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CA 2527169 A1 2004/12/23

(21) 2 527 169

(12) DEMANDE DE BREVET CANADIEN
CANADIAN PATENT APPLICATION

(13) A1

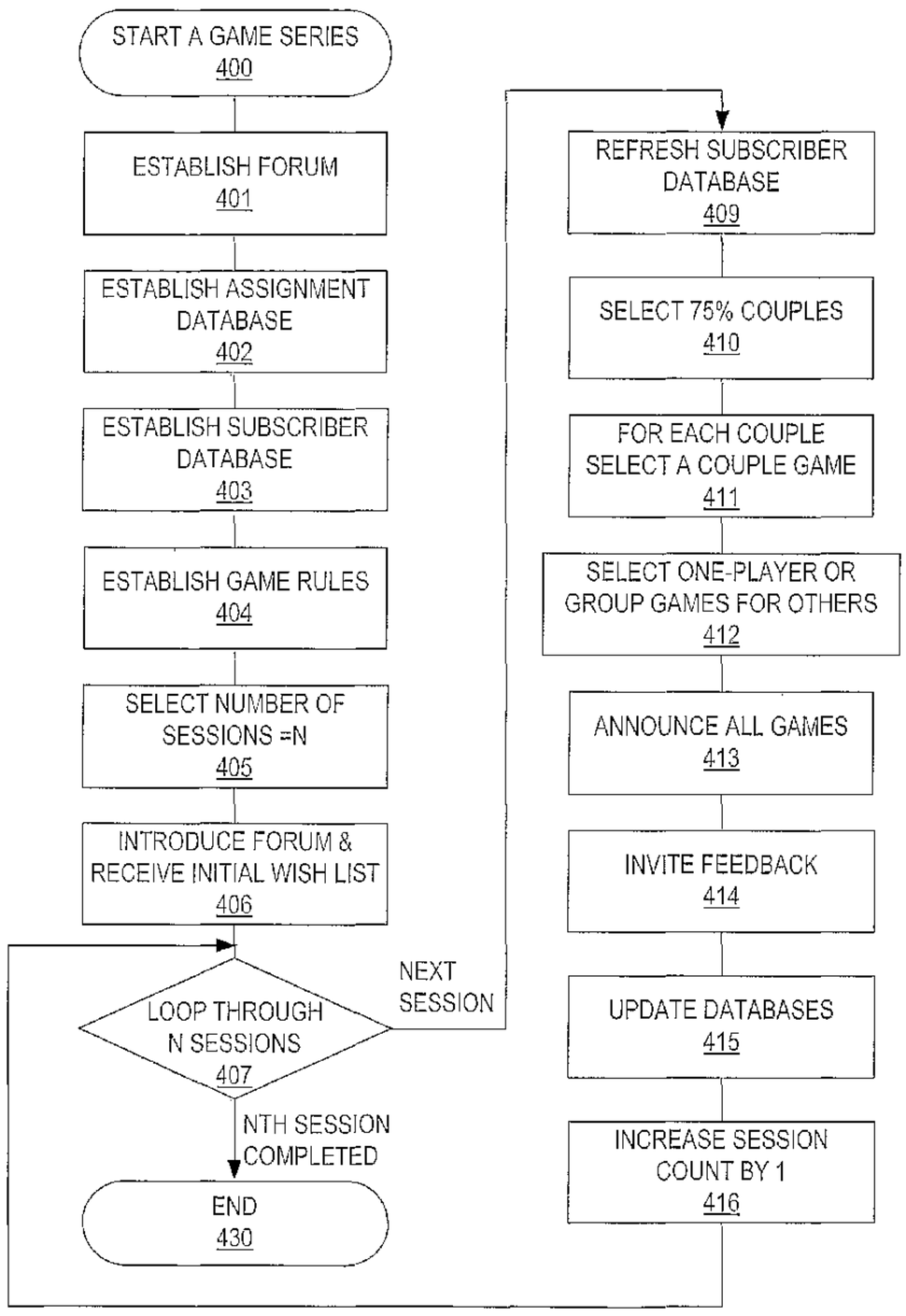
(86) Date de dépôt PCT/PCT Filing Date: 2004/06/09
(87) Date publication PCT/PCT Publication Date: 2004/12/23
(85) Entrée phase nationale/National Entry: 2005/11/24
(86) N° demande PCT/PCT Application No.: IL 2004/000485
(87) N° publication PCT/PCT Publication No.: 2004/111747
(30) Priorités/Priorities: 2003/06/15 (60/479,007) US;
2003/08/15 (60/496,242) US; 2004/05/07 (10/841,268) US

(51) Cl.Int./Int.Cl. *G06F 17/30* (2006.01)
(71) Demandeur/Applicant:
SOULGAMES LTD., IL

(72) Inventeur/Inventor:
TEICHER, MORDECHAI, IL

(74) Agent: EVERITT, PETER R.

(54) Titre : APPAREIL ET PROCEDE DE GESTION DE JEUX DE SOCIETE
(54) Title: APPARATUS AND METHOD FOR MANAGING SOCIAL GAMES



(57) Abrégé/Abstract:
An apparatus and method for managing inter-personal activities to facilitate matchmaking between single individuals, by instructing each individual what to do and with whom during a series of game (404) sessions. Singles join a forum (401) in which a plurality of activities contained in a database (402) are individually assigned to participants, who confidentially express their preferences for

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(57) Abrégé(suite)/Abstract(continued):
specific activities and for other participants with whom to conduct activities. Expressed preferences are not disclosed to other individuals, but are input to a secure computer system that assigns the activities. Participants' wish-lists (406) influence assignments made by the computer, and random factors provide variety and protect privacy by obscuring the effect of the wish-lists (406). After each assignment, participants can update their wish-list to affect further assignments.

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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number
WO 2004/111747 A3

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

(21) International Application Number: PCT/IL2004/000485

(22) International Filing Date: 9 June 2004 (09.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

60/479,007	15 June 2003 (15.06.2003)	US
60/496,242	15 August 2003 (15.08.2003)	US
10/841,268	7 May 2004 (07.05.2004)	US

(71) Applicant *(for all designated States except US)*: **SOUL-GAMES LTD.** [IL/IL]; Creative Inputs Ltd., Att: Mordechai Teicher, P.O.Box 991, Kfar-Saba 44109 (IL).

(72) Inventor; and

(75) Inventor/Applicant *(for US only)*: **TEICHER, Mordechai** [IL/IL]; Creative Inputs Ltd., P.O.Box 991, 44109 Kfar-Saba (IL).

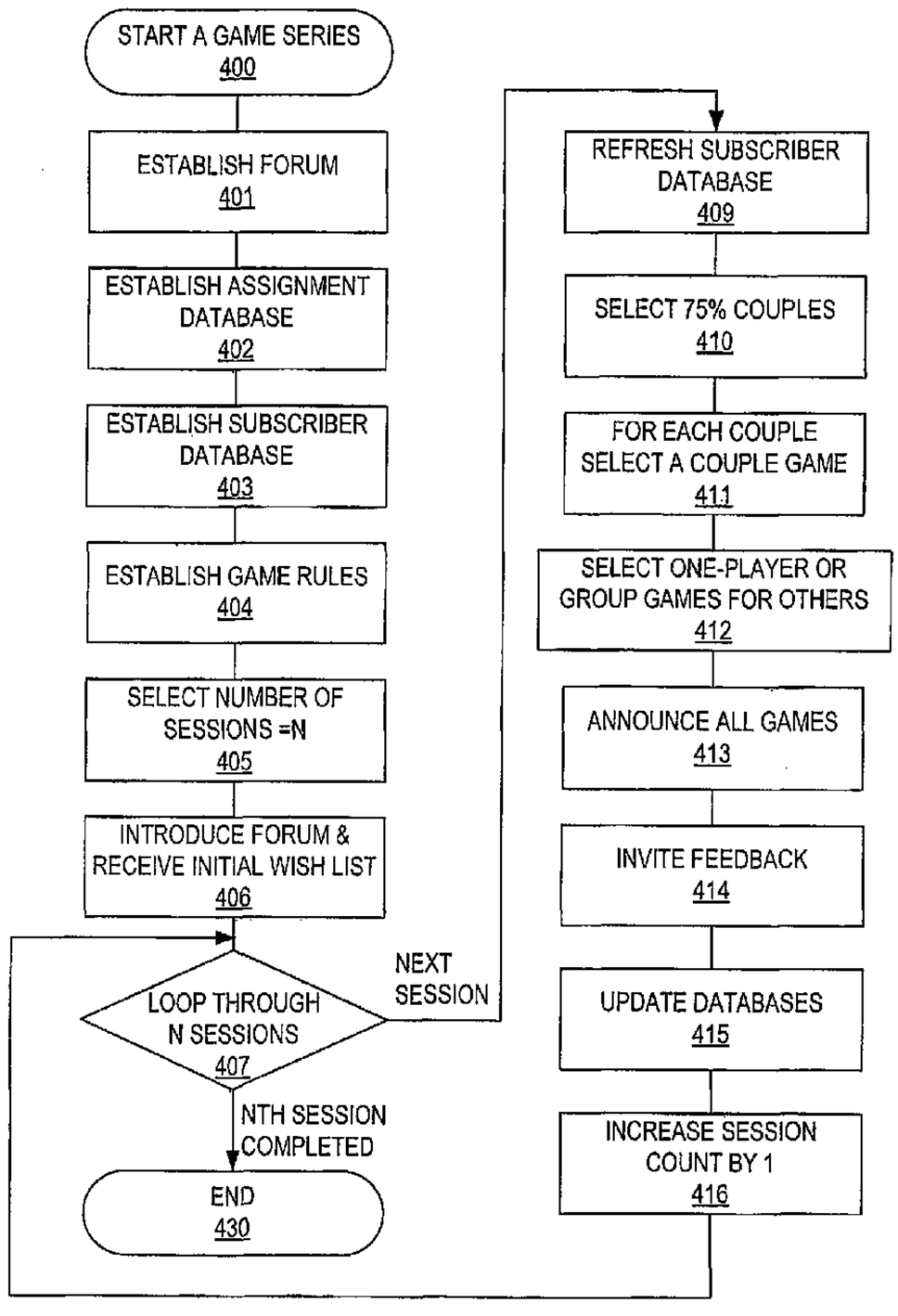
(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,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

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,

[Continued on next page]

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WO 2004/111747 A3

WO 2004/111747 A3

SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*

— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
10 November 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

APPARATUS AND METHOD FOR MANAGING SOCIAL GAMES

BACKGROUND OF THE INVENTION

FIELD OF THE INVENTION

The present invention relates to computer-aided social activities, and in particular to computer-aided interpersonal activities for matchmaking.

DESCRIPTION OF RELATED ART

Men and women seek mates for companionship, falling in love, and establishing a happy family. Some are fortunate to obtain a suitable mate by happenstance, but many others experience difficulties and may be unsuccessful. The three main obstacles to obtaining a suitable mate are:

- Not having enough opportunities for meeting eligible prospective mates;
- Having opportunities for meeting eligible prospective mates, but making the wrong choices in mate selection;
- Making a suitable choice of a prospective mate, but failing to initiate a relationship.

Many commercial and non-commercial initiatives for arranging singles meeting opportunities have promoted singles' parties, bars, cruises, weekends, trips, video introductions, Internet dating, mobile chats, blind dates, and so forth, all of which suffer from one or more of the following drawbacks:

- Event attendees are judged principally by superficial first-impressions, which favor only a small minority of men and women; the great majority require a second look to appreciate. As a result, it often happens that relatively few attractive men and women become the prime target of the attendees of the opposite sex, leaving the majority of attendees ignored by one another.
- One-on-one first meetings are often disappointing, leading to feelings of awkwardness. Often, the interest of one party may not be reciprocated, leading to embarrassing situations, where one party must reject the other. In some cases, the rejected party may continue to make annoying advances to the other.

- Approaching and communicating with a stranger is embarrassing for many people, who are unable to appear at their best under such circumstances.
- Women are sometimes offended by the way in which they are approached. Some women also find it difficult to approach men.
- Even after a successful first date that created mutual interest for a second date, many people fail to further develop a mutual interest toward intimacy and love. This often happens in spite of having a true potential for becoming a successful couple.

Many innovators have proposed schemes for presorting singles according to predefined criteria, for introducing them to each other conveniently, and for facilitating the initial interaction, by using the Internet, cellular communication, or sophisticated matchmaking algorithms. Examples for such initiatives are included in PCT publication 00/62266 to Liberman et al.; US patent 5,950,200 to Sudai et al.; US patent application publication 2002/0040310 to Lieben et al.; US patent application publication 2002/0160339 to King et al.; PCT publication 01/37232 to Pfeil; US patent application publication 2003/0087700 to Wei; and US patent 5,963,951 to Collins. However, currently-available schemes do not provide a comprehensive solution for simultaneously overcoming the three obstacles noted above, by concurrently offering meeting opportunities, helping participants make workable choices, and facilitating the start of relationships.

"Speed dating", a relatively-new dating method, made an important step forward. It is based on systematically arranging short (3-8 minute) introductory meetings among strangers. An equal number of, say, 20 men and 20 women, register for an event that takes place in a restaurant, a bar or a café, around 20 tables. They are identified by name tags displaying only a nickname, with full names and contact details expressly excluded. Participants are prescheduled to have brief meetings with other participants of the opposite sex, to introduce themselves and make an impression. Once the predetermined number of meetings has taken place and many participants have been introduced to those of the opposite sex, an optional conventional party is held. At the end of the event, participants report to the organizers, via a paper form or electronically, which of the parties of the opposite sex they would like to date conventionally, for romantic purposes, platonic friendships or business connections. The organizers then report to the participants, usually the next day, of successful matches, including exchanging their contact details, and participants then call each other and thereafter conduct conventional relationships.

Speed dating eliminates some of the obstacles of the prior dating methods, primarily the burden of unsuccessful first dates, the embarrassment of making a first approach to a stranger, the need to expressly reject others, potential unwanted advances, and the asymmetry between men and women. However, speed dating still suffers from reliance on superficial first impressions, and thus fails to offer the chance to make a second impression, which is so critical for the majority of men and women. Speed dating not only does nothing to facilitate forming a relationship beyond the first mutual introduction, but also misses possible matching opportunities that could result from a second chance within the same group. Take the case, for example, where a man has selected two women, but neither has reciprocated by selecting him. First, he comes away from the event with nothing. Second, he may have overlooked a third woman because of his focus on the selected two. And third, one or both of the two women he originally selected may have developed an interest in him upon a second meeting. In short, speed dating eases the pain in a first meeting with strangers, but does very little to help the strangers in developing interest in each other.

There is thus a widely recognized need for, and it would be highly advantageous to have, a means whereby single people can meet and become acquainted with prospective mates in a comfortable setting that is conducive to the proper selection of a prospective mate, which responds to the needs of the majority of men and women who require a second impression for knowing and getting known by each other, which facilitates the forming and growth of solid inter-personal relationships, and which does not have the drawbacks and limitations of present methods. This goal is met by the present invention.

BRIEF SUMMARY OF THE INVENTION

DEFINITIONS

The terms "subscriber" and "participant" herein denote an individual person or an established couple undertaking to participate in games according to the present invention, for interpersonal interaction with other subscribers. Primarily, in most of the preferred embodiments described herein, a subscriber is a person seeking a mate of the opposite sex. However, a subscriber can also be a person seeking a mate of the same sex, or an established couple seeking companionship with other established couples.

The term "forum" herein denotes a closed group of subscribers from whom game participants can be selected by the system of the present invention. A forum can exist within a

short-term event such as a party or a cruise; or within a long-term framework, such as a club of participating singles within a metropolitan area, who wish to interact with others in their free time. Sometimes a large group of subscribers — a "community" — can be divided into several distinct forums, each forum managed separately and autonomously according to the present invention; such division may be made on the basis of the subscribers' profiles or interests, or just randomly for easing the acquaintance between the forum members and making the games more effective.

The term "game assignment" also abbreviated "assignment" herein denotes a specification of an interpersonal activity to be performed by a subscriber, in front of or cooperatively in combination with other subscribers. Typically an assignment indicates what, when, where, and how activities are to be performed, and sometimes may also specify what is excluded and prohibited. The term "face-to-face assignment" denotes a direct personal interaction among participants, and the term "virtual assignment" denotes interaction among participants via electronic communication.

The term "game" herein denotes a selected forum subset of one or more subscribers, with a "matched" game assignment, which is a coordinated identical or complementary assignment, assigned to each selected subscriber of the subset. Often, a game is a "couple game" involving a pair of subscribers having matching "couple assignments", or a "group game" involving more than two subscribers. A "game series" herein denotes an ordered plurality of games.

The term "score" or "rank" relates to a participant expressing his or her relative level of interest for prospective mates or for an assignment in which he or she wants to participate, respectively. A high score for another participant expresses high interest in interacting with that participant, while a high rank for a specific assignment expresses high interest in performing that assignment.

The term "personal wish-list" or "wish-list" herein denotes an input from a subscriber that is entered electronically into the system of the present invention, for scoring prospective mates and/or ranking assignments. Typically, the personal wish-list addresses both with whom the subscriber wishes to interact and what assignments are preferred for such interaction.

In the context of the present invention, the term "prospective mate" is used to denote any participant who is conditionally eligible to become a mate for another given participant. A prospective mate is subject to further evaluation and may be disqualified, whereas an actual mate is considered to be someone with whom a long-term commitment is made. In some places,

such as in the drawings, the term "mate" is used alone for simplicity, it is being understood that this term denotes the concept of a "prospective mate" rather than an actual mate.

BRIEF SUMMARY

The present invention provides systems and operational capabilities for a series of computer-aided games that are entertaining by themselves, and which enable singles to get to know other singles in a positive, encouraging atmosphere.

The system of the present invention can also operate to facilitate acquaintance and companionship among established couples.

A specific object of the present invention is to allow singles to initiate a contact with preferred prospective mates without disclosing their choices and wishes to others, including their preferred prospective mates.

Another object of the present invention is to give singles a chance to know and to become known by other singles who, upon initial meeting, might not be their first choice for a prospective mate; but who, upon further encounter, would be found worthy of consideration as a prospective mate.

Still another object of the present invention is to reduce the risk of embarrassment when meeting and approaching new prospective mates and either initiating a successful interaction with them or discontinuing the interaction because of disinterest.

Additionally, the present invention seeks to provide singles with the opportunity to showcase their personal qualities by entering preferences for assignments that emphasize and highlight such qualities. Also, participants may select games that reveal qualities that are important to them in the selection of a prospective mate.

Furthermore, the present invention seeks to provide equality between men and women regarding opportunities for approaching each other, to overcome traditional asymmetries that may exist in certain cultures or societies.

Also, the present invention seeks to support both face-to-face and virtual meetings, and combinations thereof.

In addition, the present invention seeks to foster the initiation of mutual affection, in a cautious and effective manner, between participants who have already developed mutual interest. Thus, a series of games with the participation of mutually-selected mates is preferably

devised with an evolving order of intensity and intimacy and according to the preferences of the participants, to highlight their best qualities and build the relationship.

Broadly, the present invention provides a computer-assisted game environment that allows participants to discretely specify their preferences of whom they would like to approach and how they would like to make the approach, without disclosing their preferences to others, while still influencing the upcoming events according to those preferences.

There is thus provided, according to a preferred embodiment of the present invention, an apparatus for managing a series of social games for a plurality of subscribers, including: a first database containing a plurality of game assignments; a second database containing a personal wish list for each of the subscribers; a processor responsive to the second database for picking at least one subscriber from the plurality of subscribers, and assigning to each of the picked subscribers a selected game assignment from the first database; and an input port for receiving from each the picked subscribers, after completion of the game assignment, an update to the respective personal wish list, to selectably affect the picking and assigning operations with respect to a next social game in the series. The apparatus preferably includes a random number generator to facilitate the picking and assigning operations. When two subscribers are picked by the apparatus for a couple game, the picking is preferably affected by their mutual attraction, calculated from their mutual scores in their respective wish lists; the game selected for such a couple is preferably affected by the ranks set by the two participants for the game assignments of the first database. Couple games are based on matched game assignments which are either identical or complementary. Games can be executed within a face-to-face meeting, or virtually via electronic communication.

Subscribers use user terminals to send their wish lists to and receive game assignments from the apparatus. A specific embodiment adapted for a televised reality show is implemented by adding TV cameras and a broadcast system to share the games and wish list with an audience, upon the participants' approval.

Also, a method for participating is social games is described. Participants use user terminals to send their personal wish list with respect to preferred mates and preferred game assignments, and to receive is return game assignments with other participants in accordance to the personal wish lists. Also, a computer-implemented software product is described to read subscribers' wish lists and pick subscribers and assign game assignments in accordance to the wish lists.

BRIEF DESCRIPTION OF SEVERAL VIEWS OF THE DRAWINGS

The invention is herein described, by way of example only, with reference to the accompanying drawings, wherein:

FIG. 1 is a block diagram of a preferred embodiment of a system in accordance to the present invention.

FIG. 2 is a block diagram of a game generator that forms part of a preferred embodiment of the present invention.

FIG. 3 is a schematic illustration of the content of an assignment database included in a game generator according to a preferred embodiment of the present invention.

FIG. 3A is a schematic illustration of the content of a record from the assignment database.

FIG. 3B is a schematic illustration of an assignment categorization within the assignment database.

FIG. 3C is a schematic illustration of another assignment categorization within the assignment database.

FIG. 4 is a schematic illustration of the content of a personal record of the subscriber database according to a preferred embodiment of the present invention.

FIG. 4A is a table illustrating an exemplary scoring of prospective mates.

FIG. 4B is a table illustrating an exemplary ranking of assignments.

FIG. 4C is a table illustrating another exemplary ranking of assignments.

FIG. 5 is a schematic illustration of game rules according to a preferred embodiment of the present invention.

FIG. 6 is a flowchart of a registration process in a preferred embodiment of the present invention.

FIG. 7 is a flowchart of an update process in a preferred embodiment of the present invention.

FIG. 8 is a flowchart of a game procedure within a preferred embodiment of the present invention.

FIG. 9 is a flowchart of a game procedure within an alternative preferred embodiment of the present invention.

FIG. 10 shows three tables containing selection strategies of couples according to a preferred embodiment of the present invention.

FIG. 10A shows three tables containing selection strategies of assignments according to a preferred embodiment of the present invention.

FIG. 11 is a flowchart of a game session according to an embodiment of the present invention.

FIG. 12 is a flowchart of a game selection procedure according to an embodiment of the present invention.

FIG. 13 is flowchart of a process for generating a series of games according to a preferred embodiment of the present invention.

FIG. 14 is a schematic illustration of a structure of frameworks for an embodiment of the present invention.

FIG. 15 is a schematic block diagram illustrating an arrangement of computers for implementing the structure of FIG. 14 according to an embodiment of the present invention.

FIG. 16 is a schematic block diagram illustrating a setup for a televised reality show based on the games of the present invention.

FIG. 17 is a schematic block diagram illustrating call routing techniques that can be employed for preferred embodiments of the present invention.

FIG. 18 is a schematic illustration of personalization of subsets of assignments for advanced couple games according to a preferred embodiment of the present invention.

FIG. 19 is a flowchart illustrating advanced couple games according to a preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The principles and operation of a system for managing interpersonal activities according to the present invention may be understood with reference to the drawings and the accompanying description.

OVERVIEW

The system of the present invention provides a service to subscribers by arranging games in which one or more subscribers participate. The games are designed to exhibit the

advantageous and attractive qualities of the subscribers, to arrange meetings and interaction with preferred prospective mates, to provide equality of opportunity between women and men, to induce a romantic and adventurous atmosphere that encourages a personal connection between matching participants, and to build up relationships.

A game includes a game assignment assigned to a subscriber, possibly in coordination with matched game assignments assigned to other subscribers. A non-limiting example of an assignment for a single subscriber is to sing on stage in front of other subscribers during a party, while implicitly, other participants are assigned to listen to that singer. Non-limiting examples of a game for two subscribers are building a snowman together, interviewing strangers together, walking in the park for 30 minutes, or playing tennis. Non-limiting examples of a game that involves a plurality of couples include competitions among couples, such as a couples' tennis match or a trivia quiz. A non-limiting example of a game involving many subscribers is participating in a specific party or journey organized for mutual acquaintance. The content of the game assignment database is constantly evolving, and is limited only by the imagination. A good assignment is one that exhibits the advantageous qualities of the participant, encourages cooperation and teamwork, and is enjoyable and entertaining.

Games arranged according to the present invention can take place under a variety of circumstances. Games can be arranged within the context of a party, a cruise or a singles' weekend, or can be organized within the participants' free time during the work week, for example after business hours or at lunch time. They can also take place virtually, through the Internet or the telephone.

Subscribers register to become members of a forum. During registration they preferably enter their personal details and initial wish-list into the system. Preferably, they also sign a contract and commit to obey the forum's rules regarding behavior toward other participants. One of the rules preferably stipulates avoiding contact with other forum members except as instructed by the system through specific assignments.

The system of the present invention tells subscribers what to do and with whom, relieving them from the need to be original in their approach, and giving them encouragement, via a "reason" to approach others. Also, equality of opportunity between women and men is supported, allowing women in all cultures and societies to approach men without appearing aggressive, forward, or unfeminine.

A central element of the present invention is a personal wish-list entered and continually updated by each subscriber, which affects the system's selection of prospective

mates and assignments. Such a wish-list preferably includes scoring the subscriber's interest in other subscribers, as well as ranking the subscriber's interest in specific assignments. Based on the individual wish-lists, the system assigns game assignments to the subscribers. The system gives higher probability to assignments between subscribers who prefer the company of each other, lower probability if only one expresses interest in the other, and even lower probability for engaging couples who are neutral to each other, provided that neither has designated the other as unacceptable. Then, after each game is concluded, the participants are preferably invited to enter their feedback by updating their wish-list. Thus, if two neutral participants discover a liking for each other during the game, they discretely upgrade the scoring of their prospective mate, which increases the probability of meeting the same prospective mate again in subsequent games. On the other hand, one may mark his or her previous game partner as unacceptable, avoiding further interaction with that same person.

An important preferred feature of the present invention is in protecting the privacy of the subscribers. The wish-list of a subscriber is preferably kept confidential. The wish-list influences the selection of prospective mates and assignments by the system, but the preferred use of a random factor in the game selection algorithm prevents others from deducing a particular subscriber's wish-list from the visible assignments and associations. Thus, a subscriber can tell the system discreetly that he or she wishes to avoid the company of another subscriber, and never need again interact with that subscriber. This is done, however, without having to tell the other subscriber directly, and without other subscribers being able to definitely determine this preference. The opposite is also true: a subscriber can highly increase the probability of interacting with another subscriber as a prospective mate, and/or request a more daring assignment with that prospective mate, without revealing his or her feelings to any of the other subscribers. In addition, the wish-list is preferably not accessible by anyone other than the subscriber himself/herself — even the forum organizers and operators are preferably not able to access this information. In order not to disqualify subscribers that may benefit from a "second look" for appreciating their qualities, the rules preferably limit the number or percentage of subscribers one is allowed to exclude as unacceptable.

Often, a couple of subscribers that has developed a liking for each other during their interactions may decide to quit their membership in the forum, because they wish to continue to develop their relationship independently by themselves outside the forum. This may be exercised by the two assigning a "most preferred" status to each other and mutually selecting to

"retire from the forum with my most preferred prospective mate" as their preferred next assignment. Such events are the ultimate success of the system of the present invention.

A forum according to the present invention can also be configured to match established couples who seek companionship to form a long term company. It can also be configured to match persons of the same sex. Or, a forum according to the present invention can be established and configured for entertaining singles and/or established couples, rather than for creating a framework for matchmaking. In all above cases, it is necessary only to adapt the assignments and the game rules to attain the desired atmosphere and results.

SYSTEM DESCRIPTION

Reference is made to **FIG. 1**, which shows a preferred embodiment **100** of the present invention. Game generator **110** is the heart of the system. It is a computer that communicates with subscribers through user terminals **120**, which include personal terminals **123** and/or public terminals **125**, and is controlled by the forum organizer via a manager terminal **130**. The term "computer" herein denotes any data processing device or system, including, but not limited to personal computers (PCs), data networks and Internet servers. Personal terminal **123** is a device that is personal to a subscriber for allowing data entry into and/or data reception from game generator **110**. Examples of personal terminal **123** include, but are not limited to, cellular telephones with short message service (SMS) capability, one-way and two-way pagers, and personal computers of all types and sizes connectable to the Internet, to a cellular telephony network, to a cellular wireless data network, or to a local wireless network using short-range IR or RF communication (the latter case being useful especially for preferred embodiments of the present invention that are implemented within a confined small area). If virtual assignments are included, personal terminals **123** are also used for subscriber-to-subscriber communication, which adds devices such as land telephones and video phones in the list of optional personal terminals **123**. Public terminal **125** is any input and/or output device accessible to more than one subscriber and allowing data entry into and/or data reception from game generator **110**. Non-limiting examples include a public computer allowing a subscriber to communicate with game generator **110** via the Internet or a local network, by identifying himself or herself by username and password (or an alternative user authentication means); a video screen; a video projector; a printer printing game details; or a public address system used to announce games within a party. It will be appreciated that in some embodiments a subscriber may use various communication options, for example enter his/her personal record via a home PC **123** connected to the Internet,

update his/her wish-list by sending an SMS message from cellular telephone **123** to game generator **110**, and read the details of his/her next game on a large video screen **125** within a party site. Manager terminal **130** allows the forum organizer to customize, enter and update assignments and game rules, monitor games, and intervene or veto in exceptional cases, for instance when an outdoors assignment is impossible due to current weather conditions. Communication links **101** and **107** may include all kinds of wired and wireless communication means known in the art, capable of carrying signals between game generator **110**, manager terminal **130** and user terminals **120**.

Reference is now made to **FIG. 2**, which illustrates game generator **110** in more detail. A processor **160** includes a computer programmed to run a game program **165** which generates games by assigning assignments from an assignment database **150** to subscribers from a subscriber database **140**, according to subscriber wish-lists **145** included in personal records **141** and to game rules **170**. Processor **160** preferably includes a random number generator **160R** for including a random factor in the selection of game participants and/or assignments, which facilitates selections of assignments and participants and protects the privacy of subscribers by masking their wish-lists; thus, from a game assigned to a subscriber one cannot determine with certainty whether the associated assignment or partner were preferred in that subscriber's wish-list or just selected randomly by processor **160** using random number generator **160R**.

Subscriber database **140** includes, for each subscriber, personal record **141**, entered by the subscriber upon subscription and being updated regularly, in particular to refresh the subscriber's wish-list **145** in response to the results of recent games; the subscriber inputs are made using user terminals **120** and are received thorough input port **175** and communication link **101**. Assignment database **150** includes assignments **151**, and game rules **170** include rules **171**; both are optionally customized by the forum organizer using manager terminal **130**, and are received via control port **177** and communication link **107**. Output port **176** is used to announce the games generated by processor **160** by sending game details to user terminals **120** via communication link **101**. Guide database **182** includes viewable and/or printable files with guides for forum organizers and subscribers, providing guidelines, ideas and tips to make the games more effective. Such guides are distributed when appropriate by processor **160** via manager terminal **130** or user terminals **120**. Call router **180** is optionally included for cases where the system of the present invention is applied to manage virtual games, to allow subscribers to communicate with each other while masking their contact details (e.g. cellular telephone number or email address), as illustrated in more detail in **FIG. 17**.

It will be appreciated that the blocks described in **FIGS. 1-2** are logical rather than physical entities, and can be implemented using a variety of suitable hardware, operating systems and database software known to persons skilled in the art. Moreover, they can be hosted on computer networks, and even have a single block spread over more than a single computer; in particular, personal record **141** may have the personal wish-list record **145** hosted on a different computer from the one hosting the other contents of the record, for functionality or privacy reasons. Also, the system can be compacted, even to the extreme case of an all-in-one configuration, wherein a single personal computer is used to implement the functionalities of game generator **110**, manager terminal **130,** and user terminals **120** materialized as a public terminal **125**.

THE GAME ASSIGNMENT DATABASE

An important feature of the present invention is a collection of a plurality of game assignments, collectively devised to highlight the participants' qualities, to create mutual interest, to encourage togetherness, to induce a romantic and adventurous atmosphere, and to entertain. The term "assignment database" herein denotes any such collection of a plurality of game assignments that is accessible to a computer, as defined herein. Assignments are categorized into face-to-face assignments where a participant directly meets other participants, and/or virtual assignments, where a meeting between participants takes place over a communication link such as Internet mail or chat, telephone calls, or SMS messages.

FIG. 3 illustrates assignment database **150** in more detail. It contains assignments **151** in various assignment categories such as one-player assignments **151A**, couple assignments **151B** (including competitions among two or more couples **151C**), and multiple-player assignments **151D**.

One-player assignments **151A** are designed to exhibit an individual's talents and personality to a plurality of subscribers. Thus, in one-player assignment other subscribers are implicitly assigned as an audience. Non-limiting examples of one-player assignments include:

- Singing on stage;
- Organizing and leading a journey;
- Telling a story to a group of listeners;
- Serving a home-baked cake;

- Composing a poem on a specified theme and distributing it electronically to the forum members within a specified schedule (virtual assignment).

Couple assignments **151B** are designed to acquaint prospective mates with one another and encourage togetherness and cooperation. Non-limiting examples include participating in:

- Building a snowman;
- Meeting for lunch;
- Walking in the park for 30 minutes;
- Playing tennis;
- Rehearsing and performing a song on stage, where one sings and the other plays the piano;
- Inviting the other to a home-cooked meal;
- Playing chess over the internet (virtual assignment);
- Chatting over a cellular phone on a specified topic for a predetermined amount of time while driving to work, when the participants are simultaneously called and guided by the game generator (virtual assignment).

Couple competition assignments **151C** are a subset of couple assignments **151B**, devised to further encourage togetherness and cooperation by a participating couple by competing against other couples. Non-limiting examples include participating in:

- A multiple-couple trivia quiz;
- A tournament of couples-tennis matches;
- Dance competition;
- A multiple-couple trivia quiz over the Internet (virtual assignment).

Multiple-player assignments **151D** involve a number of individuals and introduce them to each other when they are not yet ready to select a prospective mate or be selected as a prospective mate, or when the system could not assign them a prospective mate in a current game session. Some non-limiting examples include participating in:

- Having a picnic in the park and discussing free press;
- Going on a one-day cruise and studying folk dancing;
- Volunteering to entertain children in the hospital via predefined teams and roles;
- Seeing a movie and discussing it afterwards;
- Playing a role-game, wherein each participant has a pre-assigned role, such as in a theater play or in a simulation of real-life situations;

- Having a group discussion in an Internet chat room on a specified theme (virtual assignment).

It will be appreciated that games are composed of matched assignments, i.e. assignments that are identical or complementary and are executed in a coordinated manner. Thus, to further game formation the assignments from database **150** are further fine-tuned to include additional details of where, when, with whom and how, as well as definition of complementary roles in the appropriate cases, such as who is playing the piano and who is singing.

FIG. 3A shows the contents of each record **152** of an assignment **151** from assignment database **150**. Detailed description **152A** is a field describing the assignment in detail. When sent to a subscriber, this information, with added details pertaining to specifics such as partner identification, place, time and matched roles, where appropriate, explains to the subscriber how to participate. In the case where the respective game is composed of complementary, non-identical assignments, field **152A** includes the respective variations. Field **152B** indicates the assignment category from fields **151A-151D**. Fields **152C** and **152D** specify the intensity and intimacy levels, respectively, that are pre-assigned to each assignment, in the scale of, say, 1-5; this allows the system to escalate interpersonal interaction by assigning lighter assignments to a couple in their first meeting, and gradually increasing the level of intensity and intimacy for the next mutual meetings; thus, building a snowman can be assigned, for example, intensity 2 and intimacy 2, walking in the park is assigned intensity 1 and intimacy 3, and man inviting a woman for a dinner he cooked can be assigned intensity 3 and intimacy 4. Assignments with higher levels of intensity and intimacy can be also adapted to couples which have reached a predefined mutual attraction score, as discussed regarding **FIGS. 5** and **10** below. Also, the intensity rating can be calibrated for participants in assignments that involve face-to-face meetings, when the system realizes that they reside far away from each other; thus, meeting for a cup of coffee could be rated at intensity level 1 for participants who are neighbors, but rated at intensity level 4 for participants who need to travel 40 miles to meet. Also, in an exemplary embodiment, the intensity of all face-to-face assignments can be temporarily upgraded if the forum organizer recognizes that harsh weather conditions suggest a preference for virtual assignments.

It will be appreciated that both the list of categories and the specific assignments of assignment database **150** described above are exemplary only, and assignment database **150** is expected to be ever-evolving and continually updated. It will be noted also that assignment

database **150**, as well as a subset actually shown and offered to each specific subscriber, may change between game sessions in accordance to weather conditions, the level of mutual acquaintance among participants selected for the same game, and personal profiles.

FIG. 3B demonstrates symbolically that assignments within database **150** can include face-to-face assignments **151F** and/or virtual assignments **151V**, which respectively relate to direct personal interaction among participants and interaction among participants via electronic communication.

FIG. 3C demonstrates symbolically that matched assignments **151′** within database **150** that are adequate for couple or multiple-player games can include identical assignments **151″** (e.g. a couple building a snowman together) and/or complementary assignments **151‴** (e.g. the assignment of the man is to invite the woman to a dinner he cooked and to cook that dinner, while the assignment of the woman to agree to be invited and then join him for that dinner).

FIG. 4 illustrates a personal record **141** from subscriber database **140**, including a subscriber ID record **142**, which is unique within a forum. This ID is preferably used for all system transactions related to a specific subscriber. The ID can be, for example, a serial number assigned by the system, or a nickname chosen by the subscriber and checked by the system for uniqueness. It may be printed on badges borne by party participants, or be included in a subset of the subscriber database that is made accessible to the forum members and includes IDs and photos. Personal data record **143** includes all the usual personal details that generally categorize a person, such as name, age, sex, profession, marital status, height, hobbies, smoking habits, photo, and contact details. It also includes the subscriber terminal address, i.e., the specifics of user terminal **120** for sending assignments to the user, such as an email address, a cell phone number or a pager number, a log-in username and password, etc. If the forum allows games to take place during the week and not only within a specific event, the subscriber's free-time days and hours are indicated and updated as needed in personal data record **143** through user terminal **120**. Game participation history record **144** includes past games and partners, to enable processor **160** to take the past history into account when assigning new assignments, e.g. for avoiding the repetition of assignments or for minimizing the probability that poor mutual connections are repeated.

Personal wish-list **145** is central to the present invention since it allows a subscriber to influence the assortment of partners and assignments assigned to him or her by the system, by scoring prospective subscribers and assignments. The scoring system described below uses the scale of 0-9 (one decimal digit) to facilitate compact scoring protocols when cellular SMS or

DTMF messaging is used, as explained in more detail below. Wish list **145** includes prospective mate scores, which is a table tying a score (0-9) to the ID of each potential prospective mate. If a subscriber has identified a unique partner with whom he or she would like to spend time, that partner is scored '9' in table **145M**. Rules **170** then highly increase the probability of the subscriber's next game involving the selected mate, especially if a symmetric selection has been made by that prospective mate in his or her wish-list **145**. While preferably only one subscriber ID can be scored '9' by each subscriber, any number of other score figures can be entered into table **145M** with respect to other subscribers, affecting the probability of meeting one of them. Score of '0' identifies "unacceptable" or "excluded" prospective mates that the present subscriber does not want to meet, and accordingly will not be assigned to him or her by the system. Preferably, the number or percentage of excluded prospective mates entered into table **145M** is limited by the system, to reduce the probability of lockup situations, whereby a subscriber is excluded by all participants of the opposite sex not excluded by him or her. Preferably, all subscribers not specifically scored default to score '1', with a low but non-zero probability of being assigned for a mutual game. Since a few exceptionally-attractive people may be widely scored high by many other subscribers, only a few of them can have their first choice fulfilled, and many games thus involve prospective mates that were initially less interested in each other. After the game, each subscriber has a better and sounder opinion on his or her prospective mate, and has an opportunity to upgrade or downgrade the score of their recent partner. **FIG. 4A** describes an exemplary table **145M** filled in by Mary who presently scores Peter, Paul, John and Jim by '6', '1', '0' and '6', respectively.

Another part of wish-list **145** of **FIG. 4** is table **145A** which ranks the assignments from assignment database **150**. **FIG. 4B** describes a simplified table **145A-1** where Mary ranks assignments A, B, C, D, E, F, G, H from assignment database **150** by '0', '0', '9', '3', '4', '4', '2', '6', respectively, to affect the probability of these assignments being selected for her (obviously, the assignment details from database **150** are presented to Mary when scoring). **FIG. 4C** describes an alternative embodiment **145A-2** of table **145A** of **FIG. 4**; in this embodiment, assignments are ranked also with respect to the prospective partner. Thus, in this example, Mary highly prefers to have assignment C with Peter, while with Jim she prefers to share assignment E. The assignment ranking scheme of **FIG. 4C** allows more flexibility than this of **FIG. 4B**, but requires higher effort when filling-in the wish-list, making both schemes viable alternatives.

Typically, personal wish-list **145** is dynamic and is frequently updated by subscribers as a result of game experience and the addition of new subscribers and new game assignments, or simply according to a changing mood or weather.

It will be appreciated that the scoring and ranking paradigms described above are exemplary. Other scoring paradigms, for example assigning integer number in the range of 0-3 to indicate the prospective mate and game preferences in the scale of 'excluded', 'acceptable', 'preferable' and 'the most preferable', or using a non-linear scoring such as '0', '1', '6', '9' for same, are also possible and may make it easier for subscribers to select. Even a three-level scoring paradigm may be employed, for example for classifying others as 'excluded', 'acceptable' and 'the most preferable one'; however, additional levels are desirable to allow finer and more effective pairing. Such multi-level scoring paradigms encourage the participant to give a chance, determined by the score (i.e. by the relative level of interest), not only to a single attractive participant, but also to others that require (and hopefully deserve) a second look in order to be appreciated.

In addition, personal record **141** is preferably departmentalized, to separate between general personal data of fields **142-144**, and personal wish-list **145**. Personal wish-list **145** reflects the intimate wishes and desires of the subscriber, and is therefore preferably accessible only to user terminal **120** of the respective subscriber and to processor **160** for generating games. Preferably, it remains inaccessible to other subscribers, as well as to manager terminal **130**. Thus, in some embodiments of the present invention, personal wish-list **145** may reside on a separate storage device, or even on a separate computer for isolation from the rest of personal record **141**.

Reference is now made to **FIG. 5**, describing game rules **170**, which are part of game program **165** and influence the way processor **160** manages the system and makes game selections. Rules **171** are categorized into wish-list rules **171A**, prospective mate selection rules **171B**, and assignment selection rules **171C**. Rules **171** are optionally updateable by the forum organizer via manager terminal **130**.

Wish-list rules **171A** take effect when a subscriber enters or updates his or her wish-list **145** in personal record **141** via user terminal **120**. The wish-list rules are devised to prevent situations of game lockup, such as where all men could have selected the same woman as the most preferred prospective mate, and exclude all other women in the forum. Another game lockup situation would occur if all men selected a romantic dinner as their only acceptable assignment, while that particular assignment is unanimously excluded for the first assignment by

all women. It is intended that the wish-list rules encourage subscribers to participate in games that they would otherwise be too shy to play. Exemplary wish-list rules may include the following constraints:

- only one prospective mate can be scored '9' (most preferred) by any subscriber;
- no more than 50% of subscribers of the opposite sex from subscriber database **140** may be excluded (scored '0') by a subscriber;
- no more than 75% of assignments from assignment database **150** may be excluded by a subscriber.

Entries for wish list **145** that violate such rules are declined by processor **160** and the user is prompted to enter an alternative choice.

Prospective mate selection rules **171B** determine the way processor **160** selects game participants. Preferably, there are rules **171D** for making a first match and separate rules **171E** for determining a consecutive match following a mutual game. Non-limiting examples for a first game rule **171D** may include:

- assign the arithmetic sum of the scores for the mutual attraction score of each couple, except that '0' is assigned for mutual attraction if any of the individual scores is '0';
- make a mandatory selection of a couple whose mutual attraction score is '18', and assign a mutual assignment to both;
- randomly match and select any other couple with probability according to the mutual attraction score.

An example for implementation of these rules is illustrated below with respect to **FIG. 10**.

Here are some non-limiting examples for consecutive game selection rules **171E**, based on the scoring scheme example described with respect to rules **171D** above:

- keep a couple together when the mutual attraction score reaches '18';
- if any of the prospective mates has upgraded the other (i.e. has increased the other's score), add '5' to the mutual attraction score toward the next couple selection;
- if the mutual attraction score is between '12'-'17', keep prospective mates together with probability of 95% for up to three consecutive games;
- if the mutual attraction score is between '7'-'11', keep prospective mates together with probability of 90% for up to three consecutive games;

- after the third consecutive game together, prospective mates are to be matched according to the first-game rules **171D**.

Assignment selection rules **171C** determine the respective probabilities taken into account by processor **160** in selecting corresponding assignments in response to subscribers' wish-lists **145**. Processor **160** may also take into account the game participation history **144** and a couple assignment intensity and intimacy level classification **152C** and **152D**, respectively, to adapt the intensity and intimacy levels to the levels of mutual acquaintance (measured, for instance, by the serial number of the mutual game for a certain couple) and mutual attraction between the two prospective mates.

The following is a non-limiting example for assignment selection rules **171C**:

- assign one-player assignments **151A** or multiple-player assignments **151D** only in cases where couple assignments **151B** (including competition among couples assignments **151C**) are not applicable (this may happen if the numbers of participating men and woman are not equal, or there remain only subscribers that have excluded each other);
- for couple assignments, select only assignments with intensity and intimacy levels that do not exceed their mutual meeting count (i.e. not exceeding level 1 on the first meeting, level 2 at the second mutual assignment, etc.);
- a couple assignment is ranked by a mutual assignment rank according to the arithmetic sum of the individual ranking of the participants, except that a mutual assignment rank of '0' is applied if either of the participants has given that assignment a rank of '0';
- for a couple, select an activity randomly from all those that have passed the intimacy and intensity criteria, have not been shared by same couple before within their last ten games, and have a high mutual assignment rank;
- for one-player or multiple-player assignments, randomly select assignments from those which have not been assigned before to the participant, and have a high assignment rank.

It will be appreciated that the above rules are exemplary only, and many other rules and variations can be devised according to the tastes and preferences of various audiences. Specifically, if the subscribers are already established couples and are seeking the companionship of other couples or just entertainment, all couples' games and selection rules

need to be adapted accordingly. Appropriate modifications are also needed if the subscribers are seeking partners of the same sex.

OPERATION OF A PREFERRED EMBODIMENT

Reference in made to **FIG. 6**, which illustrates the registration process for a new subscriber. Registration starts in a step **200**, where administrative forms and contracts (not shown) may be filled and signed, to establish the subscriber's obligations to the organizer and the other subscribers, such as payment arrangements with the organizer and committing not to communicate with other subscribers out of the framework of the games of the present invention. In a step **201** the user approaches a user terminal **120** to establish the respective personal record **141** in subscriber database **140**, selecting or being assigned a subscriber ID **142**, and entering personal data **143**. In a step **202** the user enters his or her initial wish-list **145**, primarily with respect to game preferences, and in a step **203** registration is concluded, and system **100** can now notify the new subscriber to participate in games.

Reference is now made to **FIG. 7**, which illustrates an update routine of personal record **141**. Such a routine can preferably be called on the user's initiative at any time, to update his or her personal details or wish-list. Typically, the routine is called after the forum members are introduced the first time, after completing a game, when new assignments **151** are added to assignment database **150**, or when another subscriber has joined or left the forum. In a step **210** the update procedure starts when the subscriber approaches user terminal **120** and logs in properly to gain access to his or her personal record **141**. In a step **211**, the personal data is updated, if appropriate, for example by changing address or updating the free hours' details. In a step **212**, the subscriber updates his or her personal wish-list **145**, and in a step **213** the procedure is concluded.

FIG. 8 illustrates an exemplary strategy for game selection by processor **160** running game program **165**. In a step **220**, a game starts upon the initiative of the forum organizer through manager terminal **130**, or automatically in a pre-scheduled time by game program **165**. In a step **221**, assignment **151** is selected randomly by processor **160** from assignment database **150**; the assignment specifies the required number of participants. In a step **222**, processor **160** runs through the personal wish-lists **145** of personal records **141** in subscriber database **140**, to identify subscribers that are suitable for the assignment, and prioritizes them according to their preferences indicated in their personal wish-list **145** and according to game rules **170**. For example, if the assignment is relates to a couple game of building a snowman, and if only two

participants have selected building a snowman as their preferred assignment while none of them has excluded the other, these two participants can be picked by step **222**. If step **222** does not yield a sufficient number of participants, the procedure returns to step **221** for selecting an alternative assignment (this branch in the procedure is not shown in **FIG. 8**). In a step **223** the assignment, including, as appropriate, the assignment description, partner(s), location, and time, is sent to the respective participants. After the game is completed, in a step **224** participants optionally enter their feedback by updating their personal wish-list **145** (see also **FIG. 7**), and the procedure is concluded in a step **225**, also by updating game participation history record **144** of all participating subscribers. It will be appreciated that step **224** may be set by some forum organizers in game rules **170** as mandatory, i.e. as a precondition for participation in the next game, in order to encourage participants to make a decision regarding the prospective mate and update their wish-list accordingly; obviously, a null update - meaning 'no change' - is acceptable in this case. The feedback in step **224** may also include personal advice for the prospective mate, which, after accumulating and blending with other feedback, can be anonymously sent by the system to the prospective mate to suggest improvements in the way he or she behaves, dresses, etc. Feedback in step **224** may also include the subscriber's ideas on new assignments or improvements to existing assignments as well as subjectively scoring such assignment for effectiveness and enjoyment. Feedback in step **224** can also inform the forum organizer about participants who do not obey the forum rules.

FIG. 9 illustrates an alternative exemplary strategy for game selection by processor **160** running game program **165**. The difference in the strategy of **FIG. 9** in comparison with that of **FIG. 8** is that in **FIG. 9**, the participants are selected first, and only then are the respective assignments selected. In a step **230**, a game starts upon the initiative of the forum organizer through manager terminal **130** or automatically by game program **165**. In a step **231**, a group of one or more subscribers is picked, for example, a couple. The subscriber couple is picked by processor **160** running program **165**, preferably involving a random factor received from random number generator **160R**, as illustrated in more detail for an example in **FIG. 10**. Including a random factor both facilitates the selection procedure and protects the privacy of subscribers, because no one can tell whether a prospective mate selection was made by the subscriber or just by chance. In a step **232**, assignment database **150** is scanned by processor **160** to identify matched couple assignments from categories **151B** (including **151C**) that best match the preferences of the subscribers picked in step **231**, as specified in the subscribers' respective personal wish-lists **145** and under game rules **170**. Preferably, an assignment is randomly

selected from the assignments that are ranked high. The identified assignments are matched in the sense that they are either identical or complementary in a coordinated manner so that they properly combine into an attractive game. In a step **233** the matched assignments, including as appropriate, the assignment description, partner(s), location, and time, are sent to the respective participants. If the matched assignments are complementary and not identical, such as in a couple game where the man invites the woman for a dinner that he cooked, then the complementary assignments are selected and sent as appropriate. After the game is completed, in a step **234** the participants usually enter their feedback by updating their respective personal wish-list **145** (see also **FIG. 7**), and the procedure is concluded in a step **235**, also by updating the game participation history record **144** of the participating subscribers.

SELECTION OF PARTICIPANTS AND ASSIGNMENTS

The selection of games within a system according to a preferred embodiment of the present invention includes, for each game, the selection of participating subscribers from subscriber database **140**, and selection of assignments from assignment database **150**. These selections are influenced by personal wish-lists **145** and by game rules **170**. The following description discusses a number of alternative strategies for such selections, with focus on selecting subscriber couples, and how random number generator **160R** can be employed in making such selections.

Reference is made to **FIG. 10**, which illustrates a simplified forum consisting of four men and four women. A table **300** describes the partner preferences of the participants as derived from their personal wish-lists **145**. In table **300**, the participants doing the scoring are listed in the left-most header column, and their preferences run horizontally in rows. The participants being scored are listed in the top header row, and their scores run vertically in columns. For example, the first row in table **300** shows that Mary has selected Peter as her most preferred partner and Paul as a preferred partner. Mary is neutral regarding John, and Jim is excluded by her; these selections are transformed into table entries '9', '6', '1' and '0', respectively, which describe the relative scores of the selections. The other seven rows of table **300** describe the partner selection made by the other seven forum members in their respective wish-lists **145**.

A table **310** is derived by processor **160** from table **300**, and shows the mutual attraction scores of all possible couples, based on totaling the individual scores selected by the prospective mates, except that if any of the prospective mates is excluded by the other, the

mutual attraction score is zero. Thus, Mary has given Peter 9 points ('most preferred'), Peter has given Mary 6 points ('preferred'), which scores the couple Mary-Peter 15 points in mutual attraction. On the other hand, although Rachel likes Peter (6 points), Peter dislikes Rachel (0 points) which yields the mutual attraction score of '0'. Thus table **310** reflects the mutual attraction of the potential couples, and the higher the mutual attraction score, the greater is the chance that a couple is selected for the next game.

The following examples demonstrate three couple-selection strategies, which may be decided by the forum organizer through game rules **170**. It will be noted that in the present example none of the couples has reached the mutual attraction score '18', which would have made it compulsory to select them as a couple, according to selection rules **171B** (**FIG. 5**). Exemplary selection strategies in accordance to preferred embodiments of the present invention include:

- Favoring the poor: John's only chance is with Rachel, who is the only one who has not excluded him and was not excluded by him. Therefore, the couple John-Rachel could be first selected. This, however, could be unfair to Rachel-Jim, who clearly prefer the company of each other.
- Favoring the rich: Peter-Mary score highest, and therefore could be selected first, followed by selecting Rachel-Jim, who score second, etc.
- Making a random selection, weighted by the mutual attraction but leaving the final decision to chance. A table **320** describes ranges of integers granted to each of the ten non-zero couples. Range 1-15 is granted to Mary-Peter for their '15' mutual attraction points from table **310**. The next range of seven integer numbers 16-22 is granted to Mary-Paul for their '7' mutual attraction points. Table **320** ends with granting the range 57-58 to Suzy-Paul for their '2' mutual attraction points. Thus, the integer range 1-58 has been created and divided into sub-ranges whose respective spans represent the probability of selecting a couple according to the respective mutual attraction score. Random number generator **160R** is now called to draw a number in the range of 1-58 with uniform probability. If, for instance, number 21 comes up, then the couple Mary-Paul is selected, in spite of the greater score (and probability) for selecting the couple Mary-Peter. Then Paul and Mary are removed from table **310**, along with their respective row and column, and table **310** is truncated into a 3x3 table, leading to a more compact form of table **320**, and

another random number is drawn within the corresponding truncated number range to select the next couple.

All the mate-selection strategies described above, as well as combinations thereof, are acceptable in various embodiments of the present invention. However, the strategy used in most examples below is the random-selection approach.

Under any strategy, there is a possibility that there remain subscribers who cannot be matched to other subscribers within the current session of games. Such subscribers can be referred to single-subscriber games from the **151A** category or multiple-subscriber games from category **151D**, with an opportunity to exhibit their qualities to other subscribers, as well as enjoying the game by itself. In the next session of games these single subscribers may be selected to participate in a couples' game because they have been upgraded in the wish-list of others, or have reduced the number of unacceptable partners in their own wish-list, or have just been more fortunate with respect to the drawings made by random number generator **160R**.

If the numbers of men and women are unequal, it could be advantageous to allocate only, say, 75% of the minority sex members to couples' games, and then move all remaining men and women to single or group games within the current session. During the next game session others may be selected for couples' games under the rules of the system.

It will be appreciated that the couple selection strategy illustrated in **FIG. 10** offers equality between men and women, since the scores for preference and mutual attraction calculated in tables **300** and **310**, respectively, are based on symmetric scoring rules. Although this policy may be preferred by many, a forum or forum organizer may select to use asymmetric rules, such as granting higher weight to the wishes for women over those of men. For example, a woman preferred by man can be granted 6 points in table **300**, while a man preferred by a woman can be granted 8 points, giving women a higher chance to meet with their preferred prospective mates, in case of conflict between wishes. For instance, under the symmetric policy of **FIG. 10**, Peter has an identical probability to be assigned as a prospective mate to Anna and to Suzy (both score '7' in table **310**). Under the asymmetric policy, however, Peter-Suzy would still score '7', while Peter-Anna would score '9' and will have higher probability to meet, because of the higher weight given to the woman's (Anna's) wish.

FIG. 10A illustrates an exemplary game selection strategy for couples selected by the procedure described above with respect to **FIG. 10** or by an alternative strategy. Table **330** summarizes the individual game ranking by the participants, made under the scheme described with respect to **FIG. 4B**. 'A', 'B', …, 'H' are placeholders for game specifications presented to

the subscribers when they fill-in their assignment preference **145A** in wish list **145**. In the case of a game composed of complementary rather than identical assignments, a specific placeholder (e.g. 'A') represents the appropriate assignment for each participants; for example, if a couple game involves a man inviting a woman to a dinner he cooked, then 'A' is presented to the men as 'invite…' while to the women same 'A' is presented as 'be invited…'. Table **340** summarizes the mutual assignment ranks by adding the individual ranks of all possible couples. Thus the mutual rank of game E by the couple Mary-Peter is '13' since Mary has ranked this game '4' and Peter has ranked it '9' (see table **330**). Thus if Mary and Peter have been picked by step **231** of **FIG. 9**, then assignment E would preferably be selected for them, unless their history record **144** shows that they have already shared this assignment, which would lead assignment H to be selected. It will be noted that in realistic embodiments beyond the present simplified examples, the number and variety of selectable assignments is substantially higher than the eight assignments A-H, which would have led to many more possibilities for mutual assignment selections. If there are several selectable assignments that rank equally, random number generator **160R** is preferably called in step **232** to facilitate selection.

It will be appreciated that the example of **FIG. 10A** employs the simplified assignment ranking paradigm of **FIG. 4B**, wherein assignment ranking by a subscriber is insensitive to the prospective mate. If the paradigm of **FIG. 4C** is chosen instead, then each value in table **340** of **FIG. 10A** will then take into account the finer ranking offered by the latter paradigm. For example, the mutual rank by Mary and Peter of assignment E will total the rank that Mary has selected for having assignment E with Peter (which may differ than the rank of having assignment E with Paul, as demonstrated in table **145A-2** of **FIG. 4C**) and the rank that Peter has selected for having assignment E with Mary.

FIGS. 11 and **12** generalize the couple selection and game selection processes illustrated by the example of **FIGS. 10-10A**. Reference is now made to **FIG. 11**, where a game session is started in step **500** by processor **160**. In a step **501**, processor **160** runs through all combinations of participating men and women, and calculates their mutual attraction score; this can be made by adding the individual respective scores as in the example of **FIG. 10**, by multiplying the scores, or by using other formulas that give a higher value to the mutual attraction score with higher individual score, even possibly asymmetrically with respect to men's scores versus women's scores, as explained above. Optionally, psychological models analyzing the compatibility of prospective mates can be factored into the mutual attraction calculation (e.g. by adding 4 points to the mutual attraction score calculation for a 'very

compatible couple'), thus adding external wisdom to the instinctive judgment by the participants. Also, the mutual attraction score optionally and preferably factors-in the latest individual score changes; for example, if two participants have just upgraded each other, i.e. demonstrated an increase in their mutual interest, they may benefit from an extra bonus of 5 points added to their mutual score. However, the calculation algorithm preferably ensures that any individual score of '0' (i.e. an excluded prospective mate) results in a '0' in the mutual attraction score. In a step **502**, mandatory couples are identified and selected. This includes all couples who have mutually selected each other as their unique 'most preferred prospective mate' (say '9'), as well as all other couples whose mutual attraction score has reached '18' by added factors as described above.

In a step **503**, processor **160** attempts, for each mandatory couple, to assign a mutually-acceptable game, as illustrated in more detail in **FIG. 12**. When the assignment is successful, then in a step **504** the selected game is addressed as a couple of matched assignments to the participants via their respective user terminals **120**. If no game is found mutually-acceptable in step **503**, then in a step **505** the couple is notified through their respective user terminals **120** that they are too restrictive in their wish-lists regarding games and therefore have been reassigned with a different partner. The couple is not matched, and the participants are returned to the subscriber pool, for identifying alternative prospective mates with a better match with respect to game selection. The terms "subscriber pool" and "pool" herein denote the subscribers from the forum who are available for assignment selection within the current game session.

In a step **506**, the remaining subscribers, after removing the successful matches in step **504** from the pool, are ready for further matching, and the system decides how many of them can be matched according to the game rules. In a non-limiting example this could be done by counting 75% of the minority sex in the forum and subtracting those matched in step **504**. For instance, if the subscriber pool started with an entire forum of 20 women and 24 men, and if in step **504** four couples have been matched, then the overall number to be matched for couples' games is 15 (75% of 20 — which is the number of participants of the minority sex). Four couples have already been matched by step **504**; therefore, in step **506** it is calculated that 11 couples are still left to be matched.

In a step **507**, a selection space is created by processor **160**, weighting in the mutual attraction of all couple combinations of the opposite sex that were not extracted by step **504** and did not exclude each other, similar to the example of table **320** in **FIG. 10**. In the space according to the example of table **320** of **FIG. 10**, each possible couple is assigned a unique

range of integers whose size varies according to the mutual attraction score calculated in step **501**. In a step **508**, random generator **160R** is called to select a random integer within the selection space generated in step **507**; the random number falls within the number range of a specific couple, and this couple is selected, and the selection space is recalculated to eliminate the selected couple members and truncate the selection space size. Then another couple is selected, until the desired number of couples, determined in step **506**, is reached.

In a step **509** each couple selected in step **508** is assigned a game in accordance to the mutual preference of the prospective mates, as described in step **503** above. Successful games are addressed to successful couples, in the form of matched game assignments, in a step **510** as in step **504**. If no mutual game can be assigned to the selected couple, then in a step **511** the participants are notified that they are too restrictive, and are returned to the pool. Then, the remaining subscribers are reselected by steps **507**, **508** and **509**, until the number of couples reaches the target calculated in step **506**, or until a predefined number of attempts is reached.

In a step **512**, all forum members not selected by step **504** or step **510** are preferably assigned single or group assignments, which both entertain them and allow them to better know and get to be known by other forum participants. This is done by selecting assignments according to the preferences of the subscribers, as expressed in their wish-lists. The procedure is concluded in a step **513**, where the game session actually commences according to the assignments addressed to the forum subscribers.

FIG. 12 illustrates in more detail the game selection procedure described above with respect to steps **503** and **509** of **FIG. 11**. The procedure starts in a step **550** which is called either by step **503** or by step **509** of **FIG. 11**. The selection is made for a specific couple of participants of the opposite sex, from those selected by step **502** or **508**. The assignments are selected from the couple assignments **151B** (including **151C**) of **FIG. 3**. In a step **551**, assignments given to any of the participants during the most recent three game sessions are preferably removed from the list, to avoid boring repetition. In a step **552**, assignments that are too intense or intimate for the current stage of acquaintance between the participants, are removed from the list as well, as explained above, for example, with respect to fields **152C** and **152D** of **FIG. 3A**. In a step **553**, it is determined whether any matched assignments have remained from the couple assignments **151B** (including **151C**) after the filters that have been applied by steps **551** and **552**. If no assignment has survived, then game selection fails in step **570** (however, it will be appreciated that assignment database **150** is expected to preclude such events by including a very large number of possible assignments in all assignment categories of database **150** of **FIG. 3**). In a

step **554**, the mutual interest of the participants in each surviving assignment is calculated, for example by totaling the assignment ranks in accordance with field **145A** of **FIG. 4**, but excluding assignments that are excluded by any of the participants. If no mutual matched assignments can be identified in step **554** (i.e. all matched assignments acceptable to one participant have been excluded by the other), then a step **555** identifies this situation, leading to assignment selection failure in step **570**, which further leads to step **505** or step **511** of **FIG. 11**. It will be appreciated, however, that a rich variety of assignments in assignment database **150** of **FIG. 3**, as well as the assignments selection rules **171C** of **FIG. 5**, make the event of step **570** extremely improbable.

From the available matched assignments, in a step **556** processor **160** randomly selects a pair of matched assignments that has a high mutual assignment rank. In a step **557** the matched assignments are addressed to each of the participants (actually via step **504** or **510** of **FIG. 11**), and in a step **558**, the couple game selection is concluded for the current couple, and game selection is performed for the next selected couple, if appropriate.

ARRANGING A SERIES OF GAMES

Preferably, the games of the present invention are played in series, whereby the same forum of subscribers participates in a plurality of game sessions devised to establish and develop relationships among the forum members. For example, a game series can be made up of thirty game sessions, spanning six weekend parties. Each game session preferably involves all forum subscribers, participating in either couple, single or group games played concurrently or in synchronization; for example, an off-party couple game may be scheduled to take place anytime between two consecutive parties, according to the free-time schedules of the two participants.

FIG. 13 schematically illustrates a series of games, initiated in a step **400** by a forum organizer. In a step **401**, a forum of subscribers is established. This can be accomplished by registering new subscribers as illustrated in **FIG. 6**, and/or by including a subset of a previous forum. In a step **402**, assignment database **150** is established by the forum organizer, to include assignments relevant to the current session; for example, building a snowman is not applicable for games taking place in summer, and a forum of people living in different states or countries may limit all games to virtual assignments only. In a step **403**, the subscriber database is established. New members enter their personal details and wish-lists (whereas members that have joined from a previous forum may find their older record imported into the new database), and then update their personal details and re-enter their wish-list in response to changes in the

assignment database, the forum subscribers, and changing tastes. In a step **404** the forum organizer establishes the game rules, possibly with many or all of them being imported from a previous game series or from an external database (e.g. a community or universe database, as described with respect to **FIG. 14** below). The number of game sessions (for example, thirty), and their timetable (for example, six weekend parties with five game sessions per party), are entered in a step **405** by the forum organizer into game program **165**. Preferably, in step **406** the forum members are introduced to one another, by publishing over the Internet, with access to the forum members only, their basic details, such as ID, nickname, age, photo, profession and interests; additionally or alternatively, by the discretion of the forum organizer, forum members may hold an introductory event before commencing their first game, which could include, for example, brief one-on-one speed dates between all forum participants of the opposite sex. The mutual introductions are followed by wish-list entries of all participants, to facilitate assignment and prospective mate selection by game generator **110**, toward the first game session. In a step **407** the game session count is checked, and after the last session the game series is concluded in a step **430**. Otherwise, a new game session starts in a step **409**, where subscriber database **140** is refreshed, for example to reflect the absence of some forum members; this also affects the wish-list **145** of attending members that may have previously selected absent members as their preferred prospective mates. In a step **410**, couples are selected for couple games, for example by the random method shown in **FIG. 10**. The number of couples selected in step **410** for couple games might be, for example, **75%** of the subscribers of the minority sex (men or women), so that there remain a sufficient number of the opposite sex to attend and induce interest in one-player and multiple-player games. In a step **411** each couple selected in step **410** is assigned a matched pair of couple assignments from databases **151B** (including **151C**), and in a step **412** each of the remaining subscribers is assigned a one-player assignment or a group assignment from databases **151A** or **151D**. In a step **413**, all games are announced by sending messages describing the respective assignments to all subscribers through user terminals **120**. The games are then played, and upon the conclusion of the current game session, participants are invited in a step **414** to enter their feedback, primarily by updating their personal wish-list via user terminals **120**. In a step **415**, the subscriber database is updated to reflect changes in the personal wish-lists **145** and game participation history **144**. In a step **416**, the session count is increased by 1, and in step **407** either the session is concluded in a step **430**, or is continued in step **409** in accordance to the game session schedule.

It will be appreciates that a game series can include face-to-face assignments, virtual assignments, or a combination thereof, as adapted to the goals of the forum, the geographies of the subscribers, the weather conditions, and the wish-lists of the participants.

THE OVERALL PICTURE

A system of the present invention operates within a forum of subscribers. However, such a system can be a subset of larger system, as illustrated in **FIGS. 14-15** and discussed below.

FIG. 14 illustrates an abstract structure of frameworks for implementing embodiments of the present invention. A universe **601** includes all subscribers and entities involved in implementing the present invention. Universe **601** includes a set of communities **602**, each community of which includes a plurality of subscribers registering to participate in games organized according to embodiments of the present invention, and led by a community organizer. The community is then subdivided by the community organizer into a set of forums **603**, each of which is a basic element of game organization. Thus, a community may include a large group of subscribers in New York City subdivided by age, profile and geography into many small forums of, say, 12 men and 12 women in each forum. After a game session (see **FIG. 13**) is completed, those who found a mate retire, and the remaining members can then be divided into those who show substantial mutual attraction by their mutual attraction score, and those who show no interest in each other. The community organizer can then reshuffle the compatible community members into new forums, keeping together those with higher mutual attraction and separating the others into new forums with a new chance to identify and being identified as a desirable mate. While different forums may have strong interactions within the same community, different communities usually do not interact at the subscriber level, but may still share a central knowledge base and game and game rule databases within universe **601**.

FIG. 15 illustrates the architecture of an embodiment of a computer system **605** underlying the structure of **FIG. 14**. A master server **610** contains a knowledge base in the form of electronic articles to guide community and forum organizers as well as subscribers, and databases of games and games rules. These resources are partly developed by experts and are entered through a master terminal **611**. Subscribers, forum organizer and community organizer can also contribute and upload resources onto community servers **620** and master server **610**. A community server **620** is preferably an Internet server containing knowledge base articles, game and game rule databases, and services for game generators **110**, as well as a community

subscriber database. Community server **620** is controlled by the community organizer through a terminal **621**, to select, customize and translate (where necessary) a subset of games and knowledge articles from master server **610**, add games and knowledge articles of its own, and establish forums from of the community membership.

Continuing with **FIG. 15**, game generator **110,** manager terminal **130** and user terminals **120**, are as previously described and illustrated in **FIGS. 1-13**. The element emphasized in **FIG. 15** is, however, that game generator **110** can be implemented as either a stand-alone physical server **110P**, or as a virtual server **110V**, e.g., a logical partition within the respective community server **620** or even a partition within master server **610**. Thus, community server **620** can host a plurality of game generators **110**, each controlled autonomously by a respective forum organizer through respective manager terminal **130**. Similarly, master server **610** can host community servers **620** and game generators **110V**. Similar hosting arrangements can extend to servers out of the framework of the present invention, as is common with distributed computing resources. In a most compact embodiment of the present invention, a single personal computer can serve as a game generator **110**, manager terminal **130** and public user terminal **125** that allow private log-in of the subscribers. Such a compact setup can adequately serve the needs of participants of a party. Adding a short range communication port to such a personal computer, such as infrared, Bluetooth or Wi-Fi, can offer extra convenience to users who have compatible telephones, beepers or palmtop computers that serve as personal terminals **123**.

The present invention is thus scalable, and embodiments thereof support small systems having a single game generator that runs a single game in a single forum as well as large systems (as illustrated in **FIGS. 14-15**), capable of extending across different countries, cultures, and languages. This emphasizes the nature of the components of the present invention as logical entities that are not limited by a specific physical arrangement.

GAME CUSTOMIZATION

Assignment databases and assignment particulars may be customized at various levels by various players. A community organizer may selectively choose games that are suited to the culture of the local community as well as to the season and climate. A forum organizer may further selectively choose assignments in accordance with the age and profile of the forum members, and add specific assignment attributes. For example, if a couple assignment description involves having a dinner at a restaurant, the forum organizer may add the name of

the restaurant, the number of the pre-ordered table, and the date and time of the meeting. Assignments may also be fine-tuned by subscribers. For instance, an assignment to a couple visiting the theater may be first sent to the woman for selecting the show, date and time, and only then be sent to the selected prospective mate with the specifics already determined.

"REALITY SHOW" FEATURING GAMES

Although the primary use of the system of the present invention is for managing games for introducing people to others according to their discrete wish-list, and furthering the development of interpersonal relations, such a system can also be the basis of a televised "reality show" that broadcasts the games to an audience.

FIG. 16 schematically illustrates a reality show setup **800**, wherein system **100** of **FIG. 1** cooperates with a show system **810** to implement a reality show based on the games of the present invention. Game system **100** includes game generator **110**, and user terminals **120**, as illustrated in **FIG. 1**. A manager terminal **130′** can have the same functions as manager terminal **130** of **FIG. 1** as described above. Alternatively, all or some of the functions of manager terminal **130** can be moved to a show editing system **812**, leaving only a subset of roles to terminal **130′**, or even moving all manager functions to editing system **812** thus eliminating manager terminal **130′** altogether. Subscribers participating in the game by using user terminals **120** are aware of, and approve of the publicity of the games including all or part of their wish-lists (which under normal circumstances are kept secret). Show system **810** is a regular TV show system, including TV cameras **811** to record the games, show editing system **812** to control and edit the show, and a broadcast system **813** to distribute the show via TV channels such as radio-frequency transmission, satellite, or cable. Show editing system **812** also interoperates with game generator **100** to retrieve wish-list details therefrom and/or undertake all or part of the roles of manager terminal **130** of **FIG. 1**, as described above. Show editing system **812** preferably also includes recording equipment for non-live broadcasts; it will be appreciated that recorded shows are preferable in case of a game series that spans several separate sessions, in order to hide the wish list from the participants during and between the games while revealing it to the audience.

USING A CALL ROUTER

When assignment database **150** (**FIG. 2**) includes virtual assignments, subscribers may need to interact electronically via personal terminals **123** (**FIG. 1**). However, in many situations it may be desirable to protect the contact details of subscribers from other subscribers for the initial or entire duration of the game series.

FIG. 17 schematically illustrates call router **180** (**FIG. 2**), which includes well-known and widely-used solutions to allow subscribers to communicate with one another without disclosing their telephone numbers or email addresses. A telephone call forward service **183** is used by the forum organizer to route calls from dedicated phone numbers owned by the forum organizer to selected subscribers. For example, a man whose assignment is to have a telephone discussion with a woman at a certain time, calls a forum phone number specified in the assignment, and the call is routed automatically to the assigned woman, so that none of the participants learn the telephone number of the other. A telephone conference service **185** is a common service, allowing, for example, a group of subscribers to join a group discussion without disclosing the individual telephone numbers; thus the assigned participants receive in their assignment the number of the conference service and time to make the call. An email forward service **187** is used by the forum organizer to receive, in a forum email address, a message from a subscriber, and forward only its content to the private email address of the selected addressee. An Internet chat room **189** can be established for a specific couple or group interaction, without disclosing the addresses of the participants.

It will be appreciated that the examples above represent only a sample of known technical possibilities for managing an electronic interaction without disclosing the participants' contact details.

GAMES COMPOSED OF INTERDEPENDENT ASSIGNMENTS

As already described above, each individual assignment under the present invention is devised to entertain the participants, highlight their positive features, and induce mutual interest between prospective mates. Also, it has been described (for example with respect to step **552** of **FIG. 12**) that assignment selection preferably escalates the level of the assignment's intensity and intimacy in accordance with the stage of mutual acquaintance between the prospective mates, that can be measured, for example, by the serial number of their mutual meeting, as well as by the mutual attraction score.

Furthermore, it will be appreciated that a game can be composed of a sequence of interdependent assignments that are logically ordered not only by their intimacy and intensity levels but additionally or alternatively by their content. For example, a game can include a 'culture package' that starts with a movie, followed by a visit to the museum, the theater, the opera, and finally Yankee stadium. A couple assigned to this package may be planned by the system to execute the entire tour within, say, two weeks, before being assigned a different game. Preferably, however, the participants are not aware of the fact that each of their assignments is a part of a broader game, and are notified of each assignment separately as if it belongs to a separate standalone game. This gives each of the participants an option to change her or his mind, and by excluding their partner in their wish-list the sequence is broken with nobody noticing the discontinuity, and new prospective mates and assignments are selected and assigned as usual.

WORKING WITH VARYING ASSIGNMENT DATABASES

Assignment Database **150** of **FIG. 2** has been described above as a static entity that is customized toward a specific game series of a specific forum and remains fixed during the entire game series and uniform for all participants. The game selection by processor **160** has been described however as preferably escalatory, to adapt the intensity and intimacy levels of couple assignments to the stage of mutual acquaintance.

In an alternative preferred embodiment of the present invention, the assignments available to a subscriber during a game series and ready for ranking in his or her wish list may include dynamic assignments that are personalized (adapted to the subscriber), escalatory (in a pre-programmed order for building relationships gradually) and asymmetric (such as different, complementary assignments presented to men and women). The main advantage of such dynamic allocation of selectable assignments is for couples who have already selected each other as 'the most preferred one' ('9') and the game assignments then turn to focus on building the relationship and assisting the participants in evaluating each other's personality traits.

FIG. 18 describes schematically how game assignment database **150** of **FIG. 2** is optionally subdivided into subsets **150-1**, **150-2**, …, **150-N**. Each subset represents a snapshot of the assignments presently offered to a specific subscriber. The subsets usually overlap, i.e. similar assignments may be offered simultaneously to several subscribers. Thus, assignment database **150** is actually the union of all individual subsets during the entire game series. However, effectively, only a specific subset is customized and offered to each subscriber toward

a specific game session, and the remainder of the assignments from database **150** will neither be shown to the subscriber nor will it be selected by processor **160**.

FIG. 19 describes a series of advanced couple games for a man-woman couple who have already scored each other as 'the most preferred prospective mate' (e.g. score '9'). Processor **160** then runs under program **165** (**FIG. 2**) to offer game assignments that are aimed at building up the relationship and exposing each other to the other person's personality traits. The procedure starts in step **842** by selecting to assign K game sessions to the couple, where K is the number of steps devised to let the participants get to know each other. Step **844** starts to loop through the K game assignments, to end up the procedure by either: completing the K assignments in step **860**; mutually selecting to retire before the series completion (not shown); or having one of the participants select to downgrade the other participant through his or her wish list (not shown). In step **846** processor **160** personalizes and escalates assignments from assignment database **150** in order to customize an assignment subset **150-I** and **150-J** for the participating man and woman, respectively. An example for personalized subsets are those which include concerts and exclude hiking for a couple which has already indicated that both love music and hate outdoors activities. An example for escalating subsets is offering a 'retire from the forum' assignment only to one who has selected another as 'the most preferred one', or offering a romantic, self-cooked dinner the first time only at the 10th mutual assignment. In step **848** the current respective assignment database subset is presented to each of the two participants; if appropriate, the assignments are presented in asymmetric language; for example, one of the currently-selectable assignment maybe presented to the man as 'invite the woman to a dinner you cooked', while the woman will see 'agree to be invited to a dinner he cooked'. In optional step **850**, a guide from guide database **182** is issued by processor **160** via terminal **120**, separately to each of the participants, to provide knowledge regarding what is the purpose of the current stage, and tips and ideas with respect to selecting and handling the offered assignments. In step **852** the two participants are invited by processor **160** to enter their updated scores to their wish list through user terminals **120**; this is the opportunity of the participants also to select retirements from the forum (which will be respected by processor **160** only if both select it) or any of the participants selecting to downgrade the other, thus breaking the loop **844** (not shown); also the assignment ranks may be updated. In step **854**, processor **160** weights-in the assignment ranks made by the two participants with respect to the actives assignment database subsets **150-I** and **150-J**, and selects and announces the best match. After completing the assignment (not

shown), the game session count is increased by 1, and the procedure moves to the next assignment in step **844**.

FOUR LAYERS OF INTERPERSONAL INTERACTION

It will be appreciated that the system of the present invention offers at least the following four layers of interpersonal interaction: (1) participants meet one another face-to-face in a social context, and are personally familiar with each other in the games; (2) couple games give participants the opportunity to interact intensively with prospective mates; (3) couple competition games add a dimension of teamwork, mutual reliance, and interdependency; and (4) there is a group dynamics induced by the fact that participants compete among themselves for the same prospective mates; this encourages conscious decision-making, keeping scores up-to-date, and making a best effort to be attractive to desirable prospective mates.

A VARIATION WITHOUT ASSIGNMENT RANKING

The preferred embodiments described above allowed the subscriber to both score the prospective mates and rank his or her interest in assignments from assignment database **150** (**FIG. 2**). In this way, the subscriber affects both with whom he or she will meet, and what they will do together. However, it will be noted that some preferred embodiments of the present invention may exclude assignment ranking by the participants, and then personal wish list **145** (**FIG. 4**) includes prospective mate scores **145M**, but assignment ranks **145A** are excluded. This optional policy presumes that all assignments in assignment database **150** are acceptable by all participants, or at least that the system can decide which assignments are adequate, for example by relating to the age or hobbies from personal data record **143** of the participant, and/or by receiving input through manager terminal **130** from the forum organizer, who makes an educated assignment selection for the participants. In such a case, the assignment selection rules **171C** (**FIG. 5**) exclude taking into account the respective assignment ranking but preferably take into account escalatory rules such as adapting the intensity and intimacy levels of the assignment to the serial number of the mutual meeting and/or to the mutual attraction score of the respective participants. Thus, the concept of assignment selection, such as in step **221** of **FIG. 8**, step **232** of **FIG. 9**, or step **411** of **FIG. 13**, remains meaningful even if such selection does not take into account express assignment ranking by the participants but only external rules included in assignment selection rules **171C** of **FIG. 5**.

COMMENTS, ADDITIONS, VARIATIONS, AND ENHANCEMENTS

User ideas and feedback can enrich the system and customize it. Thus, part of the user feedback entered during wish-list updates (e.g. step **234** of **FIG. 9**) can include ideas for new assignments as well as critique and suggestions for improving existing assignments. In return, a user who offers a new game for the forum can benefit from having an exclusive right to have this game assigned to him or her (along with the prospective mate) within the current game series.

The game assignments and game rules described above are exemplary and are brought for the purpose of demonstrating the system's operation and making the specification clear and tangible. It will be appreciated that the system of the present invention can support an ever-evolving set of game assignments and game rules.

The game program or forum organizers may designate some assignments as requiring additional subscriber approval before execution. For example, a subscriber may receive a message "you have been selected for a swim in the lake with one of your preferred prospective mates. Please confirm or reject".

Some assignments, such as dining in a restaurant or participating in a trip, may have an associated additional cost. Such additional cost and the way payment is to be made are included in the assignment details, and may require pre-approval by the subscriber.

When SMS-capable cellular telephones, two-way beepers or wireless palmtop computers are used as personal terminals **123**, an abbreviated messaging protocol is preferably used, preferably accompanied by a printed guide. An exemplary printed guide includes a legend with a two digit code in the range 01-30 assigned for each of the participants, another two-digit code in the range 31-99 assigned for each of the available assignments, and instructions to send short messages such as '219' to update the wish list of the sender by scoring participant '21' as 'the most preferred one' ('9'), or sending a message '550' to exclude assignment '55' by ranking it '0'. In the case of the paradigm of **FIG. 4C**, where an assignment is ranked with respect to a prospective mate, a message such as '57169' may express the sender's ranking '9' assignment '57' with respect to prospective mate '16'. In larger forums and/or larger game variety, a three-digit coding scheme can be employed for identifying prospective mates or assignments. Such coded messages are addressed to game processor **160**, which identifies and authenticates the sender through the respective caller ID and/or through additional ID digits that the user adds to the message, and then updates the respective wish list accordingly. It would be

noted that instead of SMS, which is a digital messaging format, any other communication method can be used, such as DTMF dial tones that can be applied by telephone users for entering abbreviated messages as described above. Additionally or alternatively, known voice-recognition technologies can be used to receive such messages using human voice; also the messages sent by game processor **160** can be in the form of synthesized voice messages.

ADVANTAGES OVER, AND COOPERATION WITH, EXISTING SYSTEMS

The present invention offers many advantageous aspects that are not covered by existing systems. Non-limiting examples of such advantages include:

- nurturing the mutual evolution of interest and affection through a carefully-crafted series of games;
- games involve activities selected discreetly by the participants to highlight their personal qualities and/or examine the qualities of the prospective mate;
- adapting the level of intensity and intimacy of games in accordance to the stage of relationships and the mutual attraction score;
- couples are assigned a mutual assignment, where both the prospective mate selection and assignment selection reflect the preferences of the participants, but wherein a random factor masks these expressed preferences to protect the participants' privacy;
- establishing opportunities for a second impression and second chance by generating unexpected meeting opportunities that highlight the favorable qualities of the participants;
- initiating single and group games to entertain participants and acquaint them with each other;
- involving all forum members in social interactions with others even if they were not initially chosen as a preferred prospective mate by others;
- developing mutual acquaintance and attraction through prescribed, escalating stages of interaction.

However, existing systems can facilitate preparations toward the operation of the present invention:

- Existing singles' organizations, clubs, meeting places and Internet singles' forums can provide communities **602** of **FIG. 14**, from which forums **603** can be derived to participate in games in accordance to the present invention.
- Existing matchmaking algorithms, profiling knowledge and computer programs can assist community organizers in selecting compatible subscribers to derive forums **603** from communities **602**.
- Brief introductory speed dates among all forum members of the opposite sex could precede the games of the present invention, in order to provide the basis for the initial wish-list entries, as described above with respect to step **406** of **FIG. 13**.

While the invention has been described with respect to a limited number of embodiments, it will be appreciated by persons skilled in the art that the present invention is not limited by what has been particularly shown and described herein. Rather the scope of the present invention includes both combinations and sub-combinations of the various features described herein, as well as variations and modifications which would occur to persons skilled in the art upon reading the specification and which are not in the prior art.

CLAIMS

What is claimed is:

1. An apparatus for managing a series of social games for a plurality of subscribers, comprising:
   - a first database containing a plurality of game assignments;
   - a second database containing a personal wish list for each of the subscribers;
   - a processor responsive to said second database for:
     i) picking at least one subscriber from the plurality of subscribers, and
     ii) assigning to each of said at least one subscriber a selected game assignment from said first database; and
   - an input port for receiving from each of said at least one subscriber, after completion of said selected game assignment, an update to the respective personal wish list, to selectably affect said picking and said assigning with respect to a next social game in the series.

2. The apparatus of claim 1, wherein said processor includes a random number generator, and wherein said processor performs said picking operation responsive to said random number generator.

3. The apparatus of claim 1, wherein said processor includes a random number generator, and wherein said processor performs said assigning operations responsive to said random number generator.

4. The apparatus of claim 1, wherein said selected game assignment is a one-player assignment.

5. The apparatus of claim 1, wherein said at least one subscriber is two subscribers and said selected game assignment is a couple assignment.

6. The apparatus of claim 5, wherein:
   - said second database includes individual scores of said subscribers' level of interest in other subscribers; and
   - said picking operation performed by the processor includes the actions of:

i) calculating a mutual attraction for combinations of subscriber pairs based on the respective mutual individual scores, and

ii) choosing said two subscribers in response to their mutual attraction.

7. The apparatus of claim 5, wherein:

- said second database includes a ranking of the plurality of subscribers' interest in game assignments from said first database; and
- said assigning operation performed by said processor includes selecting said couple assignment from said first database in response to said ranking by said two subscribers.

8. The apparatus of claim 1, wherein said game assignment is a couples' competition assignment.

9. The apparatus of claim 1, wherein said game assignment is a group assignment.

10. The apparatus of claim 1, wherein said game assignment is a face-to-face assignment.

11. The apparatus of claim 1, wherein said game assignment is a virtual assignment.

12. An apparatus for picking two subscribers from a plurality of subscribers for an interpersonal couple game, comprising:

- a second database scoring, for each subscriber of the plurality, the subscriber's level of interest in individual others from the plurality; and
- a processor responsive to said second database for calculating a mutual attraction for subscriber pair combinations, and making the picking in response to said mutual attraction of the two subscribers.

13. The apparatus of claim 12, wherein said processor includes a random number generator, and said processor performs the picking operation in response to said random number generator.

14. The apparatus of claim 12, wherein said processor is operable to receive updates from each of the two subscribers to their respective scoring upon completion of the interpersonal couple game.

15. The apparatus of claim 12, further comprising a first database containing a plurality of game assignments, and wherein:

- said second database also includes ranking of said subscribers' interest in game assignments from said first database; and
- said processor is also operative for selecting a pair of matched game assignments from said first database in response to said ranking by the two subscribers.

16. The apparatus of claim 15, wherein said matched game assignments are identical.

17. The apparatus of claim 15, wherein said matched game assignments are complementary.

18. The apparatus of claim 15, wherein said matched game assignments are face-to-face assignments.

19. The apparatus of claim 15, wherein said matched game assignments are virtual assignments.

20. The apparatus of claim 12, further comprising at least one TV camera and a broadcast system for providing a reality show.

21. A method for managing a game from a game series for a participant from a forum of subscribers, comprising:

- receiving a personal wish list from each of the subscribers, said wish list scoring each respective subscriber's level of interest in other subscribers;
- picking another subscriber as a partner for said participant in accordance with the mutual scores of said participant and said partner in their respective wish lists;
- assigning matched game assignments to the participant and said partner; and
- after completion of the game, receiving from the participant and said partner an update to their respective wish lists, to selectably affect said picking toward a next game in the game series.

22. The method of claim 21, further comprising drawing a random number to affect said picking.

23. The method of claim 21, wherein said personal wish list is also ranking each respective subscriber's level of interest in game assignments, and said assigning is responsive to said ranking made by the participant and said partner.

24. The method of claim 21, wherein:

- assignments are qualified by at least one of a level of intensity and a level of intimacy;
- picking of the same partner for the subscriber for each game in the game series is counted by a number; and
- said assigning is responsive to comparing said qualification with said number.

25. The method of claim 21, wherein:

- assignments are qualified by at least one of a level of intensity and a level of intimacy; and
- said assigning is responsive to comparing said qualification with said mutual scores.

26. The method of claim 21, further comprising drawing a random number to affect said assigning.

27. The method of claim 21, wherein said matched game assignments are identical.

28. The method of claim 21, wherein said matched game assignments are complementary.

29. The method of claim 21, wherein said matched game assignments are face-to-face assignments.

30. The method of claim 21, wherein said matched game assignments are virtual assignments.

31. A method for managing games for a plurality of subscribers with respect to game assignments, comprising:

- receiving from each of said plurality a personal wish list scoring each subscriber's level of interest in other subscribers and ranking said each subscriber's level of interest in game assignments;

- picking two subscribers in accordance to their mutual scoring in their respective wish lists; and
- assigning to each of said two subscribers a matched game assignment in accordance to said ranking by said two subscribers.

32. The method of claim 31, further comprising drawing a random number to affect said picking.

33. The method of claim 31, further comprising drawing a random number to affect said assigning.

34. The method of claim 31, wherein said matched game assignments are identical.

35. The method of claim 31, wherein said matched game assignments are complementary.

36. A method for operating user terminals by a first subscriber for participating in a game within a forum of subscribers, comprising:

- sending a personal wish list scoring the first subscriber's level of interest in other subscribers from the forum and ranking the subscriber's level of interest in game assignments; and
- receiving a game assignment with another subscriber, said game assignment being selected in response to said scoring and said ranking made by the first subscriber and said another subscriber.

37. A system for managing games for a plurality of subscribers, comprising:

- a game generator including:
  - i) a first database containing a plurality of game assignments,
  - ii) a second database containing a personal wish list for each of said subscribers, and
  - iii) a processor responsive to said second database for picking at least one subscriber from the plurality of subscribers and assigning to each of said at least one subscriber a selected game assignment from said first database; and
- a user terminal allocated to each of said at least one subscriber to communicate with said game generator for updating said personal wish list after completion of said selected game assignment.

38. The system of claim 37, wherein said game generator also includes a random number generator, and said game generator performs said picking operation responsive to said random number generator.

39. The system of claim 37, wherein said game generator also includes a random number generator, and said game generator performs said assigning operations responsive to said random number generator.

40. A software product stored on a computer-readable medium to instruct a computer to:

- read a wish-list database scoring the level of interest of each subscriber of a forum in other subscribers from said forum;
- pick two subscribers in accordance with their mutual scoring;
- select two matched game assignments from an assignment database;
- assign to each of said two subscribers a game assignment from said two matched game assignments; and
- receive an update to said wish-list database after completion of said two matched game assignments.

41. The software product of claim 40, wherein said wish-list database is also ranking the level of interest of said forum subscribers in assignments from said assignment database, and said select is made in accordance with said ranking by said two subscribers.

42. The software product of claim 40, wherein said pick is affected by a random number.

43. The software product of claim40, wherein said select is affected by a random number.

44. The software product of claim 40, wherein said matched game assignments are identical.

45. The software product of claim 40, wherein said matched game assignments are complementary.

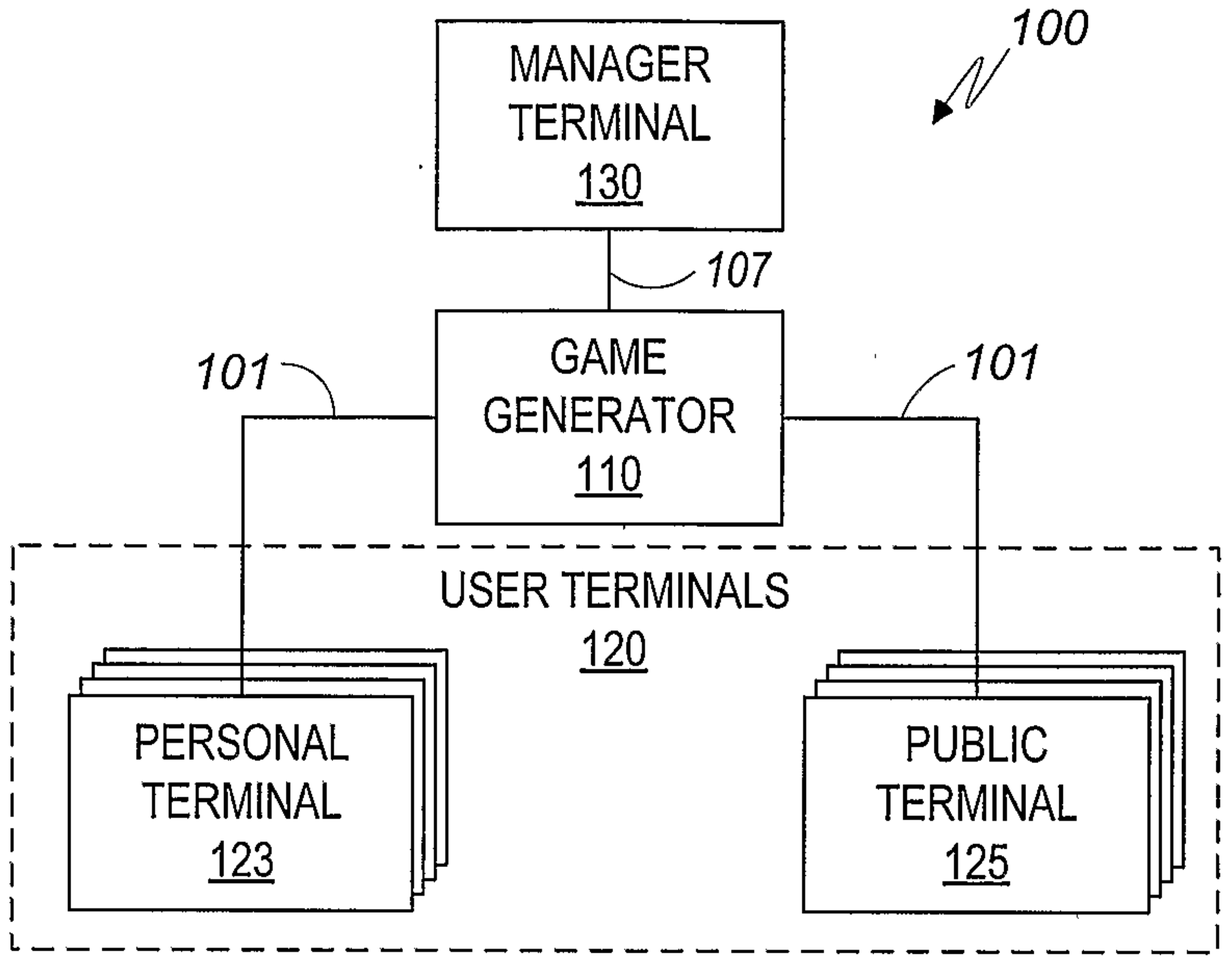

MANAGER TERMINAL 130
100
107
GAME GENERATOR 110
101
101
USER TERMINALS 120
PERSONAL TERMINAL 123
PUBLIC TERMINAL 125

FIG. 1

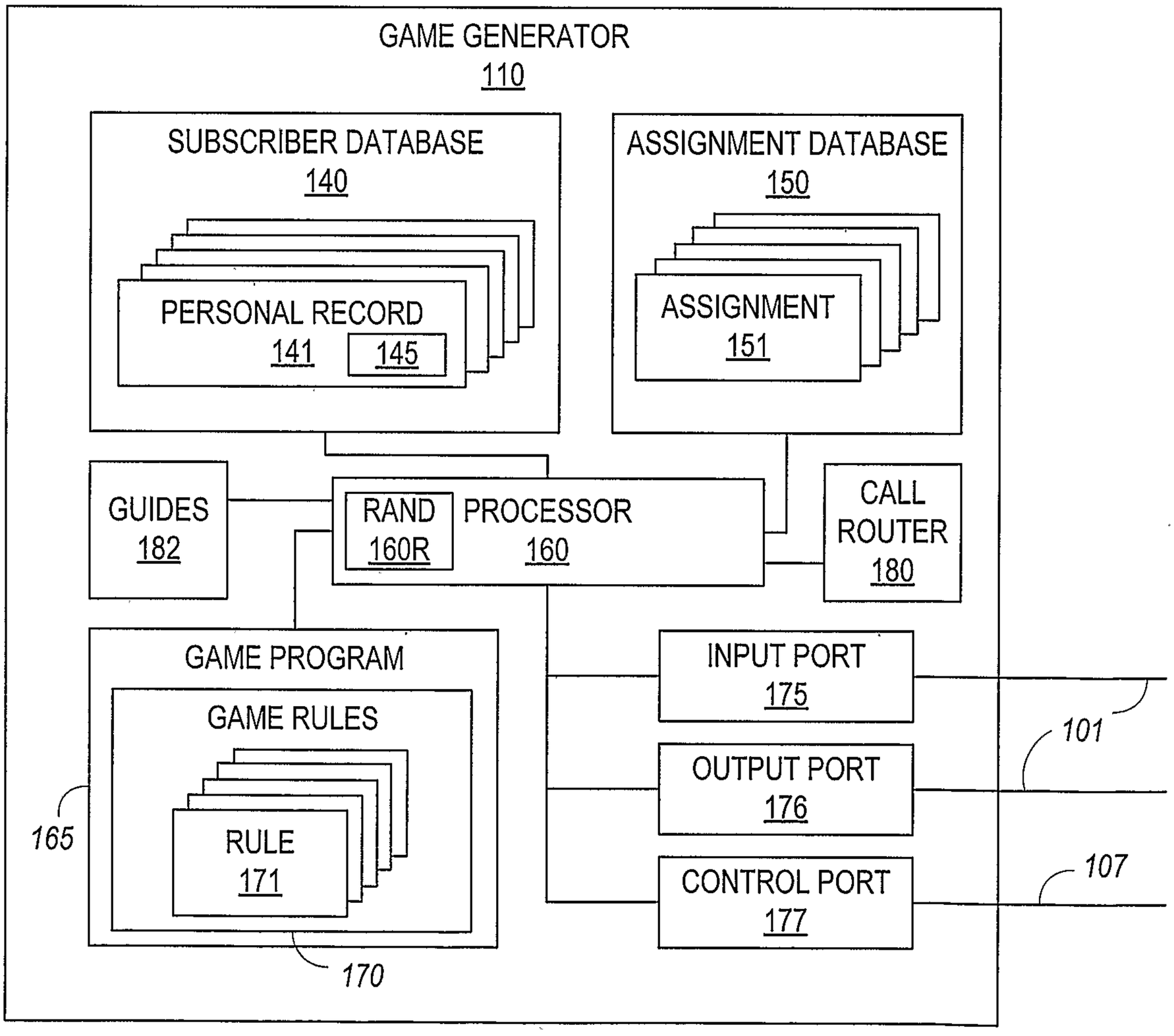

GAME GENERATOR 110
SUBSCRIBER DATABASE 140
PERSONAL RECORD 141
145
ASSIGNMENT DATABASE 150
ASSIGNMENT 151
GUIDES 182
RAND 160R
PROCESSOR 160
CALL ROUTER 180
GAME PROGRAM
GAME RULES
RULE 171
165
170
INPUT PORT 175
OUTPUT PORT 176
CONTROL PORT 177
101
107

FIG. 2

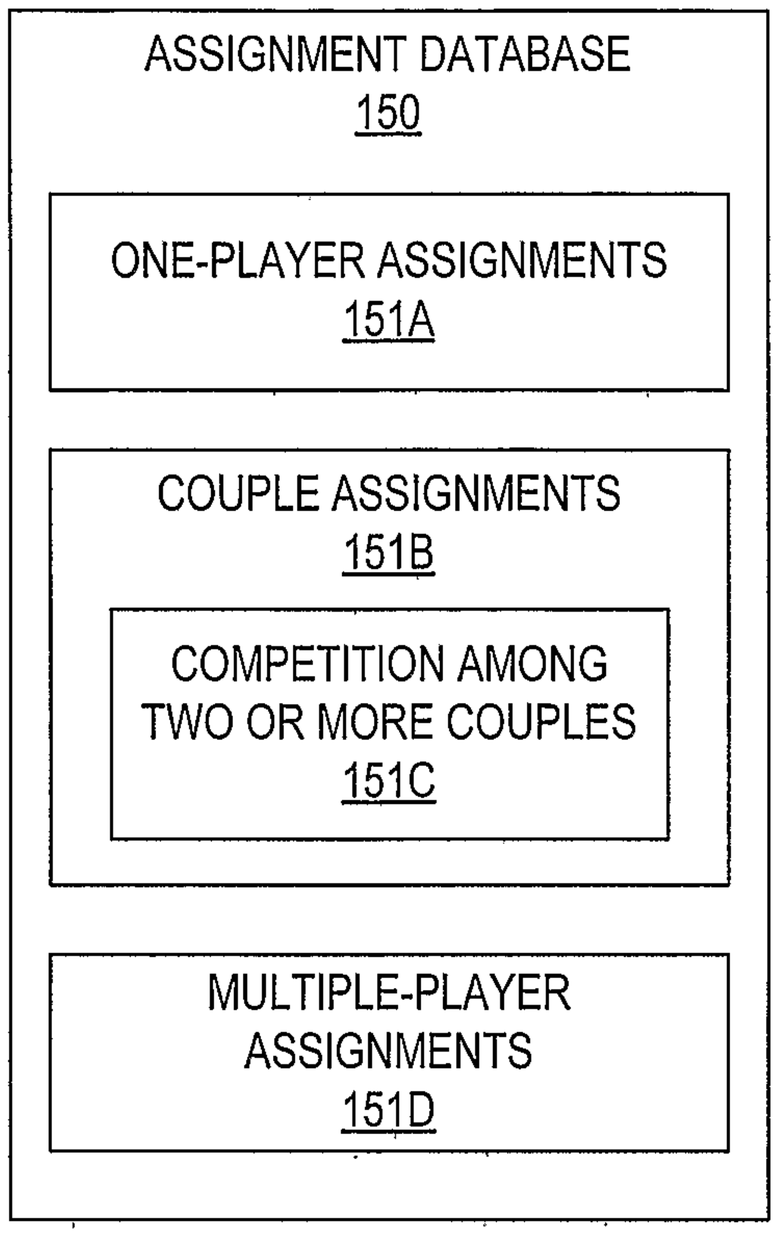


FIG. 3

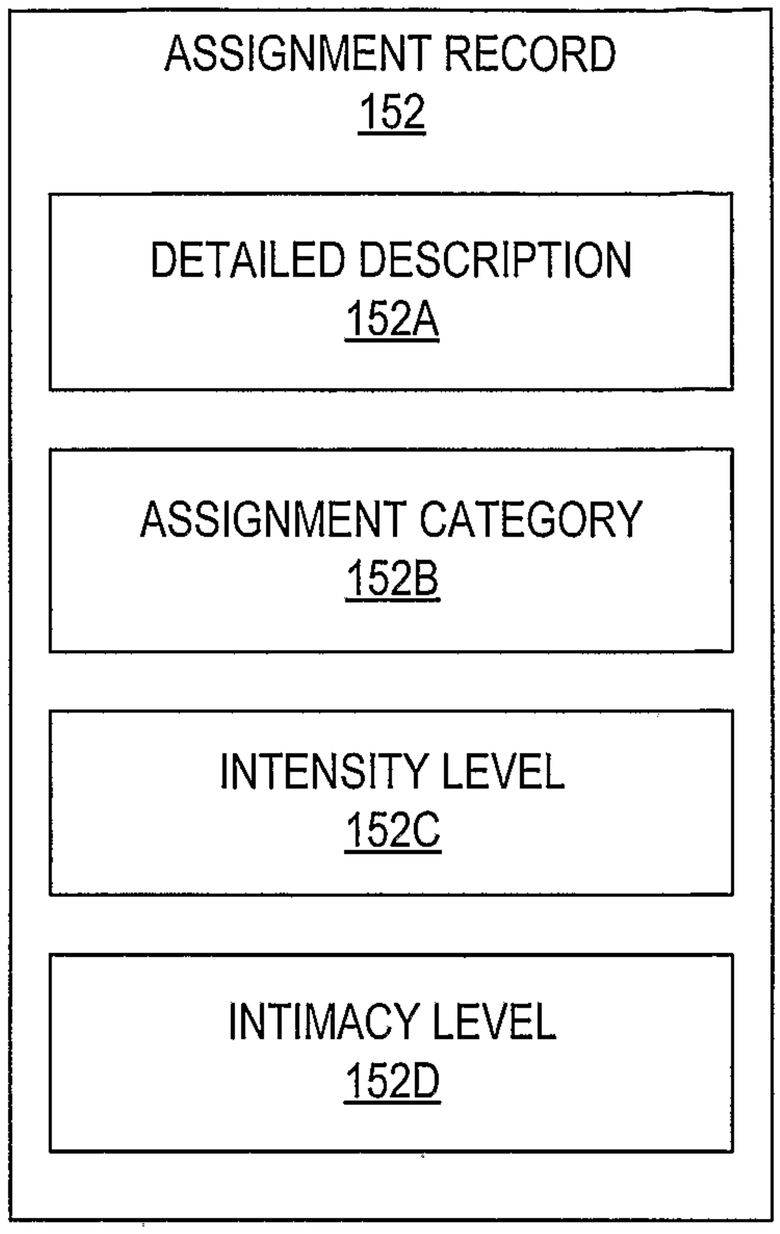


FIG. 3A

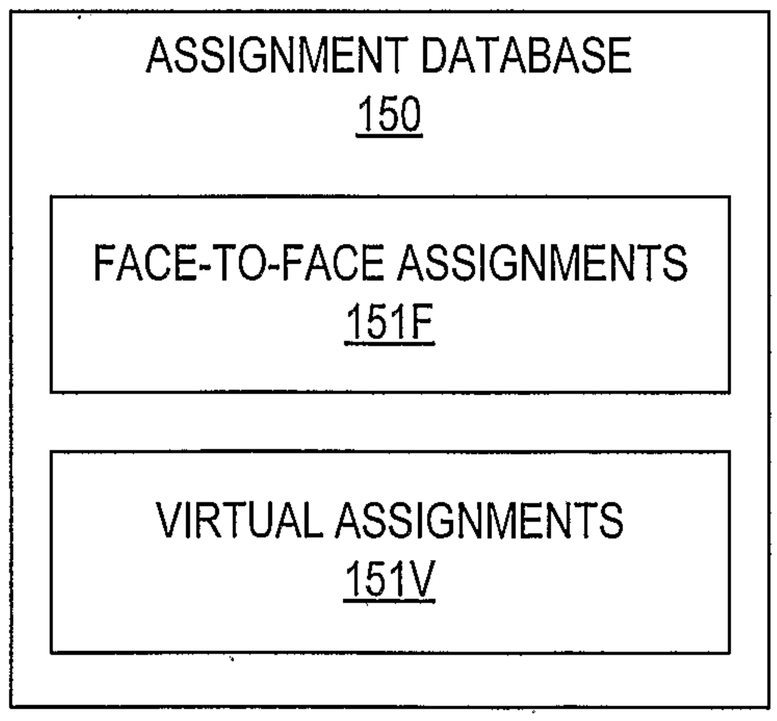


FIG. 3B

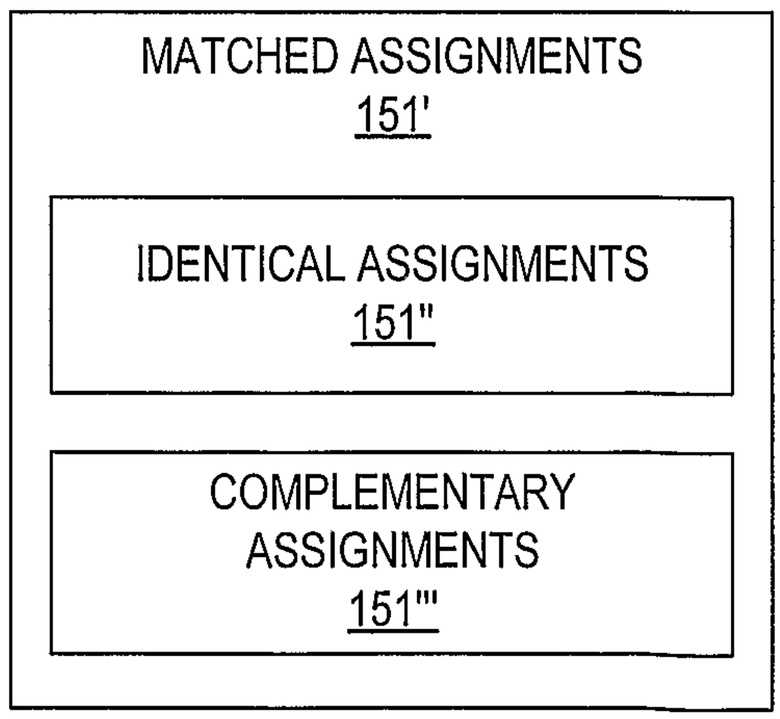


FIG. 3C

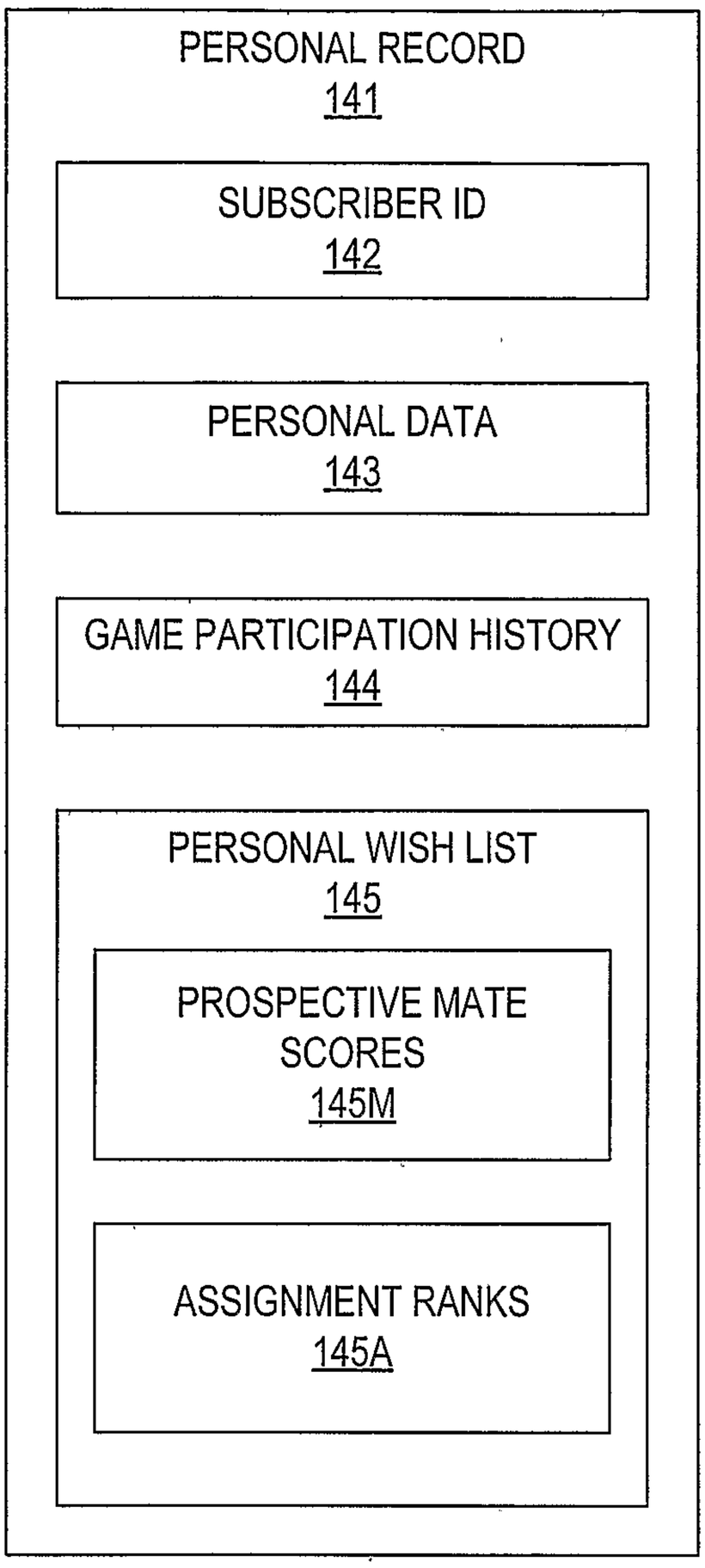


FIG. 4

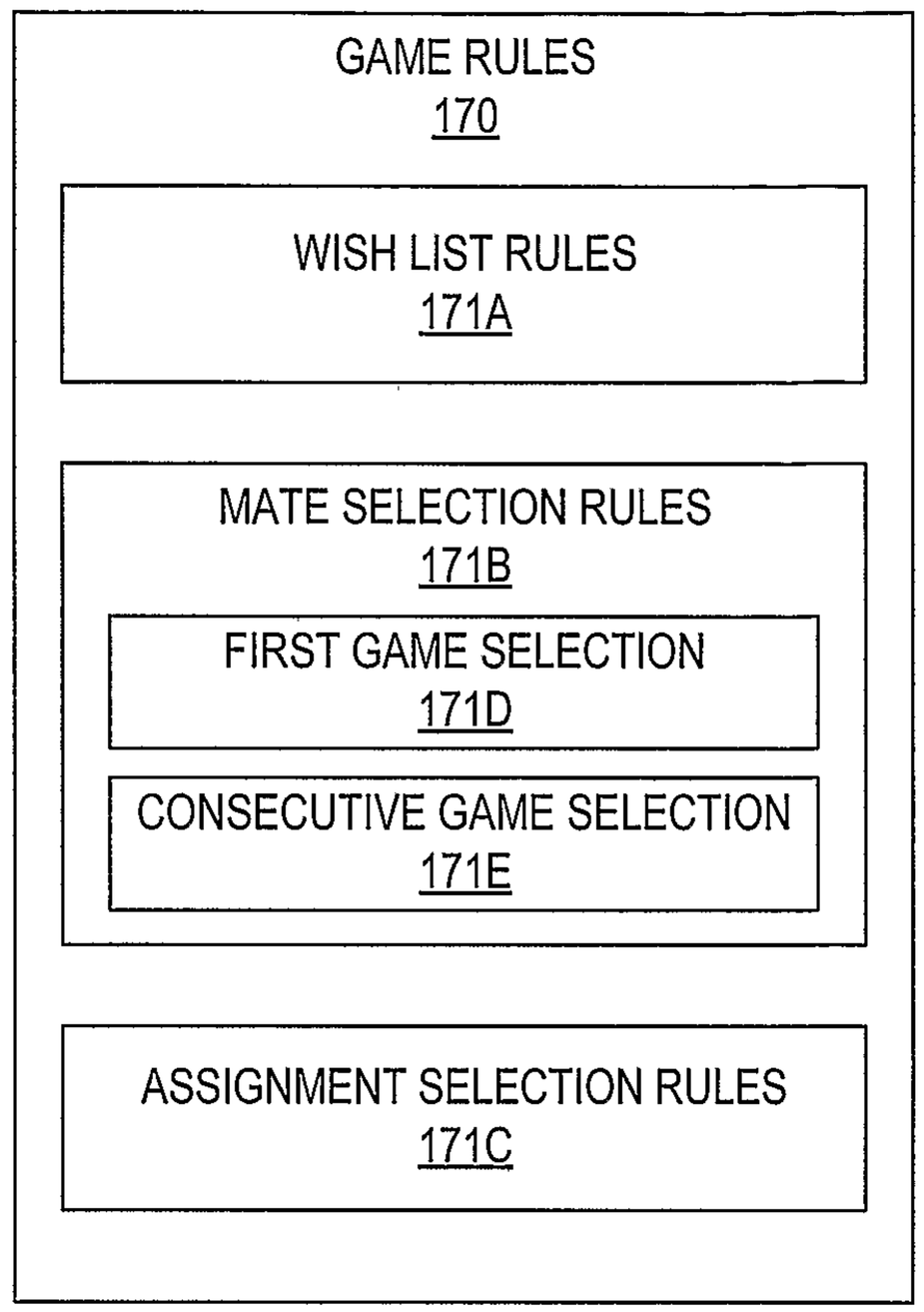


FIG. 5

145A-1

ASSN	RANK
A	0
B	0
C	9
D	3
E	4
F	4
G	2
H	6

FIG. 4B

145A-2

ASSN	RANK			
	PETER	PAUL	JOHN	JIM
A	0	0	0	2
B	0	0	0	3
C	9	1	0	5
D	3	1	0	2
E	4	1	0	9
F	4	0	0	7
G	2	0	0	6
H	6	2	0	0

FIG. 4C

145M

ID	SCORE
PETER	6
PAUL	1
JOHN	0
JIM	6

FIG. 4A

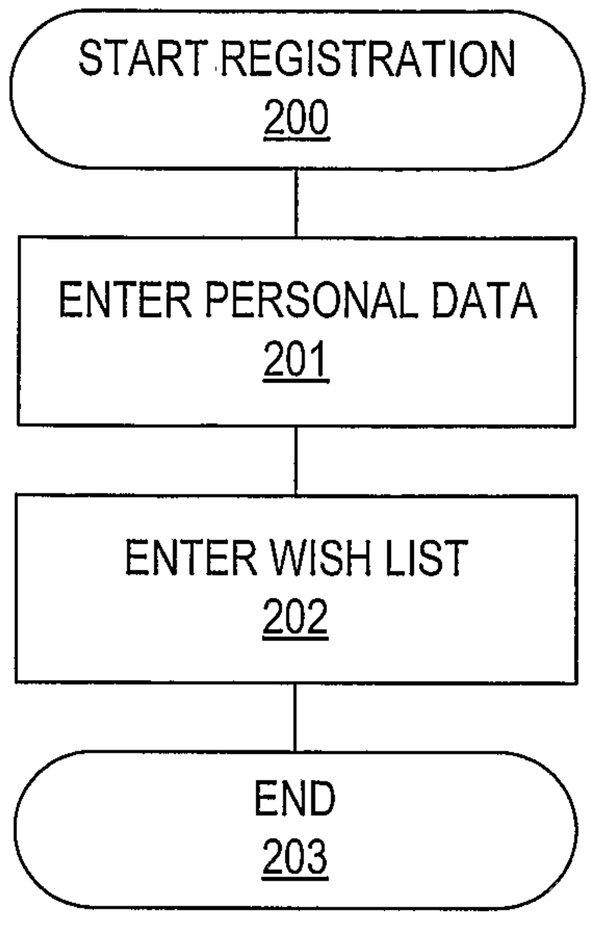


FIG. 6

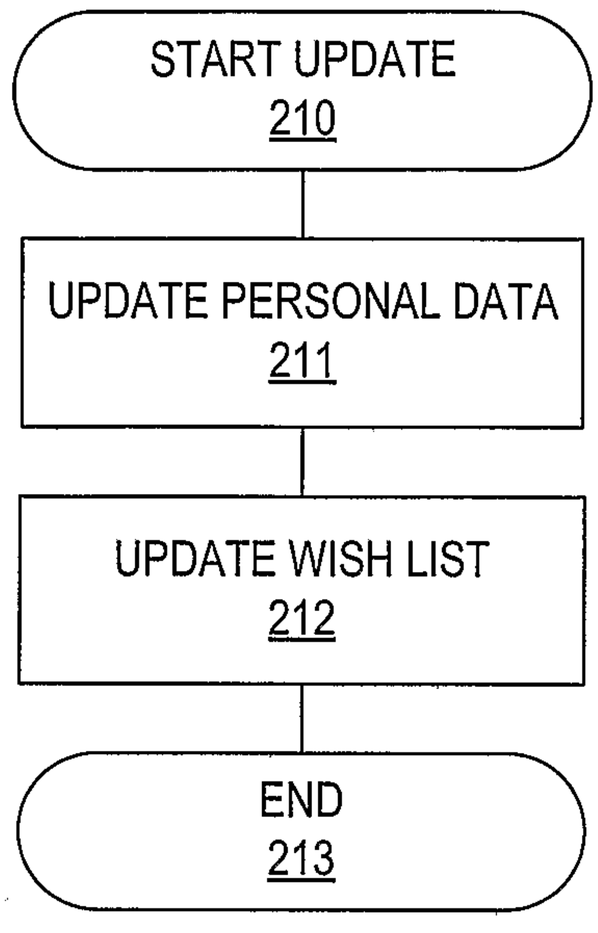


FIG. 7

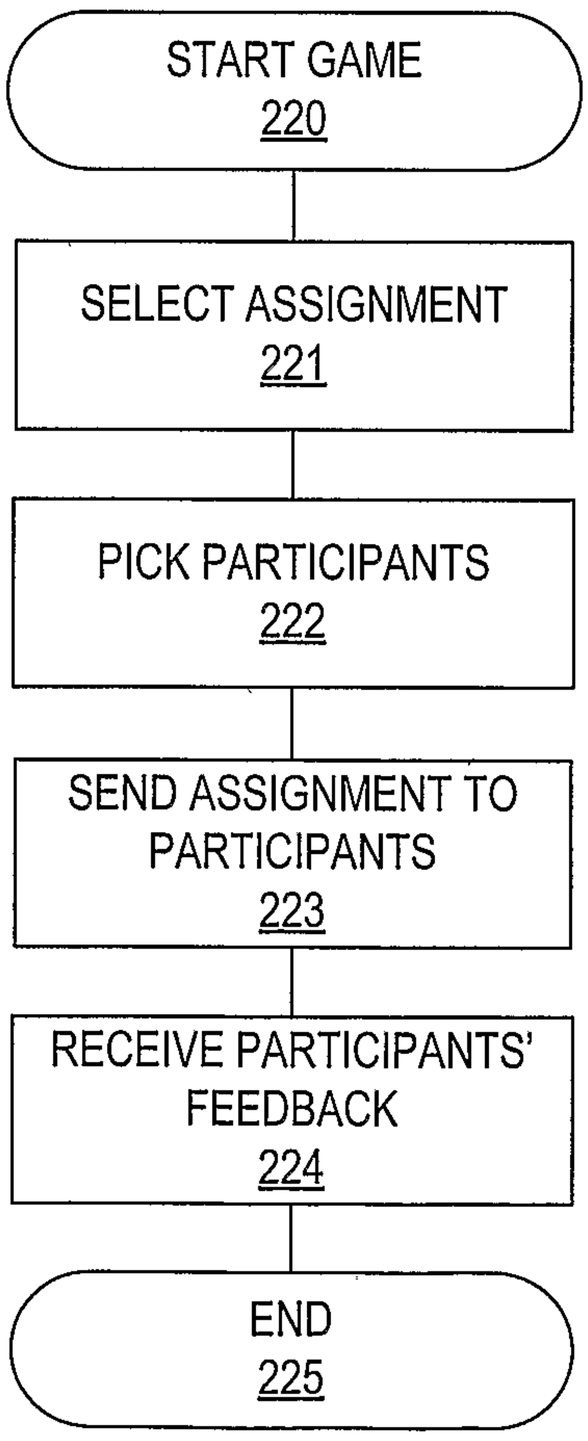


FIG. 8

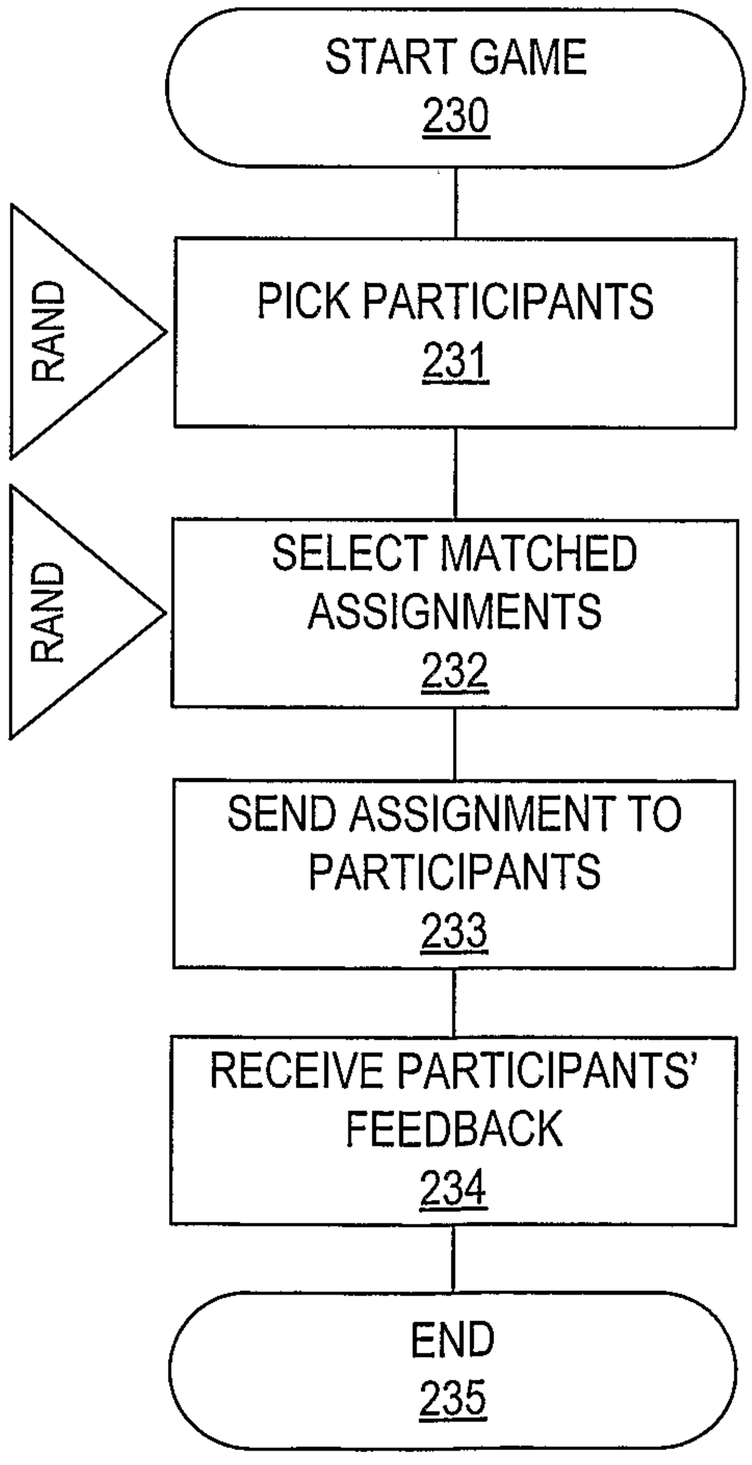


FIG. 9

300

	MARY	ANNA	RACHEL	SUZY	PETER	PAUL	JOHN	JIM
MARY	-	-	-	-	9	6	1	0
ANNA	-	-	-	-	6	1	0	1
RACHEL	-	-	-	-	6	1	1	6
SUZY	-	-	-	-	1	1	0	1
PETER	6	1	0	6	-	-	-	-
PAUL	1	1	1	1	-	-	-	-
JOHN	0	9	1	1	-	-	-	-
JIM	6	1	6	0	-	-	-	-

310

	MARY	ANNA	RACHEL	SUZY
PETER	15	7	0	7
PAUL	7	2	2	2
JOHN	0	0	2	0
JIM	0	2	12	0

320

	RANGE
MARY & PETER	1-15
MARY & PAUL	16-22
ANNA & PETER	23-29
ANNA & PAUL	30-31
ANNA & JIM	32-33
RACHEL & PAUL	34-35
RACHEL & JOHN	36-37
RACHEL & JIM	38-49
SUZY & PETER	50-56
SUZY & PAUL	57-58

FIG. 10

330

ASSIGNMENT:	A	B	C	D	E	F	G	H
MARY	0	0	9	3	4	4	2	6
ANNA	9	5	5	5	0	0	0	0
RACHEL	3	9	8	8	5	0	4	8
SUZY	8	0	0	4	4	6	9	3
PETER	0	0	0	0	9	0	1	1
PAUL	7	5	1	9	3	5	5	1
JOHN	7	6	3	0	0	8	0	5
JIM	3	0	0	9	8	3	3	1

340

ASSIGNMENT:	A	B	C	D	E	F	G	H
MARY & PETER	0	0	0	0	13	0	3	7
MARY & PAUL	0	0	10	12	7	9	7	7
MARY & JOHN	0	0	12	0	0	12	0	11
MARY & JIM	0	0	0	12	12	7	5	7
ANNA & PETER	0	0	0	0	0	0	0	0
ANNA & PAUL	16	10	6	14	0	0	0	0
ANNA & JOHN	16	11	8	0	0	0	0	0
ANNA & JIM	12	0	0	14	0	0	0	0
RACHEL & PETER	0	0	0	0	14	0	5	9
RACHEL & PAUL	10	14	9	17	8	0	9	9
RACHEL & JOHN	10	15	11	0	0	0	0	13
RACHEL & JIM	6	0	0	17	13	0	7	9
SUZY & PETER	0	0	0	0	13	0	10	4
SUZY & PAUL	15	0	0	13	7	11	14	4
SUZY & JOHN	15	0	0	0	0	14	0	8
SUZY & JIM	11	0	0	13	12	9	12	4

FIG. 10A

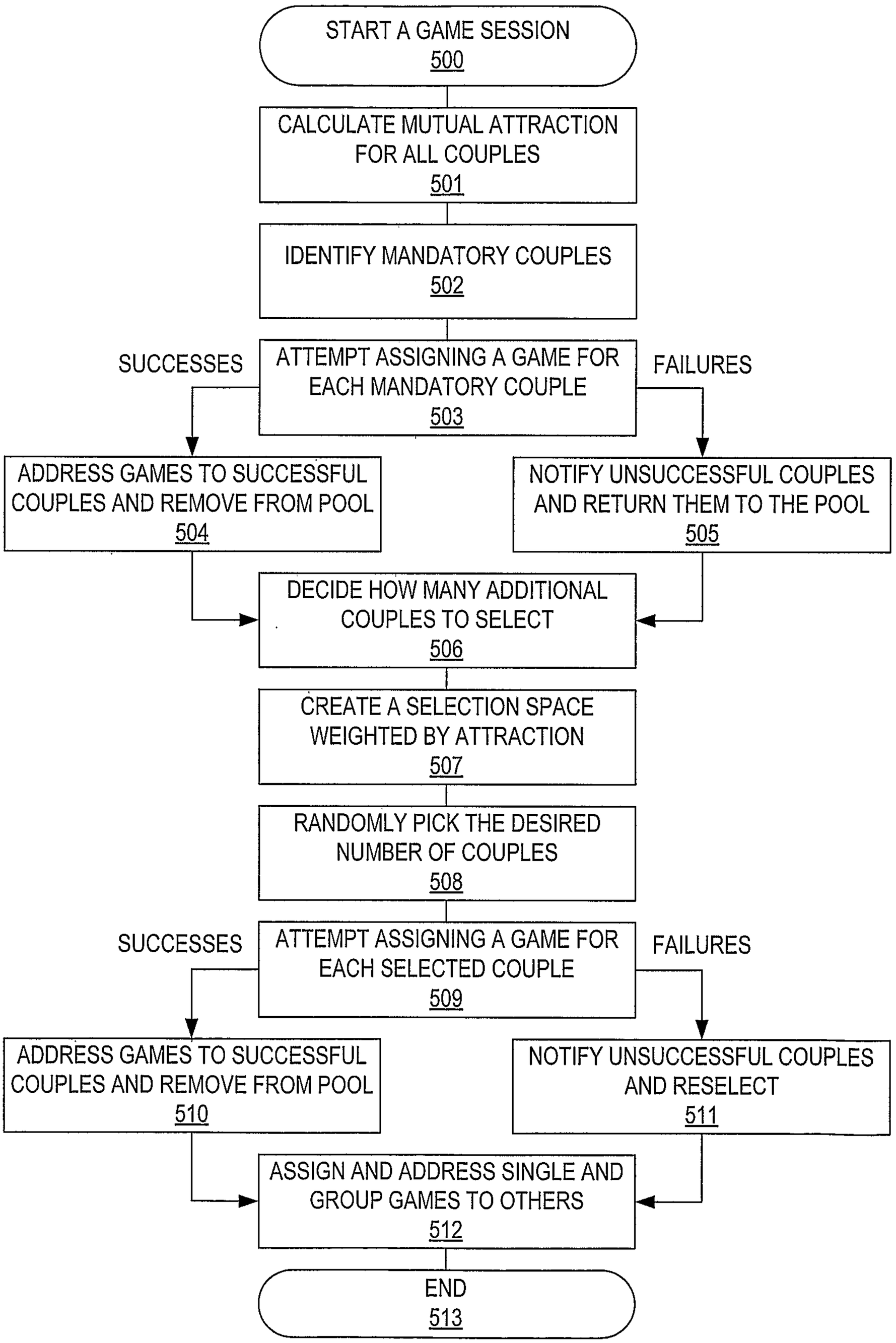

START A GAME SESSION
500
CALCULATE MUTUAL ATTRACTION FOR ALL COUPLES
501
IDENTIFY MANDATORY COUPLES
502
ATTEMPT ASSIGNING A GAME FOR EACH MANDATORY COUPLE
503
SUCCESSES
FAILURES
ADDRESS GAMES TO SUCCESSFUL COUPLES AND REMOVE FROM POOL
504
NOTIFY UNSUCCESSFUL COUPLES AND RETURN THEM TO THE POOL
505
DECIDE HOW MANY ADDITIONAL COUPLES TO SELECT
506
CREATE A SELECTION SPACE WEIGHTED BY ATTRACTION
507
RANDOMLY PICK THE DESIRED NUMBER OF COUPLES
508
ATTEMPT ASSIGNING A GAME FOR EACH SELECTED COUPLE
509
SUCCESSES
FAILURES
ADDRESS GAMES TO SUCCESSFUL COUPLES AND REMOVE FROM POOL
510
NOTIFY UNSUCCESSFUL COUPLES AND RESELECT
511
ASSIGN AND ADDRESS SINGLE AND GROUP GAMES TO OTHERS
512
END
513

FIG. 11

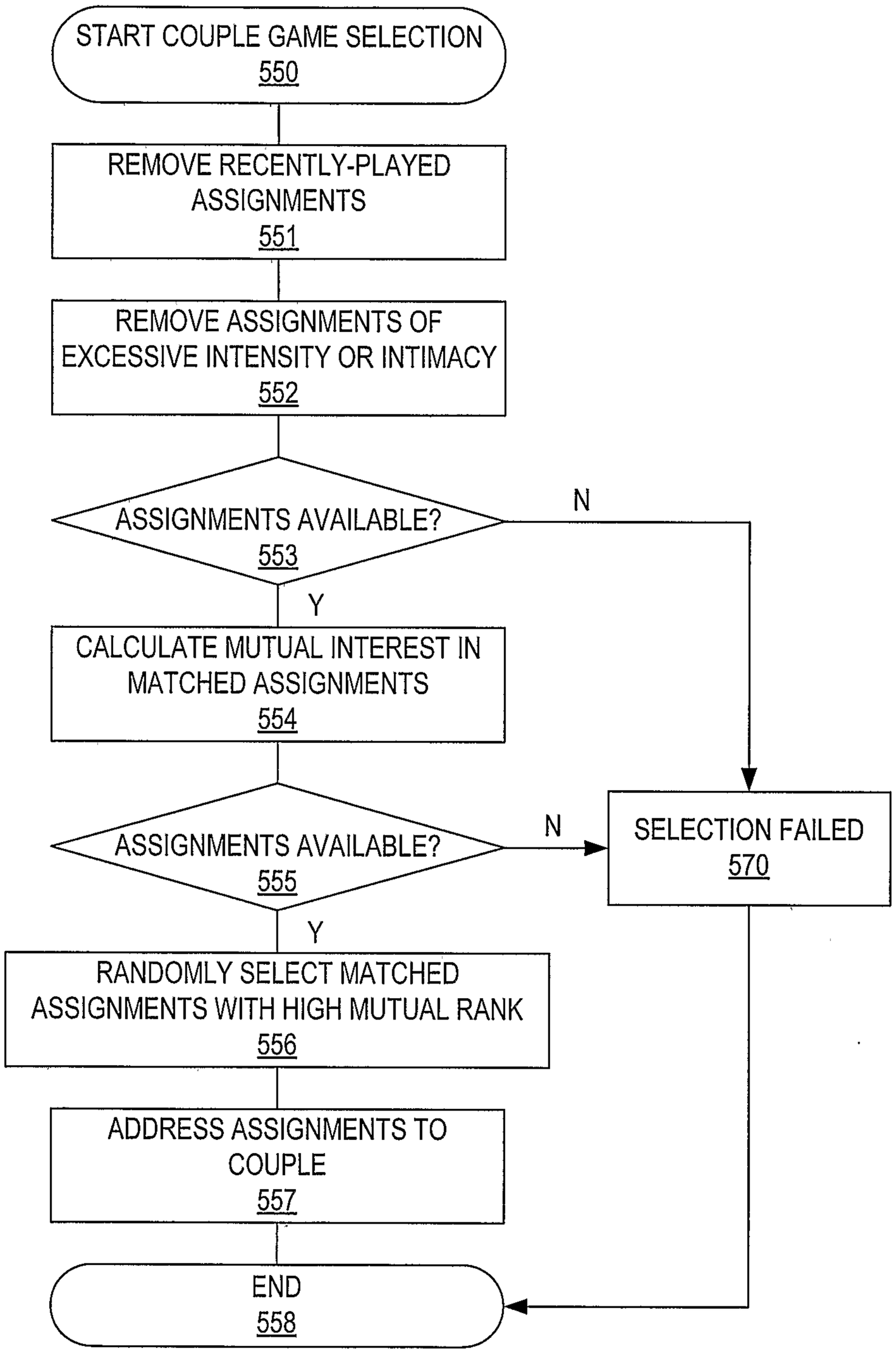

START COUPLE GAME SELECTION
550
REMOVE RECENTLY-PLAYED ASSIGNMENTS
551
REMOVE ASSIGNMENTS OF EXCESSIVE INTENSITY OR INTIMACY
552
ASSIGNMENTS AVAILABLE?
553
N
Y
CALCULATE MUTUAL INTEREST IN MATCHED ASSIGNMENTS
554
ASSIGNMENTS AVAILABLE?
555
N
SELECTION FAILED
570
Y
RANDOMLY SELECT MATCHED ASSIGNMENTS WITH HIGH MUTUAL RANK
556
ADDRESS ASSIGNMENTS TO COUPLE
557
END
558

FIG. 12

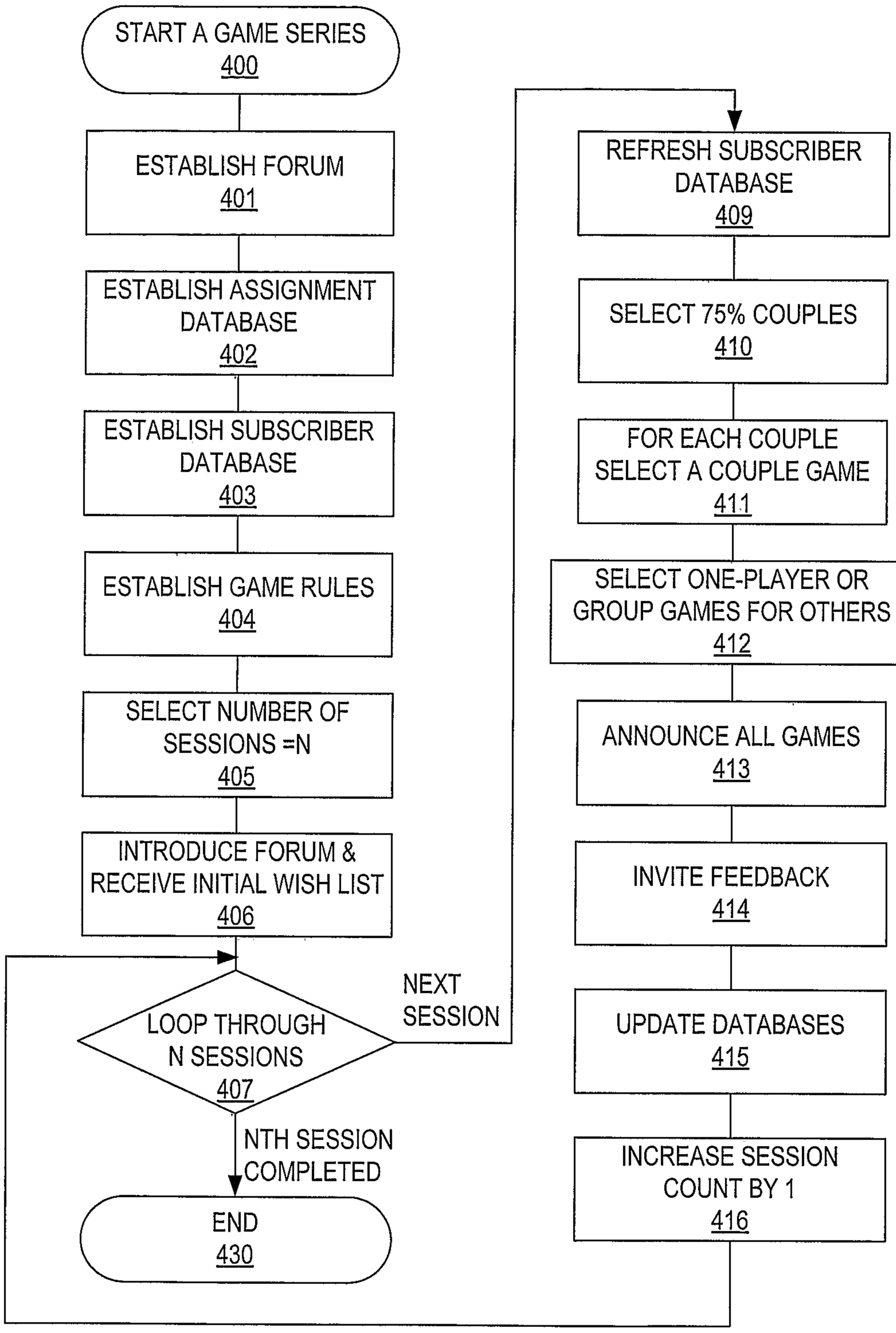

START A GAME SERIES
400
ESTABLISH FORUM
401
ESTABLISH ASSIGNMENT DATABASE
402
ESTABLISH SUBSCRIBER DATABASE
403
ESTABLISH GAME RULES
404
SELECT NUMBER OF SESSIONS =N
405
INTRODUCE FORUM & RECEIVE INITIAL WISH LIST
406
LOOP THROUGH N SESSIONS
407
NEXT SESSION
NTH SESSION COMPLETED
END
430
REFRESH SUBSCRIBER DATABASE
409
SELECT 75% COUPLES
410
FOR EACH COUPLE SELECT A COUPLE GAME
411
SELECT ONE-PLAYER OR GROUP GAMES FOR OTHERS
412
ANNOUNCE ALL GAMES
413
INVITE FEEDBACK
414
UPDATE DATABASES
415
INCREASE SESSION COUNT BY 1
416

FIG. 13

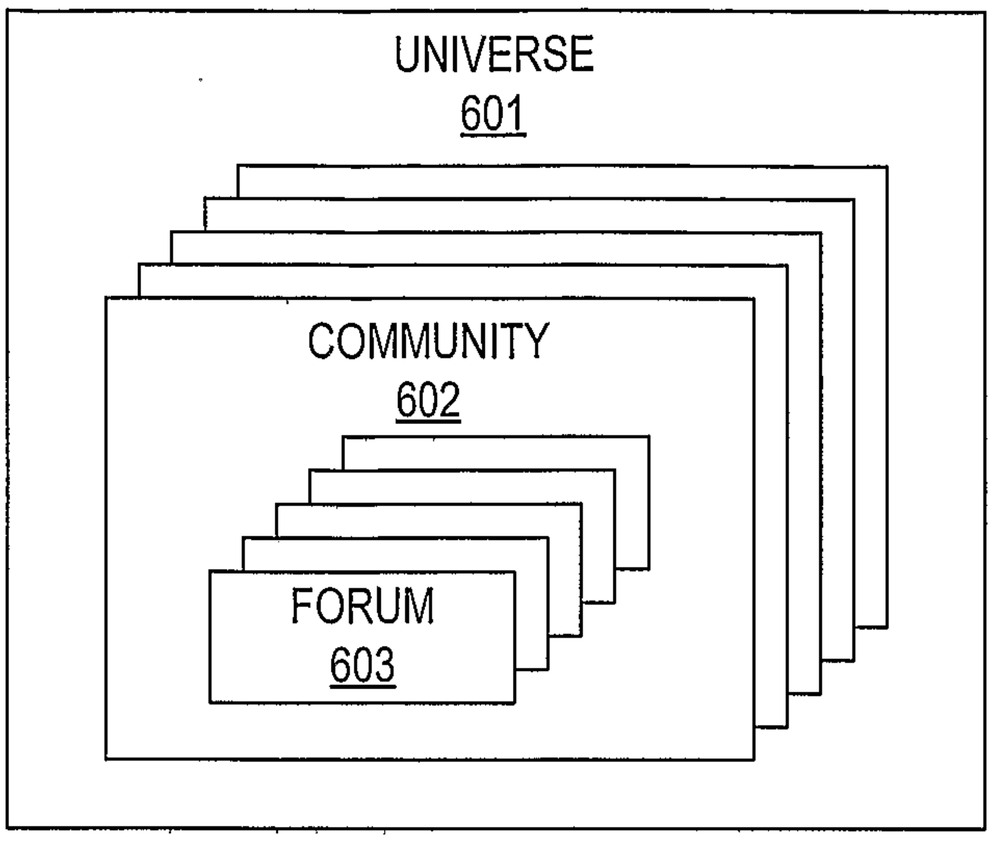

UNIVERSE
601
COMMUNITY
602
FORUM
603

FIG. 14

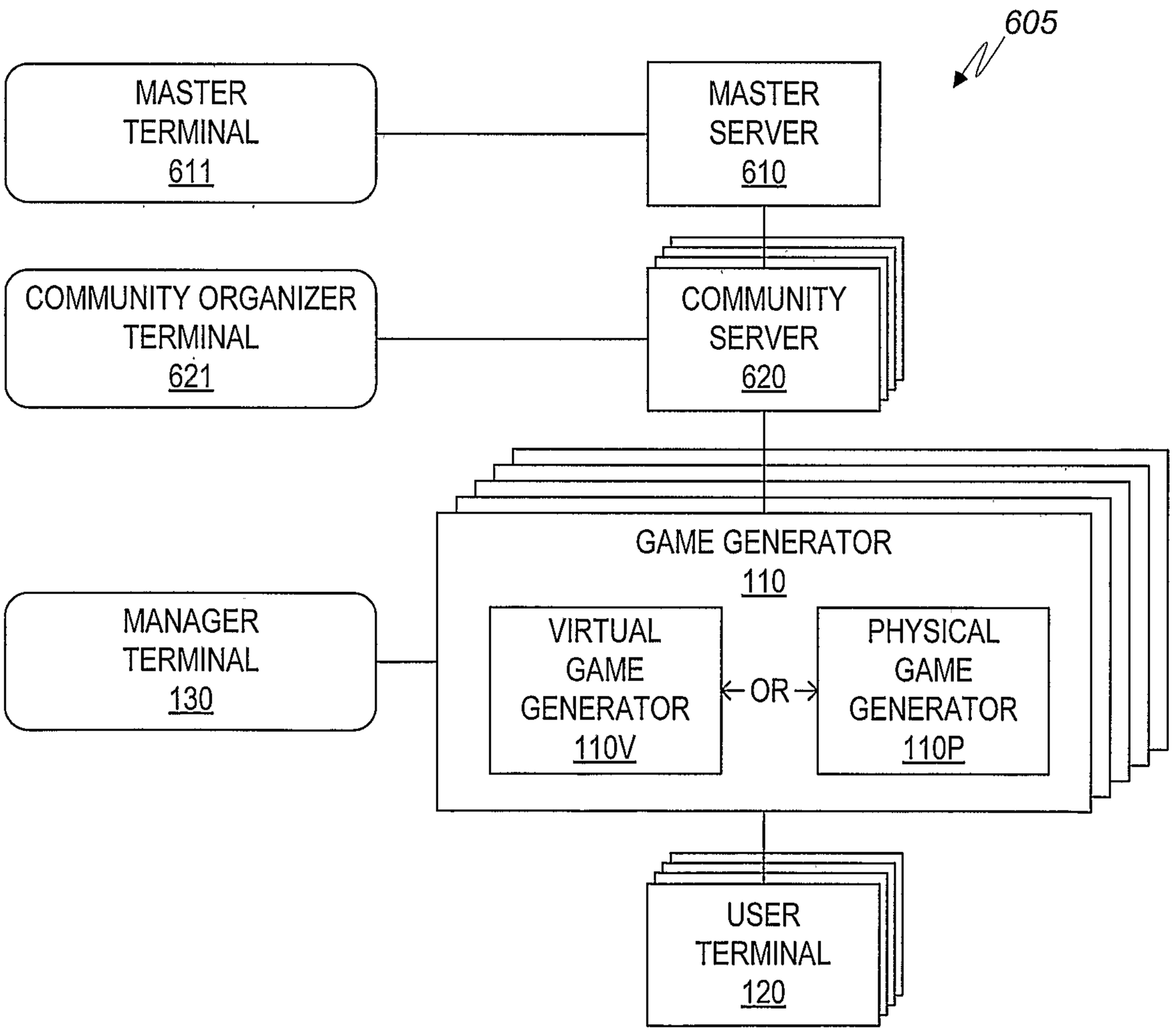

605
MASTER TERMINAL 611
MASTER SERVER 610
COMMUNITY ORGANIZER TERMINAL 621
COMMUNITY SERVER 620
GAME GENERATOR 110
MANAGER TERMINAL 130
VIRTUAL GAME GENERATOR 110V
OR
PHYSICAL GAME GENERATOR 110P
USER TERMINAL 120

FIG. 15

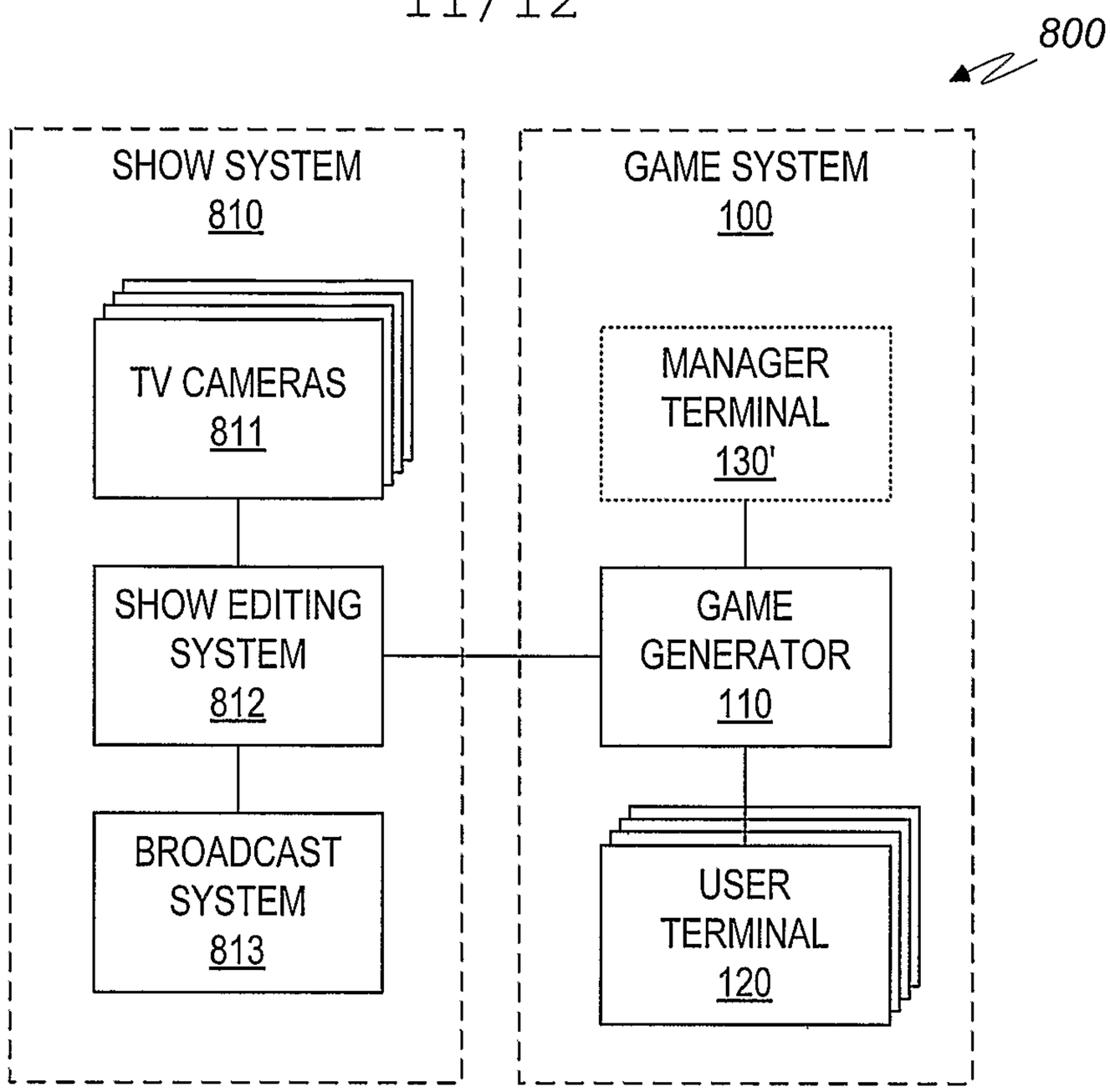

800
SHOW SYSTEM
810
TV CAMERAS
811
SHOW EDITING SYSTEM
812
BROADCAST SYSTEM
813
GAME SYSTEM
100
MANAGER TERMINAL
130'
GAME GENERATOR
110
USER TERMINAL
120

FIG. 16

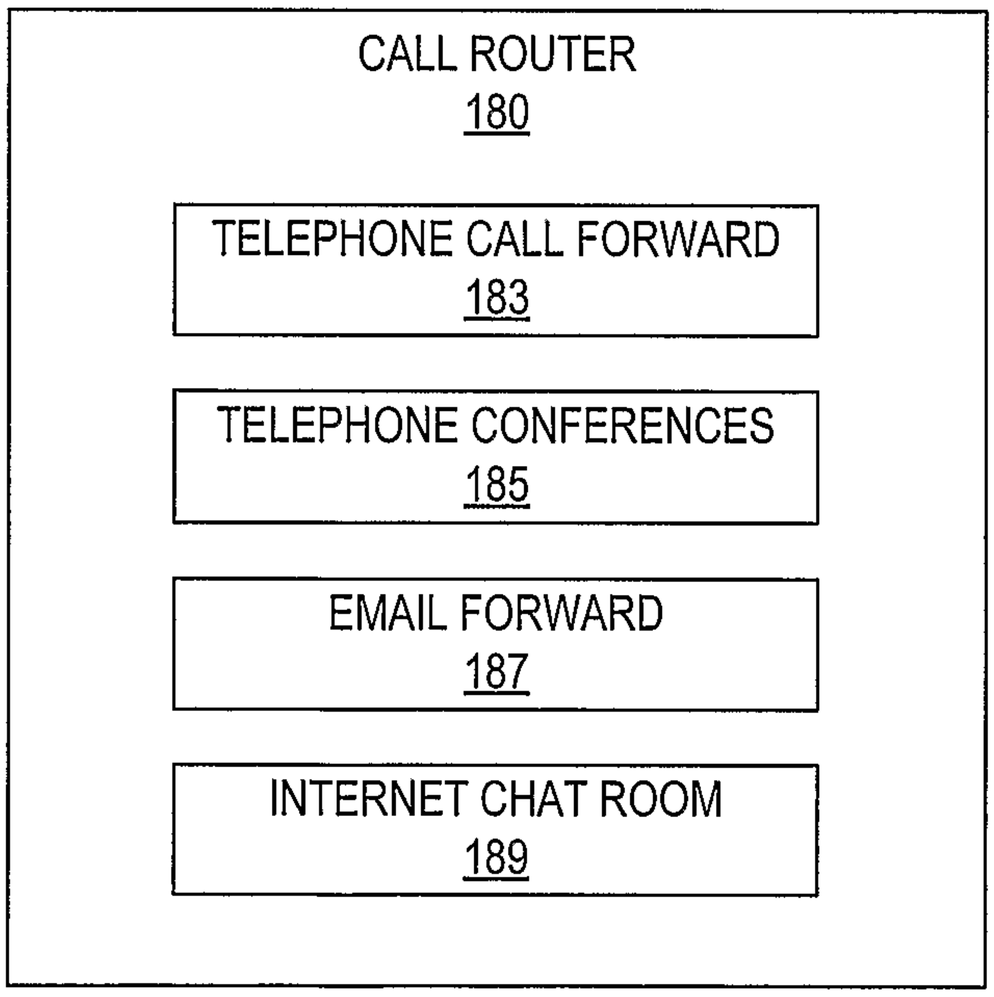

CALL ROUTER
180
TELEPHONE CALL FORWARD
183
TELEPHONE CONFERENCES
185
EMAIL FORWARD
187
INTERNET CHAT ROOM
189

FIG. 17

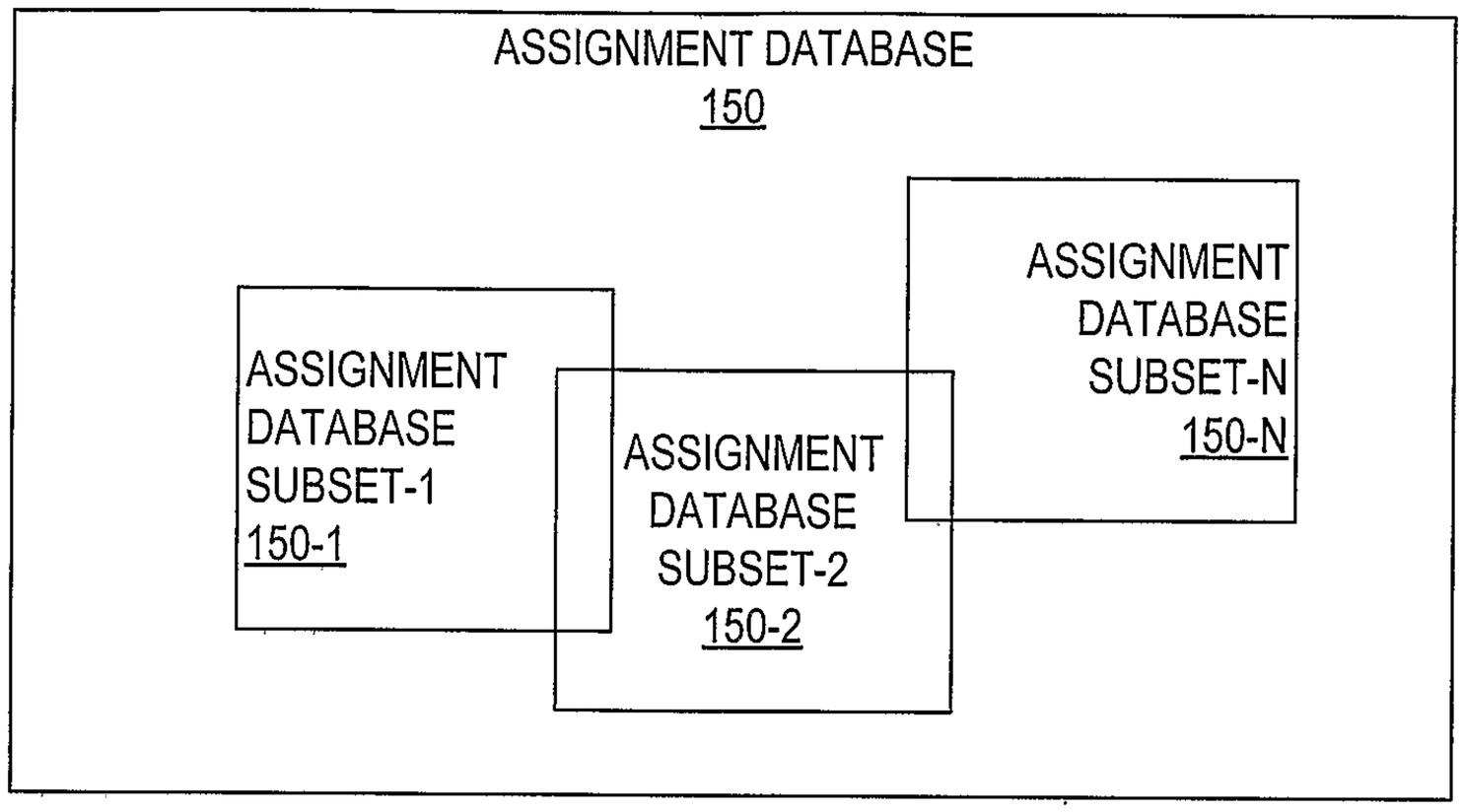

ASSIGNMENT DATABASE
150
ASSIGNMENT DATABASE SUBSET-1
150-1
ASSIGNMENT DATABASE SUBSET-2
150-2
ASSIGNMENT DATABASE SUBSET-N
150-N

FIG. 18

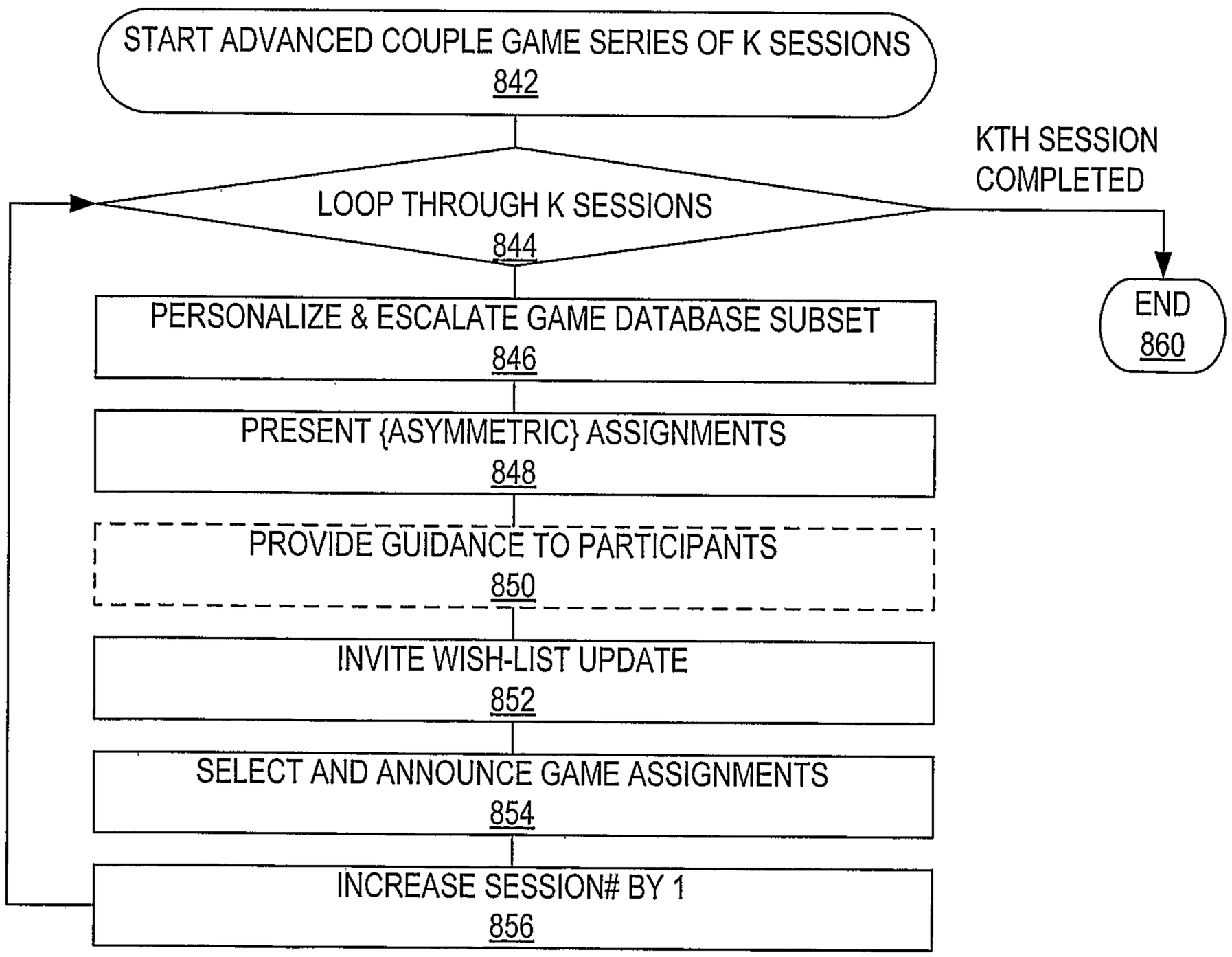
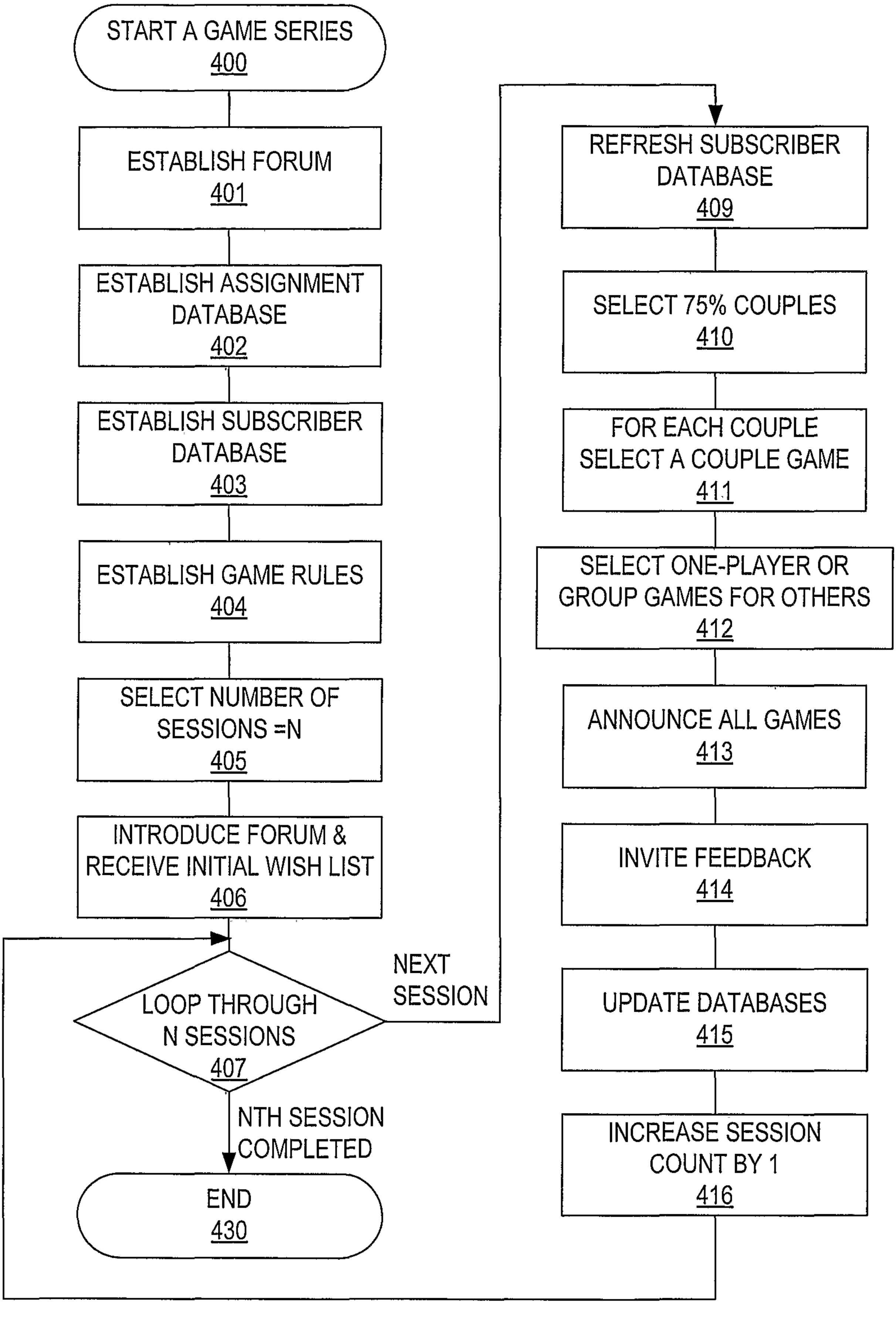

START ADVANCED COUPLE GAME SERIES OF K SESSIONS
842
LOOP THROUGH K SESSIONS
844
KTH SESSION COMPLETED
END
860
PERSONALIZE & ESCALATE GAME DATABASE SUBSET
846
PRESENT {ASYMMETRIC} ASSIGNMENTS
848
PROVIDE GUIDANCE TO PARTICIPANTS
850
INVITE WISH-LIST UPDATE
852
SELECT AND ANNOUNCE GAME ASSIGNMENTS
854
INCREASE SESSION# BY 1
856

FIG. 19


START A GAME SERIES
400
ESTABLISH FORUM
401
ESTABLISH ASSIGNMENT DATABASE
402
ESTABLISH SUBSCRIBER DATABASE
403
ESTABLISH GAME RULES
404
SELECT NUMBER OF SESSIONS =N
405
INTRODUCE FORUM & RECEIVE INITIAL WISH LIST
406
LOOP THROUGH N SESSIONS
407
NEXT SESSION
NTH SESSION COMPLETED
END
430
REFRESH SUBSCRIBER DATABASE
409
SELECT 75% COUPLES
410
FOR EACH COUPLE SELECT A COUPLE GAME
411
SELECT ONE-PLAYER OR GROUP GAMES FOR OTHERS
412
ANNOUNCE ALL GAMES
413
INVITE FEEDBACK
414
UPDATE DATABASES
415
INCREASE SESSION COUNT BY 1
416