(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
28 August 2003 (28.08.2003)

PCT

(10) International Publication Number
WO 03/071449 A1

(51) International Patent Classification[7]: G06F 17/30

(21) International Application Number: PCT/US03/04526

(22) International Filing Date: 13 February 2003 (13.02.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/078,315 15 February 2002 (15.02.2002) US

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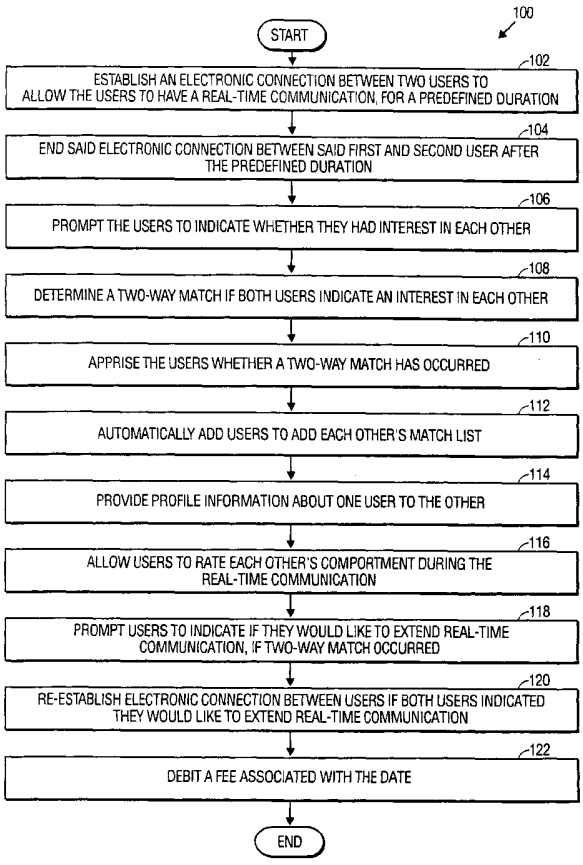
(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.

(84) Designated States *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

[Continued on next page]

(54) **Title:** METHOD AND SYSTEM TO CONNECT AND MATCH USERS IN AN ELECTRONIC DATING SERVICE



(57) Abstract: Described herein is a method (100) and system for connecting and matching users in an electronic dating service. In one embodiment of the invention, subscribers, or users, of the dating service are connected (102) for a brief duration of time. During that time (102) the users have a date, or more specifically, a real-time conversation. After the real-time conversation, the users are disconnected (104) from each other and separately asked if they enjoyed (106) the date, or in other words if they felt a mutual attraction (106), and if they would like to have further contact (118) with each other. If both users respond affirmatively then they are allowed further contact (120) with each other.

WO 03/071449 A1

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METHOD AND SYSTEM TO CONNECT AND MATCH USERS IN AN ELECTRONIC DATING SERVICE

FIELD OF THE INVENTION

[0001] This invention relates to techniques for an electronic dating service, more particularly, to a method and system for connecting and matching users.

BACKGROUND OF THE INVENTION

[0002] Dating and matchmaking have been around for a long time. However, today's fast-paced lifestyles have caused single people to come under increasing time pressures at work, school, and play. Such lifestyles leave little time left for conventional dating. Furthermore, single people are more mobile than ever, which makes it more difficult to meet people for dating. Also, individuals have higher expectations of meeting the 'right' person: someone with whom they are compatible and with whom they have 'chemistry'. Finally, workplace romance is on the decline due to growing sensitivity about sexual harassment. Consequently, many singles are enlisting the use of electronic dating services, hoping to find a more convenient and effective dating experience. Currently, there are two broad classes of electronic dating services:

- Web based dating; and
- telephone based dating (which may also feature a limited Web user interface).

Web Based Dating

[0004] In Web based, or online, dating services, an individual first becomes a subscriber by completing a detailed profile, providing various details about themselves such as age, geographic location, physical

characteristics, and likes and dislikes. The individual then searches for others by entering similar criteria, such as age range, geographic location, and desired physical characteristics. After searching, the individual can review the matching users' profiles, which may contain a photograph. The individual then decides which of the matching users they would like to pursue, and sends them an e-mail in the hope of receiving a response. Users then get to know one another by exchanging e-mails.

[0005] Web based dating services, however, suffer from major inherent drawbacks. First, the sign-up process is cumbersome because users must complete lengthy questionnaires and compose essay-type questions. This results in a high rate of abandonment during the sign-up process.

[0006] Second, it is difficult for an individual to assess other users and get a sense of what they are really like based on simply viewing their photograph and reading the textual data in their profile.

[0007] Third, email, or electronic text, is not an effective means of communication for getting to know someone for the first time, and learning what they and their personality is really like. It is too impersonal. It does not carry a wealth of human information like tone. The users must gauge 'chemistry' purely from an exchange of textual data, thus leading to uncertainty whether mutual attraction exists between two users. As a result, many shy people never end up making the first move for fear that the other person may not share a mutual interest. For others who misjudge mutual attraction,, it can result in awkward or embarrassing situations, such as trying to end an unwanted conversation.

[0008] Fourth, there is a time lag in the back and forth flow of information between the two parties. Trying to get to know someone through exchanging e-mails is usually cumbersome and tedious. Some Web services try to make the process more interactive by allowing the

exchange of instant text messages with those users who happen to be present on the system. However, instant text messages still suffer from the uncertainty and stodginess of purely textual communication

[0009] Fifth, some Web based services attempt to match users solely by comparing attributes of their profiles, such as age, geographic location, height, and various likes and dislikes. They assign weightings to each matching factor, and then compute an overall score representing the degree of matching. One problem with this method of matching is that the weights assigned to each matching factor are arbitrary. For some individuals, it would be more important that their match was tall than if they had dark hair, but this is not taken into account. Fundamentally, this purely scientific approach to matchmaking does not work in practice. It is well known that just because two individuals appear to be a good match based on attributes in their profiles, it does not mean that if they were to talk or meet, that they there would be 'chemistry' between them.

[0010] Finally, Web based dating services result in a very uneven level of activity across users. Those individuals who have profiles that are perceived as unattractive receive little or no interest from other users. This will result in them becoming dissatisfied and desisting from using the service. Conversely, those with profiles perceived as attractive receive an abundance of interest from other users, usually becoming overloaded with e-mails (for example, receiving hundreds of e-mails per day). This results in both the user who is perceived as attractive becoming dissatisfied with the service, because they are overwhelmed and can not make a rational decision about whom to pursue. It also results in the users who e-mailed the user who is perceived as attractive become dissatisfied because they did not receive a reply.

[0011] One particular type of online dating is known as "speed dating." Speed dating, consists of users meeting in a text-based chatroom and

spending a fixed amount of time (e.g. 7 minutes) exchanging messages with each other in pairs, in a round-robin fashion. After each pair talks, they fill-out a form stating whether they would like to have additional information, such as a phone number, revealed to the other persons. At the end of the session, the results are compiled, and it is determined whether there was a match in both directions. If there was a two-way match, the additional information is revealed to the matching users.

[0012] Online speed dating, however, suffers from drawbacks as well. First, participants can communicate during the date only through text based instant messaging. Thus, as discussed previously, online speed dating suffers from the same problems as web-based text dating.

[0013] Second, participants must have an Internet connection with a Web browser that supports the proprietary instant messaging system.

[0014] Finally, online speed dating is inconvenient. Online speed dating is usually divided into events according to categories (e.g. 45-55 year old New Yorkers.) Potential participants must view a schedule of upcoming events, find an event that they are interested in attending, and then return to the Web site at that time. Thus, if a user wants to meet people from different categories, the user will have to wait for the next scheduled event in that category.

Telephone Based Dating

[0015] In telephone based dating systems, a person wishing to meet another person must make a telephone call to a phone number and listen to pre-recorded messages from others who are looking to meet people. After listening to the message of another that an individual finds interesting, he/she can leave a private voicemail message for them. The two users then exchange voicemails to get to know one another. A minority of services include a Web user interface that allows listening and recording of messages through the Internet.

[0016] However, telephone based dating services also suffer from a number of major inherent drawbacks. First, the sign-up process is not pleasant for most people, because they must record an ad. This ad will be heard by all potentially compatible people on the system, so there is pressure to make it very good. There is also a fear that someone with whom the user is known will listen to the ad and recognize the user. In practice, most people do not record a voice ad that portrays them in a particularly attractive light.

[0017] Second, telephone based services in general do not feature more than a few basic searchable categories, such as gender, age or type or relationship. The user is therefore forced to listen to many ads to find a few potentially compatible people. Listening to many ads quickly becomes a tedious process.

[0018] Third, it is difficult to tell what someone is like from just a voice message. In practice, the voice messages that people record are not a true reflection of their character.

[0019] Fourth, telephone based dating services are limited in geographic scope. Most telephone based dating services are provided through local systems, available in major metropolitan areas. Thus it is not possible to listen to messages from users in another area, even a neighboring area. Providers of these services publish different phone numbers to access each separate local system. This makes it difficult to develop a strong widespread brand or advertise on a nationwide basis.

[0020] Finally, telephone conversations are open-ended. There is no mechanism for scheduling live conversations, and there is no mechanism for determining if there is a mutual desire to get to know one another further.

[0003] For all of these reasons, an electronic dating system is needed that is convenient, easy to use, fast, private and effective.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021] Figure 1 is a flow-chart diagram of an embodiment of a method of dating according to the present invention

[0022] Figure 2 is an illustration showing a user profile with attributes that may be maintained on a user.

[0023] Figure 3 is an illustration of an embodiment of a method of performing an immediate date, according to the present invention.

[0024] Figure 4 is an illustration of an embodiment of a method of performing an invited date, according to the present invention.

[0025] Figure 5 is an illustration of an embodiment of a method of participating in a group date, according to the present invention.

[0026] Figure 6 is a flow diagram of an embodiment of a method for managing dates according to the present invention.

[0027] Figure 7 is an example of a user interface illustrating telephony related attributes of a user profile.

[0028] Figure 8 is a flow diagram of an embodiment of a method for utilizing an account in the present invention.

[0029] Figure 9 is a block diagram of an embodiment of a system according to the present invention.

[0030] Figure 10 is a block diagram of one embodiment of a system according to the present invention.

[0031] Figure 11 shows a diagrammatic representation of a machine in the exemplary form of a computer system within which a set of instructions, for causing the machine to perform any one of the methodologies discussed herein, may be executed.

DETAILED DESCRIPTION OF THE PRESENT INVENTION

[0032] Disclosed is a novel system and method of connecting and matching people who date electronically. The present invention provides a mechanism for compatible individuals to communicate in real-time, for a set duration of time, and know if there was a mutual attraction. It also provides a convenient way for individuals to keep track of those users with whom there was mutual attraction, and facilitates subsequent communication with them without either individual having to reveal their phone number to the other.

[0033] In the following detailed description of the present invention, numerous specific details are set forth in order to provide a thorough understanding of the present invention. However, it will be apparent to one skilled in the art that the present invention may be practiced without these specific details.

[0034] General Definitions

[0035] Herein the term "date" or "dating" may refer broadly to the process of dating and match-making. The term "electronic dating" or "electronic dating service" should be construed as including any type of network, online, web-based, telephone, or other type of communication wherein individuals can communicate via an electronic medium and any type of service that allows such communication. The term "user" herein is a subscriber, or any person in any way utilizing an electronic dating service. Unless otherwise specified, users or persons who are electronically dating users are sexually compatible.

[0036] Some portions of the detailed descriptions that follow are presented in terms of algorithms and symbolic representations of operations on data bits within a computer memory. These algorithmic descriptions and representations are the means used by those skilled in the data processing arts to most effectively convey the substance of their

work to others skilled in the art. An algorithm is herein, and generally, conceived to be a self-consistent sequence of processing blocks leading to a desired result. The processing blocks are those requiring physical manipulations of physical quantities. Usually, though not necessarily, these quantities take the form of electrical or magnetic signals capable of being stored, transferred, combined, compared, and otherwise manipulated. It has proven convenient at times, principally for reasons of common usage, to refer to these signals as bits, values, elements, symbols, characters, terms, numbers, or the like.

[0037] It should be borne in mind, however, that all of these and similar terms are to be associated with the appropriate physical quantities and are merely convenient labels applied to these quantities. Unless specifically stated otherwise as apparent from the following discussion, it is appreciated that throughout the description, discussions utilizing terms such as "processing" or "computing" or "calculating" or "determining" or "displaying" or the like, refer to the action and processes of a computer system, or similar electronic computing device, that manipulates and transforms data represented as physical (electronic) quantities within the computer system's registers and memories into other data similarly represented as physical quantities within the computer system memories or registers or other such information storage, transmission or display devices.

[0038] The present invention also relates to system apparatus for performing the operations herein. This apparatus may be specially constructed for the required purposes, or it may comprise a general purpose computer selectively activated or reconfigured by a computer program stored in the computer. Such a computer program may be stored in a computer readable storage medium, such as, but is not limited to, any type of disk including floppy disks, optical disks, CD-ROMs, and

magnetic-optical disks, read-only memories (ROMs), random access memories (RAMs), EPROMs, EEPROMs, magnetic or optical cards, or any type of media suitable for storing electronic instructions, and each coupled to a computer system bus.

[0039] The algorithms and displays presented herein are not inherently related to any particular computer or other apparatus. Various general purpose systems may be used with programs in accordance with the teachings herein, or it may prove convenient to construct more specialized apparatus to perform the required method procedures. The required structure for a variety of these systems will appear from the description below. In addition, the present invention is not described with reference to any particular programming language. It will be appreciated that a variety of programming languages may be used to implement the teachings of the invention as described herein.

[0040] Method

[0041] Real-time Electronic Date

[0042] **Figure 1** is a flow-chart diagram of an embodiment of a method 100 of dating according to the present invention. The method 100, begins at processing block 102, by establishing an electronic connection between two users of an electronic dating service to allow the users to have a real-time communication, or, in other words, a live, person-to-person date. In exemplary embodiments, the electronic connection is an audio, video, or other live connection, such as a telephone call, an Internet ICQ, a video conference, etc. Quite often it is difficult for a user to assess another user and get a sense of what they are really like based on simply viewing a profile, exchanging e-mails, or text chatting through instant messaging. With live, real-time communication, compatible individuals have a very effective means of determining if they 'click' with each other.

[0043] Some users may feel that video may give an even richer dating experience. Other users may find that video provides a more effective way for the two individuals to assess one another. At the same time, some users may prefer only audio transmissions. An audio-only communication allows users to get to know each other in an intimate and comfortable way, and eliminates the pressure of having to meet face-to-face prematurely.

[0044] In one embodiment of the invention, the users may be informed that a "date" is about to begin. In one embodiment of the invention, the identity of the users is announced, using text-to-speech processing. In another embodiment, the identity of the other user is announced by playing a pre-recorded audio clip of that user speaking their identity. In another embodiment, attributes of the other user as shown in **Figure 2** (such as age, geographic location etc.) are announced. In one embodiment of the invention, the users have not spoken to each other previously.

[0045] During the real-time communication, or "date", the users communicate person-to-person during a limited duration of time. The duration of time should be long enough to allow the users to spark up an interesting conversation, but not too long so that the users must agonize through small talk if there is no spark of interest. An advantage of keeping the date to a pre-defined duration is to provide structure for users who have trouble knowing how to spend their time on a date, thus encouraging the parties to begin communicating quickly and more meaningfully knowing that there is a limited time to the conversation. Another advantage of having a predefined duration to the date is to allow users to avoid the awkwardness or discomfort of trying to end a conversation that they have become uncomfortable with, or negotiate whether they would like to stay in contact or not. In one embodiment of

the invention, the users themselves may agree to a particular amount of time. In one embodiment of the invention, this duration is set to be a standard amount, such as 5 minutes. During the date, in one embodiment of the invention, the users may be notified of the time remaining in the predefined duration of time that the date is expected to last.

[0046] Method 100, then continues at processing block 104, with ending the electronic connection between the users after the predefined duration. Method 100 then continues, at processing block 106, with prompting the users to indicate whether they had interest in each other. Next, at processing block 108, if both users indicate that they felt an interest in each other, a "two-way match" is determined. In other words, if both users indicate that they felt a mutual interest in each other, they are logically matched as compatible dating partners. Thus, one advantage is to provide a mechanism for two compatible individuals to talk in real-time, decide whether there was 'chemistry' between them and whether they should therefore invest more time in getting to know one another further.

[0047] In one embodiment of the invention, method 100 continues, as shown at processing block 110, with apprising, or notifying the users of whether a two-way match occurred. In one embodiment, each user is automatically added to the other's list of matched persons 112. A method of managing that list is described in further detail further below in conjunction with **Figure 6**. One advantage of adding matched users to a list is to allow the "building-up" of a portfolio of two-way matches. Many users may feel a sense of pride about the people in their portfolio. Other users may view their portfolio as a safety net. For example, if an office party is approaching, the service provides a selection of people who have indicated their attraction who are candidates to accompany the user to the party.

[0048] In one embodiment of the invention, a profile can be maintained on the users. The profile may contain information about the user along with identification attributes. The user profile may be created when the user signs up for the dating service, whereupon they enter mandatory and optional attributes. The profile may contain information such as age, height, weight, race, religion, etc, to assist the users understanding of each other either before, during, or after the two-way match has occurred. **Figure 2** is an illustration showing a user profile with attributes that may be maintained on each user. The profile may further contain contact information, such as telephone number, email address, etc. Thus, in one embodiment of the invention, method 100 may continue with presenting profile information to the users, as shown at processing block 114, if a two-way match occurs. An advantage of not displaying profile information before a two-way match has occurred, is to preserve the privacy of the users, especially if one of them does not feel an attraction to the other and would not want further information about them revealed.

[0049] In one embodiment of the invention, method 100, may include an option to rate the user's comportment during the real-time communication, as shown at processing block 116. In one embodiment of the invention, a user is prompted to rate the other user's comportment only if the user indicated that they do not have interest in the other user.

[0050] In one embodiment of the invention, method 100 may continue by prompting the users to indicate whether they would like to extend the date, if a two-way match occurred, as shown at processing block 118. In one embodiment of the invention, method 100 continues, as shown at processing block 120, with re-establishing the electronic connection between the users, if both users indicated that they would like to extend the date.

[0051] In one embodiment of the invention, method 100 may include debiting a fee, associated with the date, from the user's account, as shown at processing block 122. More detail, regarding debiting a fee from a user's account, is provided in conjunction with **Figure 8**.

[0052] The users above may greatly benefit from a method of participating in a real-time date according to several different styles of dating. The following methods - immediate dating, invited dating, and group dating - describe several different styles of dating which include the dating method described in method 100 above.

Immediate Dating Method

[0053] Many times, when a user subscribes to an electronic dating service, that user may wish to meet other users as soon as possible. That user, therefore, may utilize a method, referred to herein, as "immediate dating." **Figure 3** is an illustration of an embodiment of a method 300 of performing an immediate date, according to the present invention. Method 300 begins, at processing block 302, with presenting to the user an interface wherein the user may choose to go on an immediate date. The user is then prompted to enter their search criteria, said search criteria relating to compatible attributes in user profiles of a plurality of users, as shown at processing block 304. Examples of search criteria include age range, geographic location of the users they would like to meet, etc. In one embodiment of the invention, as shown at processing block 306, the user is presented a user interface wherein the user may specify whether a particular search criteria (i.e. physical attribute, age, religion, etc., see **Figure 2**) is a mandatory or "desirable" search criterion. In one embodiment of the invention, the user may be allowed to rank certain desirable search criteria above others, as shown at processing block 308. For instance, if a user has two desirable search criteria, such as "blonde hair" and "blue eyes", but one is more important than the other,

then the user may rank the "blonde hair" criteria a certain value higher than the "blue eyes" search criteria. In one embodiment of the invention, the user may be allowed to arbitrarily set up his or her own ranking scale. In another embodiment, however, a pre-constructed ranking scale may be presented to the user. In one embodiment of the invention, the user may be connected via a wireless device that can detect the current geographic location of the user. Thus, as shown at processing block 310, the user may be allowed to use the geographic location of the users to narrow their search criteria.

[0054] Next, as shown at processing block 312, a search algorithm is executed that meets the user's search criteria. In one embodiment of the invention, the search algorithm may flow as follows: (a) determining other sexually compatible users that are also taking part in Immediate Dating; and (b) determining if specified search criteria, from both users, are met in both directions i.e. the current user's criteria are met by a candidate user, and the candidate user's search criteria are met by the current user. The search algorithm must be able to consider ranked criteria specified by the user. For example, where users specify only an age range and geographic location as search criteria, the first pair of users who meet the search criteria (a), (b), may be selected for a date. However, if the user specifies a combination of mandatory and desirable search criteria, the search algorithm will have to be more intelligent and thus use the user's rating criteria or utilize a pre-constructed ranking scale to determine which criteria may be more important than other criteria. Hence, the algorithm may further include (c) scoring compatible users based on how close the desirable criteria match in both directions, then (d) selecting users with the highest score for a date.

[0055] In one embodiment of the invention, the search algorithm may further include, (e) determining if users have previously been on a date

with each other. An advantage of not allowing users to date more than once is to ensure that users will meet only new people. In this case, an additional search constraint is imposed.

[0056] Next, as shown at processing block 314, a validation is made to ensure that there are sufficient credits in the user's account for at least one date, based on the estimated time for a complete date. If there are not enough credits, the user is prompted to purchase some, as shown at processing block 316. If there are sufficient credits, the user the user is allowed to proceed.

[0057] Next, after the search algorithm has been executed to pair two users for a date, and the account validation has been made, that pair of users is removed from the pool of users available for Immediate Dating, as shown at processing block 318, and a date is initiated as described in method 100.

[0058] In one embodiment of the invention, as shown at processing block 320, after the date is completed, each user is presented with the choice of going on another date, or concluding the session. If a user elects to go on another date, a validation is performed to ensure that there are enough credits in the user's account for at least one date, based on the estimated time for a complete date, as described above at processing block 314. If there are not enough credits, the user is prompted to purchase some, as described above at processing block 316. If there are sufficient credits, the user is placed back in the pool of users available for Immediate Dating and the process repeats.

[0059] Thus Immediate Dating provides a way for a user to meet another compatible user as soon as possible, and repeat the process as much as he/she desires. The speed at which compatible users are paired according to the above search algorithm depends upon the volume of users on the system, and how narrow the search criteria are. In one

embodiment of the invention, the user will be informed if no compatible users were found after a predefined timeout period (e.g. 15 minutes). The user will be given the option of continuing to search , or aborting the Immediate Dating session.

Invited Dating Method

[0060] Many times, when a user subscribes to an electronic dating service, that user may wish to invite other users on a future date. That user, therefore, may utilize a method, referred to herein, as "invited dating." **Figure 4** is an illustration of an embodiment of a method 400 of performing an invited date, according to the present invention. Method 400 begins, at processing block 402, with presenting to the user an interface wherein the user may choose to go on an invited date, whereupon the user is then prompted to enter search criteria, as shown at processing block 404. A search is then executed, as shown at processing block 406. Searching methods may include any or all embodiments in conjunction with immediate dating described above. Method 400, may continue with presenting to the user a list of compatible users with a summary of search results, as shown at processing block 408. In one embodiment of the invention, the summary may display key details of the users profile, namely: Identity, age, geographic location, look attributes, and a photograph. Method 400, may then continue, as shown at processing block 410, with allowing the user to select a compatible user to access the user's full profile.

[0061] The present user can select to invite one of the compatible users on a date, as shown at processing block 412. The invited compatible user will hereafter be referred to as an "invited" user. In one embodiment of the invention, as shown at processing block 414, a validation is performed to ensure that the inviter has sufficient credits for the date. If not, the user

may be prompted to purchase more credits, as shown at processing block 416. If they do have sufficient credits, as shown at processing block 418, an estimated number of credits for the date are reserved, since the date is in the future.

[0062] Next, as shown at processing block 420, the user is prompted to enter the date/time for their first preference, an optional second preference date/time, and an optional message. Then, as shown at processing block 422, the invited user is notified electronically of the invitation. In one embodiment of the invention, the invitee receives an e-mail informing them of the invite. In another embodiment, the invitee receives a voicemail informing them of the invite. The invited user may then be allowed to respond to the invitation, as shown at processing block 424, by agreeing to date/time preference 1, agreeing to date/time preference 2, declining the invite, or canceling the current invite and counter-inviting. Then, as shown at processing block 426, the invited user's account may be validated to ensure that they have sufficient credits for the date. If counter-invite is selected, a new invite is created where the inviter is the invitee of the original invite, and the invitee is the inviter of the original invite. If the invitee declines or counter-invites, any credits reserved in the inviter's account are un-reserved. Furthermore, as shown at processing block 428, an entry is made in the upcoming dates and events section of the user's dating management area, described in conjunction with **Figure 6** below.

[0063] At the correct start time, as shown at processing block 430, a date is automatically triggered between the two users, as described above in method 100.

[0064] Thus Invited Dating provides a way for a user to meet another compatible user at some point in the future that is convenient for both users.

Group Dating Method

[0065] Many times, when a user subscribes to an electronic dating service, that user may wish to participate in a group date. That user, therefore, may utilize a method, referred to herein, as "group dating." **Figure 5** is an illustration of an embodiment of a method 500 of participating in a group date, according to the present invention. Method 500 begins, at processing block 502, with presenting to the user an interface wherein the user may choose to go on a group date. Next, at processing block 504, the user is presented with a list of upcoming group-date events. In one embodiment of the invention, group-date events may require that the users meet certain criteria depending on their user profiles. For instance, a group event may be strictly for Asian people living in San Francisco aged 23-26. Thus, method 500 continues at processing block 505 with determining if the user meets specified criteria for the group-date event.

[0066] In one embodiment of the invention, the list of upcoming group-date events may include presenting descriptive fields such as event description, event start date/time, event status, number of dates, or number of places remaining. In one embodiment of the invention, the events are listed reverse-chronologically. In another embodiment, they are listed by how narrow the criteria for the event are. For example, an event for Asian people living in San Francisco aged 23-26 would be listed ahead of another event for Asian people living in Northern California aged 20-30.

[0067] Next, at processing block 506, method 500 continues with determining if there is space available in the group-date event for the user. If there are still places remaining on an event, the user will have the opportunity to select that event to join it, as shown at processing block 508. In one embodiment of the invention, as shown at processing block

510, a validation is performed that the event does not conflict with an existing group-date event or with an invited date. In one embodiment of the invention, as shown at processing block 512, a validation ensures that the user has sufficient credits for the event. They will need sufficient credits for the product of the number of dates in the event and the estimated length of a constituent date. If the user does not have sufficient credits, they are prompted to purchase more, as shown at processing block 514. If the validations pass, the estimated number of credits for the event are reserved, and the user is added to the event as shown at processing block 516. Furthermore, as shown at processing block 518, and an entry is made in the upcoming dates and events section of the user's dating management area, described in conjunction with **Figure 6** below.

[0068] In one embodiment of the invention, the number of sexually compatible users (e.g. heterosexual men and heterosexual women) who have joined the event are tracked, as shown at processing block 520. If there are insufficient quantities of sexually compatible users at a predefined interval before the event, the event is canceled, as shown at processing block 522. In this case, the users who had joined the event are informed of the cancellation electronically, shown at processing block 524 (e.g. by e-mail, phone call, etc.), and the event is removed from their dating management area, shown at processing block 526. In one embodiment of the invention, the credits that had been resolved in their accounts are un-reserved, shown at processing block 528.

[0069] Shortly before the event start time, the system pairs sexually compatible users (e.g. heterosexual men with heterosexual women) for a round of dates, as shown at processing block 530. Then, as shown at processing block 532, method 500 continues with allowing the paired users to have an electronic date. The date may follow method 100 as described above. When the round of dates is complete, another round

may take place, with new pairings, such that every user goes on a date with a sexually compatible user with whom they have not previously gone on a date with. This process of consecutive dates continues until the number of dates in the event has been met. Thus method 500 continues, at processing block 534, with terminating the group-date event when all sexually compatible users have had at least one date with each other. In one embodiment of the invention, each date within the event causes a separate call to be made to each user. In one embodiment of the invention, only one call is made to each user at the start of the event, and all dates take place on that same call.

[0070] Thus Group Dating provides a way for a user to meet several other compatible users in succession within a predefined timeframe, thus providing a very efficient way for individuals to meet a large number of compatible individuals in a short space of time.

[0071] Dating Management Method

[0072] **Figure 6** is a flow diagram of an embodiment of a method 600 for managing dates according to the present invention. Referring to **Figure 6**, method 600 begins, at processing block 602, with displaying to a user the list of persons with whom the user has previously matched. In embodiment, the user may create this list of compatible persons by adding two-way matches as determined in method 100, described in detail above.

[0073] Next, at processing block 604, the user is allowed to select a person from the list. Then, at processing block 606, an unlimited duration date is initiated between the user and the selected person. Method 600 may further continue with, informing the selected person of the user's identity, as shown at processing block 608; prompting the selected person to accept or reject the date from the user, as shown at processing block 610; and, if the person accepts, connecting the user and the person electronically, as

shown at processing block 612. The user and the selected person may then engage in stimulating conversation, without a predefined duration. The electronic connection may be an audio, video or audio-visual real-time connection between the user and the selected person. One advantage of method 600 is that it provides a convenient way for individuals to keep track of those users with whom there was mutual attraction, and facilitates subsequent communication with them.

[0074] In one embodiment of the invention, the user may be allowed to maintain a profile that contains information about them and their preferences, as discussed above in conjunction with **Figure 1**. In one embodiment of the invention, the selected person's profile is integrated with the user's match list, and vice versa, so that the match list may display profile information about the selected person, such as the identity attributes (e.g. age, geographic location, etc.) or the date and time of previous two-way matching, before, during, or after the electronic connection is established, as shown at processing block 620. In one embodiment of the invention, the user or person, can restrict what information allowed to be seen, thus can be kept entirely private, without either individual having to disclose private information to other users such as their phone number. Thus a user is offered a lot of privacy. For instance, users can get to know one another and develop a relationship by engaging in unlimited length anonymous telephone conversations, without having to reveal their true phone number.

[0075] In one embodiment of the invention, the profile information may include a time range when the selected person is willing to receive an electronic connection. Thus, in one embodiment of the invention, as shown at processing block 624, method 600 may further include determining if the date is being initiated within the acceptable time range, and completing the date, or establishing an electronic connection, only if

within the time range. **Figure 7** is an example of a profile that includes profile information as discussed above. An advantage of allowing the user, or person, to specify an acceptable time when they can be contacted is that it allows a lot of control over when they communicate with other users.

[0076] The users may be utilizing the present invention via one, or a combination, of many different types of networks, such as the Internet or a telephone network. In many cases such networks may be wireless, and therefore mobile. Consequently, it would be advantageous for the user to know if the persons on the list were in the geographic area. Thus, in one embodiment of the invention, as shown at processing block 614, method 600 may further include determining the current geographic location of the user and the persons on the user's list, and filtering the list to display only those people who are in the geographic vicinity of the user. Where the user is connected via a wireless device and that device or its network supports location detection, the invention provides a convenient way for individuals to keep track of those users with whom there was mutual attraction who are in the current vicinity of the user, and it facilitates subsequent communication with them.

[0077] Depending on the ensuing conversation, or for any other reason, in one embodiment of the invention, the user is allowed to remove the selected person from the matched list, shown at processing block 622. In one embodiment of the invention, the user may be allowed to compile a list of persons removed from the matched list to add them back to the matched list at a later date.

[0078] In one embodiment of the invention method 600 includes validating the user's account before the date to ensure that the account has sufficient credit, shown at processing block 626, or debiting the user's account based on a fee associated with the date, shown at processing

block 628. **Figure 8** is a flow diagram of an embodiment of a method 800 for utilizing an account in the present invention. Method 800 begins, as shown at processing block 802, with maintaining an account for the user and the person. The account may allow payment by credit card, or other forms of electronic payment, to add credits to the account. In one embodiment of the invention, a user may purchase credits by supplying credit card information, and their card is charged for the cost of credits purchased. A user's credit card details may be kept on file which makes it easier for them to purchase more credits in the future. A user can request a statement of account, which presents credits such as purchases or free credit awards, and debits.

[0079] Next, as shown at processing block 804, method 800 continues with monitoring the account before the electronic connection occurs to ensure that the user who is about to go on a date has sufficient credit in the account to pay for a fee associated with the date. If the account has sufficient credits, then the users can be connected electronically and have a date, as shown at processing block 806. If the account is insufficient, then the user is prompted to credit the account with an amount sufficient to cover the fee associated with the date, as shown at processing block 808.

[0080] The fee associated with the date can be determined in many different ways. For instance, in one embodiment of the invention, the fee is based on the actual length of the date, that is, the time the users are actually conversing. In another embodiment, if the users are involved in a date according to method 100, the fee may be based on the time of the predefined period, such as from the time the real time connection is established to the time it ends, or to the time of a matching response. If one of the users disconnects before the predefined duration of the date ends, then method 800 may continue, as shown at processing block 810,

with deducting a fee from the account of the disconnecting user, based on the time the predefined duration was expected to be. The non-disconnecting user may then be informed that their account will not be debited, as shown at processing block 812. However, if both users complete the date, then a fee can be deducted from both or either user's account(s), as shown at processing block 814. If the date is not of a pre-defined duration, but rather of an unlimited-length duration, then the account may be monitored to ensure that if credits run out during the unlimited-length date, the users can be prompted to further credit the account, as shown at processing block 815.

[0081] Referring back to **Figure 6**, in one embodiment of the invention, as shown at processing block 618, method 600 may further include allowing the user to view all the dates that a user has been on whether a two-way match occurred or not, and any information provided by the user, or person, regarding the date. Date information may include any or all information determined in conjunction with methods previously described herein. In one embodiment of the invention, the user may be allowed to view upcoming dates and any information associated, as shown at processing block 616 with them. Information for upcoming dates may include any or all information determined in conjunction with methods previously described herein, such as status of the date, date/time of date, estimated duration of date, notes, etc.

[0082]

[0083] System Apparatus

[0084] **Figure 9** is a block diagram of an embodiment of a system 900 according to the present invention. Referring to **Figure 9**, a client device 910, or first user, of a dating service can communicate with another client device 912, or second user, of the dating service via a network 930. A controller 940 is to monitor and direct the flow of communication

between the first and second user. The controller 940 can be one of many types of devices such as soft switches, voice servers, telephony servers, Web servers, application servers, database servers or a combination thereof. However, for brevity, any, or all, of these devices may be referred to, herein, as simply a controller 940, which is a device that can monitor and control the flow of communication between the client/users, 910 and 912.

[0085] System 900 may be a centralized architecture - users spanning a wide geographic area connect to a single system. In today's increasingly mobile world, people are increasingly inclined to explore further from their locality to find a good match. A centralized architecture provides for a very high level of scalability. System 900, however, may also be a very localized type of architecture.

[0086] In one embodiment of the invention, system 900 operates using a call-back system, so that a user receives calls rather than having to place them. In another embodiment, the user places calls to the service by dialing a central toll free number that has wide geographic coverage.

[0087] **Figure 10** is a block diagram of one embodiment of a system 1000 according to the present invention. In one embodiment of the invention, the users connect via the Internet while utilizing a computer device 1012 capable of running browsing software, such as a personal, hand-held, laptop, or palm-held computer. The computer devices may include video transmission capabilities (e.g. webcam, video recorder, etc) and audio transmission capabilities (e.g. speakers, microphone, etc.). In one embodiment of the invention, the computer device may be connected to a public or private computer network 1034. An example of a public network well suited to electronic dating is the Internet. However, system 1000 may also be connected to a private computer network.

[0088] In one embodiment of the invention, clients 910 may be any one of landline phone devices 1016 and wireless phone devices 1014 connected to each other via a telephone network 1032. The telephone network may be landline or wireless, thus capable of being connected to by a landline phone device 1016 or a wireless phone device 1014. In another embodiment, the clients 910 may be computer devices 1012, such as a PC or a Personal Digital Assistant (PDA), with audio or visual capabilities, connected to each other via a computer network 1034. In another embodiment, the clients 910 may be connected to each other via a combination of the telephone network 1032 and the computer network 1034. In yet another embodiment, clients 910 may be hard phones, devices that look and act like telephones but plug into the computer network 1034 rather than the telephone network 1032. In addition wireless networks (e.g., wireless LANs) are becoming increasingly more prevalent. Therefore, in one embodiment of the invention, wireless telephone devices 1014 may be connected directly to the computer network 1034.

[0089] In one embodiment, the users may connect via the telephone network 1032 utilizing a telephony server 1036. The user interacts with the system using a voice user-interface via a telephone, which transmits the voice data between the user and the telephony server 1036.

[0090] The telephony server 1036 can transmit data to the user using either prerecorded voice prompts or a text-to-speech engine, and the user can transmit data either by speaking or by using Dual-Tone Multi-Frequency ("DTMF") tones, both of which are recognized by the telephony server 1036. In one embodiment of the invention, voice-recognition technology is used at user inputs, providing the user with a hands-free way of interacting with the dating service and meeting people, which is useful when operating a vehicle for example. Furthermore,

because voice and DTMF user interfaces may be used, almost all of the features that are normally available via a Web browser user interface can be accessed through the telephone. This expands the potential usage and potential ubiquity of the system. This is especially important for older demographics who do not have Internet access, or in countries where Internet penetration is low.

[0091] The telephony server 1036 can also provide the ability to place and receive calls using Internet telephony across the Internet, using VoIP, SIP and similar protocols. The telephony server 1036 also can provide voice store and forward, digit capture, text to speech, voice recognition, out-bound dialing and call progress analysis. The telephony server 1036 can also provide soft-switch capabilities, that is, the ability to make telephone and optionally video connections that are controlled by software. Furthermore, the telephony server 1036 can also provide the ability to bridge calls between the telephone network and the Internet. The telephony server 1036 may be provided either by the online dating service itself, or by a third party telephony hosting vendor. In the latter case, a data link between an application server 1038 and telephony server 1036 is likely to be via the Internet and the language used to control the telephony server may be VoiceXML, CallXML or a similar language.

[0092] In another embodiment of the invention, the users may connect through the combination of a telephone network 1032 and a computer network 1034, utilizing the telephony server 1036 in conjunction with any one of an Application server 1038 and a Web server 1040. For instance, a user may be accessing the system via a computer running Web browser software and a landline telephone. Another example would be a user accessing the system via a wireless device that provides both telephone and Web browsing functionality in the same device. These are sometimes referred to as "converged devices". The ability to operate Web browsing

functionality need not be simultaneous with operating the telephone functionality, although the ability to have simultaneous Web browsing and telephony is an advantage. The connection to the Internet and telephone network may be provided by one or more third parties using current generation wireless networks, or "next generation networks" known as 2.5G, 3G or 4G. Devices which combine the functions of a mobile phone and Web browsing in a single device are becoming increasingly popular. Certain embodiments of the present invention, therefore, are ideal for such devices, since they make use of both mobile communication and web browsing.

[0093] In one embodiment of the invention, the controller 940 is to establish an electronic connection/call ("call") between a first and second user ("users") to allow the users to have a real-time communication, or a "date". In one embodiment of the invention, the controller 940 places a call to a user, over the network, at the request of the calling user. However, if users are already connected to the network, the controller 940 would not need to place a call to that user, but merely connect the users. Once connected, the controller 940 may somehow inform the users that their date is about to begin. In one embodiment of the invention, the controller 940 announces the identity of the other users, using text-to-speech processing. In another embodiment, the identity of the other user is announced by playing a pre-recorded audio clip of that user speaking their identity.

[0094] In one embodiment of the invention, the controller 940 is to interface with a database that holds profile information about the users. Thus, in one embodiment of the invention, the controller 940 is to provide one or more attributes of profile data about one user to another user.

[0095] In one embodiment of the invention, the controller 940 is to monitor and control the duration of the date between the users. In one

embodiment of the invention, the duration of the date is according to a predefined amount of time. This duration may be a system-wide parameter that applies to all dates on the system, such as 5 minutes. The optimal setting is one where the majority of users find that it is short enough that they do not have to spend too much time talking to someone whom they do not intend to pursue, and long enough that they do not feel they are being cut-off prematurely if they are having a conversation with someone whom they do intend to pursue.

[0096] In one embodiment of the invention, the controller 940 is to disconnect the two users after the duration of the date. However, the users need not be disconnected from the controller 940.

[0097] In one embodiment of the invention, the controller 940 is to inform the users, at a predefined interval before the end of the users' date, of the amount of time remaining. This pre-defined interval may be a system-wide parameter, such as 1 minute.

[0098] In one embodiment of the invention, the controller 940 is to prompt the users to indicate whether they had interest in each other such that they would like to keep in touch with each other. Each user may respond with 'Yes' or 'No', input either by voice or DTMF. If both users respond affirmatively, then the controller 940 records a "two-way match". In one embodiment of the invention, each user may have a list of matches, and the controller 940 will place each user on the other's match list if both user's responded affirmatively.

[0099] In one embodiment of the invention, the controller 940 is to report the matching outcome to each of the users. This may be done by sending an email to the users, updating an electronic file or database that the user can check later, or informing the users directly over the telephone. The report may include information such as the date and time of the date, the identity of the other user (e.g. username, first name, last name, etc.),

certain important profile information such as age and geographic location, and the matching outcome, which will indicate if there was a two-way match or not.

[00100] In one embodiment of the invention, the controller 940 is to prompt each user to rate the other's comportment during the date. In one embodiment of the invention, the user may responds with 'Yes' or 'No', input either by voice or DTMF tones. In another embodiment, the users respond through email or an online form.

[00101] In one embodiment of the invention, the controller 940 is to interface with a database that holds account information about the users. The controller 940 may then automatically debit the account for fees associated with dates.

[00102] In one embodiment of the invention, the controller 940 is to display to a user a list of persons, which persons have been previously matched with the user, to allow the user to select a person from the list; and to initiate a date between the user and the person. In one embodiment of the invention, the controller 540 is further to inform the person of the user's identity, prompt the person to accept or reject the date; and to establish an electronic connection between the user and the person.

[00103] In one embodiment of the invention, the controller 940 is to allow the user to search through a database of user profiles, the user profiles having identifying criteria, so that the user can match identifying criteria within the profiles.

[00104] The user profiles may include a time range when a person will accept a date. Thus, in one embodiment of the invention, the controller 940 is to determine if a date is being initiated within the acceptable time range.

[00105] In one embodiment of the invention, the controller 940 is to detect the current geographic location of persons on the user's match list, and to filter the list to display only those persons who are in geographic vicinity to the user.

[00106] In one embodiment of the invention, the controller 940 is to allow the user to remove persons from their match list, display the removed persons, and add removed persons back to the list.

[00107] In one embodiment of the invention, the controller 940 is to allow users to go on immediate dates, invited dates, or group dates.

Computer Architecture

[00108] **Figure 11** shows a diagrammatic representation of machine in the exemplary form of a computer system 1100 within which a set of instructions, for causing the machine to perform any one of the methodologies discussed above, may be executed. In alternative embodiments, the machine may comprise a network router, a network switch, a network bridge, Personal Digital Assistant (PDA), a cellular telephone, a web appliance or any machine capable of executing a sequence of instructions that specify actions to be taken by that machine.

[00109] The computer system 1100 includes a processor 1102, a main memory 1104 and a static memory 1106, which communicate with each other via a bus 1108. The computer system 1100 may further include a video display unit 1110 (e.g., a liquid crystal display (LCD) or a cathode ray tube (CRT)). The computer system 1100 also includes an alphanumeric input device 1112 (e.g., a keyboard), a cursor control device 1114 (e.g., a mouse), a disk drive unit 1116, a signal generation device 1120 (e.g., a speaker) and a network interface device 1122.

[00110] The disk drive unit 1116 includes a computer-readable medium 1124 on which is stored a set of instructions (i.e., software) 1126 embodying any one, or all, of the methodologies described above. The

software 1126 is also shown to reside, completely or at least partially, within the main memory 1104 and/or within the processor 1102. The software 1126 may further be transmitted or received via the network interface device 1122. For the purposes of this specification, the term " computer-readable medium" shall be taken to include any medium that is capable of storing or encoding a sequence of instructions for execution by the computer and that cause the computer to perform any one of the methodologies of the present invention. The term "computer-readable medium" shall accordingly be taken to included, but not be limited to, solid-state memories, optical and magnetic disks, and carrier wave signals.

[00111] Thus, a method and system for connecting and matching users of a dating service have been described. Although the present invention has been described with reference to specific exemplary embodiments, it will be evident that various modifications and changes may be made to these embodiments without departing from the broader spirit and scope of the invention. Accordingly, the specification and drawings are to be regarded in an illustrative rather than a restrictive sense.

CLAIMS

What is claimed is:

1. In an electronic dating service, a method comprising:

establishing an electronic connection between a first and second user to allow the first and second user to have a real-time communication, for a predefined duration;

ending said electronic connection between said first and second user after the predefined duration;

prompting the first and second users to indicate whether they had interest in each other; and

determining a two-way match if both first and second user indicate an interest in each other.

2. The method of claim 1, further comprising apprising the first and second user whether a two-way match occurs.

3. The method of claim 1, wherein establishing the electronic connection includes utilizing a telephony server to establish a telephone connection between the first and second user.

4. The method of claim 1, wherein establishing the electronic connection includes utilizing a telephony server to receive a telephone call from the first and second user.

5. The method of claim 1, wherein establishing the electronic connection includes utilizing a telephony server to place a telephone call to the first and second user.

6. The method of claim 1, wherein establishing the electronic connection includes utilizing a telephony server to place a telephone call to the first user and receive a telephone call from the second user.

7. The method of claim 1, wherein the electronic connection includes any one of an audio, video, or audio-video connection.

8. The method of claim 1, wherein the users have not spoken to each other previously.

9. The method of claim 1, further comprising, maintaining profile information about the first and second user.

10. The method of claim 9, further comprising providing profile information of the first and second user to each other.

11. The method of claim 9, wherein said profile information includes contact information, and further comprising providing contact information about one user to the other only if a two-way match occurs.

12. The method of claim 1, further comprising informing the first and second user of time remaining in the predefined duration.

13. The method of claim 1, further comprising prompting the first and second user to rate each other's comportment during the real-time communication.

14. The method of claim 1, further comprising prompting the first and second user to indicate if they would like to extend the date, only if a two-way match occurs.

15. The method of claim 14, further comprising re-establishing the electronic connection between said first and second user, only if both first and second user indicate that they would like to extend the date.

16. The method of claim 1, further comprising maintaining an account for the first and second user.

17. The method of claim 16, wherein said account can receive credit card payment.

18. The method of claim 16, further comprising:

monitoring the duration of the real-time communication between the users; and

deducting from the account an amount corresponding to the real-time communication duration.

19. The method of claim 16, further comprising:

monitoring the duration between establishing the real time connection and reception of the users' matching responses; and

deducting from the account an amount based upon said duration.

20. The method of claim 16, further comprising:

monitoring whether the user disconnects during the real time communication; and

deducting from the user's account an amount based upon the predefined duration that the electronic connection was expected to sustain.

21. The method of claim 16, further comprising:

determining whether the first or second user has sufficient credit in the account to meet the predefined duration that the electronic connection is expected to sustain; and

prompting said user to credit the account, if said credit is insufficient.

22. In an electronic dating service, a method comprising:

presenting to a user an interface wherein the user may choose to go on any one of an immediate date or an invited date;

prompting the user to enter search criteria relating to a plurality of users' profile attributes; and

executing a search algorithm that meets the user's search criteria.

23. The method of claim 22, further comprising presenting to the user an interface wherein the user can specify whether a particular attribute is a mandatory or desirable search criterion;

24. The method of claim 23, wherein presenting to the user an interface wherein the user can specify whether a particular attribute is a mandatory or desirable search criterion includes allowing the user to rank certain desirable search criteria above others.

25. The method of claim 22, further comprising:

detecting the current geographic location of the user; and

prompting the user to use said geographic location as the search criterion for the geographic location of the plurality of users.

26. The method of claim 22, wherein executing a search algorithm that meets the user's search criteria includes:

(a) determining which plurality of users are also taking part in an immediate date; and

(b) determining if specified search criteria, from the user and the plurality of users, are met in both directions.

(c) determining if the user and the plurality of users, have previously been on a date.

27. The method of claim 26, wherein determining if specified search criteria, from the user and the plurality of users, are met in both directions includes:

(a) scoring the plurality of users based on how close the desirable criteria matched in both directions; and

(b) selecting from the plurality of users those users obtaining the highest score.

28. The method of claim 22, further comprising:

performing a validation to ensure that there are sufficient credits in a user account for at least one date, based on the estimated time for a complete date; and

prompting the user to purchase more credits if there are not enough.

29. The method of claim 22, wherein if the user selects an immediate date, then further comprising:

compiling a list of compatible users, from the plurality of users, that matched the search criteria of the user; and

immediately establishing an electronic connection between the user and a compatible user.

30. The method of claim 22, further comprising:

compiling a list of compatible users, from the plurality of users, that matched the search criteria of the user;

allowing the user to view profile information of the compatible users; and

allowing the user to select one of the compatible users for a date.

31. The method of claim 30 further comprising:

establishing an electronic connection between the user and one of the compatible users to allow the user and the one of the compatible users to have a real-time communication, for a predefined duration;

ending said electronic connection between said the user and the one of the compatible users after the predefined duration;

prompting the user and the one of the compatible users to indicate whether they had interest in each other; and

determining a two-way match if both the user and the one of the compatible users indicate an interest in each other.

32. The method of claim 31, wherein if the user selected an invited date, then the establishing of the electronic connection is scheduled for a later date/time, and the one of the compatible users is an invited user.

33. The method of claim 32, further comprising:

prompting the user to enter a first and second preference of the date/time;

prompting the user to enter an optional message;

electronically notifiying the invited user of the invited date; and

allowing the invited user to respond to the invitation.

34. The method of claim 33, wherein allowing the invited user to respond to the invitation includes prompting the invited user to agree to the first or second preference of the date/time, declining the invitation, or counter-inviting with a new date/time.

35. The method of claim 34, further comprising:

performing a validation to ensure that there are sufficient credits in the user's account for at least one invited date, based on the estimated time for a complete date;

reserving credits for the invited date, if there are sufficient credits in the account.

36. The method of claim 34, wherein if the invited user counter-invites:

performing a validation to ensure that there are sufficient credits in the invited user's account for at least one invited date, based on the estimated time for a complete date;

unreserving credits for the invited date from the user's account; and

reserving credits for the invited date from the invited user's account.

37. The method of claim 30, further comprising presenting the user and the at least one of the plurality of users with the choice of going on another date.

38. In an electronic dating service, a method comprising:

presenting to a user an interface wherein the user may choose to go on a group date;

presenting to the user a list of upcoming group-date events;

determining if there is space available in the group-date event for the user;

determining if the user meets specified criteria for the group-date event; and

allowing the user to select the event.

39. The method of claim 38 further comprising:

validating that the group-date event does not conflict with another existing group-date event or with an invited date.

40. The method of claim 39, further comprising:

performing a validation to ensure that there are sufficient credits in the user's account for at least one group-date event, based on the estimated time for a complete group-date event; and

reserving credits for the group-date event, if there are sufficient credits in the account; and

prompting the user to credit the account if there are insufficient credits in the account.

41. The method of claim 38, further comprising:

tracking the number of sexually compatible users who have joined the event;

canceling the event, if an insufficient number of sexually compatible users have not signed up for the event within a predefined interval before the event; and

informing the signed up users electronically of the cancellation.

42. The method of claim 38, further comprising

pairing sexually compatible users in the group-date event who have not previously had a date; and

allowing the paired users to have an electronic date.

43. The method of claim 42, wherein an electronic date comprises:

establishing an electronic connection between the paired sexually compatible users to allow the paired sexually compatible users to have a real-time communication, for a predefined duration;

ending said electronic connection between said paired sexually compatible users after the predefined duration;

prompting the paired sexually compatible users to indicate whether they had interest in each other; and

determining a two-way match if both the paired sexually compatible users indicate an interest in each other.

44. In an electronic dating service, a method of scheduling a date, the method comprising:

displaying to a user a list of persons, said persons previously matched with said user;

allowing the user to select a person from the list; and

initiating a date between the user and the person.

45. The method of claim 44, wherein initiating a date between the user and the person further comprises:

informing the person of the user's identity;

prompting the person to accept or reject the date; and

establishing an electronic connection between the user and the person if the person accepts the date.

46. The method of claim 44, wherein the user and person are previously matched by a method comprising:

establishing an electronic connection between the user and the person to allow the user and the person to have a real-time communication, for a predefined duration;

ending said electronic connection between the user and the person after the predefined duration;

prompting the user and the person to indicate whether they had interest in each other; and

determining a match if both the user and the person indicate an interest in each other.

47. The method of claim 44, wherein the list of persons displays information including any one of identity, age, geographic location, and date/time of matching.

48. The method of claim 44, further comprising, maintaining profile information about the user and the person, said profile information including one or more identity attributes.

49. The method of claim 48, further comprising displaying one or more attributes of the person's profile information to the user.

50. The method of claim 48, wherein the profile information includes the time range when the person will accept a date and further comprising determining whether the date is being initiated within the time range.

51. The method of claim 44, further comprising, allowing the user to remove a person from the list.

52. The method of claim 51, further comprising displaying a list of removed matches.

53. The method of claim 44, wherein the user and the person are connected to any one of the Internet, a wireless network, or a telephone network.

54. The method of claim 44 further comprising:

detecting the current geographic location of the user and the persons on the list; and

filtering the list of persons to display only those persons who are in the geographic vicinity of the user.

55. The method of claim 44 further comprising:

monitoring a user account during the date; and

prompting the users to credit the account if credits run out during the date.

56. A system for an electronic dating service comprising:

a plurality of client devices, utilized by a plurality of users, connected to each other via a network; and

a controller to

(a) establish an electronic connection between the plurality of client devices to allow the plurality of users to have a real-time communication;

(b) disconnect the plurality of client devices after a predefined duration of time;

prompt the plurality of users to produce a negative or affirmative response whether they felt a mutual attraction for each other; and

(c) determine a two-way match if the plurality of users indicate affirmative responses.

57. The system of claim 56, wherein the controller is to:

display to a first user of the plurality of users a list of other users, said other users previously matched with said first user;

allow the first user to select a second user from the list;

inform the second user of the first user's identity; and

prompt the second user to accept or reject a date from the first user.

58. The system of claim 57, wherein the controller is to establish an electronic connection between the first and second users if the second user accepts the date.

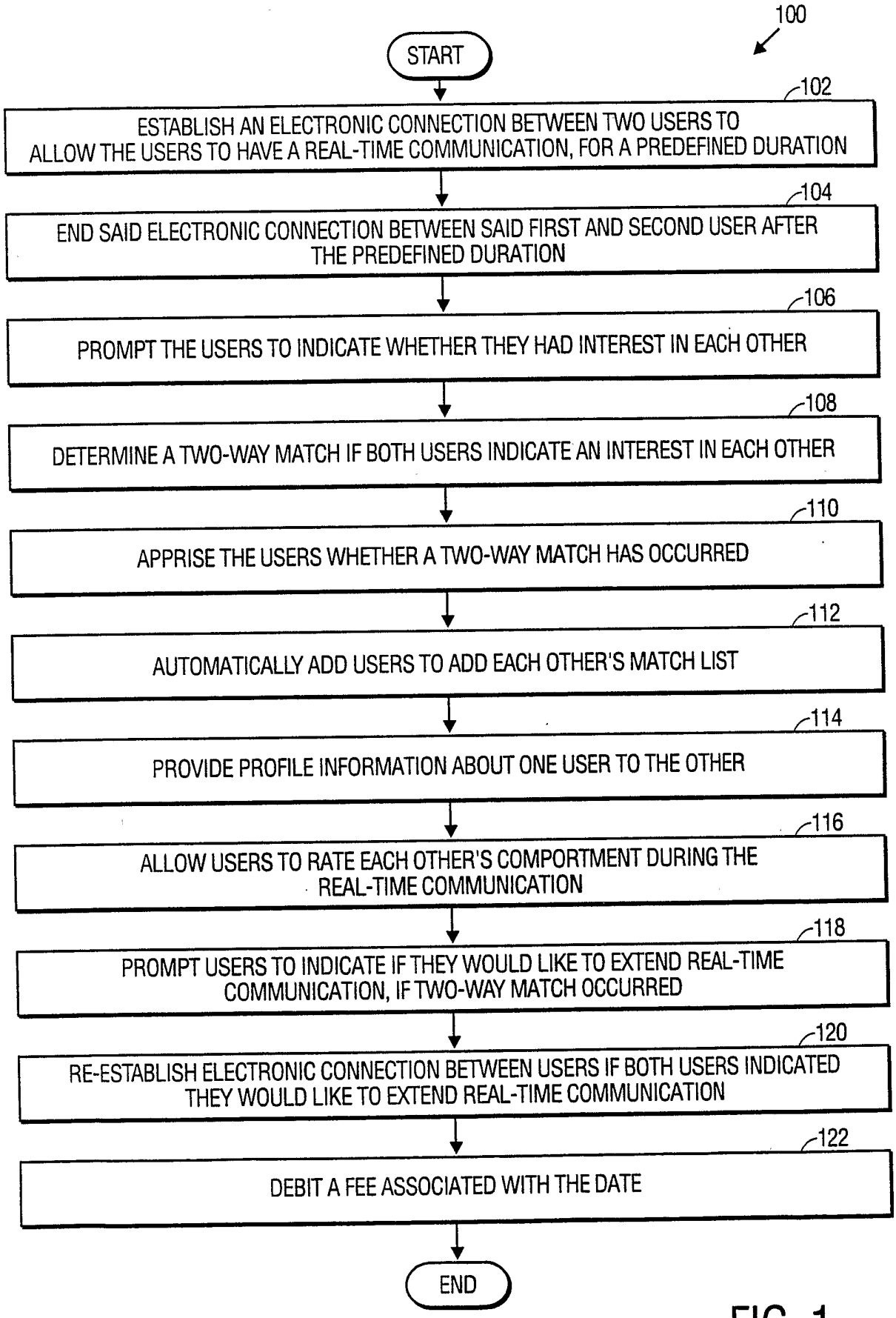
100
START
102
ESTABLISH AN ELECTRONIC CONNECTION BETWEEN TWO USERS TO ALLOW THE USERS TO HAVE A REAL-TIME COMMUNICATION, FOR A PREDEFINED DURATION
104
END SAID ELECTRONIC CONNECTION BETWEEN SAID FIRST AND SECOND USER AFTER THE PREDEFINED DURATION
106
PROMPT THE USERS TO INDICATE WHETHER THEY HAD INTEREST IN EACH OTHER
108
DETERMINE A TWO-WAY MATCH IF BOTH USERS INDICATE AN INTEREST IN EACH OTHER
110
APPRISE THE USERS WHETHER A TWO-WAY MATCH HAS OCCURRED
112
AUTOMATICALLY ADD USERS TO ADD EACH OTHER'S MATCH LIST
114
PROVIDE PROFILE INFORMATION ABOUT ONE USER TO THE OTHER
116
ALLOW USERS TO RATE EACH OTHER'S COMPORTMENT DURING THE REAL-TIME COMMUNICATION
118
PROMPT USERS TO INDICATE IF THEY WOULD LIKE TO EXTEND REAL-TIME COMMUNICATION, IF TWO-WAY MATCH OCCURRED
120
RE-ESTABLISH ELECTRONIC CONNECTION BETWEEN USERS IF BOTH USERS INDICATED THEY WOULD LIKE TO EXTEND REAL-TIME COMMUNICATION
122
DEBIT A FEE ASSOCIATED WITH THE DATE
END

FIG. 1

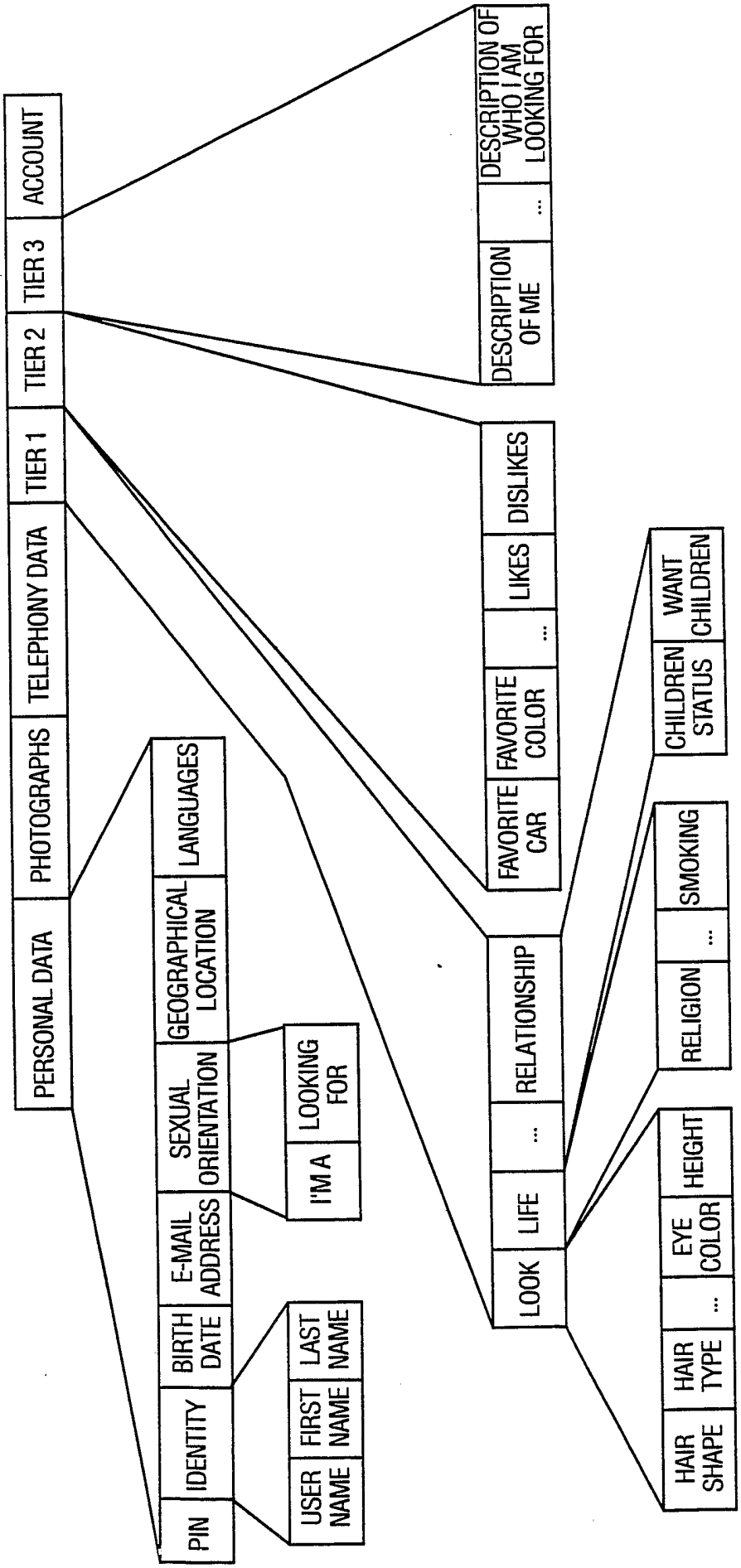
ACCOUNT
TIER 3
TIER 2
TIER 1
TELEPHONY DATA
PHOTOGRAPHS
PERSONAL DATA
DESCRIPTION OF WHO I AM LOOKING FOR
...
DESCRIPTION OF ME
DISLIKES
LIKES
...
FAVORITE COLOR
FAVORITE CAR
RELATIONSHIP
...
LIFE
LOOK
WANT CHILDREN
CHILDREN STATUS
SMOKING
...
RELIGION
HEIGHT
...
EYE COLOR
HAIR TYPE
HAIR SHAPE
LANGUAGES
GEOGRAPHICAL LOCATION
SEXUAL ORIENTATION
LOOKING FOR
I'M A
E-MAIL ADDRESS
BIRTH DATE
IDENTITY
LAST NAME
FIRST NAME
USER NAME
PIN

FIG. 2

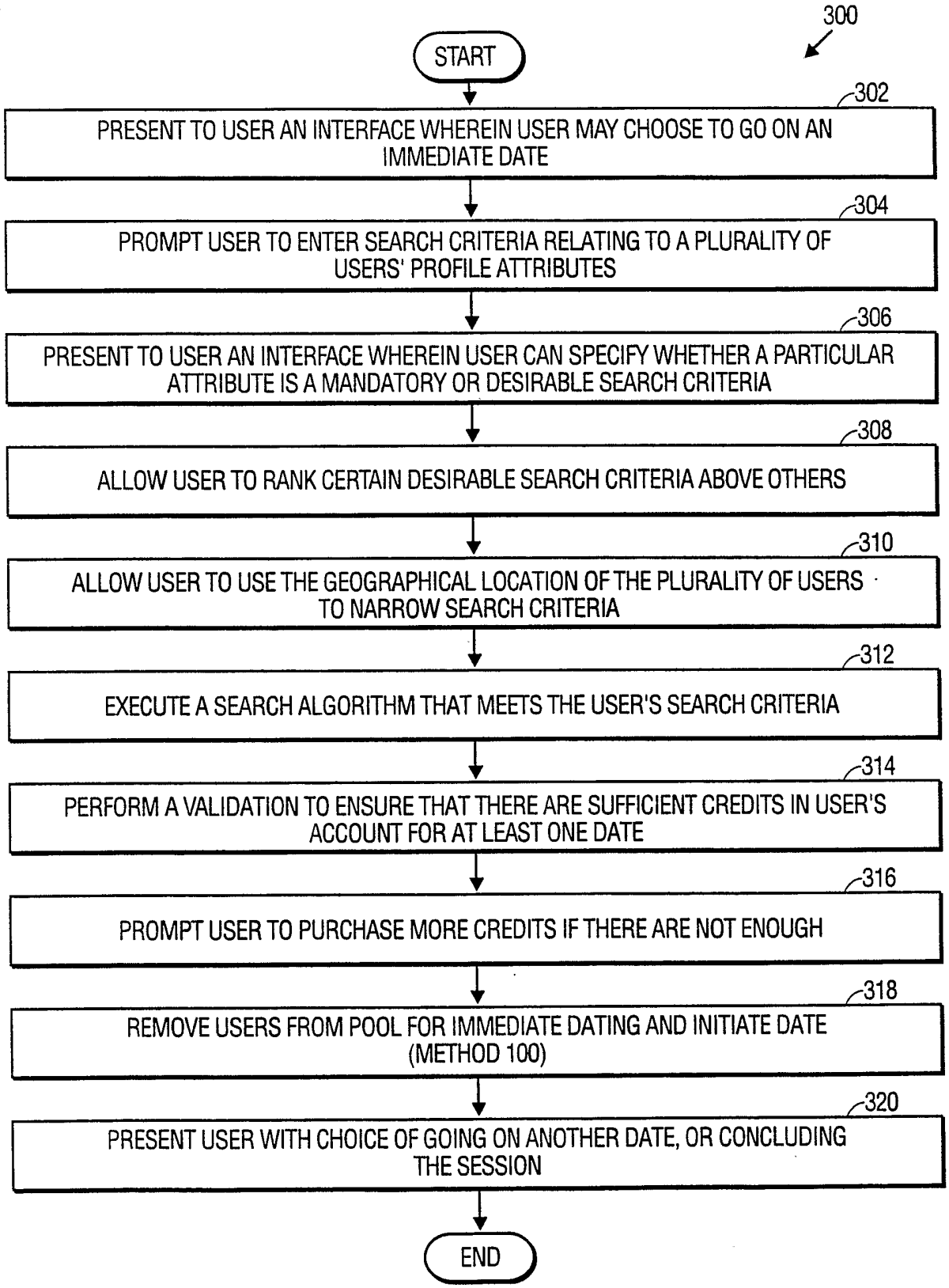
300
START
302
PRESENT TO USER AN INTERFACE WHEREIN USER MAY CHOOSE TO GO ON AN IMMEDIATE DATE
304
PROMPT USER TO ENTER SEARCH CRITERIA RELATING TO A PLURALITY OF USERS' PROFILE ATTRIBUTES
306
PRESENT TO USER AN INTERFACE WHEREIN USER CAN SPECIFY WHETHER A PARTICULAR ATTRIBUTE IS A MANDATORY OR DESIRABLE SEARCH CRITERIA
308
ALLOW USER TO RANK CERTAIN DESIRABLE SEARCH CRITERIA ABOVE OTHERS
310
ALLOW USER TO USE THE GEOGRAPHICAL LOCATION OF THE PLURALITY OF USERS TO NARROW SEARCH CRITERIA
312
EXECUTE A SEARCH ALGORITHM THAT MEETS THE USER'S SEARCH CRITERIA
314
PERFORM A VALIDATION TO ENSURE THAT THERE ARE SUFFICIENT CREDITS IN USER'S ACCOUNT FOR AT LEAST ONE DATE
316
PROMPT USER TO PURCHASE MORE CREDITS IF THERE ARE NOT ENOUGH
318
REMOVE USERS FROM POOL FOR IMMEDIATE DATING AND INITIATE DATE (METHOD 100)
320
PRESENT USER WITH CHOICE OF GOING ON ANOTHER DATE, OR CONCLUDING THE SESSION
END

FIG. 3

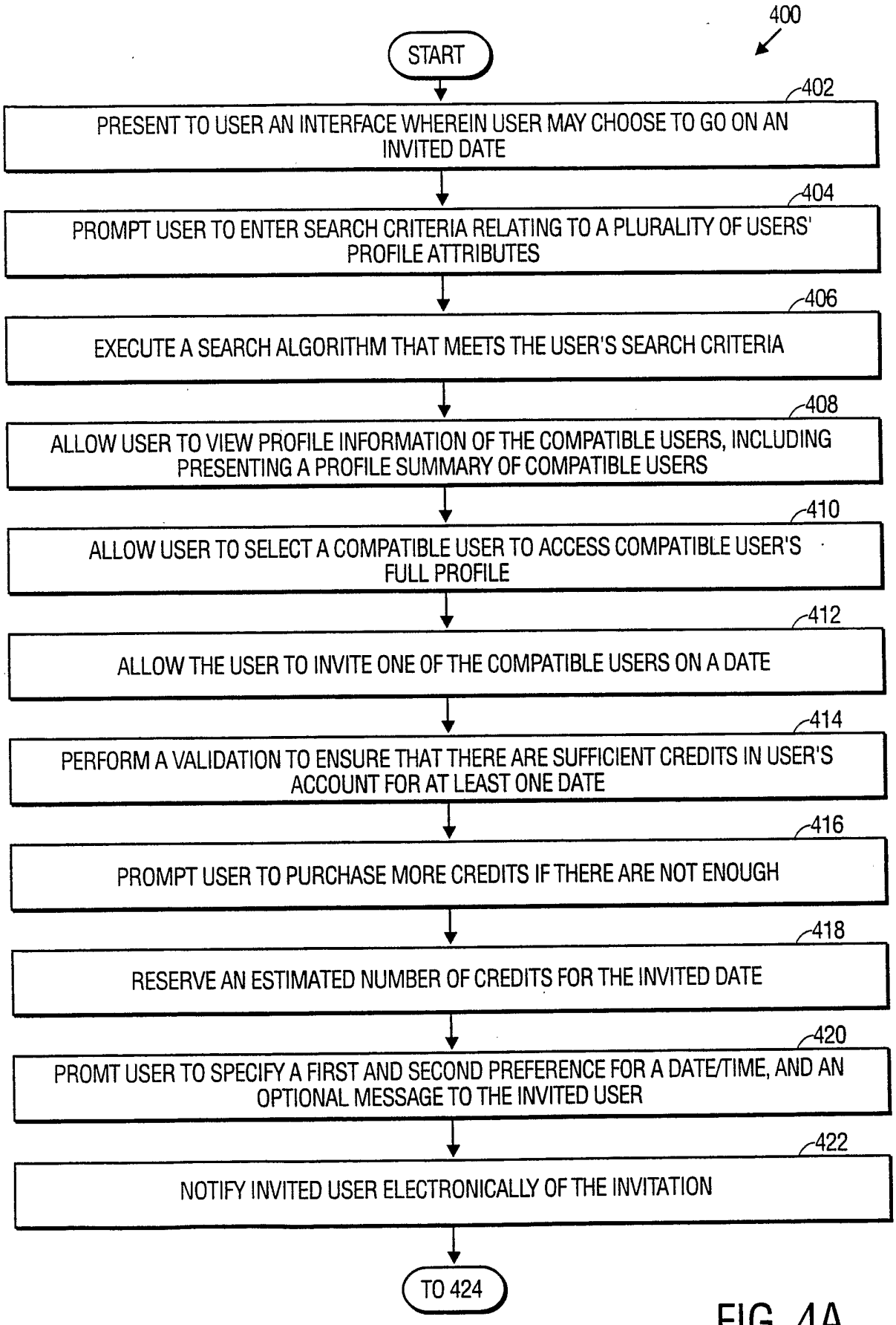
400
START
402
PRESENT TO USER AN INTERFACE WHEREIN USER MAY CHOOSE TO GO ON AN INVITED DATE
404
PROMPT USER TO ENTER SEARCH CRITERIA RELATING TO A PLURALITY OF USERS' PROFILE ATTRIBUTES
406
EXECUTE A SEARCH ALGORITHM THAT MEETS THE USER'S SEARCH CRITERIA
408
ALLOW USER TO VIEW PROFILE INFORMATION OF THE COMPATIBLE USERS, INCLUDING PRESENTING A PROFILE SUMMARY OF COMPATIBLE USERS
410
ALLOW USER TO SELECT A COMPATIBLE USER TO ACCESS COMPATIBLE USER'S FULL PROFILE
412
ALLOW THE USER TO INVITE ONE OF THE COMPATIBLE USERS ON A DATE
414
PERFORM A VALIDATION TO ENSURE THAT THERE ARE SUFFICIENT CREDITS IN USER'S ACCOUNT FOR AT LEAST ONE DATE
416
PROMPT USER TO PURCHASE MORE CREDITS IF THERE ARE NOT ENOUGH
418
RESERVE AN ESTIMATED NUMBER OF CREDITS FOR THE INVITED DATE
420
PROMT USER TO SPECIFY A FIRST AND SECOND PREFERENCE FOR A DATE/TIME, AND AN OPTIONAL MESSAGE TO THE INVITED USER
422
NOTIFY INVITED USER ELECTRONICALLY OF THE INVITATION
TO 424

FIG. 4A

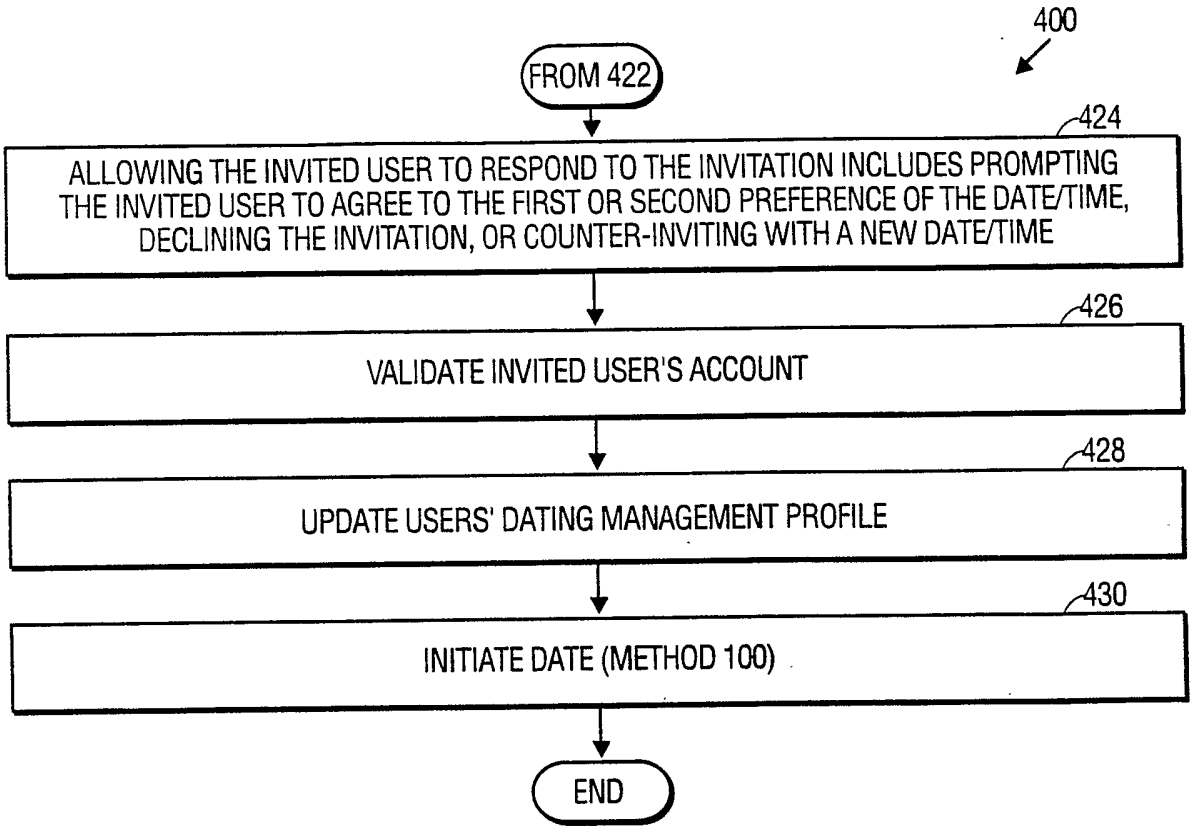
400
FROM 422
424
ALLOWING THE INVITED USER TO RESPOND TO THE INVITATION INCLUDES PROMPTING THE INVITED USER TO AGREE TO THE FIRST OR SECOND PREFERENCE OF THE DATE/TIME, DECLINING THE INVITATION, OR COUNTER-INVITING WITH A NEW DATE/TIME
426
VALIDATE INVITED USER'S ACCOUNT
428
UPDATE USERS' DATING MANAGEMENT PROFILE
430
INITIATE DATE (METHOD 100)
END

FIG. 4B

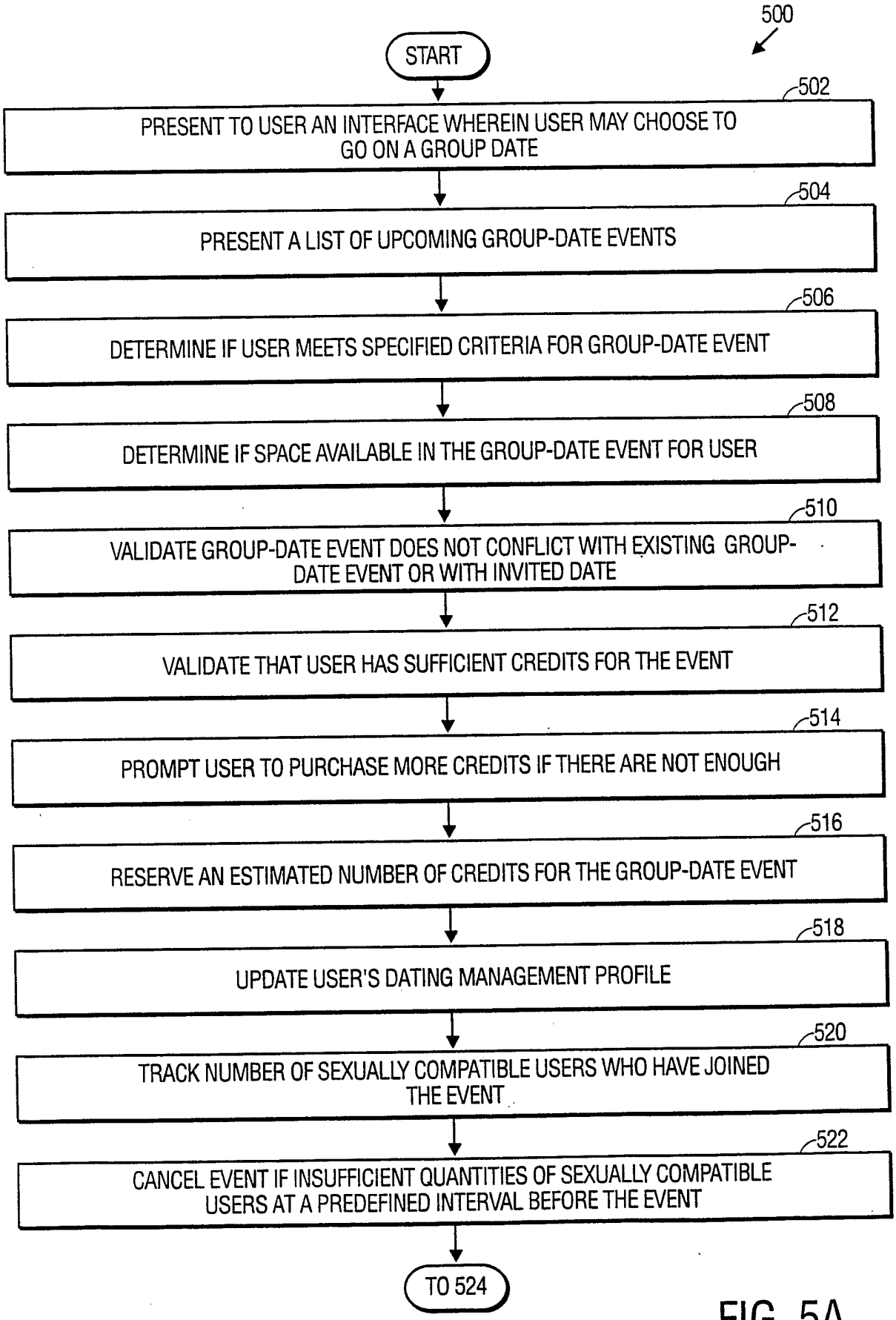
500
START
502
PRESENT TO USER AN INTERFACE WHEREIN USER MAY CHOOSE TO GO ON A GROUP DATE
504
PRESENT A LIST OF UPCOMING GROUP-DATE EVENTS
506
DETERMINE IF USER MEETS SPECIFIED CRITERIA FOR GROUP-DATE EVENT
508
DETERMINE IF SPACE AVAILABLE IN THE GROUP-DATE EVENT FOR USER
510
VALIDATE GROUP-DATE EVENT DOES NOT CONFLICT WITH EXISTING GROUP-DATE EVENT OR WITH INVITED DATE
512
VALIDATE THAT USER HAS SUFFICIENT CREDITS FOR THE EVENT
514
PROMPT USER TO PURCHASE MORE CREDITS IF THERE ARE NOT ENOUGH
516
RESERVE AN ESTIMATED NUMBER OF CREDITS FOR THE GROUP-DATE EVENT
518
UPDATE USER'S DATING MANAGEMENT PROFILE
520
TRACK NUMBER OF SEXUALLY COMPATIBLE USERS WHO HAVE JOINED THE EVENT
522
CANCEL EVENT IF INSUFFICIENT QUANTITIES OF SEXUALLY COMPATIBLE USERS AT A PREDEFINED INTERVAL BEFORE THE EVENT
TO 524

FIG. 5A

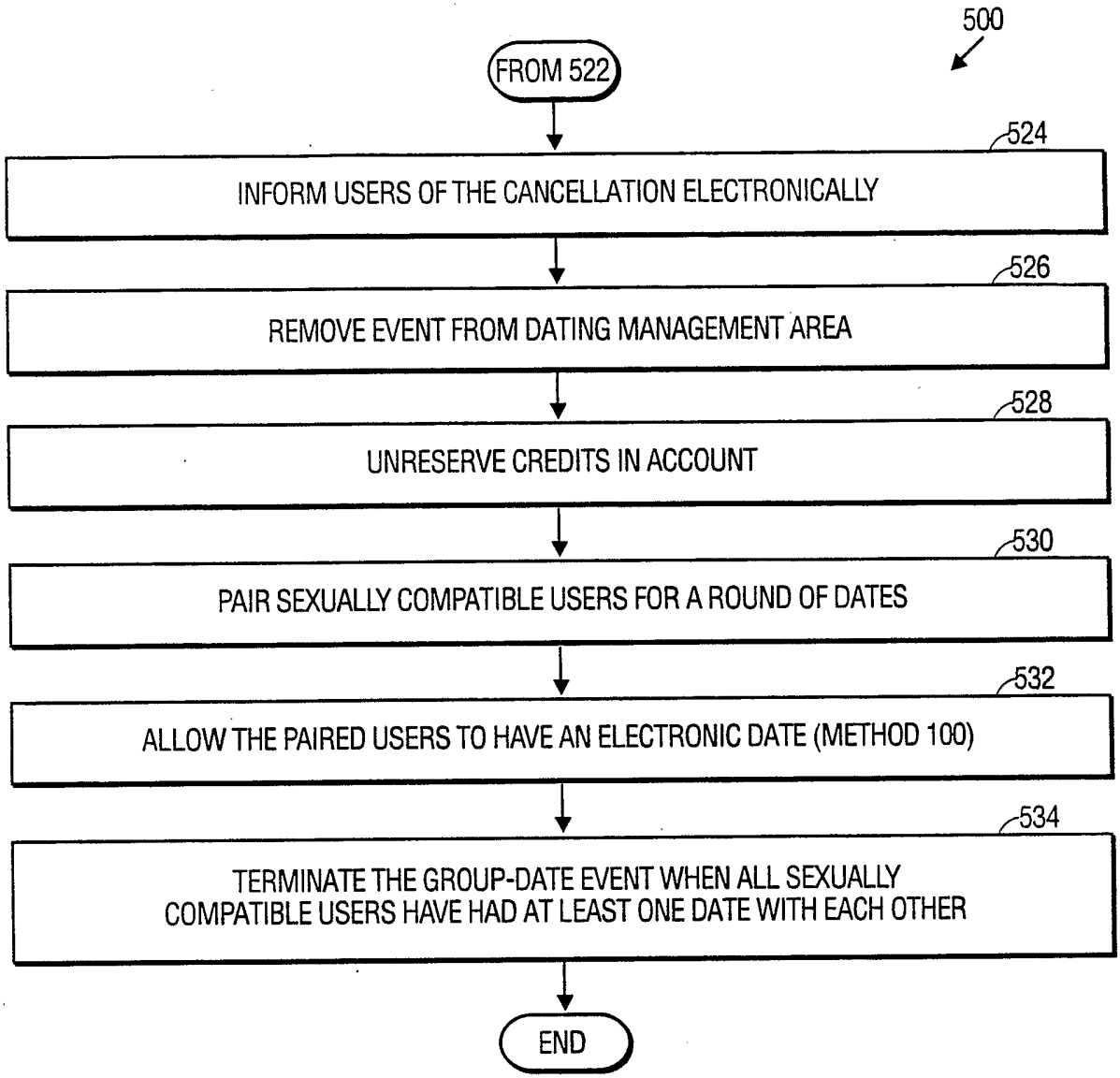
500
FROM 522
524
INFORM USERS OF THE CANCELLATION ELECTRONICALLY
526
REMOVE EVENT FROM DATING MANAGEMENT AREA
528
UNRESERVE CREDITS IN ACCOUNT
530
PAIR SEXUALLY COMPATIBLE USERS FOR A ROUND OF DATES
532
ALLOW THE PAIRED USERS TO HAVE AN ELECTRONIC DATE (METHOD 100)
534
TERMINATE THE GROUP-DATE EVENT WHEN ALL SEXUALLY COMPATIBLE USERS HAVE HAD AT LEAST ONE DATE WITH EACH OTHER
END

FIG. 5B

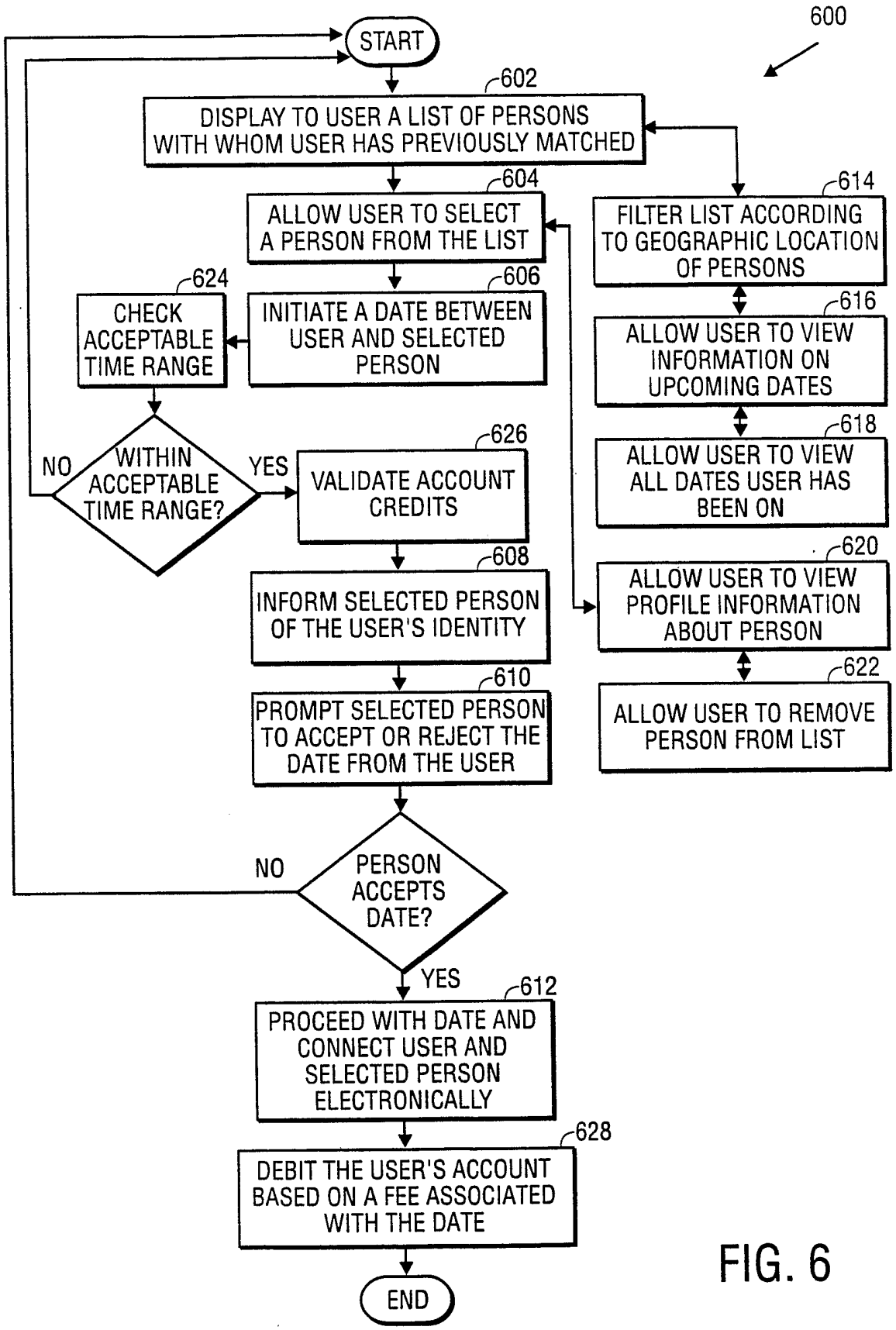
600
START
602
DISPLAY TO USER A LIST OF PERSONS WITH WHOM USER HAS PREVIOUSLY MATCHED
604
ALLOW USER TO SELECT A PERSON FROM THE LIST
606
INITIATE A DATE BETWEEN USER AND SELECTED PERSON
624
CHECK ACCEPTABLE TIME RANGE
WITHIN ACCEPTABLE TIME RANGE?
NO
YES
626
VALIDATE ACCOUNT CREDITS
608
INFORM SELECTED PERSON OF THE USER'S IDENTITY
610
PROMPT SELECTED PERSON TO ACCEPT OR REJECT THE DATE FROM THE USER
PERSON ACCEPTS DATE?
NO
YES
612
PROCEED WITH DATE AND CONNECT USER AND SELECTED PERSON ELECTRONICALLY
628
DEBIT THE USER'S ACCOUNT BASED ON A FEE ASSOCIATED WITH THE DATE
END
614
FILTER LIST ACCORDING TO GEOGRAPHIC LOCATION OF PERSONS
616
ALLOW USER TO VIEW INFORMATION ON UPCOMING DATES
618
ALLOW USER TO VIEW ALL DATES USER HAS BEEN ON
620
ALLOW USER TO VIEW PROFILE INFORMATION ABOUT PERSON
622
ALLOW USER TO REMOVE PERSON FROM LIST

FIG. 6

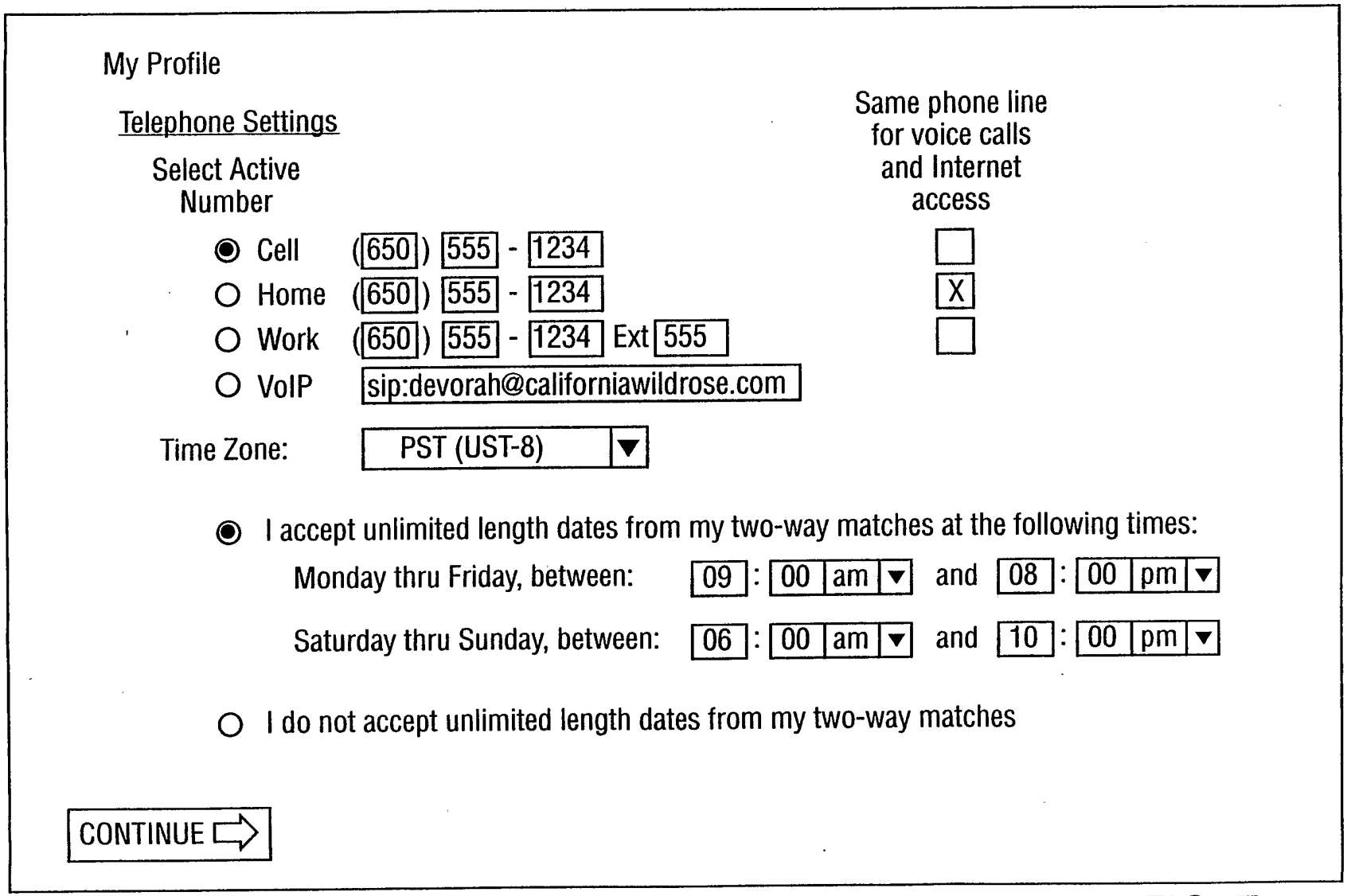
My Profile
Telephone Settings
Select Active Number
Same phone line for voice calls and Internet access
Cell (650) 555 - 1234
Home (650) 555 - 1234
Work (650) 555 - 1234 Ext 555
VoIP sip:devorah@californiawildrose.com
X
Time Zone: PST (UST-8)
I accept unlimited length dates from my two-way matches at the following times:
Monday thru Friday, between: 09 : 00 am and 08 : 00 pm
Saturday thru Sunday, between: 06 : 00 am and 10 : 00 pm
I do not accept unlimited length dates from my two-way matches
CONTINUE

FIG. 7

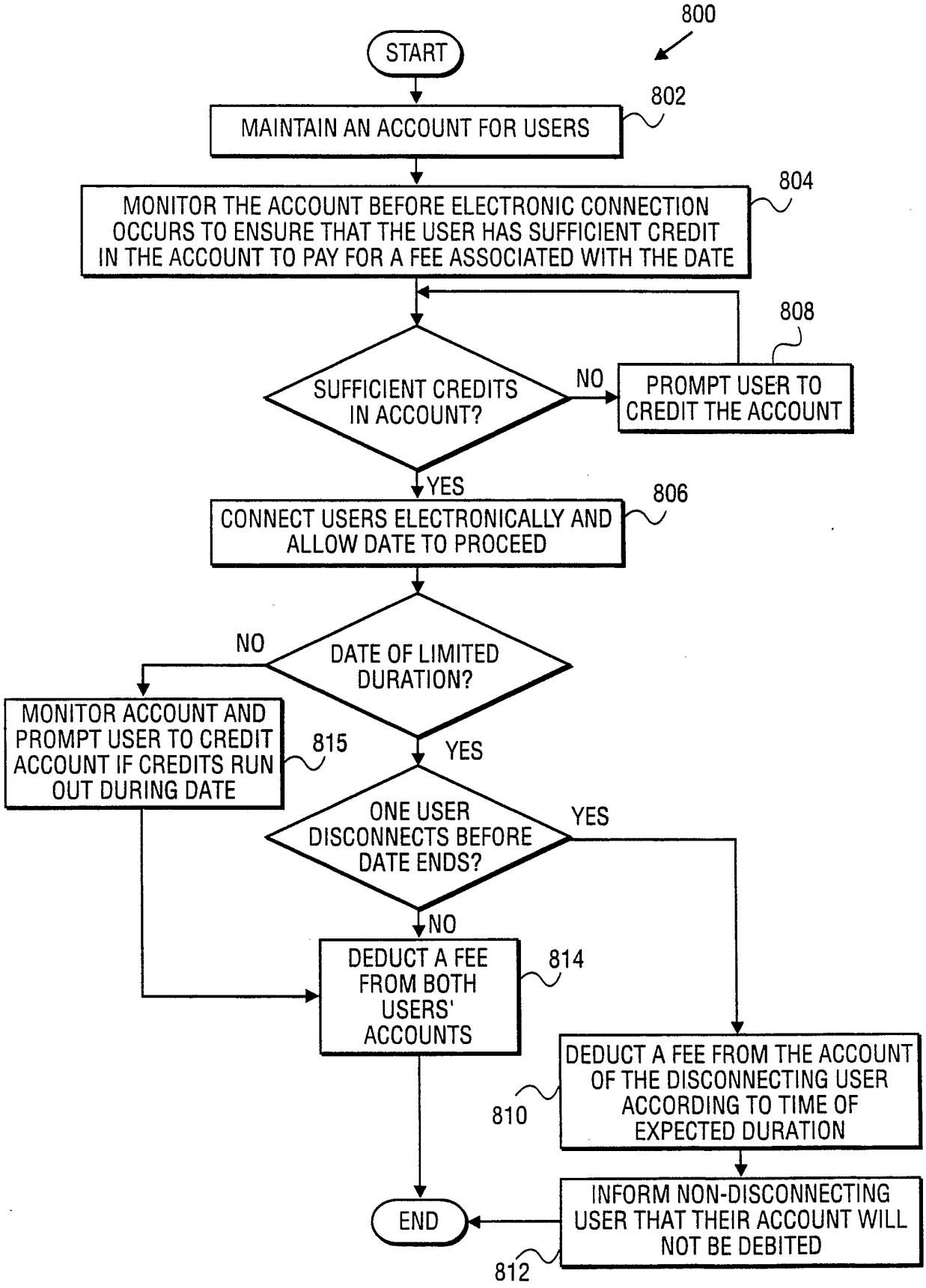
800
START
802
MAINTAIN AN ACCOUNT FOR USERS
804
MONITOR THE ACCOUNT BEFORE ELECTRONIC CONNECTION OCCURS TO ENSURE THAT THE USER HAS SUFFICIENT CREDIT IN THE ACCOUNT TO PAY FOR A FEE ASSOCIATED WITH THE DATE
808
SUFFICIENT CREDITS IN ACCOUNT?
NO
PROMPT USER TO CREDIT THE ACCOUNT
YES
806
CONNECT USERS ELECTRONICALLY AND ALLOW DATE TO PROCEED
NO
DATE OF LIMITED DURATION?
MONITOR ACCOUNT AND PROMPT USER TO CREDIT ACCOUNT IF CREDITS RUN OUT DURING DATE
815
YES
ONE USER DISCONNECTS BEFORE DATE ENDS?
YES
NO
DEDUCT A FEE FROM BOTH USERS' ACCOUNTS
814
DEDUCT A FEE FROM THE ACCOUNT OF THE DISCONNECTING USER ACCORDING TO TIME OF EXPECTED DURATION
810
INFORM NON-DISCONNECTING USER THAT THEIR ACCOUNT WILL NOT BE DEBITED
812
END

FIG. 8

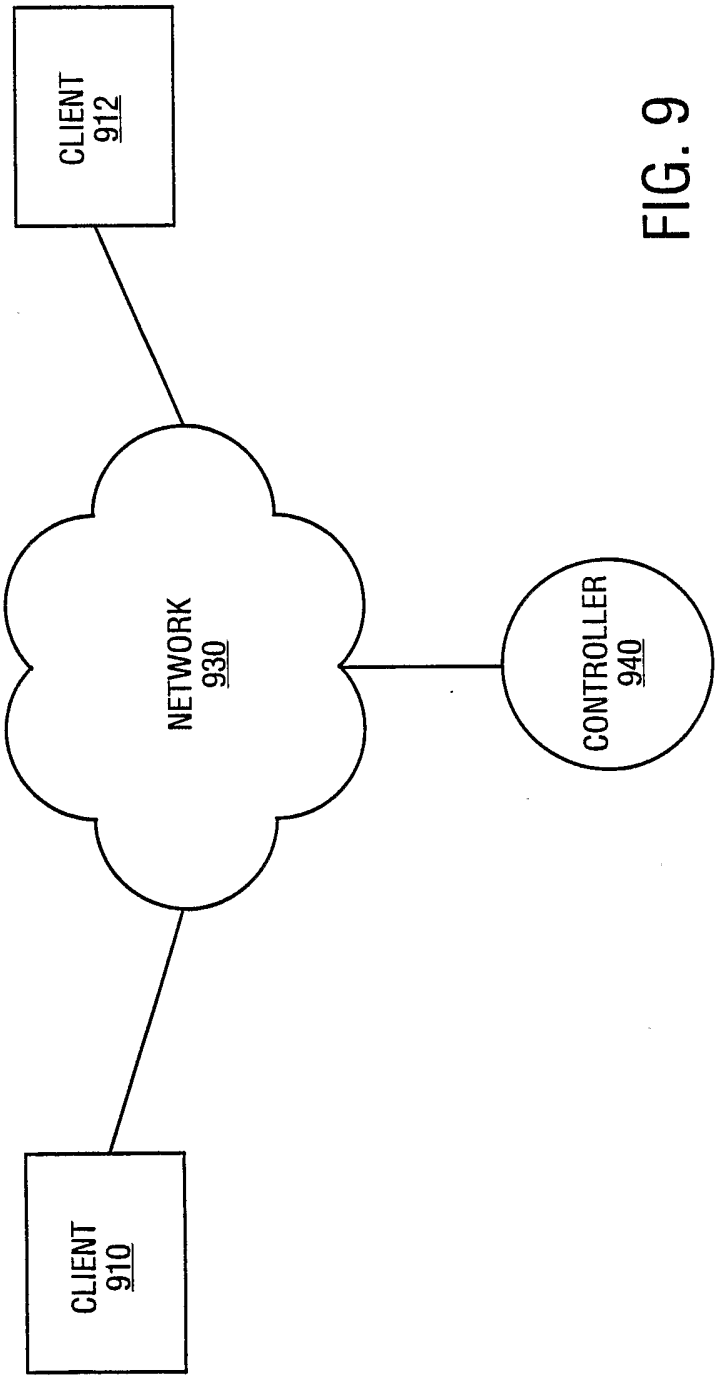

FIG. 9

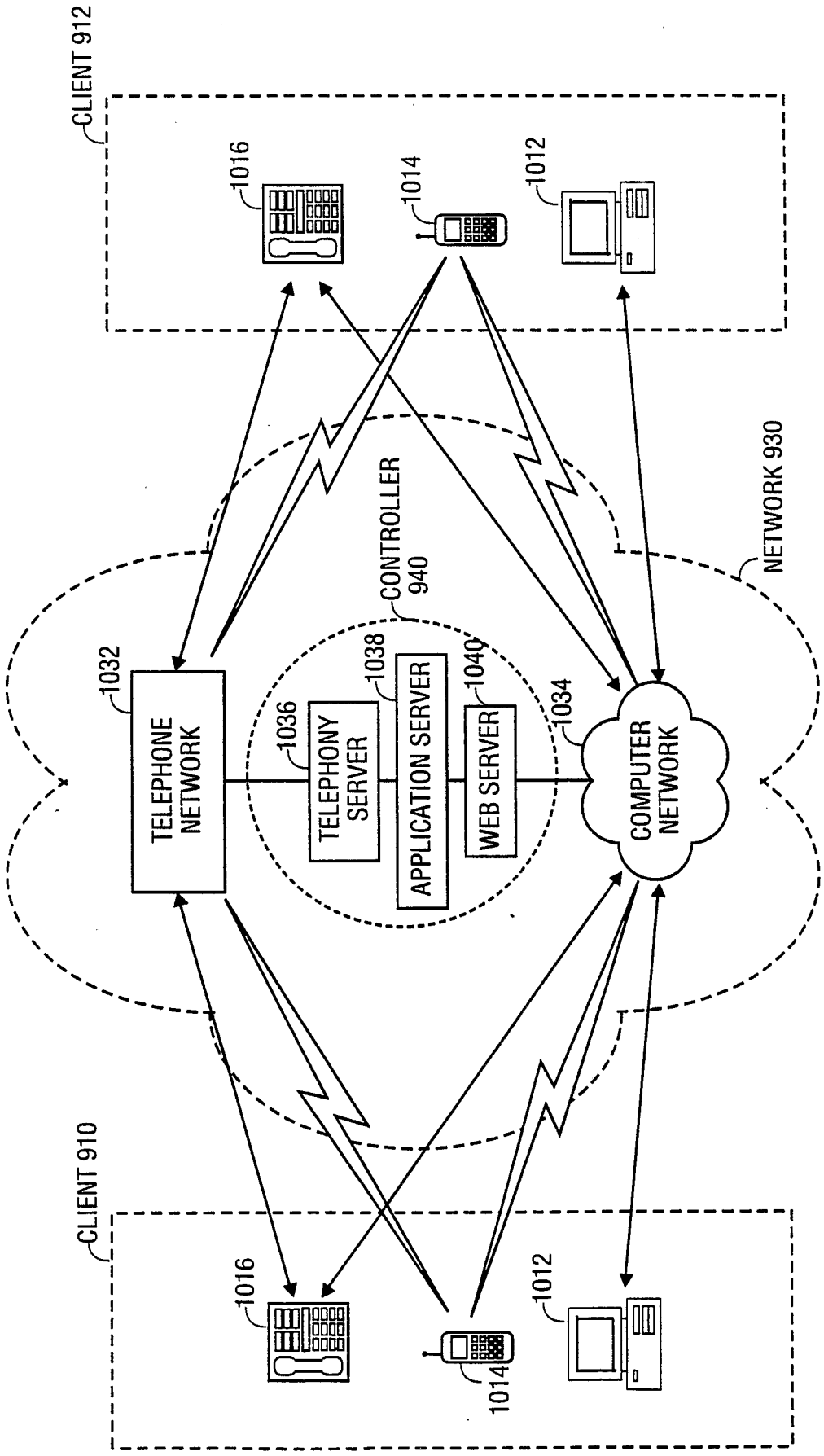
CLIENT 912
1016
1014
1012
CONTROLLER 940
NETWORK 930
1032
TELEPHONE NETWORK
1038
1036
TELEPHONY SERVER
APPLICATION SERVER
1040
WEB SERVER
1034
COMPUTER NETWORK
CLIENT 910
1016
1014
1012

FIG. 10

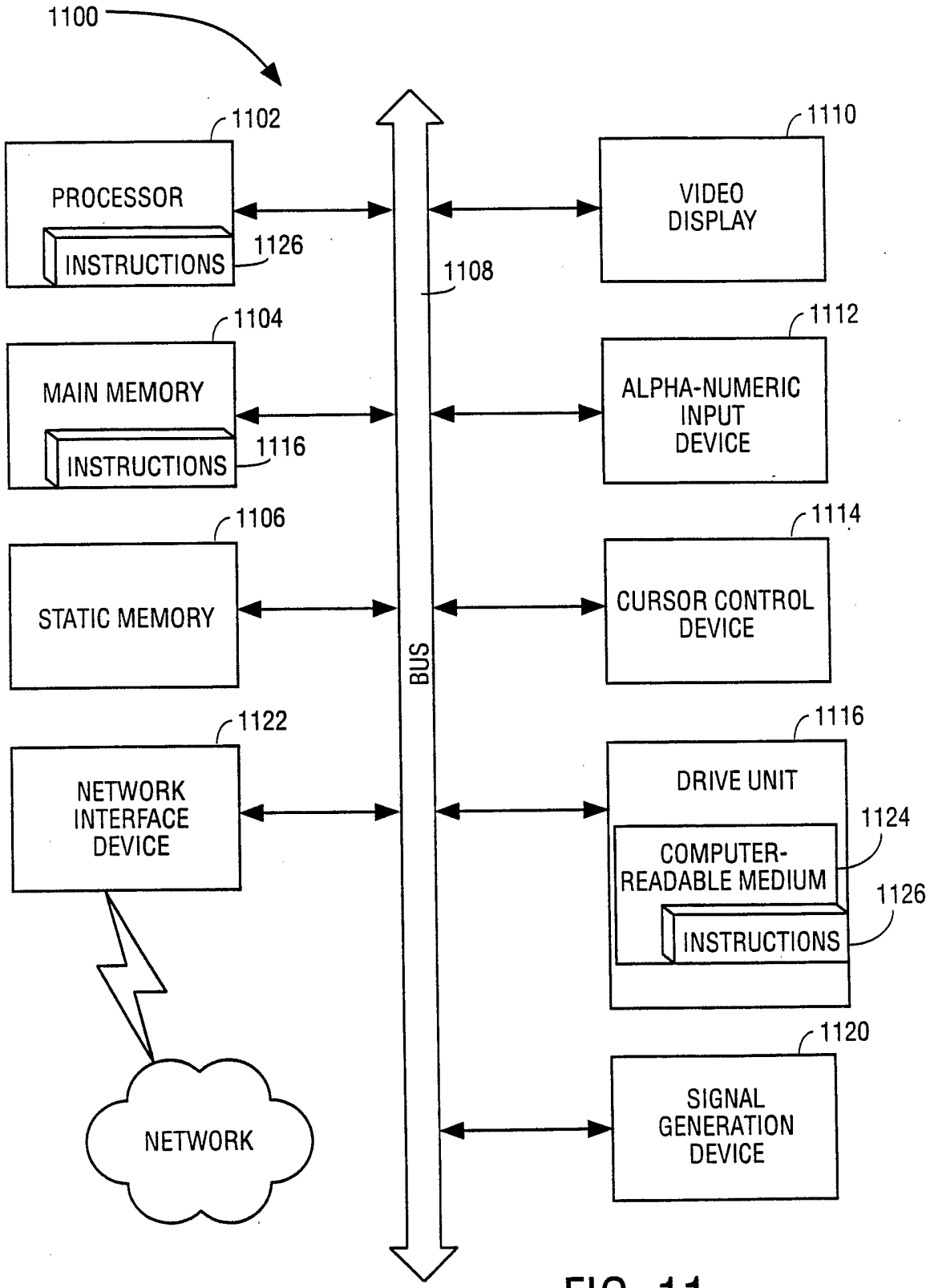
1100
1102
PROCESSOR
INSTRUCTIONS
1126
1104
MAIN MEMORY
INSTRUCTIONS
1116
1106
STATIC MEMORY
1122
NETWORK INTERFACE DEVICE
NETWORK
BUS
1108
1110
VIDEO DISPLAY
1112
ALPHA-NUMERIC INPUT DEVICE
1114
CURSOR CONTROL DEVICE
1116
DRIVE UNIT
1124
COMPUTER-READABLE MEDIUM
1126
INSTRUCTIONS
1120
SIGNAL GENERATION DEVICE

FIG. 11

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US03/04526

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G06F 17/30
US CL : 707/10

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

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 707/10

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

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

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,796,395 A (DE HOND) 18 August 1998 (18.08.1998), see entire document, especially Figures 6-15	1-16, 20-25, 38-41, 44-54, 56-58
A,P	US 6,480,885 B1 (OLIVIER) 12 November 2002 (12.11.2002), see entire document.	1-58
A	US 6,272,467 B1 (DURAND et al) 07 August 2001 (07.08.2001), see entire document.	1-58
A,P	US 6,029,195 A (HERZ) 22 February 2002 (22.02.2000) see entire document	1-58

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

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
24 April 2003 (24.04.2003)	06 MAY 2003
Name and mailing address of the ISA/US Commissioner of Patents and Trademarks Box PCT Washington, D.C. 20231 Facsimile No. (703)305-3230	Authorized officer Safet Metjahic Telephone No. (703) 308-1436

Form PCT/ISA/210 (second sheet) (July 1998)