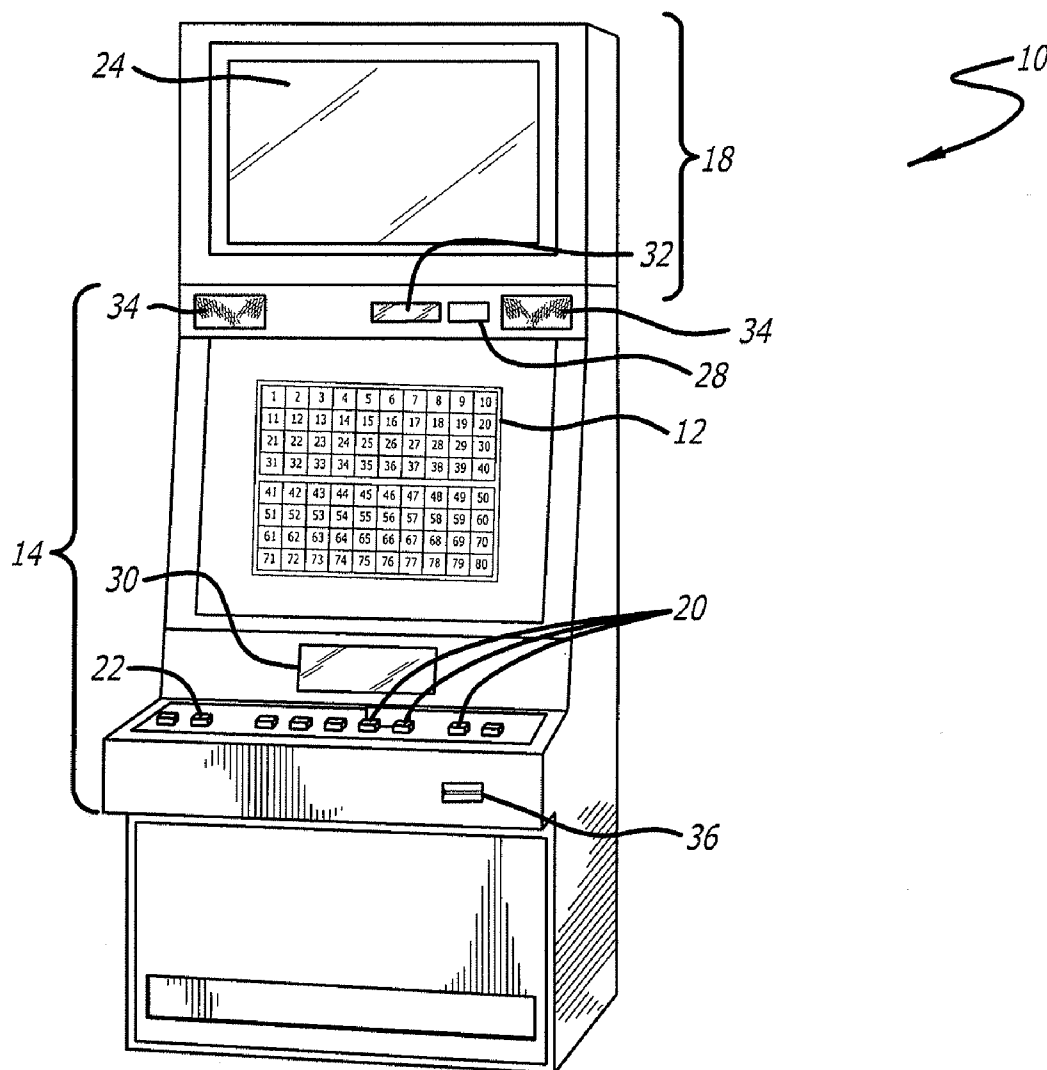




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(19) **United States**(12) **Patent Application Publication**
Schultz(10) **Pub. No.: US 2009/0197663 A1**(43) **Pub. Date: Aug. 6, 2009**(54) **BONUS KENO GAME**(76) Inventor: **David B. Schultz**, Henderson, NV
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LOS ANGELES, CA 90067 (US)(21) Appl. No.: **12/025,711**(22) Filed: **Feb. 4, 2008****Publication Classification**(51) **Int. Cl.**
A63F 3/06 (2006.01)(52) **U.S. Cl.** **463/18**(57) **ABSTRACT**

Various embodiments disclosed herein are directed to a keno game having a bonus round. The keno game provides a player with an additional opportunity to win, after the keno balls have been drawn, to add excitement and volatility to the standard keno game. According to one method, the gaming machine receives the player's input, with the player selecting one or more numbers. A keno draw, which includes a plurality of numbers from a keno pool, is then displayed to the player. A bonus round is initiated in response to a trigger event. The bonus round is a random selection of one or more numbers in addition to the numbers previously selected from the keno draw. The numbers selected from the bonus round are displayed to the player the numbers selected by the player are evaluated against the numbers from the keno draw results as well as the bonus round, and a payout for any winning outcomes are awarded to the player.



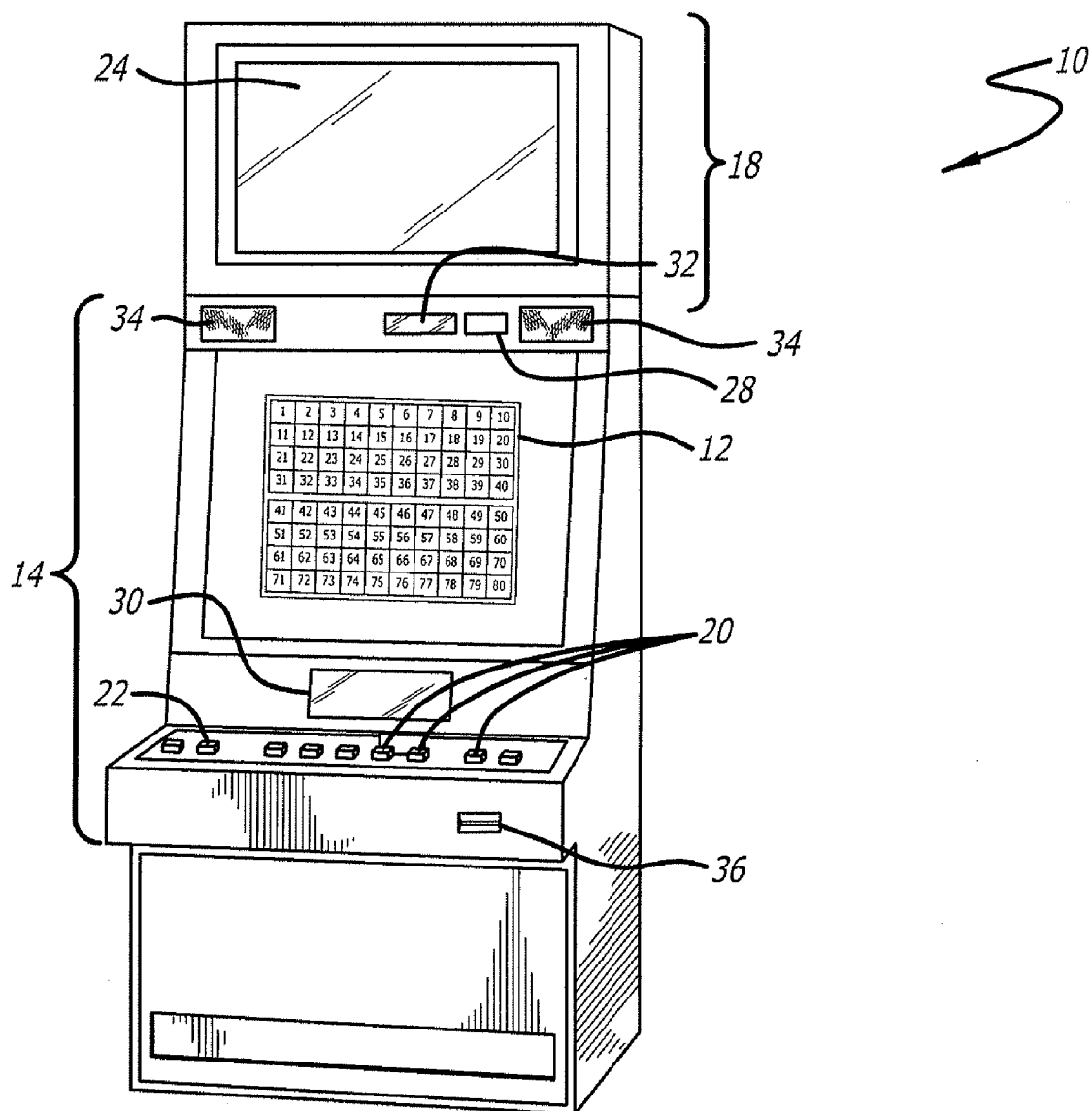
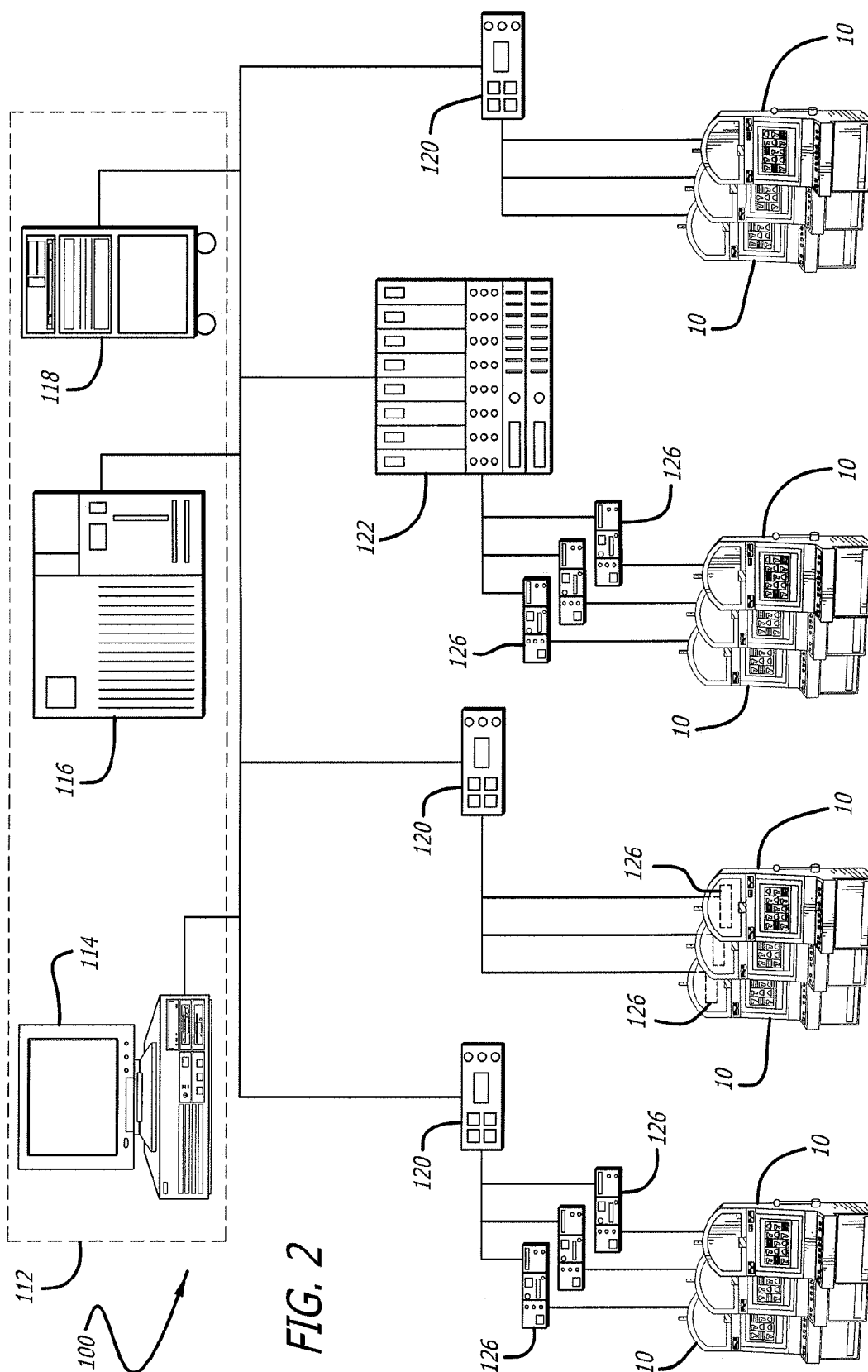


FIG. 1



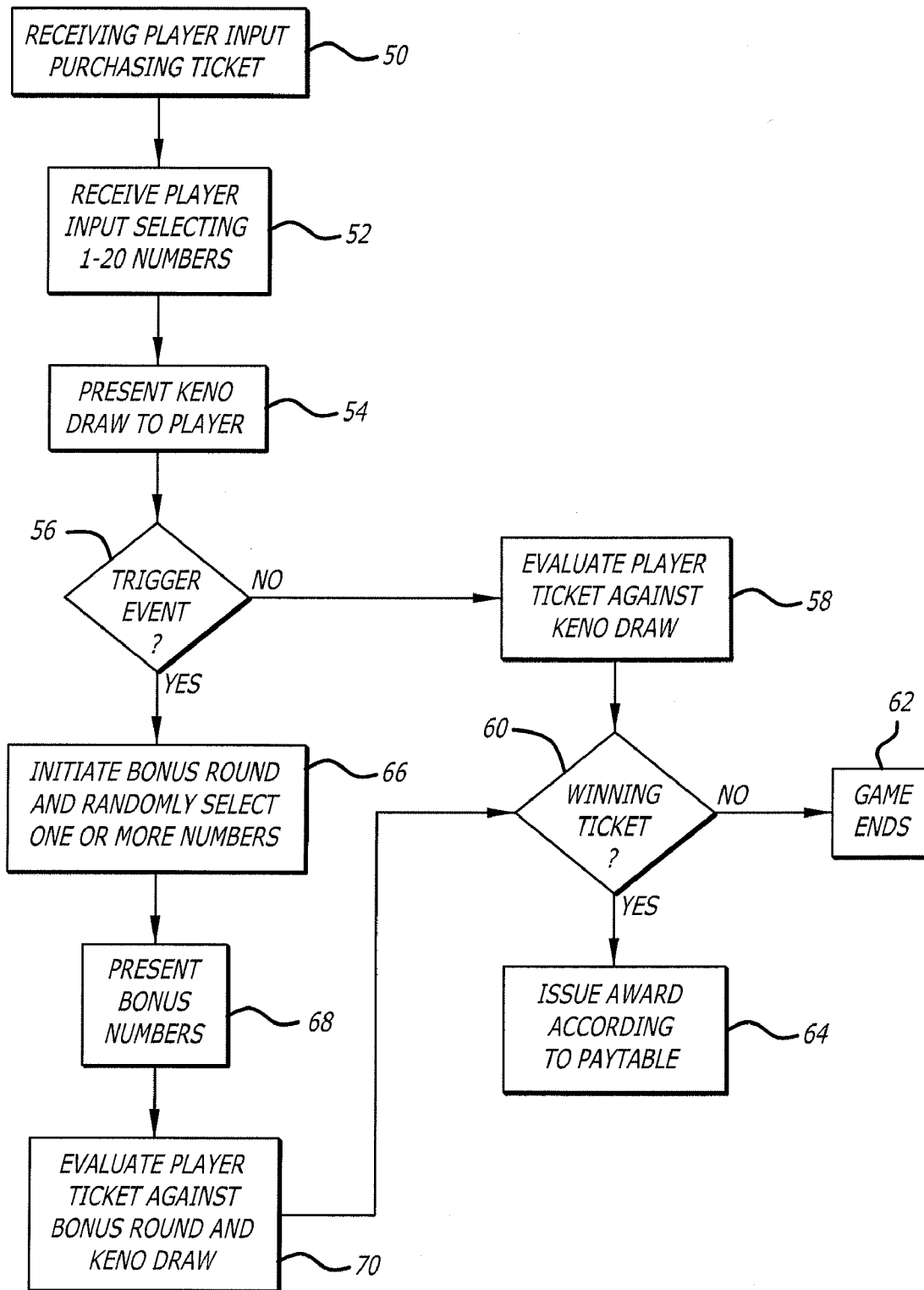


FIG. 3

FIG. 4

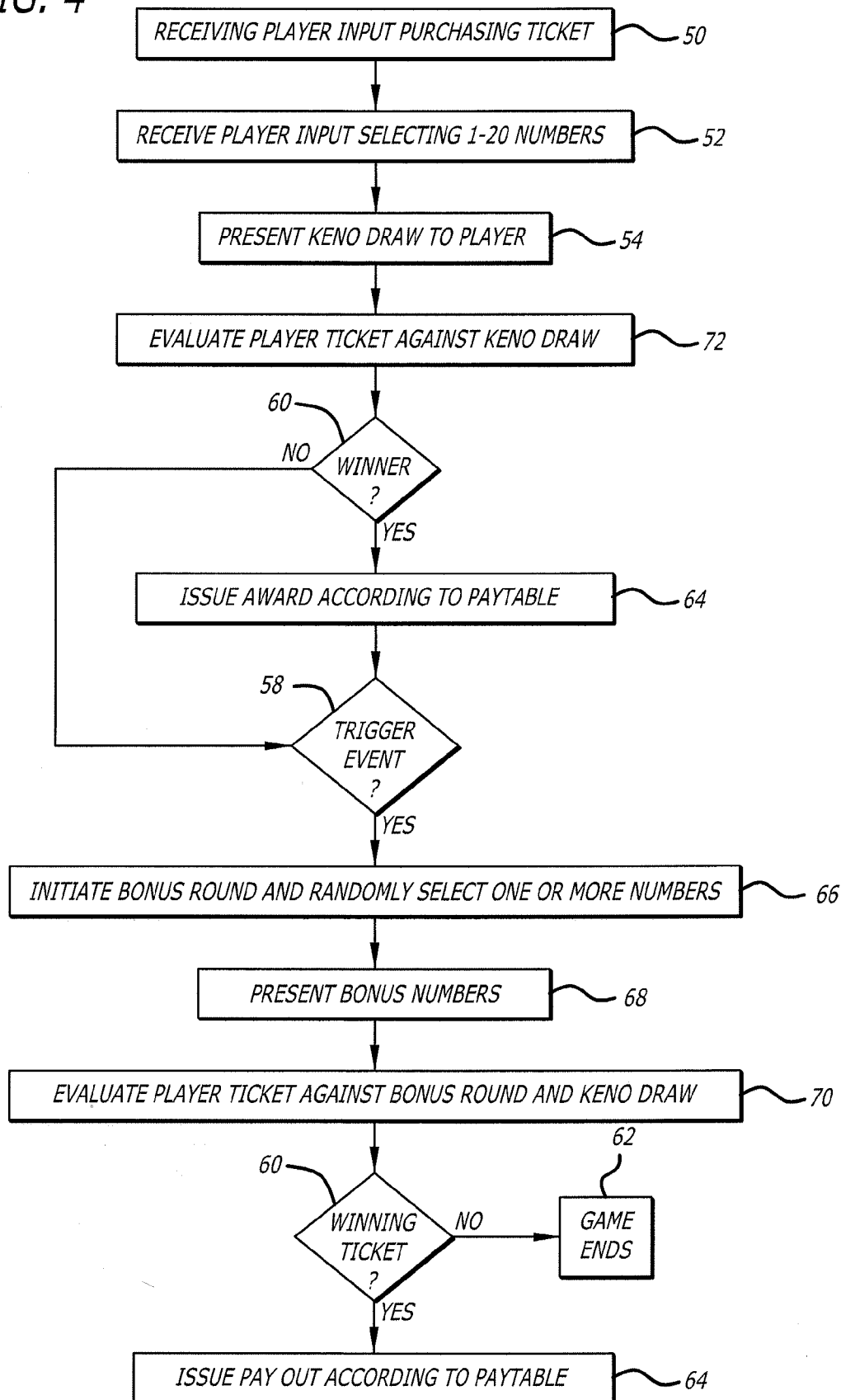


FIG. 5

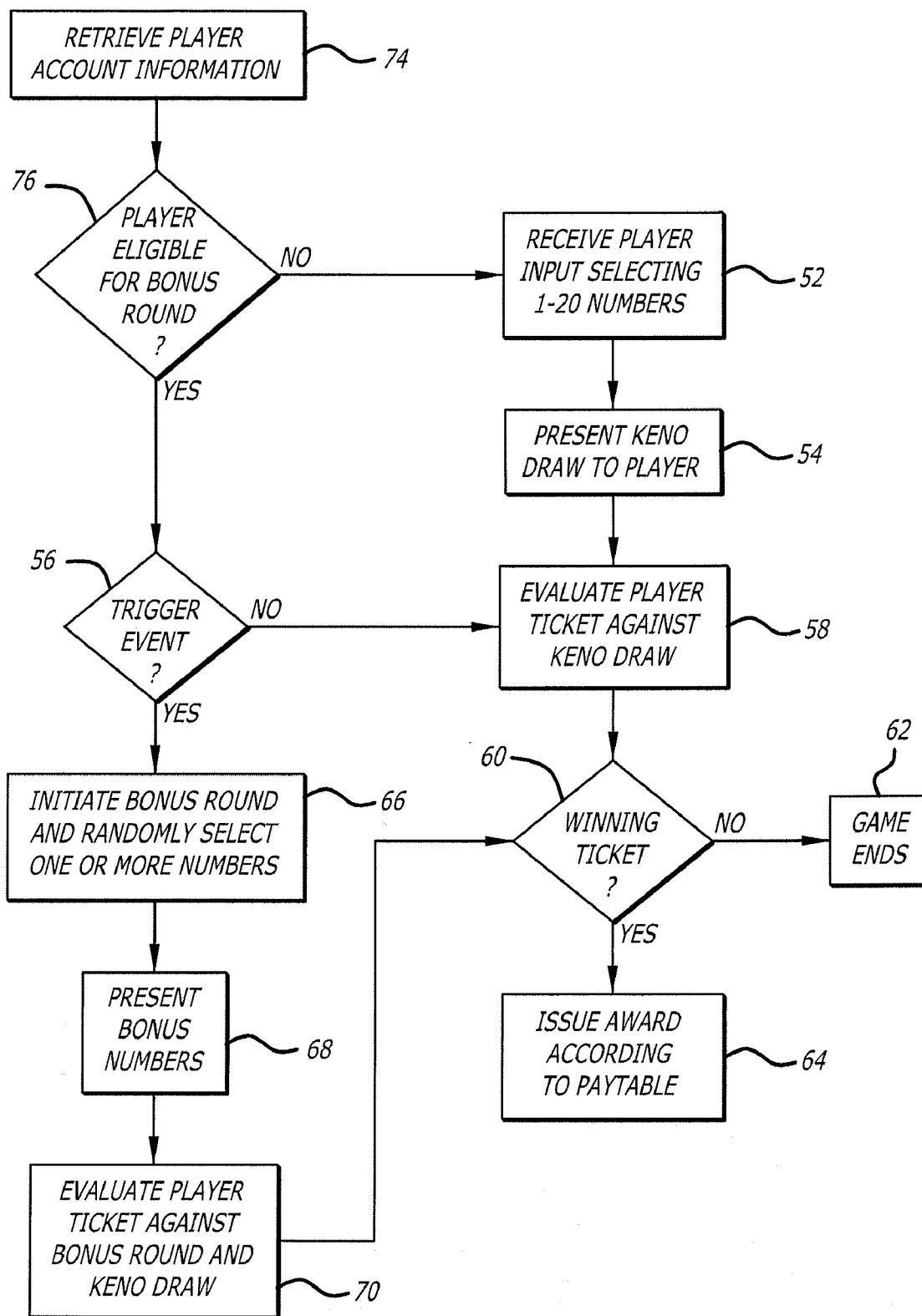
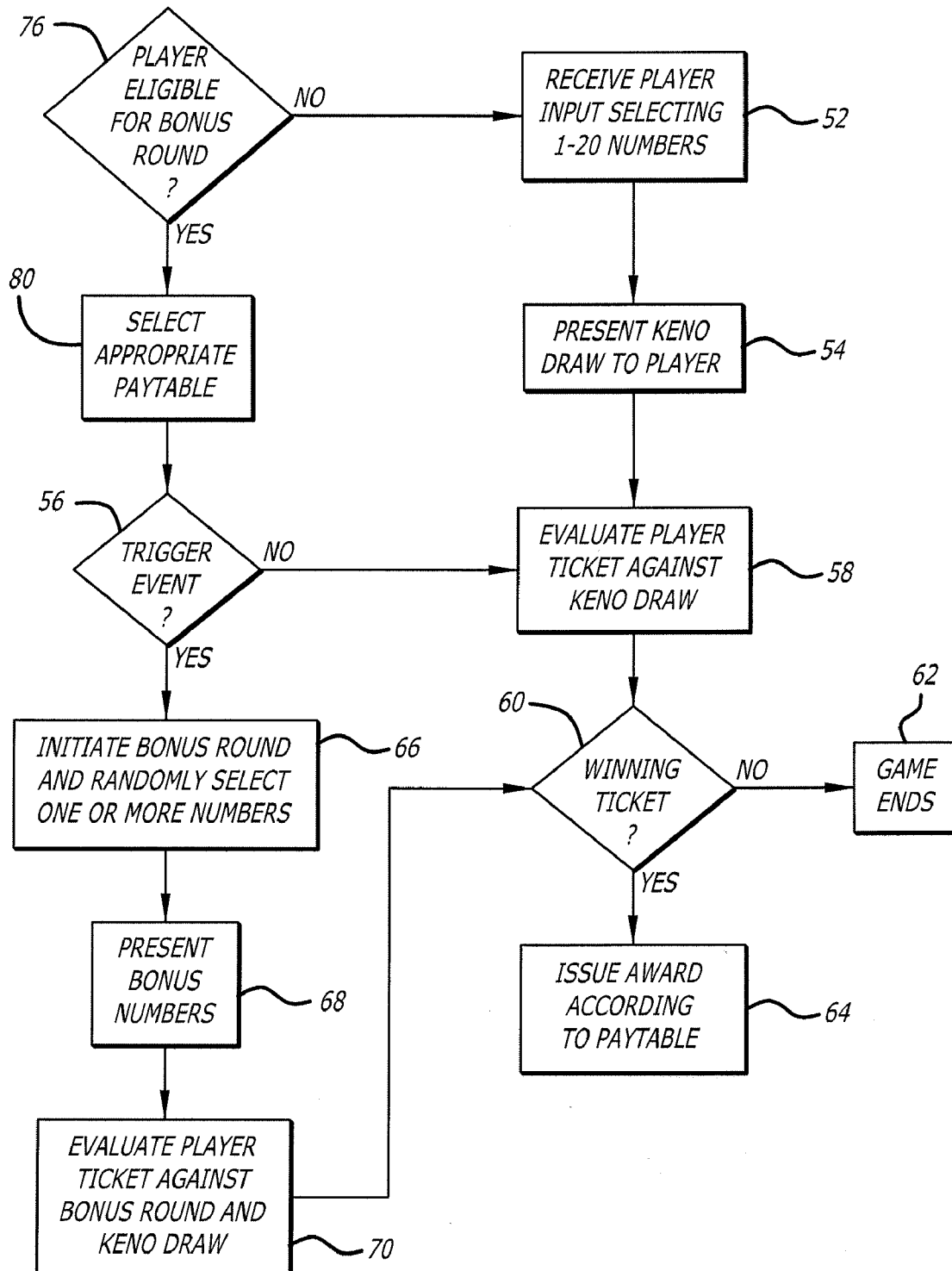


FIG. 6



BONUS KENO GAME

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is related to co-pending U.S. patent application Ser. No. 12/025,718 concurrently filed on Feb. 4, 2008, entitled BONUS KENO GAME AND RELATED METHODS.

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BACKGROUND

[0003] Many games of chance and gaming machines have been developed that have various features designed to capture and maintain player interest. Traditionally, games garner player interest by providing the player with the opportunity to win cash awards based upon a player's wager. For example, games may include one or more bonus games or the opportunity to win progressive jackpots in order to maintain player interest.

[0004] Additionally, over the years, games have grown in both sophistication and in the types of gaming features used to maintain a player's interest. For example, the mechanical reels of traditional gaming machines have been replaced with video depictions of spinning reels. These video gaming machines may provide a richer gaming experience for players by including graphics or animation as part of the game. However, there is a continuing need for games that provide player excitement and diversity of game play without creating overly complex games that unacceptably diminish player comfort.

SUMMARY

[0005] Briefly, and in general terms, various embodiments are directed to a keno game having a bonus round. The keno game provides a player with an additional opportunity to win, after the keno balls have been drawn, to add excitement and volatility to the standard keno game. According to one method, the gaming machine receives the player's input, with the player selecting one or more numbers. A keno draw, which includes a plurality of numbers from a keno pool, is then displayed to the player. A bonus round is initiated in response to a trigger event. The bonus round is a random selection of one or more numbers in addition to the numbers previously selected from the keno draw. The numbers selected from the bonus round are displayed to the player. The numbers selected by the player are evaluated against the numbers from the keno draw results as well as the bonus round, and a payout for any winning outcomes are issued to the player.

[0006] In another method, the gaming machine receives the player's input, with the player selecting one or more numbers. A keno draw of twenty randomly selected numbers is displayed to the player. The numbers selected by the player are evaluated against the numbers from the keno draw results and a first payout is issued for any winning outcomes. A bonus round then is initiated in response to a trigger event. The

bonus round is a random selection of one or more numbers in addition to the numbers selected from the keno draw. The numbers selected from the bonus round are displayed to the player. The numbers selected by the player are evaluated against the numbers from the keno draw results as well as the bonus round, and a second payout for any winning outcomes are issued to the player.

[0007] In yet another method, player account information is retrieved in response to a player input at a gaming machine. A determination regarding player eligibility for a bonus round is made. The player's eligibility is based upon the player's account information. The gaming machine receives the player input selecting one or more numbers. A keno draw of twenty randomly selected numbers is displayed to the player. A bonus round is initiated in response to a trigger event. The bonus round is a random selection of one or more numbers in addition to the numbers selected from the keno draw. The numbers previously selected from the bonus round are displayed to the player. The numbers selected by the player are evaluated against the numbers from the keno draw results as well as the bonus round, and a payout for any winning outcomes are issued to the player.

[0008] In another method, player eligibility for a keno bonus round is based upon a player's account information. If the player is eligible for the keno bonus round, a payable is selected based upon the player's account information. The gaming machine receives the player's input, with the player selecting one or more numbers. A keno draw of twenty randomly selected numbers is displayed to the player. A bonus round is initiated in response to a trigger event. The bonus round is a random selection of one or more numbers in addition to the numbers selected from the keno draw. The numbers selected from the bonus round are displayed to the player. The numbers selected by the player are evaluated against the numbers from the keno draw results and the bonus round, and a payout for any winning outcomes are issued to the player based on the selected payable.

[0009] In addition to various methods for presenting a keno game having a bonus round, various embodiments of computer-readable media including computer-executable instructions are disclosed herein that cause one or more processors to present a keno game and a bonus round. In one embodiment, the computer-executable instructions cause one or more processors to receive player input selecting one or more numbers; display a keno draw that comprises a plurality of numbers from a keno pool; initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw; display the numbers selected from the bonus round; evaluate the numbers selected by the player against the numbers from the draw results and the bonus round; and issue a payout for any winning outcomes.

[0010] In another embodiment, the computer-readable media includes computer-executable instructions that cause one or more processors to receive player input selecting one or more numbers; display a keno draw of twenty randomly selected numbers; evaluate the numbers selected by the player against the keno draw and issuing a first payout for any winning outcomes; initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw; display the numbers selected from the bonus round; evaluate the

numbers selected by the player against the numbers from the keno draw and the bonus round; and issue a second payout for any winning outcomes.

[0011] In yet another embodiment, the computer-readable media includes computer-executable instructions that cause one or more processors to retrieve player account information in response to player input; determine whether the player is eligible to play a bonus round, wherein player eligibility is based on the player account information; receive player input selecting one or more numbers; display a keno draw of twenty randomly selected numbers; initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw; evaluate the numbers selected by the player against the numbers from the bonus round and the keno draw; and issue a payout for any winning outcomes.

[0012] In another embodiment, the computer-readable media includes computer-executable instructions that cause one or more processors to determine player eligibility for a keno bonus round, wherein player eligibility is based upon a player's account information; select a paytable based upon the player's account information; receive player input selecting one or more numbers; display a keno draw of twenty randomly selected numbers; initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw; evaluate the numbers selected by the player against the numbers from the bonus round and the keno draw; and issue a payout for any winning outcomes.

[0013] In addition to methods and computer-readable media, various gaming devices and gaming systems for presenting a keno game having a bonus round are disclosed herein. According to one embodiment, the gaming device includes a display for presenting a keno game and a bonus round, a player input device for receiving player selections of one or more numbers, and a processor for evaluating the numbers selected by the player against a keno draw and determining whether to initiate the bonus round.

[0014] In another embodiment, the gaming system includes a plurality of gaming machines in communication with a gaming server. Each gaming machine includes a display for presenting a keno game and a bonus round and a player input device for receiving player selections of one or more numbers. The gaming server manages the keno game and bonus round and communicates the results of the keno game and the bonus round to each of the gaming machines.

[0015] In yet another embodiment, the gaming system includes a plurality of gaming machines in communication with the gaming server. Each gaming machine includes a display for presenting a keno game and a bonus round and a player input device for receiving player selections of one or more numbers. The gaming server includes one or more computer-readable media having computer-executable instructions that, when executed by one or more processors, causes the one or more processors to select a plurality of numbers for a keno draw, transmit the keno draw to the gaming machines, evaluate the numbers selected by the players against the keno draw, determine whether a trigger event has been established on a gaming machine, and present a bonus round to an eligible gaming machine.

[0016] Other features and advantages will become apparent from the following detailed description, taken in conjunction

with the accompanying drawings, which illustrate by way of example, the features of the various embodiments.

BRIEF DESCRIPTION OF THE DRAWING

[0017] FIG. 1 is a perspective view of one embodiment of a gaming machine presenting a keno game having a bonus round.

[0018] FIG. 2 is a diagram of one embodiment of a gaming system including a plurality of gaming machines presenting a keno game having a bonus round.

[0019] FIG. 3 is a flow diagram of one method of presenting a keno game having a bonus round.

[0020] FIG. 4 is a flow diagram of another method of presenting a keno game having a bonus round.

[0021] FIG. 5 is a flow diagram of yet another method of presenting a keno game having a bonus round.

[0022] FIG. 6 is a flow diagram of another method of presenting a keno game having a bonus round.

DETAILED DESCRIPTION

[0023] Various embodiments disclosed herein are directed to a keno game having a bonus round. The disclosed keno game provides a player with an additional opportunity to win after the keno balls have been drawn to add excitement and volatility to the standard keno game. According to one embodiment, the keno game includes a bonus round that does not include another keno ball draw. At the conclusion of the keno game, a subsequent selection of one or more numbers (that does not include another keno ball draw) occurs. After the bonus selection of one or more numbers, the player's selected numbers are evaluated for any winning outcomes. Alternatively, additional keno balls are drawn after the main keno ball draw. By selecting one or more keno numbers, all the possible keno numbers are in play whereas the selection of one or more keno balls involves the selection of one more keno balls from the balls remaining after the initial keno ball draw. In either embodiment, the resultant outcome (i.e., number of player selected numbers matching the drawn balls or numbers) is then evaluated against a paytable to determine whether a winning outcome has occurred.

[0024] In one embodiment, the keno or bingo games are live games played in a keno lounge, bingo hall, or a gaming establishment. Alternatively, the keno or bingo games are presented online via the Internet or a gaming establishment intranet. In another embodiment, the games are presented on video gaming machines.

[0025] Referring now to the drawings, wherein like reference numerals denote like or corresponding parts throughout the drawings and, more particularly to FIGS. 1-6, there are shown various embodiments of a keno gaming having a bonus round. For the sake of clarity, the various embodiments described refer to a keno game, but the descriptions are applicable to other games of chance such as, but not limited to, a bingo game, lottery, or any other ball draw game.

[0026] FIG. 1 shows a gaming machine 10 presenting a keno game having a bonus round. The gaming machine 10 includes a main display 12 positioned within the main cabinet 14. The main display 12 presents the keno game to a player. As shown in FIG. 1, the main display 12 presents a keno board having 80 numbers in eight rows of ten. Optionally, the main display 12 also presents the keno draw, which typically is the selection of twenty numbers. The keno draw may be shown as an animated sequence depicting the selection of the keno balls

from a keno cage. Alternately, the keno draw (not shown) is presented as twenty numbers presented across the top of the main display 12.

[0027] Various keno games having a bonus round may be presented on the gaming machine 10. Turning now to FIG. 3, according to one method, a player purchases one or more opportunities to play a keno game in the form a keno ticket (paper or electronic) at step 50. The keno ticket comprises a player's selection of one or more numbers up to twenty numbers. Alternately, the player may elect an automatic selection in which the player picks the total number of numbers to be selected and the gaming machine (or gaming server) selects the actual numbers. In another method, the player is able to select numbers based upon patterns (e.g., four corners, one or more rows, one or more columns, a block of numbers, or the like). Optionally, the player may elect known keno ticket wagers such as, but not limited to, a "left-right ticket" or a "top-bottom ticket" in which a ticket is evenly split into a left side and a right side where the object is to catch numbers only on a selected half of the ticket (or in the alternative not catch any numbers on the selected half of the ticket).

[0028] At step 52, the keno ticket or keno numbers have been selected by the player, and a keno draw automatically occurs at step 54. Optionally, the player verifies his selection prior to the initiation of the keno draw. Traditionally, the keno draw consists of selecting twenty numbers (or numbered balls) from a set of eighty numbers (or numbered balls). According to one embodiment, the player is responsible for marking the numbers from the keno draw. Alternatively, the selected numbers are automatically marked by the gaming machine. The number may be marked by crossing out the number, highlighting the number, altering the color of the number, altering the background color associated with the number, backlighting a selected number, animating the number, or any combination thereof.

[0029] At step 56, the game processor determines whether a trigger event has occurred. If no trigger event has been established, the game results are compared to a pay table and any winning outcomes are paid to the player (steps 60, 62, 64). The pay table lists a payout value for matching one to twenty numbers from the keno draw. If a trigger event has been established, the bonus round is initiated at step 66. At step 68, the selected bonus numbers are presented to the player. The player's ticket is then evaluated against the results of the bonus round as well as the keno draw at step 70. If the ticket is not a winning ticket, the game ends at step 62. Alternatively, the winning ticket is paid according to step 64. According to one method, the same pay table is used evaluate the first award and the bonus award. This provides the player with the increased opportunity to win a greater award. In contrast, prior art games typically reduce the payouts when awarding bonus awards thereby reducing the player benefit/advantage.

[0030] FIG. 4 illustrates another method of a keno game having a bonus round with two potential payouts. The player ticket is evaluated against the keno draw at step 72. If the ticket has a winning combination of numbers (i.e., hits), the player is issued an award according to a paytable at step 64. After the player ticket is evaluated (and any winning outcomes are issued), the gaming processor determines whether a trigger event has occurred at step 58. If a trigger event is present, a bonus round is initiated at step 66. The player ticket is then evaluated against the keno draw and the bonus round

at step 70. Any awards for any winning combinations are then issued to the player at step 64.

[0031] Various trigger events may be used with the methods disclosed herein. According to one embodiment, the trigger event is a "wild" ball. The "wild" ball is added to the traditional eighty keno balls. The "wild" ball is depicted with a unique ball color, special text, or some other designation that distinguishes the "wild" ball from the other keno balls. In another embodiment, a trigger event is the selection of a randomly pre-selected number. For example, the processor (or server) selects the number eight and selection of the number eight during the keno draw would trigger a bonus round. In yet another embodiment, the random appearance of an icon (that represents a bonus round) is presented on the main display or any other display on the gaming machine. Alternatively, the bonus round is randomly presented to the player at the end of a keno draw. That is, there is no indication during game play that notifies the player that they are qualified for a bonus round.

[0032] In yet another method, a trigger event is a system-generated message sent from another networked gaming machine or a message from a system host. For example, the message may be a tournament-initiating message (e.g., tournament is starting or player is eligible to play in the tournament) or a system-initiated bonus game message (e.g., bonus game is starting or player is eligible for the bonus game).

[0033] In another method, triggering events are based upon player activity/actions. For example, the triggering event may be based upon player performance such as, but not limited to, inserting a player tracking card into the gaming machine or inputting player ID number (e.g., step 74 of FIG. 5 or step 78 of FIG. 6), time of play, frequency of play (i.e., number of games played in a particular period of time), number of maximum bets, number of player points earned, or a combination thereof. In one method, the player is awarded points for each keno game played, keno ticket purchased, number of maximum wagers, or the like. In this method, the player needs to accrue a predetermined number of points in order to qualify for a bonus round. Optionally, a counter presenting the number of points accrued or the number of remaining points needed to qualify for a bonus round may also be presented to a player on at least one of the displays of the gaming machine.

[0034] In one method, the player's is allowed purchase of a bonus round. The player is able to purchase a bonus round prior to play of the keno game, during play of the keno game, after a trigger event, or any combination thereof. According to one method, the player purchases a predefined number of numbers (e.g., one, two, or five additional numbers). Optionally, the cost of each addition number is incremental (e.g., first number costs 1 credit, second number costs three credits, and third number costs five credits). Alternatively, the cost of playing the bonus round is fixed, and the player is given a predetermined number of additional number selections.

[0035] Once the bonus round is triggered, one or more additional keno balls (i.e., numbers) are selected. According to one method, the additional numbers are randomly selected from all eighty numbers that comprise a keno game. As a result, it is possible that a number may be selected twice (i.e., selected during the normal keno draw and the bonus round). In another method, the additional numbers are randomly selected from the remaining, unselected numbers, which is typically sixty numbers after a keno draw.

[0036] In one method, the additional number of keno balls (numbers) is predetermined by the gaming manufacturer or

the gaming establishment. For example, the player is given three additional keno balls in response to a trigger event. In another method, the number of additional numbers is based upon the player wager size. Other player wager characteristics that alter the number of additional balls include, but are not limited to, wager size, the number of keno tickets played, rate of play, number of maximum wagers, number of earned player points, player club level, or any other standard that is used to measure or track player wagers. For example, a maximum wager entitles a player to the maximum number of additional balls. In another example, a wager of one credit entitles a player to one additional number, and a wager of two credits entitles a player to two additional numbers (i.e., each credit wager entitles a player to one additional number).

[0037] When the bonus round is triggered and the additional numbers are selected, the additional numbers are marked with different indicia (e.g., color, shape, size of number (i.e., selected number is enlarged), animation, highlighting, or background color) as compared to marked spots (i.e., numbers) from the standard ball draw. The different indicia distinguishes the “bonus” marked spots from the initial player selections. As those skilled in the art will appreciate, any indicia to distinguish between the base game spots and the bonus spots is contemplated. Alternatively, the bonus marked spots may be identified with the same markings as the standard ball draw.

[0038] After the additional numbers have been selected and displayed, the game outcome is evaluated against the pay table at step **58** as shown in FIGS. 3-6. Specifically, the number of hits (numbers selected by the player that are also presented during keno draw) is tallied and compared to the pay table. According to one method, the additional numbers selected during the bonus round provide the player with additional numbers to achieve or improve a particular winning outcome at step **70** as shown in FIGS. 3-6. For example, a player who had no matches after the keno draw may hit one or more numbers during the bonus round thereby resulting in a winning outcome. A player may improve a winning outcome (e.g., four matched numbers) if the player matches one or more bonus numbers. In another method, matching any of the bonus numbers enhances the winning outcome. For example, a winning payout is multiplied (e.g., 2x, 3x, or the like). In yet another method, if a number is marked (i.e., matched in the base keno game) and the same number is selected in the bonus round, the player is award a multiplier of the stated pay out on the pay table.

[0039] In another method, the bonus aspect of the keno game involves the number selection process by the player. That is, the player is able to select one or more additional “bonus numbers” prior to the keno draw. In this method, the trigger of the “bonus” number selection may be based upon the player’s status (e.g., high roller, Gold club level player, or other indicia of player rating). If the player is qualified, the player is eligible to select one or more “bonus” numbers. For example, if the player selects seven numbers, the player may be entitled to elect one “bonus” number prior to the keno draw. The player game is evaluated and paid out on the basis of seven numbers even though the player has selected eight numbers. Accordingly, the bonus number increases the odds that the player will match one through seven numbers.

[0040] In one method, the number of bonus numbers that the player may select is based upon the number of spots (i.e., number of selected numbers). For example, a player only playing a keno game of one to three numbers may only be

eligible to select one “bonus” number whereas a player playing a keno game of twenty numbers may be eligible to select three “bonus” numbers. In another method, the number of “bonus” numbers available to the player may be based on the player’s activity or status (i.e., club level or some other indicia of player rating). In either method, the pay table for the keno game may be static (i.e., the same pay table is used whether or not a player has selected “bonus” numbers). Alternatively, the game may include a standard payable and a bonus payable. The gaming manufacturer or the gaming establishment may adjust the payouts of the bonus pay table to either enhance the payouts as compared to the standard pay table or reduce one or more payouts as compared to the standard pay table to offset the additional opportunities to achieve a catch (i.e., a chosen number that matches a number from the keno draw).

[0041] In addition to various methods for presenting a keno game having a bonus round, various aspects of the game are customizable according to a player’s preferences. These preferences may be saved onto a player tracking card or a player account that is stored on a back end system. The aspects of the game that may be customized include the speed of game play, preferred wager denominations, preferred number of keno tickets to play for a given keno draw, presence or absence of a keno draw animation, preferred number selections or patterns, number colors, background colors, layout of the game display, font size on the screen, or any combination thereof. Additionally, the keno game may be configured to the player according to player characteristics. For example, a player is awarded one or more bonus rounds on special dates (e.g., birthday, wedding anniversary, membership milestones (e.g., player club member for one year)) or during promotional periods or during one or more holidays, or being a member of a particular convention or tour group. In another embodiment, the payable for the game is configured to a particular player club level (e.g., Silver, Gold, and Platinum paytables) as shown in FIG. 6 at step **80**.

[0042] In yet another aspect of the keno game having a bonus round, the game is configured for community play. Community play is a plurality of players playing the game toward a common goal or in competition with one another. For example, players playing the keno game may collectively attempt to collect a sufficient number of play points to qualify for the bonus round. Alternatively, all the active players are awarded a bonus round when a single player achieves a sufficient number of play points. That is, a single player may trigger a bonus round for all the active players of the keno bonus game. In another embodiment, the players are all competing to achieve a particular trigger event for the bonus round (e.g., the fastest player to achieve a predetermined number of play points wins one or more bonus rounds). In yet another embodiment, the keno bonus game is configured for tournament play. Accordingly, a group of players are playing the keno bonus game for a given period of time, and the player that achieves the highest score (or earns the most credits) is the winner of the tournament.

[0043] Referring back to FIG. 1, the main display **12** includes a touch screen or a touch glass technology that allows the player to input their number selection by touching a particular portion of the screen displaying a particular number. Additionally, as shown in FIG. 1, the gaming machine **10** includes a plurality of player-activated buttons **20** used for various functions such as, but not limited to, selecting a wager denomination, selecting a number of games to be played, selecting the wager amount per game, initiating a game, or

cashing out money from the gaming machine **10**. In various embodiments, the player-activated buttons **20** function are, but are not limited to, mechanical buttons, electromechanical buttons, touch screen buttons, or soft key buttons. According to one embodiment, the buttons **20** are backlit to indicate whether the button is active.

[0044] In another embodiment, the player-activated button is a universal button module that provides a dynamic button system adaptable for use with various games, as disclosed in U.S. application Ser. No. 11/106,212, entitled "Universal Button Module", filed Apr. 14, 2005 and U.S. application Ser. No. 11/223,364, entitled "Universal Button Module", filed Sep. 9, 2005, which are both hereby incorporated herein by reference. In other embodiments, other input devices, such as but not limited to, touch pad, track ball, mouse, switches, toggle switches, are included with the gaming machine to also accept player input.

[0045] In yet another embodiment, a cellular phone or other input device (e.g., PDA), separate and apart, from the gaming machine may also be used to input various player choices and information to enhance the player's interactive experience with the gaming machine. In this embodiment, the gaming machine **10** includes an IR sensor, RF sensor, BLUETOOTH receiver, or other means for receiving input from a cellular phone or other wireless input devices. Furthermore, inputting information via these devices provides an added level of security as any key presses may be hidden from view. In yet another embodiment, a player may call or send a text message or a short message service (SMS) to the gaming machine.

[0046] In another embodiment, the top box **18** includes a secondary display **24**. The secondary display **24** may be used to present an animated sequence mimicking a keno draw. For example, the animated sequence includes a cage or hopper holding keno balls numbered 1-80, the rotating of the cage or hopper, and the selection of a ball from the cage or hopper. Optionally, the animation sequence may include audio (e.g., a casino employee calling out the numbers during the keno game).

[0047] In yet another embodiment, the secondary display **24** presents game information (e.g., name of the game, animation, one or more pay tables, game information, one or more help menus, progressive jackpot or game information, tournament game information, or any combination thereof) or non-game related information (e.g., news, advertisements, messages, promotions, or any combination thereof). In another embodiment, the secondary display **24** presents a secondary game such as, but not limited to, a bonus game, a progressive game, or another game of chance such as, but not limited to, video slots, video keno, video poker, video blackjack, video roulette, Class II bingo, games of skill, games of chance involving some player skill, or any combination thereof.

[0048] In an alternative embodiment, the secondary display **24** presents game-related information such as, but not limited to, a pay table or one or more game options to the player. Alternately, the secondary display **24** presents non-game related information such as, but not limited to, advertisements, news, information on sports betting and betting options for those sporting events, requests for drinks or food, concierge services, or promotional information (e.g., information relating to player's club).

[0049] The main cabinet **14** of the gaming machine **10** is a self-standing unit that is generally rectangular in shape. In another embodiment, the main cabinet is a slant-top gaming

cabinet. Alternatively, in other embodiments, the gaming cabinet may be any shaped cabinet known or developed in the art that may include a top box. Additionally, the cabinet may be manufactured with reinforced steel or other rigid materials that are resistant to tampering and vandalism. Optionally, in an alternate embodiment, the gaming machine is a cinema-style gaming machine (not shown) having a widescreen display, as disclosed in U.S. application Ser. No. 11/225,827, entitled "Ergonomic Gaming Cabinet," filed on Sep. 12, 2005, which is hereby incorporated herein by reference.

[0050] As shown in FIG. 1, the gaming machine **10** includes a top box **18** and a main cabinet **16**. According to one embodiment, the top box **18** is a separate and distinct component that is affixed to the main cabinet **16**. In another embodiment, the top box **18** is an area that is partitioned from the main cabinet **16**. Alternatively, the top box **18** and the main cabinet **16** may be contiguous areas with the outward appearance of two distinct components. In another embodiment, the top box **18** also includes a display glass (not shown) that includes the name of the game, artwork, game instructions, pay table, or other information relating to one or more games presented on the gaming machine **10**.

[0051] Optionally, the gaming machine **10** also includes a third display **30** positioned below the primary display **12**. As those skilled in the art will appreciate, the third display may be positioned below the main display, adjacent to the primary or secondary display, on the player interface, or any location on the gaming machine within the line-of-sight of a player. According to one embodiment, the third display **30** is a graphical interface, which is the subject of U.S. patent application Ser. No. 10/943,771, filed Sep. 16, 2004, which is hereby incorporated herein by reference.

[0052] The graphical interface includes a web content capable display screen and an embedded processor. Preferably, the web content capable display screen presents web information to a user via the display screen. The embedded processor preferably utilizes an internal operating system and communicates with the gaming processor of the gaming machine. Preferably, the embedded processor reads incoming data, translates the data into a web protocol (web authoring language), if necessary, and maps the data to the web content capable display screen. In this manner, the web content capable display screen increases user excitement by providing a richer gaming experience. Furthermore, the display allows the player to play a secondary game, input information, make selections, receive promotional information or other types of information including, but not limited to, notification that the player has won a system award, is entered into a tournament game or other bonus game. Additionally, the player is able to configure the attributes of interchanging display content via the graphical interface. In another embodiment, the content of the graphical interface may be presented on a portion of the main display **12** or as a pop-up window on the main display.

[0053] As shown in FIG. 1, the gaming machine **10** includes a player tracking system. The player tracking system allows a casino to monitor the gaming activities of various players. Additionally, the player tracking system is able to store data relating to a player's gaming habits. That is, a player can accrue player points that depend upon the amount and frequency of their wagers. Casinos can use these player points to compensate the loyal patronage of players. For example, casinos may award or "comp" a player free meals, room accommodations, tickets to shows, and invitations to

casino events and promotional affairs. In one embodiment, the player's club level (e.g., Silver, Gold, Platinum), player rating, or total number of player points may qualify a player for a keno bonus round. In another embodiment, the player's club level adjusts the pay table for a keno game. Accordingly, a higher rated player wins more money for a given outcome as compared to a lower level (or unrated) player.

[0054] Typically, the player tracking system is operatively connected to one or more input components on the gaming machine **10**. These input components include, but are not limited to, a slot **28** for receiving a player tracking card, a keypad or equivalent, an electronic button receptor, a display **32**, a touch screen, or the like. The player tracking system may also include a database of all qualified players (i.e., those players who have enrolled in a player rating or point accruing program). Generally, the database for the player tracking system is separate from the gaming machines.

[0055] The main cabinet **16** of the gaming machine also houses a game management unit (not shown) that includes a CPU, circuitry, and software for receiving signals from the player-activated buttons **20**, operating the games, and transmitting signals to the respective game display **12**, **24** and speakers **34**.

[0056] In various embodiments, game program may be stored in a memory (not shown) comprising a read only memory (ROM), volatile or non-volatile random access memory (RAM), a hard drive or flash memory device or any of several alternative types of single or multiple memory devices or structures. Optionally, the gaming machines **10** includes one or more data repositories for storing data. Examples of information stored by the gaming machines **10** include, but are not limited to, accounting data, maintenance history information, short and/or long-term play data, real-time play data, sound data, video data, or animation data.

[0057] As shown in FIG. 1, the gaming machine **10** includes a ticket reader/ticket printer slot **36** that is associated with a cashless gaming system (not shown). According to one embodiment, the slot **36** is used for the ticket reader and ticket printer. Accordingly, the same slot **36** may be used to insert and/or issue a ticket. However, in alternate embodiments, separate slots (not shown) may be provided for the ticket acceptor and the ticket printer. In one embodiment, the ticket reader (not shown) of the cashless gaming system is capable of accepting previously printed vouchers, paper currency, promotional coupons, or the like. The ticket printer (not shown) of the cashless gaming system generates vouchers having printed information that includes, but is not limited to, the value of the voucher (i.e., cash-out amount) and a barcode that identifies the voucher.

[0058] In another embodiment, the gaming machine **10** includes an internet connection or other known network connections to link one or more gaming machines together. According to one embodiment, the internet connection is used for web browsing, prize redemption, or access to other gaming or non-gaming information. Additionally, with the various gaming machines in communication with one another (or a system host), the gaming machine **10** may participate in a gaming tournament. In one embodiment, the gaming tournament is a competitive gaming tournament having one or more winners. Alternatively, the gaming tournament is a cooperative gaming tournament where all eligible gaming machines win a particular award.

[0059] One of ordinary skill in the art will appreciate that not all gaming machines have all these components and may

have other components in addition to, or in lieu of, those components mentioned here. Furthermore, while these components are viewed and described separately, various components may be integrated into a single unit in some embodiments.

[0060] Referring now to FIG. 2, a casino gaming system **100** is illustrated. The casino gaming system **100** comprises one or more gaming machines **10**. The gaming machines **10** illustrated in FIG. 2 act as terminals for interacting with a player playing a casino game. Networking components facilitate communications between the system server **112** and game management units **126** that control displays for carousels of gaming machines **10** across a network. Game management units (GMU's) **126** connect gaming machines to networking components and may be installed in the gaming machine cabinet or external to the gaming machine **10**. The function of the GMU **126** is similar to the function of a network interface card connected to a desktop personal computer (PC). Some GMU's **126** have much greater capability and can perform such tasks as presenting and playing a game using a display (not shown) operatively connected to the GMU **126**. In one embodiment, the GMU **126** is a separate component located outside the gaming machine **10**. Alternatively, in another embodiment, the GMU **126** is located within the gaming machine **10**. Optionally, in an alternative embodiment, one or more gaming machines **10** connect directly to a network and are not connected to a GMU **126**.

[0061] The gaming machines **10** are connected via a network to a network bridge **120**, which is used for networking, routing and polling gaming machines, including slot machines. The network bridge **120** connects to a back end system **112**. Optionally, the gaming machines **10** may connect to the network via a network rack **122**, which provides for a few number of connections to the back end system **112**. Both network bridge **120** and network rack **122** may be classified as middleware, and facilitate communications between the back end system **112** and the game management units **126**. The network bridges **120** and network rack **122** may comprise data repositories for storing network performance data. Such performance data may be based on network traffic and other network related information. Optionally, the network bridge **120** and the network rack **122** may be interchangeable components. For example, in one embodiment, a casino gaming system may comprise only network bridges and no network racks. Alternatively, in another embodiment, a casino gaming system may comprise only network racks and no network bridges. Additionally, in an alternative embodiment, a casino gaming system may comprise any combination of one or more network bridges and one or more network racks.

[0062] The back end system **112** may be configured to comprise one or more servers. The type of server employed is generally determined by the platform and software requirements of the gaming system. In one embodiment, as illustrated in FIG. 2, the back end system **112** is configured to include three servers: a slot floor controller **114**, a casino management server **116** and a casino database **118**. The slot floor controller **114** is a part of the player tracking system for gathering accounting, security and player specific information. The casino management server **116** and casino database **118** work together to store and process information specific to both employees and players. Player specific information includes, but is not limited to, passwords, biometric identification, player card identification, and biographic data. Additionally, employee specification information may include

biographic data, biometric information, job level and rank, passwords, authorization codes and security clearance levels.

[0063] Overall, the back end system **112** performs several functions. For example, the back end system **112** can collect data from the slot floor as communicated to it from other network components, and maintain the collected data in its database. The back end system **112** may use slot floor data to generate a report used in casino operation functions. Examples of such reports include, but are not limited to, accounting reports, security reports, and usage reports. The back end system **112** may also pass data to another server for other functions. Alternatively, the back end system **112** may pass data stored on its database to floor hardware for interaction with a game or game player. For example, data such as a game player's name or the amount of a ticket being redeemed at a game may be passed to the floor hardware. Additionally, the back end system **112** may comprise one or more data repositories for storing data. Examples of types of data stored in the system server data repositories include, but are not limited to, information relating to individual player play data, individual game accounting data, gaming machine accounting data, cashable ticket data, sound data, and optimal display configurations for one or more displays for one or more system game.

[0064] Of course, one will appreciate that a gaming system **100** may also comprise other types of components, and the above illustrations are meant only as examples and not as limitations to the types of components or games used in a casino gaming system presenting a keno game having a bonus round.

[0065] The various embodiments and methods described above are provided by way of illustration only and should not be construed to limit the claimed invention. Those skilled in the art will readily recognize various modifications and changes that may be made to the claimed invention without following the example embodiments and applications illustrated and described herein, and without departing from the true spirit and scope of the claimed invention, which is set forth in the following claims.

What is claimed:

1. A gaming device, comprising:
 - a display for presenting a keno game and a bonus round;
 - a player input device for receiving player selections of one or more numbers; and
 - a processor for evaluating the numbers selected by the player against the keno draw and the bonus round, determining whether to initiate the bonus round, and issuing a payout for any winning outcome.
2. The gaming device of claim 1, further comprising a second display for presenting the keno draw.
3. The gaming device of claim 1, further comprising a player tracking system in communication with the processor.
4. The gaming device of claim 1, further comprising a cashless gaming system in communication with the processor.
5. The gaming device of claim 1, wherein the player input device is a touch screen system positioned over the display.
6. A gaming system, comprising:
 - a gaming server in communication with each of the gaming machines, the gaming server manages a keno game and bonus round, communicates the results of the keno game and the bonus round to each of the gaming machines; and

- a plurality of gaming machines, each gaming machine including a display for presenting a keno game and a bonus round, a player input device for receiving player selections of one or more numbers, a processor for evaluating the numbers selected by the player against a keno draw, and a means for issuing a payout for any winning outcomes.

7. The gaming system of claim 6, further comprising a player tracking system in communication with the plurality of gaming machines.

8. The gaming system of claim 6, further comprising a cashless gaming system in communication with the plurality of gaming machines.

9. The gaming system of claim 6, wherein the player input device is a touch screen system positioned over the display.

10. A gaming system, comprising:

- a gaming server in communication with each of the gaming machines, the gaming server including one or more computer-readable media comprising computer-executable instructions that, when executed by one or more processors, causes the one or more processors to select a plurality of numbers for a keno draw, transmit the keno draw to the gaming machines, evaluate the numbers selected by the players against the keno draw, determine whether a trigger event has been established on a gaming machine, and present a bonus round to an eligible gaming machine; and

- a plurality of gaming machines, each gaming machine including a display for presenting a keno game and a bonus round, a player input device for receiving player selections of one or more numbers, a processor for evaluating the numbers selected by the player against a keno draw, and a means for issuing a payout for any winning outcomes.

11. The gaming system of claim 10, further comprising a player tracking system in communication with the plurality of gaming machines.

12. The gaming system of claim 10, further comprising a cashless gaming system in communication with the plurality of gaming machines.

13. The gaming system of claim 10, wherein the player input device is a touch screen system positioned over the display.

14. One or more computer-readable media comprising computer-executable instructions that, when executed by one or more processors, causes the one or more processors to:

- receive player input selecting one or more numbers;
- display a keno draw that comprises a plurality of numbers from a keno pool;
- initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw;
- display the numbers selected from the bonus round;
- evaluate the numbers selected by the player against the numbers from the draw results and the bonus round; and
- issue a payout for any winning outcomes.

15. The computer-readable media of claim 14, wherein the player input is the activation of an automatic pick function.

16. The computer-readable media of claim 14, wherein the trigger event is a randomly selected number from the keno pool, a specialized bonus symbol, a predetermined number of maximum wagers, a predetermined number of spots, a predetermined number of purchased keno cards, a player card level, or any combination thereof.

17. The computer-readable media of claim 14, wherein the trigger event is the player purchasing the bonus round.

18. The computer-readable media of claim 14, wherein the numbers selected from the bonus round comprise only those numbers not selected from the keno pool thereby preventing duplicative selection of a number in the bonus round.

19. The computer-readable media of claim 14, further causing the one or more processors to determine whether the player is eligible to play the bonus round in response to the trigger event.

20. One or more computer-readable media comprising computer-executable instructions that, when executed by one or more processors, causes the one or more processors to:

- receive player input selecting one or more numbers;
- display a keno draw of twenty randomly selected numbers;
- evaluate the numbers selected by the player against the keno draw and issuing a first payout for any winning outcomes;

- initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw;

- display the numbers selected from the bonus round;
- evaluate the numbers selected by the player against the numbers from the keno draw and the bonus round; and
- issue a second payout for any winning outcomes.

21. The computer-readable media of claim 20, wherein the player input is the activation of an automatic pick function.

22. The computer-readable media of claim 20, wherein the trigger event is a randomly selected number from the keno pool, a specialized bonus symbol, a predetermined number of maximum wagers, a predetermined number of spots, a predetermined number of purchased keno cards, a player card level, or any combination thereof.

23. The computer-readable media of claim 20, wherein the trigger event is the player purchasing the bonus round.

24. The computer-readable media of claim 20, wherein the numbers selected from the bonus round comprise only those numbers not selected from the keno pool thereby preventing duplicative selection of a number in the bonus round.

25. The computer-readable media of claim 20, further causing the one or more processors to determine whether the player is eligible to play the bonus round in response to the trigger event.

26. The computer-readable media of claim 20, wherein a first payable is used to determine the first payout and a second payout is used to determine the second payable.

27. One or more computer-readable media comprising computer-executable instructions that, when executed by one or more processors, causes the one or more processors to:

- retrieve player account information in response to player input;

- determine whether the player is eligible to play a bonus round, wherein player eligibility is based on the player account information;

- receive player input selecting one or more numbers;

- display a keno draw of twenty randomly selected numbers;
- initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw;

- evaluate the numbers selected by the player against the numbers from the bonus round and the keno draw; and
- issue a payout for any winning outcomes.

28. The computer-readable media of claim 27, wherein the player input is the activation of an automatic pick function.

29. The computer-readable media of claim 27, wherein the trigger event is a randomly selected number from the keno pool, a specialized bonus symbol, a predetermined number of

maximum wagers, a predetermined number of spots, a predetermined number of purchased keno cards, a player card level, or any combination thereof.

30. The computer-readable media of claim 27, wherein the trigger event is the player purchasing the bonus round.

31. The computer-readable media of claim 27, wherein the numbers selected from the bonus round comprise only those numbers not selected from the keno pool thereby preventing duplicative selection of a number in the bonus round.

32. The computer-readable media of claim 27, wherein the player account information includes a player club level, number of player points accrued, player rating, or any combination thereof.

33. One or more computer-readable media comprising computer-executable instructions that, when executed by one or more processors, causes the one or more processors to:

- determine player eligibility for a keno bonus round, wherein player eligibility is based upon a player's account information;

- select a payable based upon the player's account information;

- receive player input selecting one or more numbers;

- display a keno draw of twenty randomly selected numbers;

- initiate a bonus round in response to a trigger event, wherein the bonus round is a random selection of one or more numbers in addition to the keno draw;

- evaluate the numbers selected by the player against the numbers from the bonus round and the keno draw; and
- issue a payout for any winning outcomes.

34. The computer-readable media of claim 33, further causing the one or more processors to:

- award points to the player for game play; and

- present the player with the option to save points for future game play.

35. The computer-readable media of claim 33, wherein the player account information includes a player club level, number of player points accrued, player rating, or any combination thereof.

36. The computer-readable media of claim 33, wherein the player input is the activation of an automatic pick function.

37. The computer-readable media of claim 33, wherein the trigger event is a randomly selected number from the keno pool, a specialized bonus symbol, a predetermined number of maximum wagers, a predetermined number of spots, a predetermined number of purchased keno cards, a player card level, a predetermined number of points, or any combination thereof.

38. The computer-readable media of claim 33, wherein the trigger event is the player purchasing the bonus round.

39. The computer-readable media of claim 33, wherein the numbers selected from the bonus round comprise only those numbers not selected from the keno pool thereby preventing duplicative selection of a number in the bonus round.

40. The computer-readable media of claim 33, further comprising:

- presenting the player with an option to configure player preferences for game play; and

- saving the player preferences for future gaming sessions.

41. The computer-readable media of claim 40, wherein the player preferences are speed of play, layout of the game on a game display, font size on the game display, application of multiple wagers, colors of marks, audio volume, types of animation, or any combination thereof.