and a network 201 connecting electronic devices 202 to server 210 and each electronic device 202 to each other. The plurality of electronic devices 202 are each configured to include a computer-readable medium 209, such as random access memory, coupled to an electronic processor 208. Processor 208 executes program instructions stored in the computer-readable medium 209. In one embodiment, a unique user operates each electronic device 202 via an interface 115 as described with reference to Figure 1.
- [0035] The server device 130 includes a processor 211 coupled to a computer-readable medium 212. In one embodiment, the server device 130 is coupled to one or more additional external or internal devices, such as, without limitation, a secondary data storage element, such as database 240.
- [0036] In one instance, processors 208 and 211 are manufactured by Intel Corporation, of Santa Clara, California. In other instances, other microprocessors are used.
- [0037] In one embodiment, the plurality of client devices 202 and the server 210 include instructions for selectively accessing an application. In one embodiment, the plurality of computer-readable media 209 and 212 contain, in part, the customized application.

  Additionally, the plurality of client devices 202 and the server 210 are configured to receive

and transmit electronic messages for use with the customized application. Similarly, the network 210 is configured to transmit electronic messages for use with the customized application.

- **[0038]** In another embodiment, the plurality of client devices 202 and the server 210 include instructions for dynamically suggesting an application based on a collaboration session.
- [0039] In another embodiment, the plurality of client devices 202 and the server 210 include instructions for automatically initiating an application.
- [0040] In another embodiment, the plurality of client devices 202 and the server 210 include instructions for managing the distribution and installation of applications.
- [0041] One or more user applications are stored in media 209, in media 212, or a single user application is stored in part in one media 209 and in part in media 212. In one instance, a stored user application, regardless of storage location, is made customizable based on selectively accessing an application as determined using embodiments described below.
- [0042] In another instance, a stored user application, regardless of storage location, is made customizable based on dynamically suggesting an application based on a collaboration session as determined using embodiments described below.
- [0043] In another instance, a stored user application, regardless of storage location, is made customizable based on automatically initiating an application as determined using embodiments described below.
- [0044] In another instance, a stored user application, regardless of storage location, is made customizable based on managing the distribution and installation of applications as determined using embodiments described below.
- [0045] In one embodiment, the dynamic social network system utilizes the collaboration sessions to share information and communicate among the participants. For example, collaboration sessions are configured to provide real-time communication between multiple participants. In one embodiment, the content that is shared among the participants of the collaboration session is content that is displayed on the desktop of one of the participants.
- **[0046]** Figure 3 illustrates one embodiment of a system 300. In one embodiment, the system 300 is embodied within the server 130. In another embodiment, the system 300 is embodied within the electronic device 110. In yet another embodiment, the system 300 is embodied within both the electronic device 110 and the server 130.
- **[0047]** In one embodiment, the system 300 includes a conferencing module 310, an applications grouping 320, an on-line community grouping 330, a company grouping 340, and a professional organization grouping 350.

[0048] In one embodiment, the conferencing module 310 communicates with the applications grouping 320, the on-line community grouping 330, the company grouping 340, and the professional organization grouping 350. In one embodiment, the conferencing module 310 coordinates tasks, requests, and communications between and within the applications grouping 320, the on-line community grouping 330, the company grouping 340, and the professional organization grouping 350.

- [0049] In one embodiment, the conferencing module 310 allows the different groupings to communicate and hold collaboration sessions between users within each grouping and across multiple groupings.
- [0050] In one embodiment, the conferencing module 310 detects content that is utilized by one of the users within one of the groupings. In one embodiment, the content is utilized in connection with multiple devices within a collaboration session between multiple parties. For example, the collaboration session may include a data conference or a video conference through a network, a phone line, and/or the Internet.
- [0051] In one embodiment, the content is a document utilized within a collaboration session. In another embodiment, the content is audio visual media that is utilized within a collaboration session.
- **[0052]** In one embodiment, the conferencing module 310 monitors input from various interface devices connected to devices that are participating in the collaboration session. These various interface devices include a keyboard, a pointing device, a microphone, a telephone, a video camera, and the like.
- **[0053]** In one embodiment, the applications grouping 320 includes users that are related to a particular application. For example, multiple users that are interested in a particular application can form a user's group that is represented by the applications grouping 320.
- **[0054]** In another embodiment, the applications grouping 320 includes repository of different applications that are made available to participants that make up the on-line community grouping 330, the company grouping 340, and the professional organization grouping 350. In one embodiment, access to the applications within the repository is selectively controlled based on an access rights parameter.
- [0055] In one embodiment, the on-line community grouping 330 includes users that are related to a particular community group such as Friendster or another social networking group.
- **[0056]** In one embodiment, the company grouping 340 includes users that are related to a particular company. For example, multiple users that are employees at a particular company are related to each other and are represented by the company grouping 340.

[0057] In one embodiment, the professional organization grouping 350 includes users that are related to a particular professional organization. For example, multiple users that are members of a particular professional organization are related to each other and are represented by the professional organization grouping 350.

[0058] The system 300 in Figure 3 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for selectively accessing an application. Additional modules may be added to the system 300 without departing from the scope of the methods and apparatuses for selectively accessing an application. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for selectively accessing an application.

[0059] Alternatively, the system 300 in Figure 3 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for dynamically suggesting an application based on a collaboration session. Additional modules may be added to the system 300 without departing from the scope of the methods and apparatuses for dynamically suggesting an application based on a collaboration session. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for dynamically suggesting an application based on a collaboration session.

[0060] Alternatively, the system 300 in Figure 3 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for automatically initiating an application. Additional modules may be added to the system 300 without departing from the scope of the methods and apparatuses for automatically initiating an application. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for automatically initiating an application.

[0061] Alternatively, the system 300 in Figure 3 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for managing the distribution and installation of applications. Additional modules may be added to the system 300 without departing from the scope of the methods and apparatuses for managing the distribution and installation of applications. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for managing the distribution and installation of applications.

**[0062]** Figure 4 illustrates one embodiment of a system 400. In one embodiment, the system 400 facilitates a collaboration session between multiple parties. In one embodiment, the system 400 includes a presenter device 410, a conference interface 420, and an attendee

device 430. In one embodiment, the presenter device 410 and the attendee device 430 are utilized by a presenter user and an attendee user, respectively.

[0063] In one embodiment, the presenter device 410 shares content with the attendee device 430. In one embodiment, the attendee device 430 also shares content with the presenter device 410. The conference interface 420 monitors the communications between the presenter device 410 and the attendee device 430.

[0064] Figure 5 illustrates one embodiment of a system 500. In one embodiment, the system 500 is embodied within the server 130. In another embodiment, the system 500 is embodied within the electronic device 110. In yet another embodiment, the system 500 is embodied within both the electronic device 110 and the server 130.

**[0065]** In one embodiment, the system 500 includes an interface module 510, a storage module 520, a content recognition module 530, a profile manager module 540, a control module 550, a title recognition module 560, an attendee recognition module 570, a security manager module 580, a rating manager 590, and an application manager 595.

[0066] In one embodiment, the control module 550 communicates with the interface module 510, the storage module 520, the content recognition module 530, the profile manager module 540, the title recognition module 560, the attendee recognition module 570, the security manager module 580, the rating manager 590, and the application manager 595. In one embodiment, the control module 350 coordinates tasks, requests, and communications between the interface module 510, the storage module 520, the content recognition module 530, the profile manager module 540, the title recognition module 560, the attendee recognition module 570, the security manager module 580, the rating manager 590, and the application manager 595.

**[0067]** In one embodiment, the interface module 510 receives a signal from one of the electronic devices 110. In one embodiment, the electronic devices 110 are participating in a collaboration session. For example, the system 500 monitors the collaboration session between the presenter device 410 and the attendee device 430. In another embodiment, the interface module 510 delivers a signal to one of the electronic devices 110.

**[0068]** In one embodiment, the interface module 510 monitors input from various interface devices connected to devices that are participating in the collaboration session. These various interface devices include a keyboard, a pointing device, a microphone, a telephone, a video camera, and the like. Further, the interface module 510 also monitors the identity of the participants of a collaboration session, the title of the collaboration session, and the content exchanged in the collaboration session.

**[0069]** In one embodiment, the storage module 520 stores a record including a list of attributes associated with the each device participating in a collaboration session. An exemplary list of attributes is shown in a record 600 within Figure 6.

- [0070] In another embodiment, the storage module 520 stores the collaboration session. In one embodiment, the storage module 520 stores the content that is presented during the collaboration session. In another embodiment, the storage module 520 stores the annotations and comments produced by the participants of the collaboration session.
- [0071] In another embodiment, the storage module 520 stores scoring produced by the rating manager 590. In one embodiment, the scoring values for each user are stored.
- [0072] In yet another embodiment, the storage module 520 stores applications referenced within the application module 595.
- [0073] In one embodiment, the content recognition module 530 detects content that is utilized by the user in connection with the device. In one embodiment, the content is utilized in connection with multiple devices within a collaboration session between multiple parties. For example, the collaboration session may include a data conference or a video conference through a network, a phone line, and/or the Internet.
- [0074] In one embodiment, the content is a document utilized within a collaboration session. In another embodiment, the content is audio visual media that is utilized within a collaboration session.
- [0075] In one embodiment, the content recognition module 530 detects the content exchanged between the presenter device 410 and the attendee device 430. In one embodiment, the content is textual. In another embodiment, the content is audio. In another embodiment, the content is graphical.
- [0076] In one embodiment, the content recognition module 530 analyzes this content to identify keywords. In one embodiment, the keywords can be identified by the frequency in which the words are utilized. In another embodiment, the keywords are identified by the context of the related words. For example, if the content being exchanged between the presenter device 410 and the attendee device 430 relate to computers, then the frequent use of terms such as memory, RAM, and chips may have increased significance during the collaboration session.
- **[0077]** In one embodiment, the profile manager module 540 organizes a plurality of profiles. In one embodiment, each profile corresponds to each individual user. In another embodiment, each individual user may have multiple profiles.

[0078] In one embodiment, a profile describes attributes of the associated user. For example, the profile may include areas of interest of the associated user. Further, the profile may also describe the areas of expertise corresponding to the associated user.

[0079] In another embodiment, the profile may also describe the relational hierarchy between multiple users. For example, the profile may also describe the title and level of the user within a company or organization.

[0080] In one embodiment, the title recognition module 560 detects the titles that describe or label collaboration sessions. In one embodiment, collaboration sessions have corresponding titles or descriptions that describe the purpose or content of the collaboration sessions. For example, a particular collaboration session may have a title "Mail Server Maintenance". The title of this particular collaboration session may be stored within a calendaring system that helps participants of this particular collaboration session keep track of their respective schedules.

[0081] In one embodiment, the participant recognition module 570 detects the identities of the participants of the collaboration session. In one embodiment, collaboration sessions have schedule participants that are scheduled to participate in a particular collaboration session. Further, there may be additional or fewer actual participants that join the particular collaboration session. In one embodiment, the participant recognition module 570 detects both scheduled and actual participants for a particular collaboration session.

[0082] In one embodiment, the participant recognition module 570 detects the identities of the participants of the collaboration session. In one embodiment, collaboration sessions have schedule participants that are scheduled to participate in a particular collaboration session. Further, there may be additional or fewer actual participants that join the particular collaboration session.

[0083] In one embodiment, the participant recognition module 570 detects distinct participants through their respective associated profiles.

**[0084]** In one embodiment, the security manager module 580 controls access to the profiles of each user based on the information of a requesting party. For example, if the requesting party is authorized to gain access to other profiles, the requesting party can search for profiles that match a particular criteria such as subject expertise, experience, and the like.

[0085] In one embodiment, the rating manager module 590 ranks and rates the available profiles based on a match between a request and the profile information. For example, a user may request a search for other users with an expertise in a particular area of specialty. The rating manager module 590 may review the profiles of other users and select and rank the

WO 2008/086332 PCT/US2008/050472 corresponding profiles based on the whether the profiles match the area of specialty requested by the user.

[0086] In another embodiment, the rating manager module 590 ranks and rates the available applications based on a match between a request for an application and parameters associated with the participants that are requesting the application.

[0087] In one embodiment, the application manager 595 controls the availability and distribution of the applications to potential recipient participants. In one example, the availability of the application to the potential recipient participant may depend on the authorization of the particular participant. In another embodiment, the application manager 595 tracks the distribution of the applications to various participants.

**[0088]** In one embodiment, the system 500 suggests additional participants for a particular collaboration session based on the invited participants. In another embodiment, the system 500 suggests additional participants for a particular collaboration session based on the title or topic of the particular collaboration session.

[0089] The system 500 in Figure 5 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for selectively accessing an application. Additional modules may be added to the system 500 without departing from the scope of the methods and apparatuses for selectively accessing an application. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for selectively accessing an application.

[0090] Alternatively, the system 500 in Figure 5 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for dynamically suggesting an application based on a collaboration session. Additional modules may be added to the system 500 without departing from the scope of the methods and apparatuses for dynamically suggesting an application based on a collaboration session. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for dynamically suggesting an application based on a collaboration session.

[0091] Alternatively, the system 500 in Figure 5 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for automatically initiating an application. Additional modules may be added to the system 500 without departing from the scope of the methods and apparatuses for automatically initiating an application. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for automatically initiating an application.

[0092] Alternatively, the system 500 in Figure 5 is shown for exemplary purposes and is merely one embodiment of the methods and apparatuses for managing the distribution and installation of applications. Additional modules may be added to the system 500 without departing from the scope of the methods and apparatuses for managing the distribution and installation of applications. Similarly, modules may be combined or deleted without departing from the scope of the methods and apparatuses for managing the distribution and installation of applications.

[0093] Figure 6 illustrates an exemplary record 600 for use with the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications. In one embodiment, the record 600 illustrates an exemplary record associated with a profile corresponding to a user. In one embodiment, the profile associated with the user is initiated based on the participation of the user during a collaboration session. Further, the profile associated with the user is updated and refined based on the participation of the user during a collaboration session.

[0094] In one embodiment, there are multiple records such that each record 600 is associated with a particular profile corresponding to a particular user. In another embodiment, multiple profiles are associated with the same user and each profile is represented by a record 600.

[0095] In one embodiment, the record 600 includes areas of expertise field 610, a collaboration frequency field 620, a participant history field 630, a collaboration history field 640, a hierarchy field 650, a colleagues field 660, and an applications field 670. In one embodiment, the record 600 resides within the storage module 520. In one embodiment, the record 600 describes an attributes detected through the system 500.

[0096] In one embodiment, the areas of expertise field 610 includes information related to the expertise of the user corresponding to the record 600. For example, the user may have designing web sites, programming databases, building houses, and the like. In one embodiment, the areas of expertise for a user are determined through the content exchanged during collaboration sessions and through titles of collaboration sessions participated in by the user.

[0097] In one embodiment, the collaboration frequency field 620 includes information related the frequency in which the user associated with the record 600 participates in a collaboration session. For example, the user may have attended a collaboration session with a frequency of four times a week. Further, the collaboration frequency field 620 may also note a

percentage of whether the user was an attendee or presenter of the collaboration session. In one embodiment, the interface module 510 detects the collaboration sessions.

**[0098]** In one embodiment, the participant history field 630 includes the identities of the participants of collaboration sessions including the user associated with the record 600. In one embodiment, the participant recognition module 570 detects the participants of the collaboration sessions.

[0099] In one embodiment, the collaboration history field 640 includes information related the prior collaboration sessions held in which the user associated with the record 600 participated in. In one embodiment, the interface module 510 detects the collaboration sessions.

**[00100]** In one embodiment, the hierarchy field 650 includes information related to the profile's standing relative to other profiles. For example, the profile associated with the record 600 may be related to other profiles similar to a person being categorized within an organization chart within a company. In one instance, the profile associated with the record 600 may manage 40 other people. Accordingly, the hierarchy field 650 would reflect be associated with 40 other profiles in which the current profile would have access to the other profiles.

[00101] In one embodiment, the hierarchy field 650 allows the selected profiles to be protected from view or access from other profiles depending on the hierarchy within the field 650. For example, a profile belonging to a rank and file employee would not have access to sensitive information within a profile belonging to a manager in one embodiment.

**[00102]** In one embodiment, the colleague field 660 includes information related friends and colleagues of the user associated with the profile. In one embodiment, the user associated with the record 600 is able to select additional profiles associated with users to be listed within the colleague field 660.

**[00103]** In one embodiment, the applications field 670 includes information related to the applications associated with the profile. In one embodiment, the applications may be licensed applications associated with the profile. In another embodiment, the applications may be unlicensed applications that are being evaluated that are associated with the profile. In yet another embodiment, the applications within the applications field 670 may be suggested and recommended to the associated profile.

[00104] In another embodiment, the applications field 670 includes information related to ratings of specific applications by the user of the application. For example, the user associated

with the record 600 can provide ratings for the application listed within the applications field 670.

**[00105]** In another embodiment, the applications field 670 includes a library of applications for the record 600. In one embodiment, the library includes both a corporate library and a personal library. In one embodiment, the corporate library may include applications that are required by the corporation or company that controls the user associated with the record 600.

**[00106]** In one embodiment, the personal library includes applications that are selected by the user associated with the particular record 600. In one instance, the applications within the personal library are limited to only a list of pre-approved applications. In another instance, the applications within the personal library include any applications with the exception of prohibited applications.

[00107] The flow diagrams as depicted in Figures 7, 8, 9, 10, 11, 12, 13, 14, and 15 are one embodiment of the methods and apparatuses for selectively accessing an application. The blocks within the flow diagrams can be performed in a different sequence without departing from the spirit of the methods and apparatuses for selectively accessing an application. Further, blocks can be deleted, added, or combined without departing from the spirit of the methods and apparatuses for selectively accessing an application.

[00108] Alternatively, the flow diagrams as depicted in Figures 7, 8, 9, 10, 11, 12, 13, 14, and 15 are one embodiment of the methods and apparatuses for dynamically suggesting an application based on a collaboration session. The blocks within the flow diagrams can be performed in a different sequence without departing from the spirit of the methods and apparatuses for dynamically suggesting an application based on a collaboration session. Further, blocks can be deleted, added, or combined without departing from the spirit of the methods and apparatuses for dynamically suggesting an application based on a collaboration session.

**[00109]** Alternatively, the flow diagrams as depicted in Figures 7, 8, 9, 10, 11, 12, 13, 14, and 15 are one embodiment of the methods and apparatuses for automatically initiating an application. The blocks within the flow diagrams can be performed in a different sequence without departing from the spirit of the methods and apparatuses for automatically initiating an application. Further, blocks can be deleted, added, or combined without departing from the spirit of the methods and apparatuses for automatically initiating an application.

**[00110]** Alternatively, the flow diagrams as depicted in Figures 7, 8, 9, 10, 11, 12, 13, 14, and 15 are one embodiment of the methods and apparatuses for managing the distribution and installation of applications. The blocks within the flow diagrams can be performed in a

different sequence without departing from the spirit of the methods and apparatuses for managing the distribution and installation of applications. Further, blocks can be deleted, added, or combined without departing from the spirit of the methods and apparatuses for managing the distribution and installation of applications.

- **[00111]** The flow diagram in Figure 7 illustrates detecting activities during a collaboration session and refining the profiles of the participants of the collaboration session according to one embodiment of the invention.
- [00112] In Block 705, a scheduled collaboration session is detected. In one embodiment, the scheduled collaboration session corresponds to a collaboration session that is scheduled to occur in the future. In one embodiment, the scheduled collaboration session includes identification of the subject matter of the collaboration session and the participants expected to attend.
- [00113] In Block 710, the subject matter of the scheduled collaboration session is detected. In one embodiment, the subject matter includes a title given to the scheduled collaboration session. In another embodiment, the subject matter includes an agenda or description of the scheduled collaboration session.
- **[00114]** In Block 715, the participants that are expected to attend the scheduled collaboration session are detected. For example, participants may be invited ahead of time for the scheduled collaboration session.
- **[00115]** In Block 725, key words are extracted. In one embodiment, these key words describe the essence of the scheduled collaboration session. For example, these key words may be utilized to describe the subject matter of the scheduled collaboration session. In one embodiment, the key words are derived from the subject matter that is detected within the Block 710.
- **[00116]** In Block 730, the key words from the Block 725 are compared with the profiles associated with the participants identified within the Block 715. In one embodiment, the profile of each participant includes an area of expertise field 610 of a record 600 that describes areas of interest and knowledge that is associated with a corresponding user of the profile. In one embodiment, the key words are compared with these areas of expertise identified within the field 610.
- [00117] In Block 735, if there is a sufficient match between the profiles and the key words, then the profiles of the participants that take part in the scheduled collaboration session are updated in Block 740. In one embodiment, the areas of expertise are strengthened and updated. For example, if the participant's profile does not indicate expertise in this area, the key words

are added to the participant's area of expertise field 610. Further, if the participant is already an expert in this area, then the participant's expertise if further emphasized.

- **[00118]** In one embodiment, the number of meetings field 620 may also be increased based on the scheduled collaboration session. Further, the participant history field 630 and collaboration history field 640 can also be updated.
- [00119] In one embodiment, based on the participants that are part of the scheduled collaboration session, each of the profiles may be updated to reflect other participants within the colleagues 660 field. For example, each of the participants of the scheduled collaboration session will have the other participants reflected within the colleagues 660 field based on the scheduled collaboration session.
- **[00120]** If there is not a sufficient match within the Block 735, then key words can be manually entered or confirmed by a participant of the collaboration session in the Block 750. In one embodiment, the presenter or planner of the collaboration session confirms the key words for the corresponding collaboration session.
- [00121] In one embodiment, the sufficient match is determined by the similarity between the participant profiles and the extracted key words.
- **[00122]** In Block 745, based on the key words and the participants of the scheduled collaboration session, an additional participant may be suggested. For example, based on the key words, another profile corresponding to a potential participant may be identified through the area of expertise field 610.
- [00123] In one embodiment, selected profiles that are accessible and allowed to be searched are considered. In one embodiment, the hierarchy field 650 may be utilized to determine eligibility of the profile for searching.
- [00124] The flow diagram in Figure 8 illustrates detecting activities during a collaboration session and refining the profiles of the participants of the collaboration session according to one embodiment of the invention.
- [00125] In Block 805, a collaboration session is detected. In one embodiment, the collaboration session corresponds to a collaboration session that is currently taking place. In one embodiment, the collaboration session includes identification of the subject matter of the collaboration session and the participants that are attending the collaboration session.
- [00126] In Block 810, the content being exchanged during the collaboration session is detected. In one embodiment, the content is the audio content exchanged during the collaboration session. In another embodiment, the content is the video content exchanged

during the collaboration session. In yet another embodiment, the content is the textual or graphical content exchanged during the collaboration session.

- [00127] In Block 815, the participants that are attending the collaboration session are detected. In one embodiment, different participants may attend different portions of the collaboration session. Further, the different participants are detected for the portions of the collaboration that they attend.
- [00128] In Block 820, the correct participants currently attending the collaboration session is determined. For example, the listed participants for the collaboration session are checked against the current participants of the collaboration session in one embodiment.
- [00129] Further, based on the profiles of the participants that are attending the collaboration and the content of the collaboration session, additional participants that were not originally contemplated may be desired. For example, if the collaboration session was originally contemplated to cover a specific technical area of expertise and the focus of the collaboration session shifts into another technical area, then other participants that have experience in this other technical area may benefit the collaboration session with their expertise.
- [00130] In one embodiment, selected profiles that are accessible and allowed to be searched are considered. In one embodiment, the hierarchy field 650 may be utilized to determine eligibility of the profile for searching.
- [00131] If additional participants are desired, then additional participants are invited to the collaboration session in Block 825.
- [00132] In Block 830, key words are extracted. In one embodiment, these key words describe the essence of the collaboration session. For example, these key words may be utilized to describe the content of the collaboration session. In one embodiment, the key words are derived from the content that is detected within the Block 805.
- **[00133]** In Block 835, the profiles of the participants that take part in the collaboration session are updated. In one embodiment, the areas of expertise are strengthened and updated. For example, if the participant's profile does not indicate expertise in this area, the key words are added to the participant's area of expertise field 610. Further, if the participant is already an expert in this area, then the participant's expertise if further emphasized.
- **[00134]** In one embodiment, the number of meetings field 620 may also be increased based on participation in the collaboration session. Further, the participant history field 630 and collaboration history field 640 can also be updated.
- [00135] In one embodiment, based on the participants that are part of the collaboration session, each of the profiles may be updated to reflect other participants within the colleagues

660 field. For example, each of the participants of the collaboration session will have the other participants reflected within the colleagues 660 field based on the collaboration session.

- **[00136]** The flow diagram in Figure 9 illustrates detecting activities during a collaboration session and identifying participants to join the collaboration session according to one embodiment of the invention.
- **[00137]** In Block 905, a collaboration session is detected. In one embodiment, the collaboration session corresponds to a collaboration session that is currently taking place. In one embodiment, the collaboration session includes identification of the subject matter of the collaboration session and the participants that are attending the collaboration session.
- [00138] In Block 910, the title corresponding to the collaboration session is detected.
- [00139] In Block 915, the participants that are attending the collaboration session are detected. In one embodiment, different participants may attend different portions of the collaboration session. Further, the different participants are detected for the portions of the collaboration that they attend.
- **[00140]** In Block 920, a subset of available profiles is determined based on the title of the collaboration session. For example, if the title of the collaboration session is "Caring For Your Teeth", then the subset of available profiles will include users that are related to dental care such as dentist, orthodontists, toothpaste vendors, toothbrush vendors, and the like.
- [00141] In one embodiment, selected profiles that are accessible and allowed to be searched are considered. In one embodiment, the hierarchy field 650 may be utilized to determine eligibility of the profile for searching.
- [00142] In Block 925, the content being exchanged during the collaboration session is detected. In one embodiment, the content is the audio content exchanged during the collaboration session. In another embodiment, the content is the video content exchanged during the collaboration session. In yet another embodiment, the content is the textual or graphical content exchanged during the collaboration session.
- **[00143]** In Block 930, if there is a request to include an expert to participate in the collaboration session, then in Block 935 a profile is identified from the subset of available profiles that are identified within the Block 920. In one embodiment, the request to include an expert is initiated by one of the participants of the collaboration session.
- [00144] In one embodiment, the profile is identified based on the content as detected in the Block 925. For example, if the content that is detected in the Block 925 is related to "Deciding on What Type of Material to Use for a Filling", then a profile that is identified as the expert would be a dentist in one embodiment.

[00145] In Block 930, if there is no request to include an expert to participate in the collaboration session, then content is detected in Block 925

- [00146] In Block 940, the user associated with the identified profile in the Block 935 joins the collaboration session.
- [00147] The flow diagram in Figure 10 illustrates suggesting participants to join the collaboration session according to one embodiment of the invention.
- **[00148]** In Block 1010, a title for the collaboration session is selected. In one embodiment, the collaboration session corresponds to a collaboration session that is currently taking place. In another embodiment, the collaboration session corresponds to a scheduled collaboration session that take place in the future.
- [00149] In Block 1020, the title corresponding to the collaboration session is detected.
- **[00150]** In Block 1030, suggested participants for the collaboration session are displayed. In one embodiment, the profiles are searched based on the title of the collaboration session and the participant scheduling the collaboration session.
- [00151] In one embodiment, the possible profiles searched for the collaboration session is limited to profiles that are accessible by the participant scheduling the collaboration session. In one instance, the participant scheduling the collaboration session has permission to access the profiles. For example, if the participant scheduling the collaboration session has permission to access a pool of profiles, then this pool of profiles will be searched as potential participants for the collaboration session. In one embodiment, an organizational chart within a company is one example of a hierarchy that is utilized to determine whether a participant has access to other profiles. For example, subordinates on an organizational chart may not have access to superiors. On the other hand, superiors on the organizational chart have access to subordinate profiles. In another embodiment, a participant may be given proxy access rights that place the participant either further up or further down in stature on the organizational chart.
- [00152] In one embodiment, the profiles are selected based on the areas of expertise of each profile relative to the subject matter of the collaboration session that is identified by the title.
- [00153] In another instance, the profiles are selected based on the availability of the user associated with the profile. For example, if the status of the user is unavailable, then the particular profile will not be selected. However, if the status of the user is available as detected through the corresponding profile, then the profile is eligible for selection.
- [00154] In Block 1040, the participants are selected.
- [00155] In Block 1050, additional suggested participants are displayed based on the participants that were selected in the Block 1040. In one embodiment, additional participants

may be selected based on the participant history field 630, the collaboration history field 640, and colleagues field 660 of the participants that are selected in the Block 1040. For example, if participant A is selected in the Block 1040 and typically participants in collaboration sessions with participant B, the participant B may be displayed as a suggested participant. Further, if the subject matter of the collaboration session as detected in the Block 1020 matches the collaboration history field 640 of participant A to suggest participant B, then the selection of participant B as a suggested participant is further strengthened.

- [00156] The flow diagram in Figure 11 illustrates suggesting participants to join the collaboration session according to one embodiment of the invention.
- [00157] In Block 1110, a participant is selected for the collaboration session. In one embodiment, the collaboration session corresponds to a collaboration session that is currently taking place. In another embodiment, the collaboration session corresponds to a scheduled collaboration session that take place in the future.
- [00158] In Block 1120, the profile associated with the selected participant within the Block 1110 is detected. Further, additional profiles that are listed within the profile associated with the selected participant are also identified and suggested. In one embodiment, these additional profiles are discovered through the participant history field 630, the collaboration history field 640, the hierarchy field 650, and/or the colleagues field 660.
- [00159] In Block 1130, suggested participants for the collaboration session are displayed.
- [00160] In Block 1140, the participants are selected.
- **[00161]** In Block 1150, additional suggested participants are displayed based on the participants that were selected in the Block 1140. In one embodiment, additional participants may be selected based on the participant history field 630, the collaboration history field 640, and colleagues field 660 of the participants that are selected in the Block 1140.
- [00162] The flow diagram in Figure 12 illustrates suggesting participants to join the collaboration session according to one embodiment of the invention.
- [00163] In Block 1210, a subject is selected for the collaboration session. In one embodiment, the collaboration session corresponds to a collaboration session that is currently taking place. In another embodiment, the collaboration session corresponds to a scheduled collaboration session that take place in the future. In one embodiment, the subject may be reflected in the title assigned to the collaboration session. In another embodiment, the presenter of the collaboration session may explicitly state the subject of the collaboration session.

**[00164]** In Block 1220, available participants are detected. In one embodiment, the possible profiles searched for the collaboration session is limited to profiles that are accessible by the participant scheduling the collaboration session. In one instance, the participant scheduling the collaboration session has permission to access the profiles. For example, if the participant scheduling the collaboration session has permission to access a pool of profiles, then this pool of profiles will be searched as potential participants for the collaboration session.

[00165] In another embodiment, each of the participants associated with a corresponding profile is capable of choosing whether to allow their respective profile to be accessible to others.

[00166] In another example, the available of a profile belonging to a participant is restricted to profiles that are associated with participants affiliated with the same company.

[00167] In Block 1230, the available participants from the Block 1220 are ranked according to the subject matter of the collaboration session. For example, the available participants my have their areas of expertise field 610, number of meetings field 620, participant history field 630, and/or collaboration history field 640 examined. Based on the profile, the participant is ranked according to how closely matched the profile relates to the subject matter of the collaboration session.

**[00168]** In Block 1240, the highest ranked participants are selected and displayed. In one embodiment, a predetermined number of participants are selected. In another embodiment, a predetermined percentage of the total number of possible participants is selected. In yet another embodiment, a predetermined scoring threshold is applied such that participants that score above the predetermined scoring threshold are selected.

**[00169]** In one embodiment, the methods and apparatuses for selectively accessing an application, for dynamically suggesting an application based on a collaboration session, for automatically initiating an application, and for managing the distribution and installation of applications, allows a profile to be searched wherein the profile belongs to a user associated with a different company or a different organization within the same company. For example, the organizational structure that is searchable for a particular profile may include multiple companies that are related through partnerships, affiliations, or client and customer relationships.

[00170] The flow diagram in Figure 13 illustrates suggesting applications to participants within a collaboration session according to one embodiment of the invention.

**[00171]** In Block 1300, a collaboration session is detected. In one embodiment, the collaboration session corresponds to a collaboration session that is currently taking place.

[00172] In Block 1310, the subject matter, the content, and the participants of the collaboration session are detected. In one embodiment, the content is the audio content exchanged during the collaboration session. In another embodiment, the content is the video content exchanged during the collaboration session. In yet another embodiment, the content is the textual or graphical content exchanged during the collaboration session.

- [00173] In one embodiment, the collaboration session includes identification of the subject matter of the collaboration session and the participants that are attending the collaboration session.
- [00174] In one embodiment, different participants may attend different portions of the collaboration session. Further, the different participants are detected for the portions of the collaboration that they attend.
- [00175] In Block 1320, the profiles associated with the participants are detected. In one embodiment, a representative profile is shown as record 600 in Figure 6.
- **[00176]** In Block 1330, an application associated with any of the participants are detected. In one embodiment, the application is detected through a listing within the profile of the corresponding participant.
- **[00177]** In Block 1340, additional applications are displayed for the participants. In one embodiment, the additional applications are selected based on the content and/or subject matter of the collaboration session. For example, if the collaboration session includes sharing a spreadsheet, then a specialized application that is directed towards use of a spreadsheet may be displayed to the participants.
- **[00178]** In another embodiment, the additional applications are selected based on the current applications available to the participants. For example, if a newer, updated version of an application already available to the participants is found, then this newer, updated version may be displayed to the participants. Further, exact duplicate applications that are already being used within the collaboration session may be prevented from being displayed.
- [00179] In yet another embodiment, the additional applications may also include applications available to the participants within the collaboration session but are not being currently utilized. For example, if there is a spread sheet application available to the participants, a spread sheet is being shared within the collaboration session, this spreadsheet application is not currently being utilized, then this spread sheet application may be displayed to the participants to encourage use of the application by the participants.
- **[00180]** In Block 1350, if one of the additional applications is not selected, then further applications may be displayed within the Block 1340.

[00181] If an additional application is selected, then the additional application is initiated and the corresponding profile is updated within Block 1360. In one embodiment, the profile of the participant is updated with the additional application depending on ownership of the additional application. For example, if all the participants of the collaboration session are authorized to utilize the additional application at a future time, the profiles of all the participants may be modified to reflect the additional application. Similarly, if selected participants of the collaboration session are authorized to utilize the additional application at a future time, the profiles of the selected participants may be modified to reflect the additional application.

[00182] The flow diagram in Figure 14 illustrates accessing applications according to one embodiment of the invention.

[00183] In Block 1400, a request for use of an application is detected. In one embodiment, the request for use of the application comes from a user that is not part of a collaboration session. In another embodiment, the request for use of the application comes from a user that is a participant of a collaboration session.

**[00184]** In Block 1410, the profile associated with the requester is detected. In one embodiment, a representative profile is shown as record 600 in Figure 6.

[00185] In Block 1420, the permission to utilize the requested application is detected. In one embodiment, the profile of the requester includes information indicating permission to utilize the requested application. For example, if the requested application requires a license in order to utilize the requested application, then a corresponding license for the requested application is detected. In another example, the requester may need verification that permission is granted for the requester to utilize the requested application from the requester's organization. In other embodiments, other factors such as the hierarchical position of the requester within the requester's organization, the number of participants collaborating with the requested application, and the like are utilized to determine whether permission is granted to utilized the requested application.

[00186] If there is permission to access the requested application in Block 1430, then the use of the requested application is initiated for the requester within the Block 1470.

[00187] In one embodiment, permission to access the requested application is determined based on the hierarchy of the profile associated with the requester. For example, if the requester has obtained a sufficiently high hierarchical categorization within the particular organization, then access to the application may be automatically granted.

[00188] In another embodiment, permission to access the requested application is determined based on the number of participants that are currently attending a collaboration session. For example, if there are enough participants attending the collaboration session that wherein one of the participants is the requester, then access to the application may be automatically granted.

**[00189]** If there is no permission to access the requested application in the Block 1430, then permission to access the application is requested in Block 1440. In one embodiment, the request for permission includes a purchase request for the requested application. In another embodiment, the request for permission includes requesting access by the requester to utilize the requested application. For example, the organization that the requester is associated with may require permission for any of its members to gain access to other applications.

**[00190]** In one embodiment, permission to purchase the requested application is determined based on the hierarchy of the profile associated with the requester. For example, if the requester has obtained a sufficiently high hierarchical categorization within the particular organization, then authorization to purchase the application may be automatically granted.

[00191] If access is to the requested application is granted to the requester in the Block 1440, then the requester is authorized to access the requested application and the requester's profile is also updated in Block 1460. In one embodiment, the requester's profile is updated if the requested application is purchased to reflect permission to utilize the requested application in the future. In another embodiment, the requester's profile is updated if the requester's organization wishes to allow future access to the requested application; the requester's profile is updated to reflect use of the requested application by the requester in the future. In yet another embodiment, the requester's profile is updated if the requester's organization does not wish to allow future access to the requested application; the requester's profile is updated to reflect denial of use of the requested application by the requester in the future.

[00192] After Block 1460, the requested application is initiated for the requester.

[00193] If access is to the requested application is denied to the requester in the Block 1440, then the requester is denied access to the requested application in Block 1450.

[00194] After the Blocks 1450 and 1470, additional requests are detected within the Block 1400.

[00195] The flow diagram in Figure 15 illustrates accessing applications according to one embodiment of the invention.

[00196] In Block 1500, a request for installation of an application is detected. In one embodiment, the request for installation of the application comes from a user that is not part of

a collaboration session. In another embodiment, the request for use of the application comes from a user that is a participant of a collaboration session.

[00197] In Block 1510, the profile associated with the requester is detected. In one embodiment, a representative profile is shown as record 600 in Figure 6.

**[00198]** In Block 1520, the permission to install the requested application is detected. In one embodiment, the profile of the requester includes information indicating permission to install the requested application. For example, the requested application may already be preinstalled within the corporate library; the application is on a prohibited application list; or the application is on an approved application list.

[00199] If there is permission to install the requested application in Block 1530, then the installation of the requested application is initiated for the requester within the Block 1540.

**[00200]** In one embodiment, permission to install the requested application is determined based on the permissions of the requested application within the profile associated with the requester.

[00201] If there is no permission to install the requested application in the Block 1530, then the requester is denied installation of the requested application in Block 1570.

**[00202]** In Block 1550, a recommendation of the requested application may be submitted by the requester. In one embodiment, the recommendation serves as a rating of the requested application that can be shared with other users.

[00203] In Block 1560, the requester's profile is updated to reflect the installation of the requested application and any recommendations. In one embodiment, the requester's profile is updated if the requested application is purchased to reflect permission to utilize the requested application in the future. In another embodiment, the requester's profile is updated if the requester's organization wishes to allow future access to the requested application; the requester's profile is updated to reflect use of the requested application by the requester in the future. In yet another embodiment, the requester's profile is updated if the requester's organization does not wish to allow future access to the requested application; the requester's profile is updated to reflect denial of use of the requested application by the requester in the future.

[00204] After the Blocks 1560 and 1570, additional requests are detected within the Block 1500.

[00205] The foregoing descriptions of specific embodiments of the invention have been presented for purposes of illustration and description. The invention may be applied to a variety of other applications.

[00206] They are not intended to be exhaustive or to limit the invention to the precise embodiments disclosed, and naturally many modifications and variations are possible in light of the above teaching. The embodiments were chosen and described in order to explain the principles of the invention and its practical application, to thereby enable others skilled in the art to best utilize the invention and various embodiments with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the Claims appended hereto and their equivalents.

### WHAT IS CLAIMED:

1. A method comprising:

requesting an application;

detecting a user requesting the application;

detecting a profile associated with the user; and

granting permission to access the application based on an access parameter.

- 2. The method according to Claim 1 further comprising storing the permission and associated reference to the application within a record that corresponds to the profile.
- 3. The method according to Claim 1 wherein the access parameter is a free license to utilize the application.
- 4. The method according to Claim 1 wherein the access parameter is a paid license to utilize the application.
- 5. The method according to Claim 1 wherein the access parameter corresponds with a hierarchical position of the requester on an organization chart.
- 6. The method according to Claim 1 wherein the access parameter corresponds with a number of participants within a collaboration session wherein the collaboration session includes the requester.
- 7. The method according to Claim 1 further comprising purchasing the application by the requester.
- 8. The method according to Claim 7 further comprising updating the profile of the requester based on purchasing the application.
- 9. The method according to Claim 7 wherein purchasing the application is based on a hierarchy of the requester.
- 10. The method according to Claim 1 sharing the application with another participant.
- 11. A system, comprising:

a storage module configured to store a record containing a permission status associated with an application;

an application manager module configured to control distribution of the application to a requester based on the permission status; and

a controller module configured to update the permission status within the record.

12. The system according to Claim 11 wherein storage module is configured to store the permission status with the record.

13. The system according to Claim 11 wherein the application manager module is further configured to modify the permission status to allow use of the application by the requester.

- 14. The system according to Claim 13 wherein the application manager module is configured to allow the requester to purchase a license to the application.
- 15. The system according to Claim 14 wherein the requester purchases the license based on a hierarchy of the requester.
- 16. The system according to Claim 11 wherein the application manager module is configured to allow another participant to utilize the application.
- 17. A system comprising:

means for requesting an application;

means for detecting a user requesting the application;

means for detecting a profile associated with the user; and

means for granting permission to access the application based on an access parameter.

- 18. The system according to Claim 18 wherein the means for granting permission includes allowing the user to access the application.
- 19. The system according to Claim 18 wherein the means for granting permission includes allowing another participant to access the application.
- 20. A method comprising:

detecting shared content during a collaboration session; detecting a content type based on the shared content;

suggesting an application based on the content type; and

initiating the application during the collaboration session.

- 21. The method according to Claim 20 further comprising storing the application within a profile that corresponds to a participant of the collaboration session.
- 22. The method according to Claim 20 wherein a free license is included with the application.
- 23. The method according to Claim 20 wherein the application includes a paid license authorizing use of the application.
- 24. The method according to Claim 20 wherein the content type includes one of a database, a spreadsheet, a text document, a graphical document, a presentation, an audio file, and a visual file.

25. The method according to Claim 20 wherein the application is configured to operate with the content type.

- 26. The method according to Claim 20 further comprising purchasing the application by a participant of the collaboration session.
- 27. The method according to Claim 26 further comprising updating the profile of the participant based on purchasing the application.
- 28. The method according to Claim 26 wherein purchasing the application is based on a hierarchy of the participant.
- 29. The method according to Claim 20 further comprising sharing the application among a plurality of participants within the collaboration session.
- 30. The method according to Claim 20 further comprising updating the profile of a participant based on initiating the application.
- 31. A system, comprising:

a storage module configured to store a record containing references to a plurality of applications;

an application manager module configured to select one of the plurality of applications based on a content type corresponding to shared content during a collaboration session; and

a controller module configured to monitor the shared content during the collaboration session.

- 32. The system according to Claim 31 wherein application manager module is configured to detect a permission status associated with the selected application wherein the permission status describes an allowable use of the selected application.
- 33. The system according to Claim 32 wherein the application manager module is configured to allow a participant of the collaboration session to utilize the selected application based on the permission status.
- 34. The system according to Claim 31 wherein the application manager module is configured to allow a participant of the collaboration session to purchase a license to the selected application.
- 35. The system according to Claim 34 further comprising a profile manager configured to update a profile of the participant to reflect the license purchased by the participant.
- A system comprising:
   means for detecting shared content during a collaboration session;
   means for detecting a content type based on the shared content;

means for suggesting an application based on the content type; and means for initiating the application during the collaboration session.

- 37. The system according to Claim 36 wherein the means for initiating the application includes checking a profile associated with a participant of the collaboration session.
- 38. The system according to Claim 36 wherein the means for initiating the application includes purchasing a license for the application.
- 39. A method comprising:

detecting an application associated with a requester; suggesting the application based on a requester parameter; selecting the application by the requester; and automatically initiating the application for the requester.

- 40. The method according to Claim 39 further comprising storing the application within a profile that corresponds to the requester.
- 41. The method according to Claim 39 wherein a free license is included with the application.
- 42. The method according to Claim 39 wherein the application includes a paid license authorizing use of the application.
- 43. The method according to Claim 39 wherein the request parameter corresponds with a prior use of the application by the requester.
- 44. The method according to Claim 39 wherein the application is configured to operate with another user in addition to the requester.
- 45. The method according to Claim 39 further comprising purchasing the application by requester.
- 46. The method according to Claim 45 further comprising updating the profile of the requester based on purchasing the application.
- 47. The method according to Claim 45 wherein purchasing the application is based on a hierarchy of the requester.
- 48. The method according to Claim 39 further comprising sharing the application among a plurality of participants within a collaboration session.
- 49. The method according to Claim 39 further comprising updating a profile of the requester based on initiating the application.
- 50. A system, comprising:

a storage module configured to store a record corresponding to a requester wherein the record contains references to a plurality of applications;

an application manager module configured to select one of the plurality of applications based on a request parameter; and

a controller module configured to monitor the record.

- 51. The system according to Claim 50 wherein application manager module is configured to detect a permission status associated with the selected application wherein the permission status describes an allowable use of the selected application.
- 52. The system according to Claim 51 wherein the application manager module is configured to allow another participant of the collaboration session to utilize the selected application based on the permission status.
- 53. The system according to Claim 50 wherein the application manager module is configured to allow the requester to purchase a license to the selected application.
- 54. The system according to Claim 53 further comprising a profile manager configured to update a profile of the requester to reflect the license purchased by the participant.
- 55. The system according to Claim 50 wherein the request parameter includes one of a history of use of the selected application and a permission to use the selected application.
- 56. A system comprising:

means for detecting an application associated with a requester; means for suggesting the application based on a requester parameter; means for selecting the application by the requester; and means for automatically initiating the application for the requester.

- 57. The system according to Claim 56 wherein the means for suggesting the application includes checking a profile associated with the requester.
- 58. The system according to Claim 56 wherein the means for suggesting the application includes purchasing a license for the application.
- 59. A method comprising:

requesting an installation of an application;
detecting a user requesting the application;
detecting a profile associated with the user; and
granting permission to install the application based on an installation permission.

60. The method according to Claim 59 further comprising storing the permission and associated reference to the application within a record that corresponds to the profile.

- 61. The method according to Claim 59 wherein the installation permission excludes a reference to the application from a prohibited application list.
- 62. The method according to Claim 59 wherein the installation permission excludes a reference to the application from a mandatory application list.
- 63. The method according to Claim 59 wherein the installation permission includes a reference to the application from an approved application list.
- 64. The method according to Claim 59 further comprising installing the application by the requester.
- 65. The method according to Claim 64 further comprising updating the profile of the requester based on installing the application.
- 66. The method according to Claim 59 further comprising purchasing the application by the requester.
- 67. The method according to Claim 66 further comprising updating the profile of the requester based on purchasing the application.
- 68. The method according to Claim 66 wherein purchasing the application is based on a hierarchy of the requester.
- 69. The method according to Claim 59 wherein the application is configured to operate with one of textual data, graphical data, audio data, and video data.
- 70. The method according to Claim 59 further comprising rating the application based on installation by the requester.
- 71. A system, comprising:

a storage module configured to store a record containing a permission status associated with an application;

an application manager module configured to control installation of the application for a requester based on the permission status; and

a controller module configured to update the permission status within the record.

- 72. The system according to Claim 71 wherein storage module is configured to store the permission status with the record.
- 73. The system according to Claim 71 wherein the application manager module is further configured to modify the permission status to allow installation of the application by the requester.

74. The system according to Claim 73 wherein the application manager module is configured to allow the requester to purchase a license to the application.

- 75. The system according to Claim 74 wherein the requester purchases the license based on a hierarchy of the requester.
- 76. The system according to Claim 71 wherein the application manager module is configured to allow another participant to install the application.
- 77. A system comprising:

means for requesting an installation of an application;
means for detecting a user requesting the application;
means for detecting a profile associated with the user; and
means for granting permission to install the application based on an installation
permission.

- 78. The system according to Claim 77 wherein the means for granting permission includes allowing the user to install the application.
- 79. The system according to Claim 77 wherein the means for granting permission includes allowing another participant to install the application.

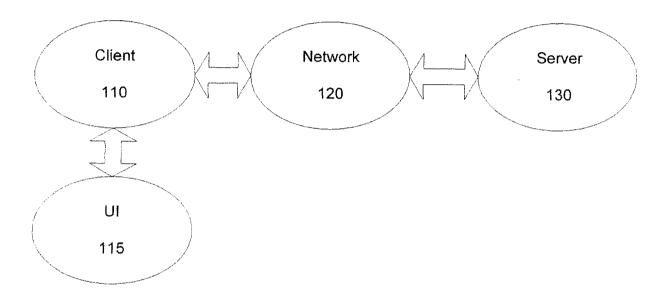
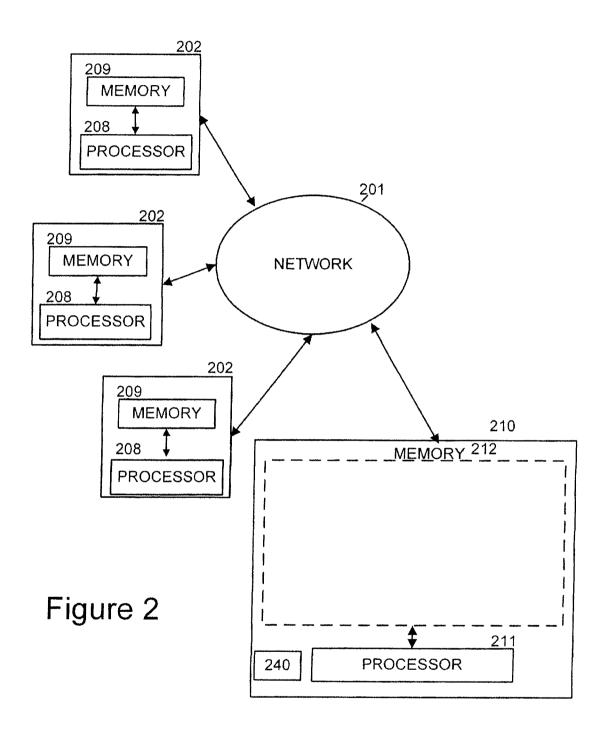
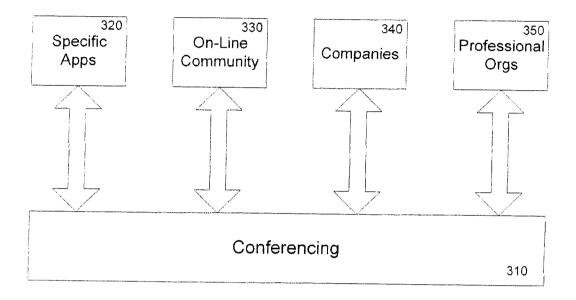


Figure 1





300

Figure 3

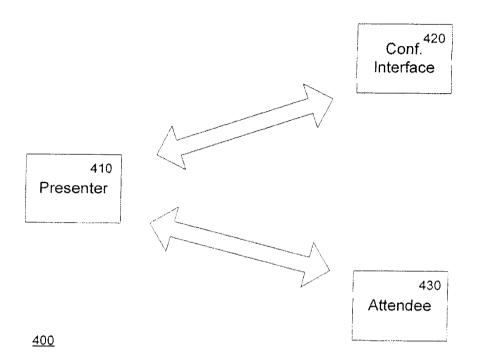


Figure 4

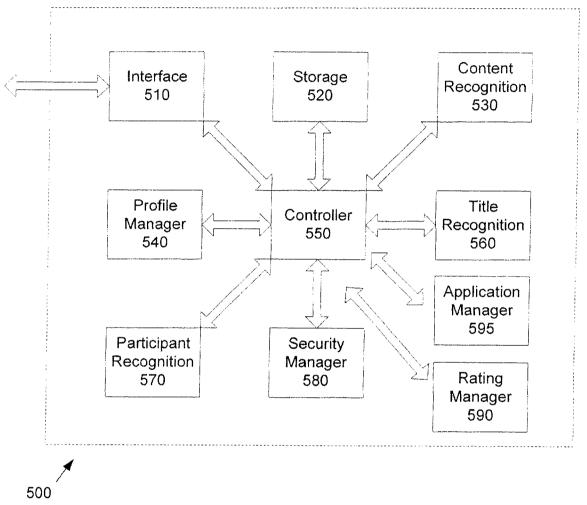
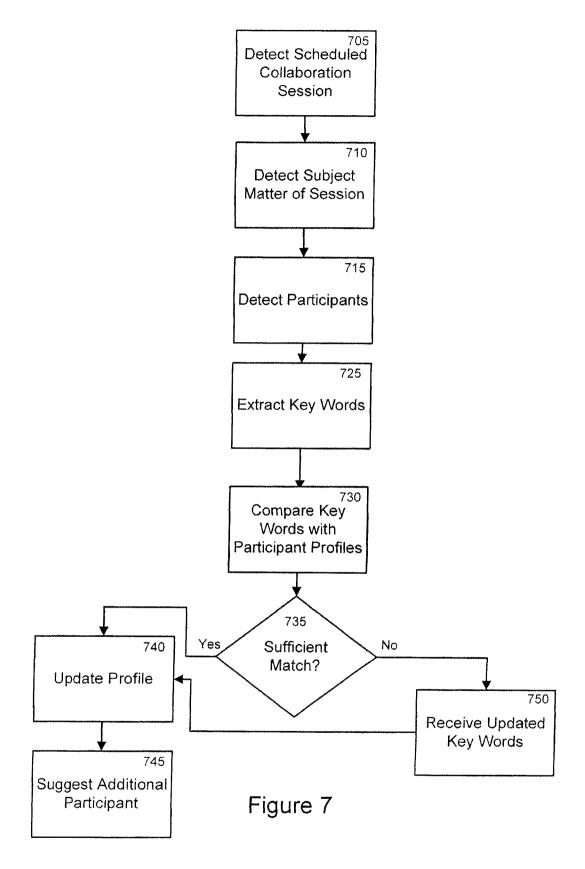


Figure 5

600

| 1. | Areas of Expertise 610    |
|----|---------------------------|
| 2. | Number of Meetings 620    |
| 3. | Participant History 630   |
| 4. | Collaboration History 640 |
| 5. | Hierarchy 650             |
| 6. | Colleagues 660            |
| 7. | Applications 670          |
|    |                           |
|    |                           |

Figure 6



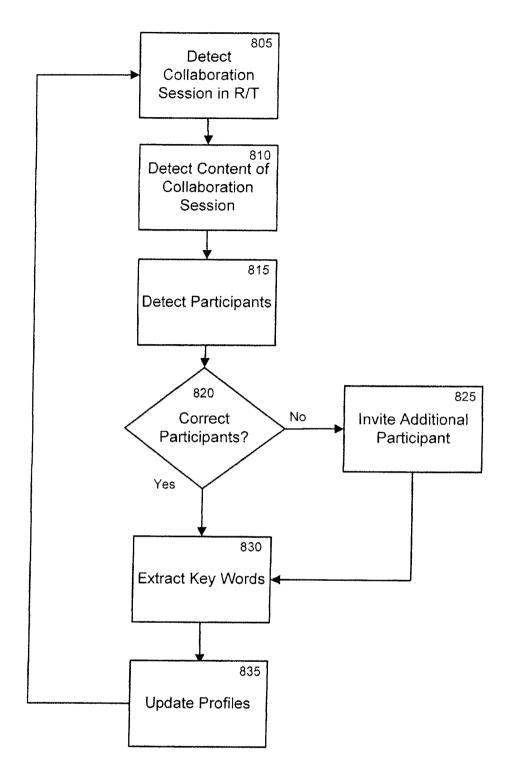
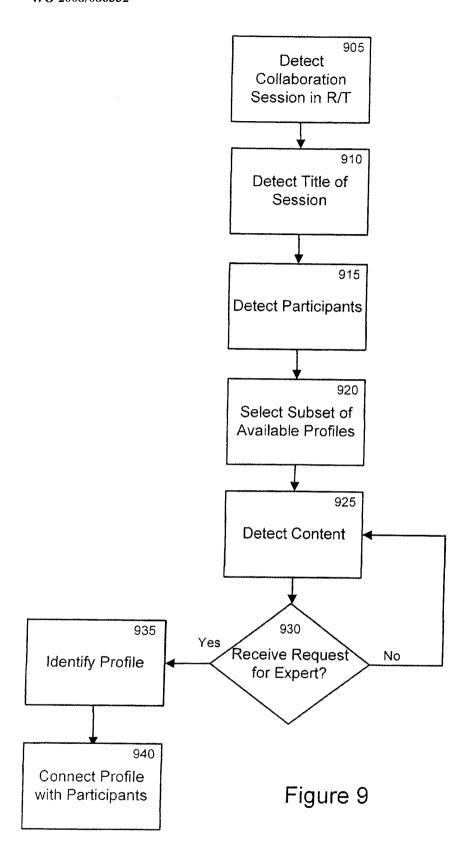


Figure 8



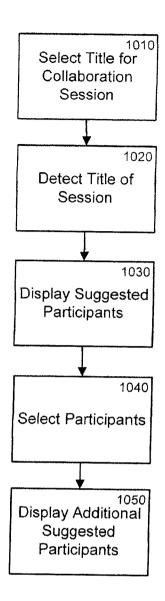


Figure 10

WO 2008/086332 11/15 PCT/US2008/050472

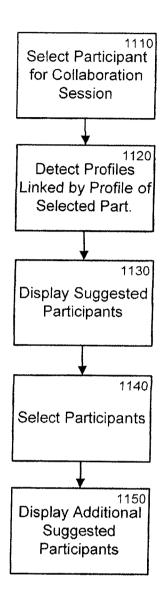


Figure 11

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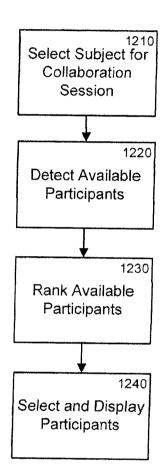


Figure 12

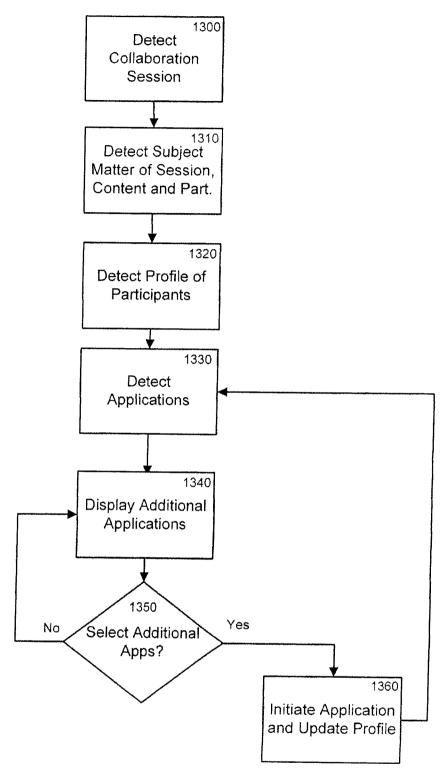


Figure 13

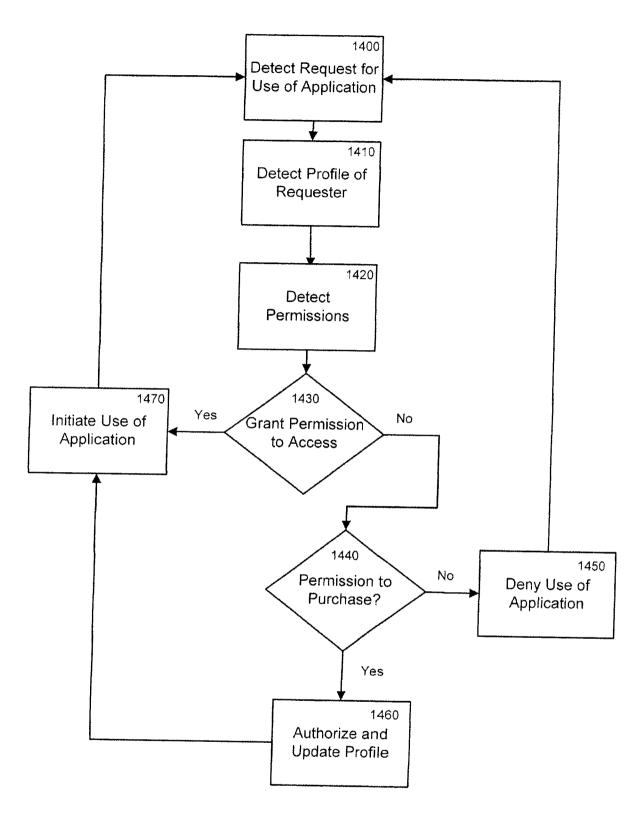


Figure 14

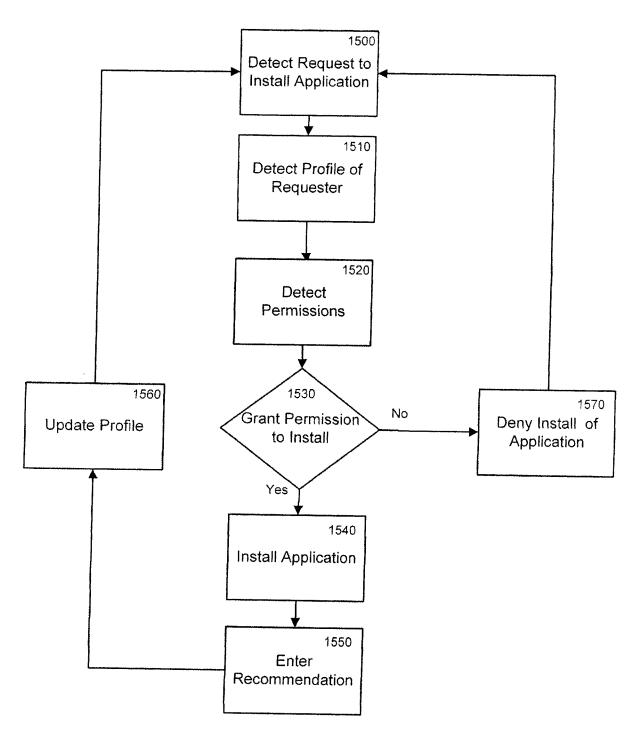


Figure 15