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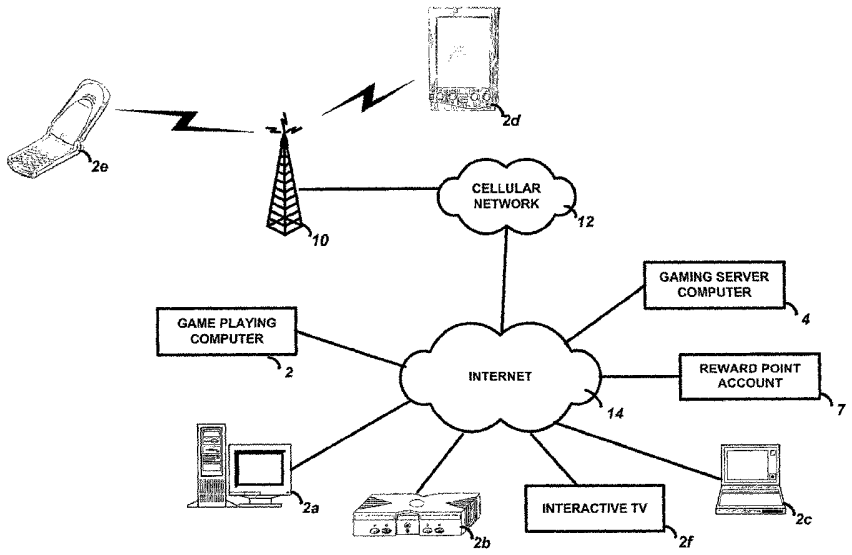
(54) **Title:** METHOD AND SYSTEM FOR GAMING OVER A COMPUTER NETWORK



(57) **Abstract:** A networked, online gaming system and method of operation, the system including a plurality of players, each operating a game playing computer interconnected over a network with a gaming server computer. The gaming server computer generates a profile for each of the players, which may include the player's gaming proficiency, and socioeconomic and physical data of the player. The gaming server computer matches the players (as teammates or opponents) to play a game based on the profile of the players, supervises the game played by the matched players, modifies controllable parameters of the game being played, and manages a reward point account provided for each player.

WO 2004/046859 A2

METHOD AND SYSTEM FOR GAMING OVER A COMPUTER NETWORK

TECHNICAL FIELD

The present invention relates to computer gaming, and in particular to computer gaming in an online community, over a computer network.

BACKGROUND ART

Computer gaming has become extremely popular, evidenced by the prevalence of dedicated game consoles such as MICROSOFT XBOX, NINTENTO 64 and GAMECUBE, SONY PLAYSTATION and PS2, as well as handheld products such as GAMEBOY and GAMEBOY ADVANCE, and the use of gaming software on general purpose personal computers. Recently, games are included on portable devices such as cell phones, pagers, PDAs, etc. In addition to playing games with one to four people on a single gaming machine as listed above, the use of computer networks has allowed players in remote locations to connect with each other and play games against each other by using their respective gaming machine. This has spawned online gaming communities that do not require physical presence of opponents or teammates in order to play a game.

Online, or networked, gaming is in its infancy, however. Prior art gaming systems do not address critical functions that relate to online gaming, such as player matching (opponent and teammates), skill measurement, player profiling, reward compensation systems, payment systems, etc. The present invention addresses these many issues in order to implement an online networked gaming system that is advantageous in many respects over the prior art.

It is therefore an object of the present invention to provide a networked gaming environment that overcomes these and many other problems of the prior art.

DISCLOSURE OF THE INVENTION

In a first major aspect of the invention, provided is a online gaming system and method of its operation, supervision and management. The system has a plurality of game playing computers selectively interconnected over a computer network, with each game playing computer adapted to play a game with one or more other game playing computers over the computer network. A gaming server computer is selectively interconnected over the computer network to one or more of the game playing computers for management and supervision of the games played by, between and amongst players operating the game playing computers. In particular, the gaming server computer is programmed and adapted to generate a profile for each of the players associated with the game playing computers. The gaming server computer matches at least two of the players to play a game with each other (as teammates) or against each other (as opponents) based on the profile of each of the players, and it may then supervise part or all of a game being played by the players.

The profile generated by the gaming server computer may include the gaming proficiency of a player (i.e. his or her expertise in playing a particular game or in executing certain aspects of that game), which may be ascertained by the gaming server computer by observing the player play the game over the computer network, or by giving the player a predefined test based on skills utilized in playing a game. A player may be re-tested as required by the gaming server, for example
when the player reaches a predefined level of play, when the player has played less than (or more than) a predefined number of games, when the player has won (or lost) a predefined number of games, when a predefined amount of time has expired, etc. The player's gaming profile may also be

based on a player's socioeconomic data, such as the player's age, the player's gender, the player's occupation, the player's leisure interests, the players desires, and the player's income level, etc. The socioeconomic data provided by a player may be verified by the gaming server before the player may be matched with other players, the verification being extrinsic or intrinsic.

Player matching may be performed by the gaming server computer in various ways. In a simple case, the gaming server computer matches two players to play a game against each other over the computer network, or it forms teams of players to play a game against each other. A player may make a request to the gaming server computer to be matched with another opponent player, with other teammate players, etc. The match requests may also be generated by the gaming server computer. For example, a player may request to be matched to play against (or with) a player from another country, or from the same state, or with the same approximate income, or with a higher IQ, etc. Players may also be matched based on historical play between the players or other players that each have already played. The system may be sponsored by entities such as companies desiring to place ads on the system, which may be in exchange for providing a prize to a winning player or team. The sponsor may make a request that certain types of players be matched, for example to help promote a product or service of the sponsor.

Once the gaming server determines an appropriate match (or matches), then it issues an invitation to the matched players, which may be in the form of an Instant Message (IM) or the like, an email message, an automated voice call, a pop-up screen on the game playing computer, illumination or activation of an invitation icon the screen of the game playing computer, a series of tones, etc. If and when a

player responds with an acceptance, then the game is initiated and the gaming server computer may supervise play.

A game may have certain roles, which may be assigned to certain players by the gaming server based on their profile (e.g. based on their proficiency, their socioeconomic profile, physical traits, geographic location, etc.).

The present invention also may provide consideration to players meeting certain criteria, which maybe originated by a sponsor or player desiring to find certain types of players to play that meet certain criteria, wherein the consideration would be an incentive for the requested player to play the requesting player. For example, if a player of a relatively lower proficiency score wishes to play one of a higher proficiency score, he may provide a payment to that player (in the form of cash, game credits, reward points, etc.) as incentive. An auction may be had by several players of relatively lower proficiency to bid for the right to play one of relatively higher proficiency, for example if several amateurs bid to play against Tiger Woods in an online golf tournament.

A playerboard or lobby may be provided with a list of available players that a requesting player may review and request the gaming server to issue an invitation. The playerboard may list only logged on or otherwise currently available players, or it may list all players in predefined categories (e.g. all baseball players with batting averages over .350), etc.

The system is adapted to allow the gaming server computer to modify controllable parameters of the game, either prior to the start of the game or during play on a real-time basis. Such modifications may correspond to predefined criteria such as the proficiency levels of the

players (e.g. make it harder for good players), or the modifications may be randomly made. Handicaps may be assigned to relatively better player that are matched with relatively weaker players.

In a second major aspect of the present invention, the online gaming system may provide for the awarding and/or redemption of reward points (akin to loyalty or frequent flyer points) which may be combinable with existing reward accounts held by the player. For example, a player may be awarded 1000 American Airlines points if he wins a certain game. The number of points awarded to a player may be correlated to the proficiency of the player (such that players having a relatively high proficiency are awarded with a relatively lower number of reward points, or vice versa), or it may be correlated to the complexity of the game being played. Points may be subtracted for various events (e.g. losing a game, purchasing a premium game, paying another player to play a game, failing to meet predefined game play criteria, purchasing longer game play time, etc.). Likewise, points may be added for various events (e.g. winning a game, receiving pay from another player to play a game, etc.)

BRIEF DESCRIPTION OF THE DRAWING

Figure 1 is a block diagram of the system of the present invention;

Figure 2 is a block diagram of the gaming server computer;

Figure 3 is a block diagram of the player profile database;

Figure 4 is an illustration of a player proficiency record;

Figure 5 is an flowchart of the general operation of the invention; and

Figure 6 is an illustration of screenshots used in the present invention.

BEST MODE FOR CARRYING OUT THE INVENTION

The system of the preferred embodiment is depicted in block diagram format in Figure 1. Shown is a computer network 14, which in the preferred embodiment is a wide area network (WAN) such as the Internet, but which may of course refer to any infrastructure that provides for the wired or wireless communication of various computing devices, which in this invention are referred to generally as game playing computers 2 and a gaming server computer 4. The game playing computer 2 may be any type of dedicated or general purpose computing device that is capable of allowing a user or player to interface and interoperate with gaming software executing locally (i.e. on the game playing computer 2) or remotely (i.e. on another computing device interconnected over the network 14). Typical examples of the game playing computer are the general purpose personal computer 2a, a laptop computer 2c, and a gaming console 2b, which may of the type known as the MICROSOFT XBOX, the SONY PLAYSTATION OR PS2, and/or the NINTENDO 64, GAMECUBE, or GAMEBOY/GAMEBOY ADVANCE, all of which are well known in the art. A television set configured with an appropriate set top box may be used as an interactive TV 2f. In addition, wireless devices such as a personal digital assistant (PDA) 2d and a cellular telephone 2e may communicate via an antenna 10 with a wireless or cellular network 12, which in turn communicates with the network 14 for seamless communications with other game playing computers and/or the gaming server computer 4. These gaming devices 2a, 2b, 2c, 2d, 2e and 2f are referred to generally as game playing computers 2 for the sake of clarity throughout this description.

The gaming server computer 4 provides many functions and services to the game playing computers 2, which together form a gaming community. The gaming services to be described herein are shown as executing on a single platform, but of course may be distributed across multiple platforms as may be desired or required (e.g. for appropriate scalability, etc.). Distribution of services as described herein are well known in the art and need not be described in further detail.

Thus, in general terms, the game playing computers all communicate in selective fashion with the gaming server computer over the computer network 14 in order to accomplish the objectives described herein. The present invention contemplates operation between as few as two game playing computers over the network to thousands of game playing computers or more. The game playing computers communicate with each other and/or the gaming server computer selectively; meaning that a particular player may choose to have his or her game playing computer online as desired, or he may disconnect from the gaming network as desired.

The present invention operates with respect to games played by the game playing computers over the network, wherein games refer to any type of rule-based activity or contest between or amongst two or more players (wherein one player may be emulated by the gaming server computer), with goals and objectives attainable for the players. Games include but are not limited to knowledge based games (e.g. trivia games), creative games, individual or team sports games (baseball, football, soccer, hockey, golf, tennis, etc.), games of chance (poker, blackjack, bridge, etc.), role playing games, fantasy games, historical games, war games, problem-solving games, puzzle-solving games, contests, rehabilitation games, etc. Games may also include

simulation events, such as the popular Flight Simulator program and the like.

The gaming server 4 will now be described in detail. The gaming server in the present invention provides many functions and services to the game playing computers, such as player profile generation, player skill measurements, player matching for game play, awarding of prizes in the form of reward points and management of a reward points account for each player, and game supervision and analysis.

With reference to the block diagram of Figure 2 and the flowchart of Figure 5, the main logical components of the gaming server computer are a processor means 22, which performs all required processing and logic functions and controls operation of the gaming server, and a network interface 28, which controls all physical and logical interface functions between the gaming server and the computer network. The processor operates in conjunction with a player profile database 18, which stores all profile data for the players that belong to the gaming system (the gaming community); a game database 23, which stores gaming parameters, functions and the like; and a sponsor database 25, which stores information about the various sponsors and advertisers that subscribe to the system (described in detail below). The processor 22 also works in conjunction with proficiency testing algorithms 26, game parameter modification algorithms 30, reward points algorithms 32, player matching algorithms 34, profile verification algorithms 36, and player match requests 38, all of which are described in detail below. The gaming server computer has additional components, well known in the art of computing, that are not shown here for the sake of clarity.

Player Profile

Each player or subscriber that is otherwise associated with the gaming system of the present invention is provided with a player profile that is generated, maintained, modified and stored by the gaming server. Each player's profile is stored in the player profile database 18, which holds a plurality of player records 16 as shown in Figure 3. Each player record 16 includes player proficiency data 16a, socioeconomic data 16b, physical data 16c, game playing history 16d, player availability 16e, and a reward points account 16f. Although the data topology illustrated in Figure 3 shows a single player record 16 associated with each player in a database, the database configuration may be constructed in any manner known in the art (e.g. use of several databases on one or more distributed computers, etc.).

Proficiency data 16a is generated and stored for each player in his profile record 16, and may be revised periodically by the gaming server on the occurrence of certain conditions. A sample proficiency record for Player A is shown in Figure 4. The gaming server ascertains the proficiency or skill level of a player with respect to a particular game, with respect to a particular role within a game, and/or with respect to gaming skills that may applied generally to several types of games. For example, the gaming server may determine that a player's skill level in playing a simple game such as PAC-MAN is in the novice category, yet it may determine his skill level as a pilot in a space battle game (e.g. STAR WARS) to be intermediate, which may be different from his skill level as a gunner (master) in the same game. The methodology used to determine a score and assign a descriptive rank as shown in the Figure 4 may vary in accordance with objectives of the system designer (one example is speed of play, in particular

in games that don't intrinsically limit the time to make certain moves (e.g. bridge)).

The gaming server 4 utilizes one or more of various methods to determine and manage the player proficiency scores in this invention. A player's proficiency, which will be used to perform player matching as described herein, may be measured in several ways. The gaming server may take a passive approach and simply monitor or supervise a game played by a player against another player over the network, and record scores in various categories, results if the game, time required to finish the game, etc., in arriving at a skill or proficiency level for that player as described above. If the opponent of the player has proficiency scores stored in the gaming server, those scores may be used to adjust upwards or downwards. For example, when a new player opposes a master-rated opponent, his skill scores should be adjusted upwards to account for the high skill level he has faced, and vice versa.

In the alternative to monitoring actual game play between a new player and an opponent to determine the new player's proficiency, the gaming server may execute proficiency testing algorithms 26 as shown in Figure 2 to ascertain his skill level. This manner of determining the skill level provides a more uniform baseline for objectively measuring skill level than does observing actual game play, since more variables are introduced in game play than in a controlled testing paradigm. For example, a player might be given a series of controlled maneuvers to execute in ascertaining a pilot's skill level, with the results analyzed and stored in the proficiency record 16a. Since everyone will be given the same series of maneuvers to complete, the resulting score will be an accurate reflection of that player's skill level with respect to everyone who takes that test. In another example, a player's proficiency

with respect to a card game would be determined by dealing him the same hand as all others who have taken the test, and having the gaming server computer analyze his moves, play against him, etc. A player may be given a series of related tests to determine an overall gaming score, as well as the specialized skill tests described herein. The results of the proficiency tests are stored in the proficiency data record 16a for later player matching as described below.

The player may be re-evaluated at certain times after his initial proficiency scores are logged. For example, the player may need to be re-tested after he has reached a certain level of play (e.g. master status), or he may be re-tested after he has played more than a certain number of games (or if he played less than a certain number of games over a time period), or if he has won (or lost) a certain number of games, or when a predefined time has expired, etc. The player's proficiency scores may also be revised based on the results of games he has played over time. For example, once a novice player reaches certain levels in a game, he may be upgraded to intermediate status. In addition, if a player has failed to play a certain game over a predefined time period, he may be required to be re-tested prior to play, or he may be automatically downgraded.

In addition to game proficiency data, a player profile may also store socioeconomic data 16b and physical data 16c, as shown in Figure 3. Socioeconomic data may include the player's age, the player's gender, the player's occupation, the player's leisure interests, the player's desires (e.g. he may want to be an airline pilot), and the player's income level, etc. Physical data may include the player's height, weight, and/or an image of the person. Real-time video and/or voice data may be included as well, e.g. by using a web cam or microphone or similar device to obtain video footage and/or voice samples of the player for later

matching and/or verification purposes. This data may be used by the matching process to determine certain types of player matching as described below.

In addition to the "static" physical data listed above, a player's physical profile may include biofeedback data, which is more likely to vary over time. For example, a gaming system may be configured with biofeedback sensors such as a body thermometer or a heart rate monitor. Data taken from these sensors during game play may be stored in the player's profile and used for matching purposes as explained below. Biofeedback data may also be obtained separately from game play. For example, a player may wear a heart rate monitor throughout the day and then plug it into his gaming computer (or use a wireless connection) to feed it the acquired data, which is then uploaded to the gaming server for storage therein. The players may also be provided with wearable items having embedded sensors such as a virtual headgear or a full body suit, wherein motion made by various parts of the body is detected, recorded, and uploaded to the gaming server computer.

The socioeconomic data provided by a player may be verified by the profile verification function 36 of the gaming server before the player may be matched with other players, the verification being extrinsic or intrinsic. For example, if a player indicates that in a profile input form that he is a 14 year old boy but in fact is an adult, verification methods would be implemented to determine that this person is attempting to provide a fraudulent profile. Extrinsic verification relies on methodologies outside of the gaming system, while intrinsic verification relies on methodologies within the gaming system. For example, the gaming system may check with pre-existing databases (utilizing address information, social security number, telephone information, email address, IP address of the

gaming computer, etc.) and determine that the above-mentioned adult player has lied about his age. Verification is critical in providing appropriate screening functions and provide a certain level of protection to the online gaming community that utilizes the system. An intrinsic verification methodology may also be used, such as using artificial intelligence (AI) or fuzzy logic analysis to determine if a player's game play habits and scores are likely from the type of person the player indicates in his profile. For example, if a player says that she is a ten year old girl but her play habits indicate that statistically the player is more likely a 45 year old man, then this verification will raise a flag to the gaming server. Also, the use of a PIN (personal identification number) or the like, obtainable by purchase at a retail or other physical outlet, may be used for verification. In addition to providing a mechanism for obtaining compensation for allowing a player to play in the system (i.e. one needs a valid PIN to play an online game), a sales clerk may obtain physical data about the person purchasing the PIN and report that to the gaming server. For example, if a 45 year old man purchases a PIN, that PIN will be sent back to the gaming server with data indicating he is a 45 year old man. If someone logs into the system with that PIN but indicates a different age and/or gender to the system in entering the profile data, then a verification flag will be raised by the gaming server.

In addition to player profiles, team profiles may be used. Thus, a team formed for play of a war game may have a collective profile having collective proficiency scores, etc. The team profile may be used for matching purposes as described herein in the same manner as player profiles.

Player Matching

The player matching methodologies implemented by the present invention are discussed with respect to Figure 2. A processor 22 implements one or more player matching algorithms 34 which may, for example, be based on a player request to be matched with another player (either a teammate or an opponent). The processor operates with the player matching algorithms 34 to determine appropriate players to match based on player profiles 16 stored in the database 18 as described above.

In a simple case, a player issues a request 38 to the gaming server via his game playing computer to be matched with an opponent in order to play a certain game. For example, Player 1 might want to play the game HALO and request the gaming server to determine an appropriate opponent to play against Player A. After Player A issues a request to the gaming server, the gaming server utilizes one or more player matching algorithms to determine an appropriate list of players that would be suitable to play against Player A. That list of matched opponents is then sent to Player A for display on his monitor, and Player A may then select a desired opponent. For example, if Player A is given 10 names to choose, he may find one who he is familiar with and select that player. Player profile characteristics may be displayed with the player name (or alias for privacy reasons); for example, the player's home state or age bracket, his scoring history in the selected or another game (his HALO record), etc. This data may help the player in determining a desired opponent. This will be described in further detail hereunder.

Once a player has selected a desired opponent (or teammate, depending on the request), then that selection is indicated back to the gaming server. The gaming server uses

the selected alias to determine, from that selected player's profile, the preferred means to contact that player in order to issue an invitation. For example, if Player A selects Player B, then the gaming server looks up in Player B's profile and determines that he should be sent an Instant Message (IM) when he has been matched with someone. The gaming server then sends an IM to Player B, indicating that Player A has requested to play him in game of HALO. Player B can then accept or decline the invitation. If Player A does not respond in a timeout period (e.g. 10 minutes), then an alternate mode of communication is attempted (e.g. an email, a voice call, etc.). If Player B declines, then Player A is given another chance to select an alternate opponent, and the invitation/response cycle continues until a player accepts the invitation and play is begun. If Player B accepts, then play begins between Player A and Player B.

Players may be matched by the gaming server for playing a game against each other based on their proficiency level. Thus, when Player A requests an opponent of the same skill level, the gaming server finds an opponent with a proficiency score in that game within a certain range. For example, if Player A is an intermediate player, he will be given a list of intermediate players to select from. If numeric scores are stored rather than descriptive terms, then a range may be given corresponding to that of the requesting player. Optionally, he may only be given a list of intermediate players that are currently available (logged into the system), so that he only will select someone who is available for play. The gaming server may also be configured to filter out players who indicate that they currently do not want to play HALO so they are not bothered with HALO game playing requests at a given time.

A player may be automatically matched with another player by simply indicating he is available for play and agrees to play whenever the gaming server matches him with another player. A penalty, such as losing reward points (described below), may be imposed on a player who subsequently declines to play in this scenario.

A player may request to "play up", i.e. play an opponent with a higher proficiency rating than that player. For example, Player A may be a novice but only want to play against an intermediate player. Since most intermediate players may not want to play against a novice ("play down"), the gaming server and/or the requesting player may need to provide some sort of incentive to coerce the intermediate player to play the requesting novice. In the embodiment of the present invention that includes a reward point feature, to be described in further detail below, such incentive could be the transfer of reward points from the requesting player's account to the intermediate player in order to get him to agree to play the requesting novice player. Other types of incentives including cash payments (which may be made in the form of micropayments utilizing various Internet micropayment technologies), credit card payments, etc. may also be used.

In an alternative embodiment, several players may compete for the right to play a better player in an auction-like setting. For example, if 10 players want to play against a certain player known to be proficient in HALO, the gaming server may set up a limited time auction process so that the highest bidder obtains the services of the better player in exchange for the auction price. In this event, the gaming server may initiate the auction at the request of one or more requesting players, or at the request of a player asking for his services to be auctioned off to a player with a lower proficiency rating. At the completion

of the auction, the winning bidder transfers the agreed-to consideration to the opponent and play may then begin. The player auction process is particularly appealing in a celebrity setting. For example, an auction may be held for the right to play against Tony Hawk in a skateboarding game, or Tiger Woods in a golf tournament, etc.

One great advantage in a networked gaming environment is the ability to form teams of players in disparate locations for team play. In a simple, case, two players may be matched by the system as teammates against two opposing players in a game of hockey. Players A and B, on team 1, would play against players C and D, on team 2. Player A could be assigned the goalie position, Player B the skaters' positions, and likewise for team 2. All four players could then play the game amongst each other over the computer network. In a more complex scenario, tens or even hundreds of players could be formed into two or more teams for complex game play scenarios. For example, a World War game could be played, with a United States team, a Canadian team, and an Australian team. Each team could be comprised of various roles, for example, the country's President, Secretary of Defense, military generals, admirals, pilots, infantrymen, etc. Each role would be filled by a player having predefined profile characteristics as explained herein. Thus, the role of a general may require a high proficiency in the game, or certain socioeconomic characteristics such as a college education, while the role of an army cook may only require high school education. The role of a pilot may require piloting proficiency (ascertained by a flight simulation test), while that of the president may require proficiency in world diplomacy. In a further example, the game may limit members of the United States team to those located in the United States, so as not to allow a "spy" from Australia to infiltrate the U.S. team.

Teams may also be matched with each other based on their respective team profile, which is a collective profile similar to a single player profile as described above.

Other player matching scenarios are embodied in the present invention, such as matching via physical characteristics and/or biofeedback data stored in the player profile. A player may request only female opponents, or within a certain age group, etc. The gaming server is provided with screening control functions if desired by a player. For example, a young female may indicate that she does not wish to be made available to a male player in the 35-45 age group, etc. These types of screening and parental control functions will be important in this gaming community which opens itself to virtually anyone who wishes to enter. In addition, photographs or other images may be stored in the player profile, such that a player, if desired, may request matches based on the image of the prospective opponent.

Game playing history data is stored in the player profile as shown at block 16d. Players may be matched with one another on the basis of their historical play. For example, the gaming server computer may determine that Player A has played against Player B ten times in the past, and that each has won on 5 occasions, with each game ending in a relatively close score. This indicates that Players A and B are relatively close in skills in that game, perhaps notwithstanding a difference in stored proficiency scores, and the gaming server would use this intelligence in making subsequent matches (e.g. Player B could be substituted for Player A if he is not available to play with another player in that game). Likewise, even if Players A and B have similar proficiency scores in a game, but Player A has always beaten Player B, then the gaming server computer uses

this historical play information in subsequent match scenarios.

Players may be matched with each other, as teammates and/or opponents, based on data in the players' socioeconomic profile record. Socioeconomic data may include, but is not limited to, a player's age, a player's gender, a player's occupation, a player's leisure interests, a player's desires, and a player's income level, and the player's ideology. Thus, for example, a player may request to be matched with only Republicans or with only college graduates, or with only males, etc.

Player matching may be completely and/or automatically controlled by the gaming server computer, or it may be partially controlled by the requesting player via player matching requests 38. When completely controlled by the gaming server computer, a player requests to be matched with another player to play a game, and the gaming server computer determines the optimal match based on pre-programmed parameters and priorities, including those mentioned herein. For example, the gaming server may be programmed to find the potential opponent with the closest proficiency level in the requested game, who has been a member of the gaming community for the closest period of time, and who has the closest similar socioeconomic profile. That optimal person would be invited to play, and if he accepts, play would begin. If he rejects the invitation (a timeout with no response being considered a rejection), then the next closest match would be invited, and so on. In this manner, the requesting player has no control over who he may play. In another mode, the requesting player may be given certain options, for example he may pick the criteria with the highest priority (close proficiency scores, close income, etc.), and then the gaming server performs the automatic selection/invitation process. The player may also

be given even more control by providing a list of possible candidates after the matching process has been executed, and the requesting player selects a player from the list to invite to play by the gaming server as previously described.

Although an invited player may decline to play the requesting player ("elective play"), in an alternative mode, the invited player must accept the invitation to play when issued by the gaming server ("required play"). In this case, players are provided with incentives (e.g. in the form of reward points) for making themselves available at certain times and days, but must play when the gaming server and/or the requesting player determines the match. This provides a system where players are always available and promotes use of the system in general.

Players may also be selected on a "first come first served" basis, where the first available player meeting certain match criteria is selected by the gaming server to play.

A leaderboard or "top ten" type of list maybe provided to show who the best players are, their points totals, etc. This can also show who is currently playing which games against whom.

Game Play

Many types of games may be played under the present invention, ranging from simple one-one-one games to complex team play involving players around the world. Games include games of chance, games of skill, fantasy role playing games, historical games, knowledge-based games, futuristic games, war games, psychological games, and sports games. Leagues of teams may be formed, which may stay the same after the player matching process is executed. Tournament play may

take place with this invention, with players entering and exiting the tournament at varying times. In this context, a tournament may be made to be never-ending, in that there are no absolute winners, and players may take away consideration for their successful play. This is particularly useful with respect to the reward points aspect of the invention, to be described later.

The gaming server utilizes game parameter modification algorithms 30 to modify parameters of a game being played, either in real-time or before the game is played. Real-time modification allows the gaming server to supervise (monitor) a game being played and modify its operation based on the status of the game, its players, etc. For example, assume that Player A is playing against Player B in a hockey game. Player B may be playing exceptionally strong against Player A at that time, perhaps by having numerous breakaways on Player A's goalie, which all result in goals. The gaming server may observe this and increase the ability of Player A's goalie so that Player B faces more difficulty in scoring on Player A under those circumstances. This modification may occur on a one-time basis (that game only), or it may occur every time Player A and Player B face each other in a hockey game, or it may occur every time Player A plays anyone in a hockey game, etc. By monitoring the real-time events in a game, the gaming server is able to control certain parameters and change the play of the game accordingly.

The extent of the game parameter modifications may correspond to the proficiency level of the players. Thus, novice players with relatively lower scores may be provided with more modifications to help them get through a game without an inordinate amount of frustration at their relative inability to play the game. Even though prior art games provide for various levels in a game, where the player

may indicate his level of skill and obtain game play with appropriate levels of difficulty, the present invention provides for a more controllable environment since it monitors game play while it occurs and makes game adjustments in real-time without requiring the players to start over. Moreover, the level of intelligence that the gaming server introduces into the parameter modifications is clearly superior to prior art methodologies. In an alternative embodiment, rather than selective modifications as described herein, the gaming server may introduce random modifications into a game. For example, in a game played by highly skilled players, randomly changing certain game parameters may serve to increase the difficulty of the game in an unpredictable manner, thus increasing the enjoyment of the game for these skilled contestants.

In certain cases, the gaming server might select players to play each other wherein one player has a relatively higher proficiency level, and then assign a handicap to that player to level the playing field. The handicap could be similar to a golf handicap, in that points are added to the better players score (or subtracted, as the case may be). The gaming handicap could also serve to increase the difficulty of play for only the better player, rather than modify the final score as in golf. The use of a relatively better player may take place randomly, or it may be on request of a lower skilled player, or it maybe on request of the higher skilled player, or it may be on request of a team seeking to complete its roster with a better player, etc.

A game is envisioned where remotely located players can play each other using the same physical data as a basis for play. For example, in a space-based game, two or more players may have access to a telescope and view certain

celestial formations, and the game would be based on their response to these formations (so-called "stargazing games").

Players can play to win reward points as described below. In addition (or in the alternative), players can be compensated for superior play with awards of titles (similar to Chess Grand Master) and the like. It is also a feature of this invention for players to compete for certain jobs that may be available from employers. For example, a company may declare that it will award certain jobs to the best player of a certain game or contest

Reward Points

The online gaming system may provide for the awarding and/or redemption of reward points (akin to loyalty or frequent flyer points) which may be combinable with existing reward accounts held by the player. By utilizing reward points algorithms 32 as described herein, reward points may be stored locally in a record associated with each player (i.e. in conjunction with the player's profile). As shown in Figure 1, the gaming server is in selective communication with the reward points computers 7 operated by other entities with whom a player has a separate points account, such as an airlines points account, a car rental points account, etc. Periodically, the gaming server communicates with the external reward points computer 7 to modify the points total in the player's account. Reconciliation with the external rewards points computer may take place periodically as desired by the parties. For example, Player A has an existing frequent flyer account with American Airlines, with 10,000 points in the account. By virtue of winning several games in the gaming system of the present invention, he is awarded with 2,000 points into his reward points account 16f on the gaming server. Player A elects to have his points transferred to his American Airlines (AA)

account and issues a request to do so to the gaming server. The gaming server initiates a transaction with the AA points computer, in which (1) Player A's AA account is incremented to 12,000 points, and (2) consideration is transferred from the gaming server to the AA points computer (or some associated account of AA), to compensate AA for taking on the increased liability with respect to Player A. Player A can now utilize his increased number of AA points as allowed by AA (i.e. to obtain a free flight, upgrade, etc.).

The reverse process may also take place, in which Player A may increase his gaming reward point account 16f with the gaming server and correspondingly decrease his points total in his AA account. In this event, consideration flows from AA to the gaming server to compensate the gaming server for the exchange of points.

Gaming reward points may be earned in many ways as indicated in the reward points algorithm 34, such as by winning games and/or tournaments, by reaching certain levels of play in a game, by being "paid" in points for playing against lesser opponents (described above), for executing certain games and/or levels in games in a relatively fast time, etc. Gaming reward points may be utilized by the player (i.e. his account total decreased) in many ways as well, such as by paying to play a game, or allowing access to a premium game, or paying to "play up" against a superior player, increasing play time, failing to meet certain levels of play during a game, receiving assistance during a game from the gaming server, losing the game. etc.

The number of reward points awarded to a player for winning a game may be correlated to his skill level. Thus, better players may receive less points than less skilled players for winning a particular game, or vice versa. The number of points awarded may also be correlated to the

complexity of a game played, so as to reward players for playing harder games.

A database 25 of sponsors is maintained on the gaming server computer. The gaming system may utilize these sponsors to provide prizes to players of the system. Sponsors are given advertisement opportunities in the system in exchange for providing prizes. The prizes, in turn, may be obtained by the player in exchange for points earned as previously described. Thus, for example, NIKE may elect to become a system sponsor and provide Tiger Woods golf shirts to the system in exchange for ads provided to game players.

In the alternative to holding reward points in a local account for each player, the gaming server may opt to transfer points immediately to a pre-designated external computer.

I CLAIM:

1. A method of operating a networked gaming system comprising the steps of:

generating a profile for each of a plurality of players associated with a game playing computer interconnected over a computer network with a gaming server computer;

the gaming server computer matching at least two of said players to play a game based on the profile of each of said players; and

each of the matched players using their associated game playing computers to play a game with each other over the computer network.

2. The method of claim 1 further comprising the step of the gaming server computer supervising at least part of the game being played.

3. The method of claim 1 wherein the step of generating a profile for each of a plurality of players comprises the step of ascertaining the proficiency of a player and including the ascertained proficiency in the profile of the player.

4. The method of claim 3 wherein the step of ascertaining the proficiency of a player comprises the step of ascertaining the proficiency of a player with respect to a game played on the game playing computer.

5. The method of claim 3 wherein the step of ascertaining the proficiency of a player comprises the step of the

gaming server providing a proficiency test to the player on the game playing computer.

6. The method of claim 5 further comprising the step of the gaming server providing an additional proficiency test to the player on the game playing computer on the occurrence of a re-test condition.

7. The method of claim 6 wherein the re-test condition is met when the player reaches a predefined level of play.

8. The method of claim 6 wherein the re-test condition is met when the player has played at least a predefined number of games.

9. The method of claim 6 wherein the re-test condition is met when the player has played less than a predefined number of games.

10. The method of claim 6 wherein the re-test condition is met when the player has won a predefined number of games.

11. The method of claim 6 wherein the re-test condition is met when a predefined amount of time has expired.

12. The method of claim 6 wherein the gaming server awards at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player, and wherein the re-test condition is met when the number of reward points awarded to a player exceeds a predetermined threshold.

13. The method of claim 6 wherein the gaming server awards at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player, and wherein the re-test condition is met when the number of reward points awarded to a player is less than a predetermined threshold.

14. The method of claim 1 wherein the gaming server awards at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player, and wherein players are matched based on the number of points in their respective accounts.

15. The method of claim 3 wherein the step of ascertaining the proficiency a player comprises the step of the gaming server measuring a proficiency score of the player with respect to a game played on the game playing computer.

16. The method of claim 15 further comprising the step of revising the proficiency score of a player based on the results of games played by the player.

17. The method of claim 15 wherein the step of the gaming server measuring a proficiency score of the player comprises the steps of:

the gaming server computer administering a game skill proficiency test to the player;

the player executing the game skill proficiency test administered by the gaming server computer;

the gaming server computer generating a

proficiency score for the player representing the player's proficiency in the test, based on the success of the player executing the test; and

the gaming server computer storing the player's proficiency score in memory.

18. The method of claim 15 wherein the step of the gaming server measuring a proficiency score of the player comprises the steps of:

the gaming server monitoring a game played by the player,

the gaming server computer generating a proficiency score for the player representing the player's proficiency in the game, based on the success of the player playing the game; and

the gaming server computer storing the player's proficiency score in memory.

19. The method of claim 1 wherein the step of generating a profile for each of a plurality of players comprises the step of a player inputting socioeconomic profile data to the gaming server over the computer network.

20. The method of claim 19 wherein said socioeconomic profile data is selected from the group consisting of the player's age, the player's gender, the player's occupation, the player's leisure interests, the player's desires, and the player's income level.

21. The method of claim 19 wherein the socioeconomic profile data input by the player into the gaming server

is verified by the gaming server before the player maybe matched with other players.

22. The method of claim 21 wherein the gaming server verifies the socioeconomic profile data by an extrinsic method.

23. The method of claim 21 wherein the gaming server verifies the socioeconomic profile data by an intrinsic method.

24. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game comprises the gaming server matching two players to play a game against each other over the computer network.

25. The method of claim 1 wherein the gaming server computer matches at least two of said players to play a game in accordance with match requests made by players.

26. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game comprises the gaming server forming at least two teams of players, each team comprising at least two players, to play a game against each other over the computer network.

27. The method of claim 26 wherein the teams are formed in accordance with team match requests made by players.

28. The method of claim 1 wherein the gaming server computer matches at least two of said players to play a game in accordance with challenge requests made by players.

29. The method of claim 1 wherein the gaming server computer requests certain players to play based on predefined criteria.

30. The method of claim 1 wherein a system sponsor issues a request for players having predefined characteristics.

31. The method of claim 26 wherein the game played over the computer network requires a plurality of different roles to be played, wherein each role is assigned to a player by the gaming server.

32. The method of claim 31 wherein the roles each have associated proficiency requirements, and wherein a player is assigned a role in a game based on the proficiency requirements of the role matching proficiency measurements contained in the profile of the player.

33. The method of claim 31 wherein a player is assigned a role in a game based on socioeconomic data in the profile of the player.

34. The method of claim 33 wherein said socioeconomic data is selected from the group consisting of the player's age, the player's gender, the player's occupation, the player's leisure interests, the player's income level, and the player's ideology.

35. The method of claim 31 wherein a player is assigned a role in a game based on the geographic location of the player.

36. The method of claim 1 wherein the gaming server

computer matches at least two of said players to play a game in accordance with a physical profile of the players.

37. The method of claim 36 wherein the physical profile comprises a physical description of the player and a photograph of the player.

38. The method of claim 36 wherein the physical profile comprises video images of the player.

39. The method of claim 36 wherein the physical profile comprises voice recordings of the player.

40. The method of claim 36 wherein the physical profile comprises biofeedback data of the player.

41. The method of claim 36 wherein the gaming server provides a screening function to match requests made by players based on a physical profile of the player.

42. The method of claim 1 further comprising the step of generating a profile for a team comprised of a plurality of players, and wherein the gaming server matches at least two teams to play a game based on the profile of each team.

43. The method of claim 3 wherein the step of matching at least two of said players to play a game comprises the steps of

a first player having a first player proficiency score requesting to be matched with another player to play a game; and

the gaming server computer determining a second

player having a proficiency score within a predefined range of the first player.

44. The method of claim 1 further comprising the step of the gaming server computer issuing an invitation to a matched player to play a game.

45. The method of claim 44 further comprising the steps of

the second player accepting the invitation to play a game with the first player; and

the first player and the second player playing a game.

46. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players further comprises the gaming server matching players on the basis of historical play between players.

47. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players further comprises the steps of:

a player providing match criteria to the gaming server computer, and

the gaming server computer utilizing the match criteria provided by the player to match said player with another player for game play.

48. The method of claim 47 wherein the match criteria comprises socioeconomic criteria.

49. The method of claim 48 wherein the socioeconomic criteria is selected from the group consisting of a player's age, a player's gender, a player's occupation, a player's leisure interests, and a player's income level, and the player's ideology.

50. The method of claim 3 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players further comprises the steps of:

a first player requesting to be matched with a second player having a relatively higher proficiency, and

the gaming server requesting a second player having a relatively higher proficiency to play the first player.

51. The method of claim 50 comprising the further step of the gaming server offering the second player consideration in exchange for playing a game against the first player.

52. The method of claim 3 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players further comprises matching a first player having a relatively higher proficiency with a player having a relatively lower proficiency by:

the gaming server determining a plurality of players having a relatively lower proficiency than the first player, and

the gaming server conducting an auction to determine which of the plurality of players having a relatively lower proficiency than the first

player will be matched to play the first player.

53. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players is performed automatically by the gaming server.

54. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players is performed randomly by the gaming server.

55. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players comprises the steps of:

a first player requesting to be matched with a second player to play a game,

the gaming server determining a plurality of players having a profile that matches the first player,

the gaming server providing to the first player a list of the plurality of players having a profile that matches the first player, and

the first player selecting one of the players from the list to play a game.

56. The method of claim 1 wherein the step of the gaming server computer matching at least two of said players to play a game based on the profile of each of said players comprises the steps of:

a first player requesting to be matched with a second player to play a game,

the gaming server determining a plurality of players having a profile that matches the first player and that are available for playing the game at the time of the first player's request,

the gaming server providing to the first player a list of the plurality of players having a profile that matches the first player and that are available for playing the game at the time of the first player's request, and

the first player selecting one of the players from the list to play a game.

57. The method of claim 1 wherein a player selects a player to play from a list of available players provided by the gaming server.

58. The method of claim 1 wherein the players are matched in the playing of a tournament, wherein a player may enter the tournament at any time, and further wherein the tournament continues without defined termination criteria.

59. The method of claim 1 wherein the game played is selected from the group consisting of a game of chance, a game of skill, a fantasy role playing game, an historical game, a knowledge-based game, a futuristic game, a war game, a psychological game, and a sports game.

60. The method of claim 1 wherein the gaming server

modifies controllable parameters of the game while it is being played by the players.

61. The method of claim 60 wherein the modifications made by the gaming server correspond to the proficiency level of the players.

62. The method of claim 60 wherein the modifications made by the gaming server are random.

63. The method of claim 60 wherein the modifications made by the gaming server are selective.

64. The method of claim 60 wherein the modifications made by the gaming server are defined by predetermined criteria.

65. The method of claim 3 wherein the gaming server selects players of different proficiencies to play with each other, and wherein a handicap is assigned to a player having a relatively higher proficiency than a player having a relatively lower proficiency.

66. The method of claim 3 wherein a player having a relatively higher proficiency is placed on a team by request of other players.

67. The method of claim 66 wherein the player having a relatively higher proficiency is assigned a handicap by the gaming server.

68. The method of claim 3 further comprising the step of at least one of the players being awarded with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player.

69. The method of claim 68 wherein the number of reward points awarded to a player is correlated to the proficiency of the player.

70. The method of claim 69 wherein players having a relatively high proficiency are awarded with a relatively lower number of reward points.

71. The method of claim 69 wherein players having a relatively high proficiency are awarded with a relatively higher number of reward points.

72. The method of claim 68 wherein the number of reward points awarded to a player is correlated to the complexity of the game played.

73. The method of claim 68 wherein the player's reward point account is stored on a reward server computer associated with an entity that provides other reward points for transactions directly between the player and the entity.

74. The method of claim 73 wherein the reward points awarded to the player are transferred into the player's reward point account immediately after being awarded to the player by the gaming server.

75. The method of claim 73 wherein the reward points awarded to the player are held in a temporary player account associated with the gaming server, and wherein points are subsequently transferred to the player's reward point account on the occurrence of a predefined condition.

76. The method of claim 79 comprising the further steps of

awarding additional reward points to the player based on additional game play, and accumulating said additional reward points into the temporary player account prior to being transferred to the player's reward point account.

77. The method of claim 79 further comprising the steps of the player requesting to play a premium game which requires usage of reward points to be able to play, the gaming server subtracting points from the temporary player account in exchange for allowing the player to play the premium game.

78. The method of claim 79 wherein the predefined condition that initiates transfer of reward points from the temporary player account into the player's reward point account is the player logging off from the gaming server.

79. A method of operating a networked gaming system comprising the steps of:

at least two players, each associated with a game playing computer interconnected over a computer network with a gaming server computer, playing a game with each other over the computer network;

the gaming server computer supervising at least part of the game being played;

at least one of the players being awarded with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player.

80. The method of claim 79 wherein the number of reward

points awarded to a player is correlated to the complexity of the game played.

81. The method of claim 79 wherein the player's reward point account is stored on a reward server computer associated with an entity that provides other reward points for transactions directly between the player and the entity.

82. The method of claim 81 wherein the reward points awarded to the player are transferred into the player's reward point account immediately after being awarded to the player by the gaming server.

83. The method of claim 81 wherein the reward points awarded to the player are held in a temporary player account associated with the gaming server, and wherein points are subsequently transferred to the player's reward point account on the occurrence of a predefined condition.

84. The method of claim 81 comprising the further steps of awarding additional reward points to the player based on additional game play, and accumulating said additional reward points into the temporary player account prior to being transferred to the player's reward point account.

85. The method of claim 83 further comprising the steps of the player requesting to play a premium game which requires usage of reward points to be able to play, the gaming server subtracting points from the temporary player account in exchange for allowing the player to play the premium game.

86. The method of claim 83 wherein the predefined

condition that initiates transfer of reward points from the temporary player account into the player's reward point account is the player logging off from the gaming server.

87. The method of claim 79 wherein reward points are deducted from a player's reward point account if the time that the player requires to complete a game is greater than a predetermined threshold.

88. The method of claim 79 wherein reward points are deducted from a player's reward point account if the player loses a game.

89. The method of claim 79 wherein reward points are deducted from a player's reward point account if a player fails to meet predetermined play criteria during play of a game.

90. The method of claim 79 wherein reward points are deducted from a player's reward point account if a player requests assistance in the game from the gaming server.

91. The method of claim 79 wherein reward points are added to a player's reward point account if a player meets predetermined play criteria during play of a game.

92. The method of claim 79 wherein reward points are deducted from a player's reward point account if a player requests that the time allotted to play a game be increased.

93. The method of claim 79 wherein the reward points awarded to a player are provided by a sponsor in

exchange for sponsor advertisements served by the gaming server to the game playing computers.

94. The method of claim 97 wherein a player may exchange reward points from his reward point account for a prize supplied by the sponsor.

95. A networked gaming system comprising:

a plurality of game playing computers selectively interconnected over a computer network, each of said game playing computers adapted to play a game with other game playing computers over the computer network; and

a gaming server computer selectively interconnected over the computer network to said game playing computers, said gaming server computer adapted to:

generate a profile for each of a plurality of players associated with each of the game playing computers; and

match at least two of said players to play a game against each other based on the profile of each of said players.

96. The system of claim 95 wherein the gaming server is further adapted to supervise at least part of a game being played by the players.

97. The system of claim 95 wherein the gaming server generates a profile for each of a plurality of players by ascertaining the proficiency of a player and

including the ascertained proficiency in the profile of the player.

98. The system of claim 97 wherein the gaming server ascertains the proficiency of a player by ascertaining the proficiency of a player with respect to a game played on the game playing computer.

99. The system of claim 97 wherein the gaming server ascertains the proficiency of a player by providing a proficiency test to the player on the game playing computer.

100. The system of claim 99 wherein the gaming server is further adapted to provide an additional proficiency test to the player on the game playing computer on the occurrence of a re-test condition.

101. The system of claim 100 wherein the re-test condition is met when the player reaches a predefined level of play.

102. The system of claim 100 wherein the re-test condition is met when the player has played at least a predefined number of games.

103. The system of claim 100 wherein the re-test condition is met when the player has played less than a predefined number of games.

104. The system of claim 100 wherein the re-test condition is met when the player has won a predefined number of games.

105. The system of claim 100 wherein the re-test condition is met when a predefined amount of time has

expired.

106. The system of claim 100 wherein the gaming server is further adapted to award at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player, and wherein the re-test condition is met when the number of reward points awarded to a player exceeds a predetermined threshold.

107. The system of claim 100 wherein the gaming server is further adapted to award at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player, and wherein the re-test condition is met when the number of reward points awarded to a player is less than a predetermined threshold.

108. The system of claim 95 wherein the gaming server is further adapted to award at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player, and wherein players are matched based on the number of points in their respective accounts.

109. The system of claim 95 wherein the gaming server ascertains the proficiency a player by measuring a proficiency score of the player with respect to a game played on the game playing computer.

110. The system of claim 109 wherein the gaming server is further adapted to revise the proficiency score of a player based on the results of games played by the

player.

111. The system of claim 109 wherein the gaming server is adapted to measure a proficiency score of the player by:

administering a game skill proficiency test to the player;

generating a proficiency score for the player representing the player's proficiency in the test based on the success of the player executing the test; and

storing the player's proficiency score in memory.

112. The system of claim 109 wherein the gaming server is adapted to measure a proficiency score of the player by:

monitoring a game played by the player,

generating a proficiency score for the player representing the player's proficiency in the game, based on the success of the player playing the game; and

storing the player's proficiency score in memory.

113. The system of claim 95 wherein the gaming server is adapted to generate a profile for each of a plurality of players by receiving socioeconomic profile data from a game playing computer over the computer network.

114. The system of claim 113 wherein said socioeconomic

profile data is selected from the group consisting of the player's age, the player's gender, the player's occupation, the player's leisure interests, and the player's income level.

115. The system of claim 113 wherein the socioeconomic profile data input by the player into the gaming server is verified by the gaming server before the player may be matched with other players.

116. The system of claim 115 wherein the gaming server verifies the socioeconomic profile data by an extrinsic system.

117. The system of claim 115 wherein the gaming server verifies the socioeconomic profile data by an intrinsic system.

118. The system of claim 95 wherein the gaming server computer matches at least two of said players to play a game by matching two players to play a game against each other over the computer network.

119. The system of claim 95 wherein the gaming server computer matches at least two of said players to play a game in accordance with match requests made by players.

120. The system of claim 95 wherein the gaming server computer matches at least two of said players to play a game by forming at least two teams of players, each team comprising at least two players, to play a game against each other over the computer network.

121. The system of claim 120 wherein the teams are formed in accordance with team match requests made by

players.

122. The system of claim 95 wherein the gaming server computer matches at least two of said players to play a game in accordance with challenge requests made by players.

123. The system of claim 95 wherein the gaming server computer requests certain players to play based on predefined criteria.

124. The system of claim 95 wherein a system sponsor issues request for players having predefined characteristics.

125. The system of claim 120 wherein the game played over the computer network requires a plurality of different roles to be played, wherein each role is assigned to a player by the gaming server.

126. The system of claim 125 wherein the roles each have associated proficiency requirements, and wherein a player is assigned a role in a game based on the proficiency requirements of the role matching proficiency measurements contained in the profile of the player.

127. The system of claim 125 wherein a player is assigned a role in a game based on socioeconomic data in the profile of the player.

128. The system of claim 127 wherein said socioeconomic data is selected from the group consisting of the player's age, the player's gender, the player's occupation, the player's leisure interests, the player's income level, and the player's ideology.

129. The system of claim 125 wherein a player is assigned a role in a game based on the geographic location of the player.

130. The system of claim 95 wherein the gaming server computer matches at least two of said players to play a game in accordance with a physical profile of the players.

131. The system of claim 130 wherein the physical profile comprises a physical description of the player and a photograph of the player.

132. The system of claim 130 wherein the physical profile comprises video images of the player.

133. The system of claim 130 wherein the physical profile comprises voice recordings of the player.

134. The system of claim 130 wherein the physical profile comprises biofeedback data of the player.

135. The system of claim 131 wherein the gaming server provides a screening function to match requests made by players based on a physical profile of the player.

136. The system of claim 95 wherein the gaming server is further adapted to generate a profile for a team comprised of a plurality of players, and wherein the gaming server matches at least two teams to play a game based on the profile of each team.

137. The system of claim 97 wherein the gaming server is adapted to match at least two of said players to play a game by:

receiving a request from a first player having a first player proficiency score to be matched with another player to play a game; and

determining a second player having a proficiency score within a predefined range of the first player.

138. The system of claim 95 wherein the gaming server is further adapted to issue an invitation to a matched player to play a game.

139. The system of claim 138 wherein the gaming server is adapted to supervise a game between the second player, that has accepted the invitation to play a game with the first player, and the first player.

140. The system of claim 95 wherein the gaming server computer matches at least two of said players to play a game based on the profile of each of said players by matching players on the basis of historical play between players.

141. The system of claim 95 wherein the gaming server computer is adapted to match at least two of said players to play a game based on the profile of each of said players by:

obtaining match criteria from a player, and

utilizing the match criteria to match said player with another player for game play.

142. The system of claim 141 wherein the match criteria comprises socioeconomic criteria.

143. The system of claim 142 wherein the socioeconomic criteria is selected from the group consisting of a player's age, a player's gender, a player's occupation, a player's leisure interests, and a player's income level, and the player's ideology.

144. The system of claim 97 wherein the gaming server computer is adapted to match at least two of said players to play a game based on the profile of each of said players by:

receiving a request from a first player to be matched with a second player having a relatively higher proficiency, and

requesting a second player having a relatively higher proficiency to play the first player.

145. The system of claim 144 wherein the gaming server is further adapted to offer the second player consideration in exchange for playing a game against the first player.

146. The system of claim 97 wherein the gaming server computer is adapted to match at least two of said players to play a game based on the profile of each of said players by matching a first player having a relatively higher proficiency with a player having a relatively lower proficiency by:

determining a plurality of players having a relatively lower proficiency than the first player, and

conducting an auction to determine which of the plurality of players having a relatively lower

proficiency than the first player will be matched to play the first player.

147. The system of claim 95 the gaming server computer is adapted to automatically match at least two of said players to play a game based on the profile of each of said players.

148. The system of claim 95 the gaming server computer is adapted to randomly match at least two of said players to play a game based on the profile of each of said players.

149. The system of claim 95 wherein the gaming server computer is adapted to match at least two of said players to play a game based on the profile of each of said players by:

receiving a request from a first player to be matched with a second player to play a game,

determining a plurality of players having a profile that matches the first player,

providing to the first player a list of the plurality of players having a profile that matches the first player, and

receiving a selection from the first player of one of the players from the list to play a game.

150. The system of claim 95 wherein the gaming server computer is adapted to match at least two of said players to play a game based on the profile of each of said players by:

receiving a request from a first player to be

matched with a second player to play a game,

determining a plurality of players having a profile that matches the first player and that are available for playing the game at the time of the first player's request,

providing to the first player a list of the plurality of players having a profile that matches the first player and that are available for playing the game at the time of the first player's request, and

receiving a selection from the first player of one of the players from the list to play a game.

151. The system of claim 95 wherein a player selects a player to play from a list of available players provided by the gaming server.

152. The system of claim 95 wherein the players are matched in the playing of a tournament, wherein a player may enter the tournament at any time, and further wherein the tournament continues without defined termination criteria.

153. The system of claim 95 wherein the game played is selected from the group consisting of a game of chance, a game of skill, a fantasy role playing game, an historical game, a knowledge-based game, a futuristic game, a war game, a psychological game, and a sports game.

154. The system of claim 95 wherein the gaming server is adapted to modify controllable parameters of the game while it is being played by the players.

155. The system of claim 154 wherein the modifications made by the gaming server correspond to the proficiency level of the players.

156. The system of claim 154 wherein the modifications made by the gaming server are random.

157. The system of claim 154 wherein the modifications made by the gaming server are selective.

158. The system of claim 154 wherein the modifications made by the gaming server are defined by predetermined criteria.

159. The system of claim 97 wherein the gaming server selects players of different proficiencies to play with each other, and wherein a handicap is assigned to a player having a relatively higher proficiency than a player having a relatively lower proficiency.

160. The system of claim 97 wherein a player having a relatively higher proficiency is placed on a team by request of other players.

161. The system of claim 160 wherein the player having a relatively higher proficiency is assigned a handicap by the gaming server.

162. The system of claim 97 wherein the gaming server is further adapted to award at least one of the players with reward points based on the outcome of the game played, said reward points stored into a reward point account associated with the player.

163. The system of claim 162 wherein the number of reward

points awarded to a player is correlated to the proficiency of the player.

164. The system of claim 163 wherein players having a relatively high proficiency are awarded with a relatively lower number of reward points.

165. The system of claim 163 wherein players having a relatively high proficiency are awarded with a relatively higher number of reward points.

166. The system of claim 162 wherein the number of reward points awarded to a player is correlated to the complexity of the game played.

167. The system of claim 162 wherein the player's reward point account is stored on a reward server computer associated with an entity that provides other reward points for transactions directly between the player and the entity.

168. The system of claim 167 wherein the reward points awarded to the player are transferred into the player's reward point account immediately after being awarded to the player by the gaming server.

169. The system of claim 167 wherein the reward points awarded to the player are held in a temporary player account associated with the gaming server, and wherein points are subsequently transferred to the player's reward point account on the occurrence of a predefined condition.

170. The system of claim 169 wherein additional reward points are awarded to the player based on additional game play, and accumulating said additional reward

points into the temporary player account prior to being transferred to the player's reward point account.

171. The system of claim 169 wherein, with the player requesting to play a premium game which requires usage of reward points to be able to play, the gaming server subtract points from the temporary player account in exchange for allowing the player to play the premium game.

172. The system of claim 169 wherein the predefined condition that initiates transfer of reward points from the temporary player account into the player's reward point account is the player logging off from the gaming server.

173. A networked gaming system comprising:

a plurality of game playing computers selectively interconnected over a computer network, each of said game playing computers adapted to play a game with other game playing computers over the computer network; and

a gaming server computer selectively interconnected over the computer network to said game playing computers, said gaming server computer adapted to:

supervise at least part of a game being played between a plurality of players associated with the game playing computers;

awarded at least one of the players with reward points based on the outcome of the game played, said reward points stored into a

reward point account associated with the player.

174. The system of claim 173 wherein the number of reward points awarded to a player is correlated to the complexity of the game played.

175. The system of claim 173 wherein the player's reward point account is stored on a reward server computer associated with an entity that provides other reward points for transactions directly between the player and the entity.

176. The system of claim 175 wherein the reward points awarded to the player are transferred into the player's reward point account immediately after being awarded to the player by the gaming server.

177. The system of claim 175 wherein the reward points awarded to the player are held in a temporary player account associated with the gaming server, and wherein points are subsequently transferred to the player's reward point account on the occurrence of a predefined condition.

178. The system of claim 177 wherein additional reward points are awarded to the player based on additional game play and accumulated into the temporary player account prior to being transferred to the player's reward point account.

179. The system of claim 177 wherein a player requests to play a premium game which requires usage of reward points to be able to play, the gaming server subtracts points from the temporary player account in exchange for allowing the player to play the

premium game.

180. The system of claim 177 wherein the predefined condition that initiates transfer of reward points from the temporary player account into the player's reward point account is the player logging off from the gaming server.

181. The system of claim 173 wherein reward points are deducted from a player's reward point account if the time that the player requires to complete a game is greater than a predetermined threshold.

182. The system of claim 173 wherein reward points are deducted from a player's reward point account if the player loses a game.

183. The system of claim 173 wherein reward points are deducted from a player's reward point account if a player fails to meet predetermined play criteria during play of a game.

184. The system of claim 173 wherein reward points are deducted from a player's reward point account if a player requests assistance in the game from the gaming server.

185. The system of claim 173 wherein reward points are added to a player's reward point account if a player meets predetermined play criteria during play of a game.

186. The system of claim 173 wherein reward points are deducted from a player's reward point account if a player requests that the time allotted to play a game be increased.

187. The system of claim 173 wherein the reward points awarded to a player are provided by a sponsor in exchange for sponsor advertisements served by the gaming server to the game playing computers.

188. The system of claim 187 wherein a player may exchange reward points from his reward point account for a prize supplied by the sponsor.

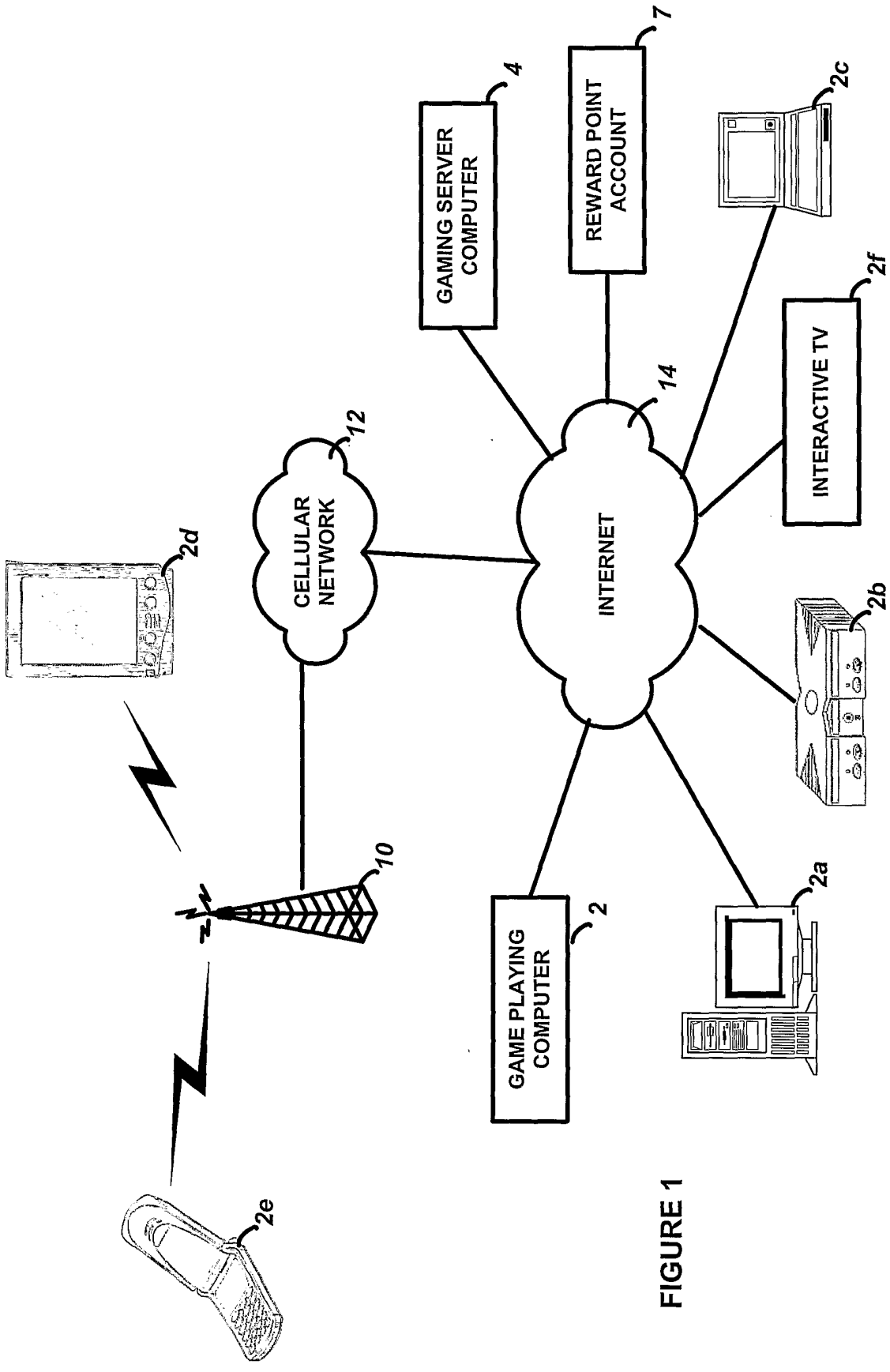

GAME PLAYING COMPUTER
2
GAMING SERVER COMPUTER
4
REWARD POINT ACCOUNT
7
INTERNET
14
CELLULAR NETWORK
12
INTERACTIVE TV
2f
2a
2b
2c
2d
2e
10

FIGURE 1

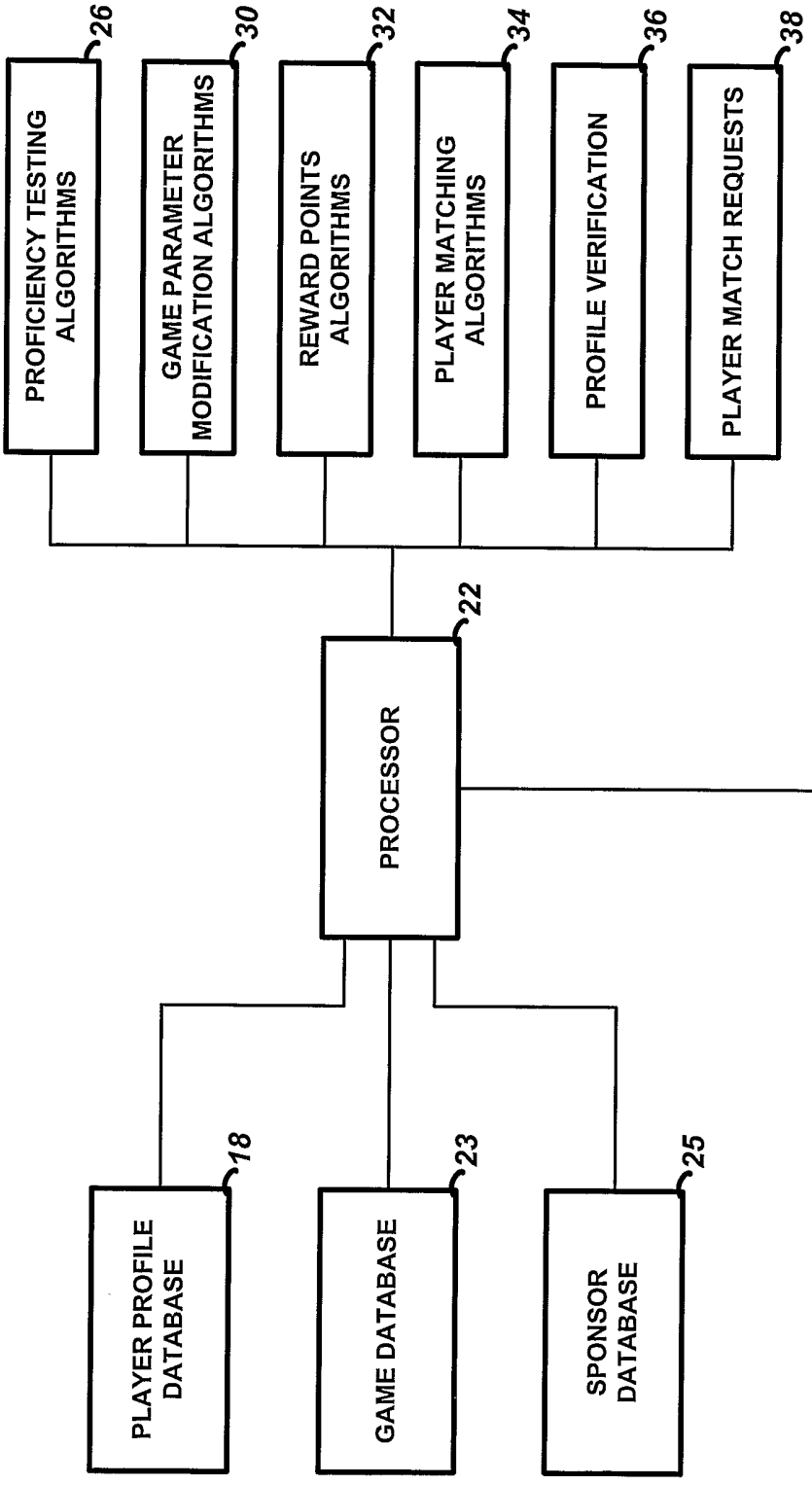

PROFICIENCY TESTING ALGORITHMS
26
GAME PARAMETER MODIFICATION ALGORITHMS
30
REWARD POINTS ALGORITHMS
32
PLAYER MATCHING ALGORITHMS
34
PROFILE VERIFICATION
36
PLAYER MATCH REQUESTS
38
PROCESSOR
22
NETWORK INTERFACE
28
PLAYER PROFILE DATABASE
18
GAME DATABASE
23
SPONSOR DATABASE
25

FIGURE 2

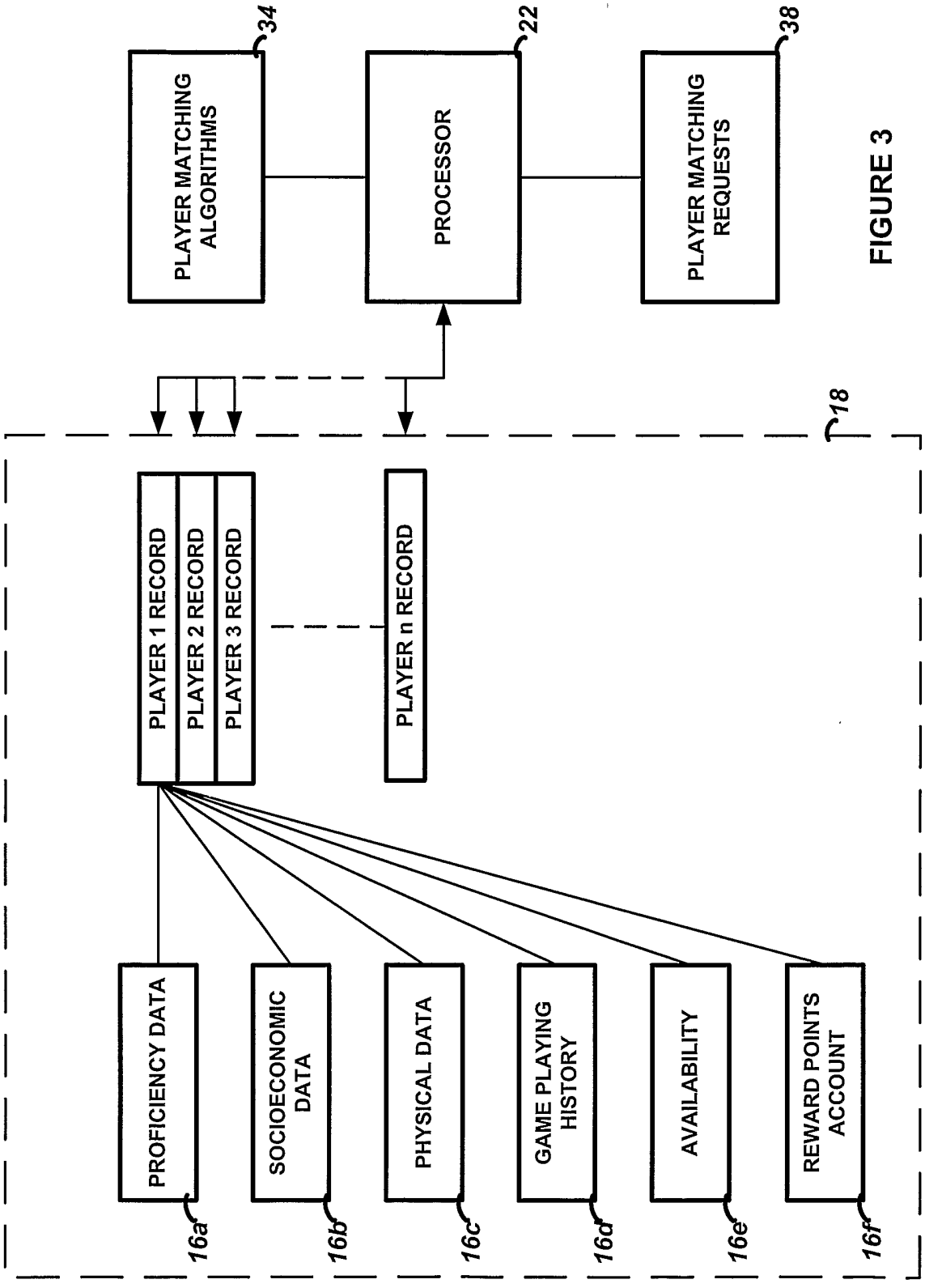

PLAYER MATCHING ALGORITHMS
34
PROCESSOR
22
PLAYER MATCHING REQUESTS
38
18
PLAYER 1 RECORD
PLAYER 2 RECORD
PLAYER 3 RECORD
PLAYER n RECORD
PROFICIENCY DATA
16a
SOCIOECONOMIC DATA
16b
PHYSICAL DATA
16c
GAME PLAYING HISTORY
16d
AVAILABILITY
16e
REWARD POINTS ACCOUNT
16f

FIGURE 3

FIGURE 4

Player A Proficiency Record			
Game	**Role**	**Score**	**Rank**
PAC-MAN	-	48	novice
STAR WARS	pilot	85	intermediate
STAR WARS	gunner	98	master
general	-	88	intermediate

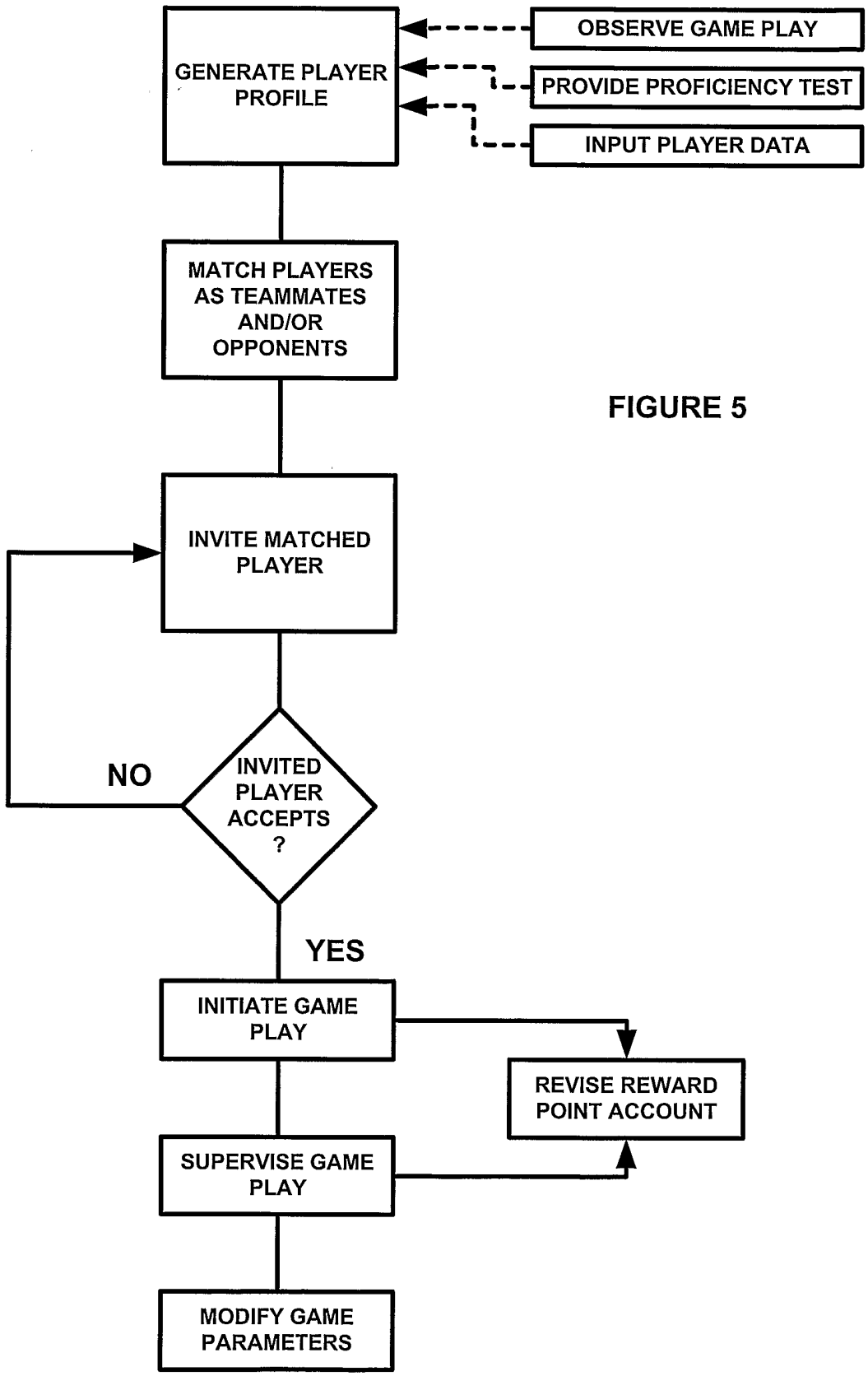

GENERATE PLAYER PROFILE
OBSERVE GAME PLAY
PROVIDE PROFICIENCY TEST
INPUT PLAYER DATA
MATCH PLAYERS AS TEAMMATES AND/OR OPPONENTS
INVITE MATCHED PLAYER
INVITED PLAYER ACCEPTS ?
NO
YES
INITIATE GAME PLAY
REVISE REWARD POINT ACCOUNT
SUPERVISE GAME PLAY
MODIFY GAME PARAMETERS

FIGURE 5

Selected Game:	CIVIL WAR RE-ENACTMENT

Currently Available Players		*Request Play Against*	*Request Teammate*
Rank	**ID**		
master	hitman12	☐	☐
intermediate	gameboy36	☐	☐
novice	player123	☐	☐
intermediate	winger47	☐	☐

Submit

Current Team Selections		
Team	**Role**	***Player***
north	general	robot23
north	infantry	----
south	captain	player123
south	infantry	----

FIGURE 6