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**Tarantino**(10) **Pub. No.: US 2007/0191084 A1**(43) **Pub. Date: Aug. 16, 2007**(54) **METHOD OF OPERATING A GAMING MACHINE WITH A SECONDARY LOTTERY**

cation No. 09/298,604, filed on Apr. 23, 1999, now abandoned.

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**LAS VEGAS, NV 89169 (US)**(51) **Int. Cl.****A63F 9/24** (2006.01)(52) **U.S. Cl.** ..... **463/16**

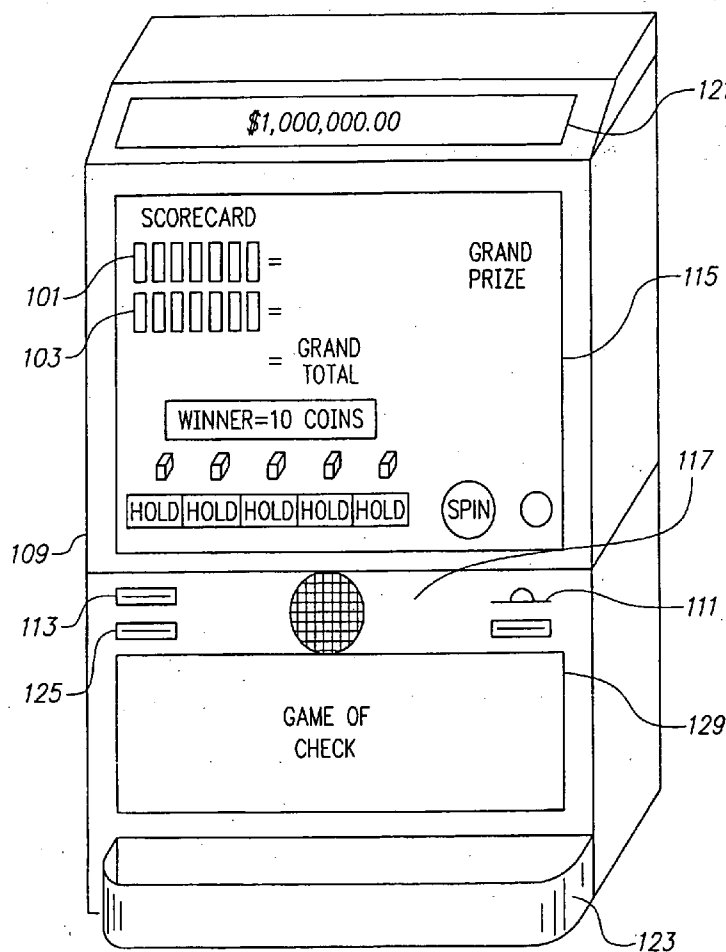
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**ABSTRACT**

This gaming machine and method includes both individual and multi-player lottery aspects. Players play individual wagering games for individualized results. In addition, upon achievement of a set of at least one predesignated result within such wagering individual game, a player receives an entry into a lottery drawing. For example, in one embodiment, where the underlying individual game is a dice game, players achieve an aggregate score which, if high enough, entitles a player to receive a lottery entry. At a predetermined point, a lottery drawing is held, selecting a winner from among the potential lottery entries, regardless of whether such entry has been distributed or not. If such entry has been distributed, the lottery prize is awarded. If not, the lottery prize is not awarded.

(21) Appl. No.: **11/396,017**(22) Filed: **Mar. 30, 2006****Related U.S. Application Data**

(63) Continuation-in-part of application No. 10/636,828, filed on Aug. 6, 2003, now Pat. No. 7,081,050, which is a continuation-in-part of application No. 09/553,915, filed on Apr. 20, 2000, now Pat. No. 6,605,001, which is a continuation-in-part of application No. 09/439,934, filed on Nov. 12, 1999, now Pat. No. 6,656,047, which is a continuation-in-part of appli-



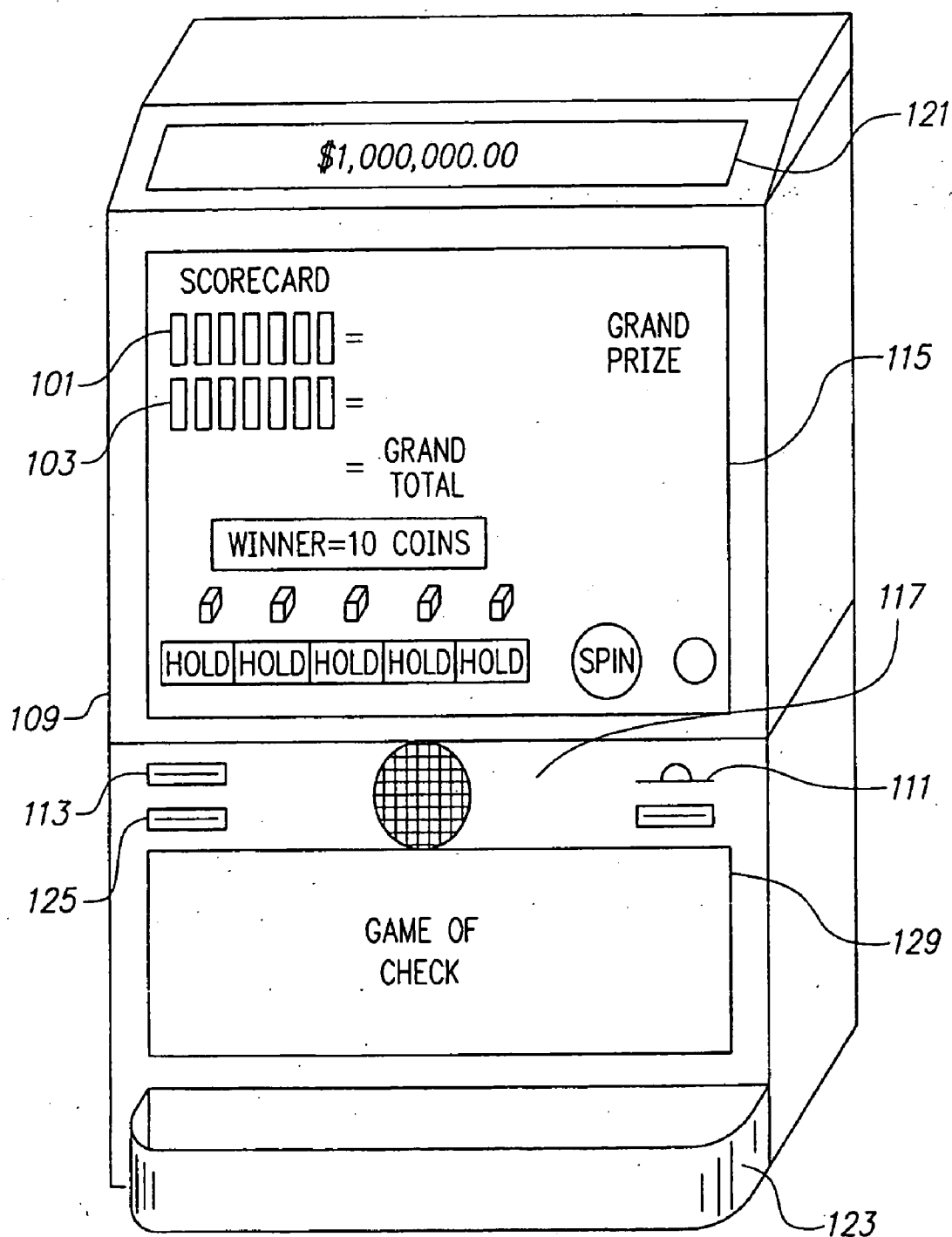
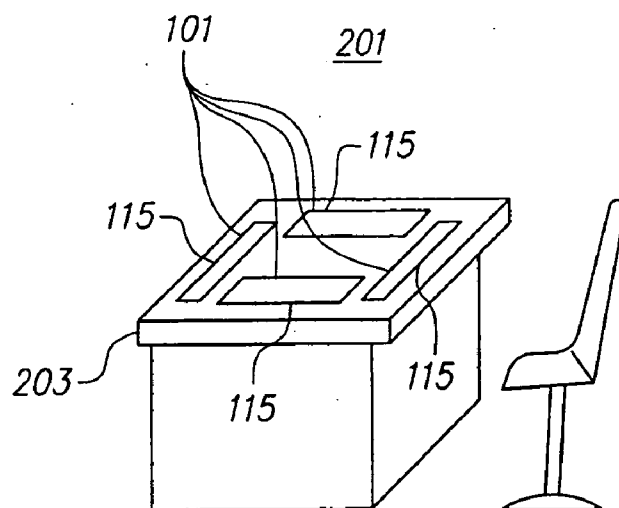
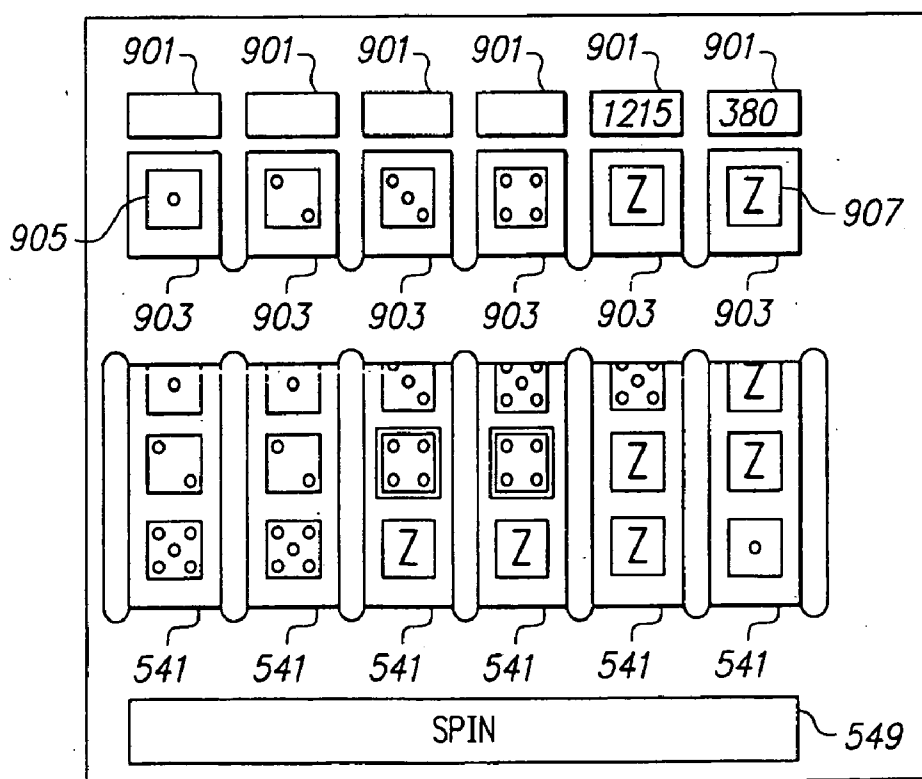


FIG. 1



**FIG. 2**



**FIG. 9**

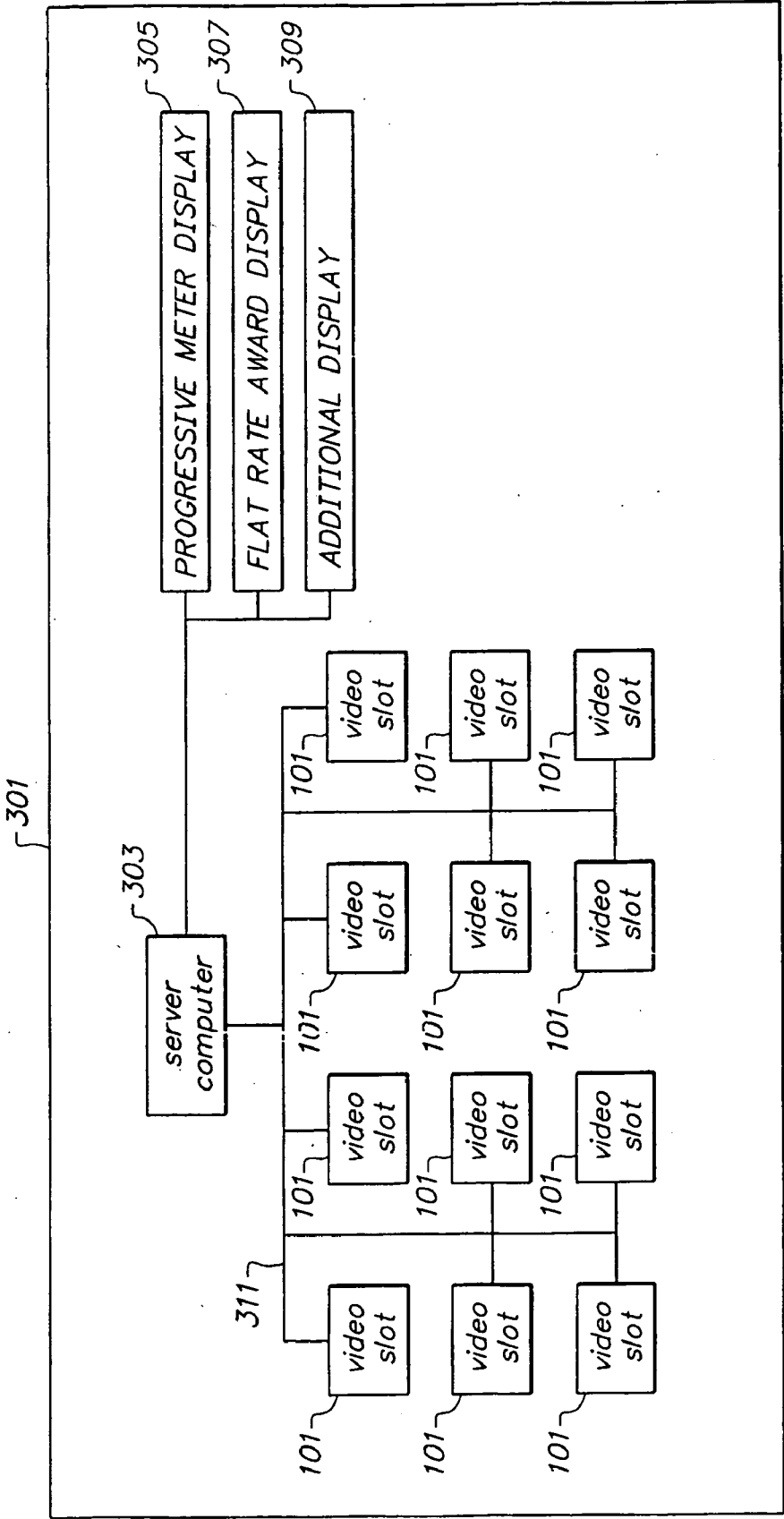


FIG. 3

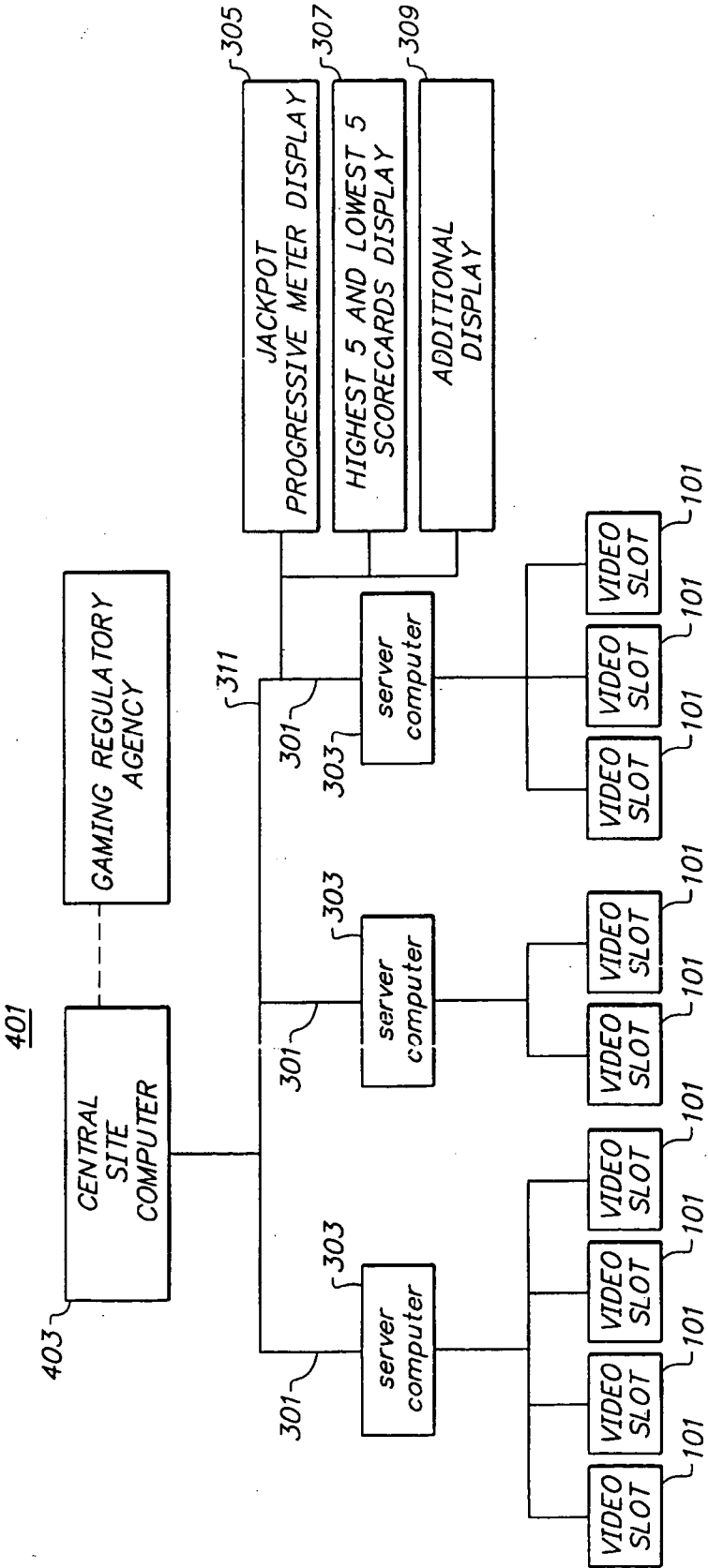


FIG. 4



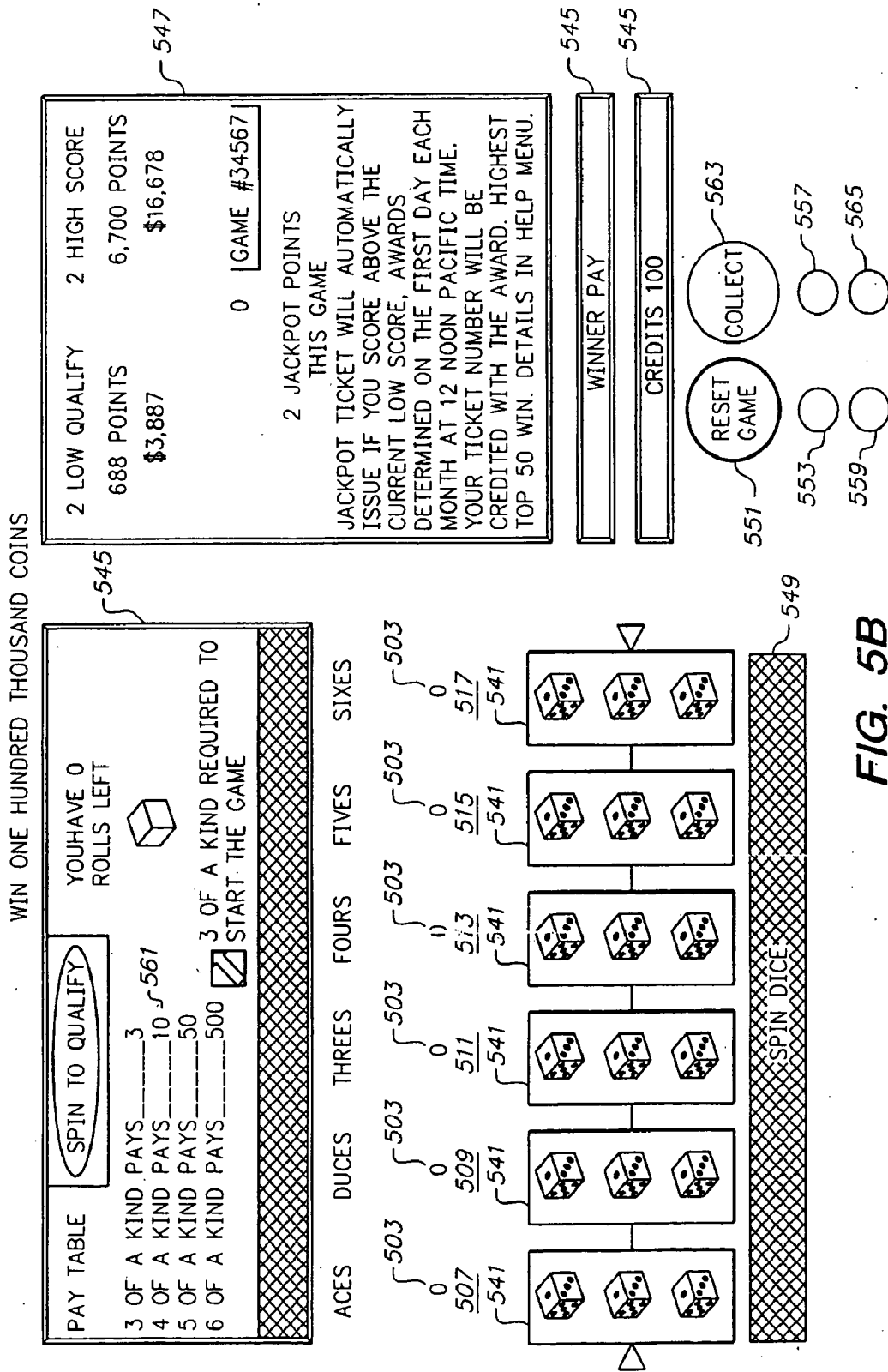


FIG. 5B

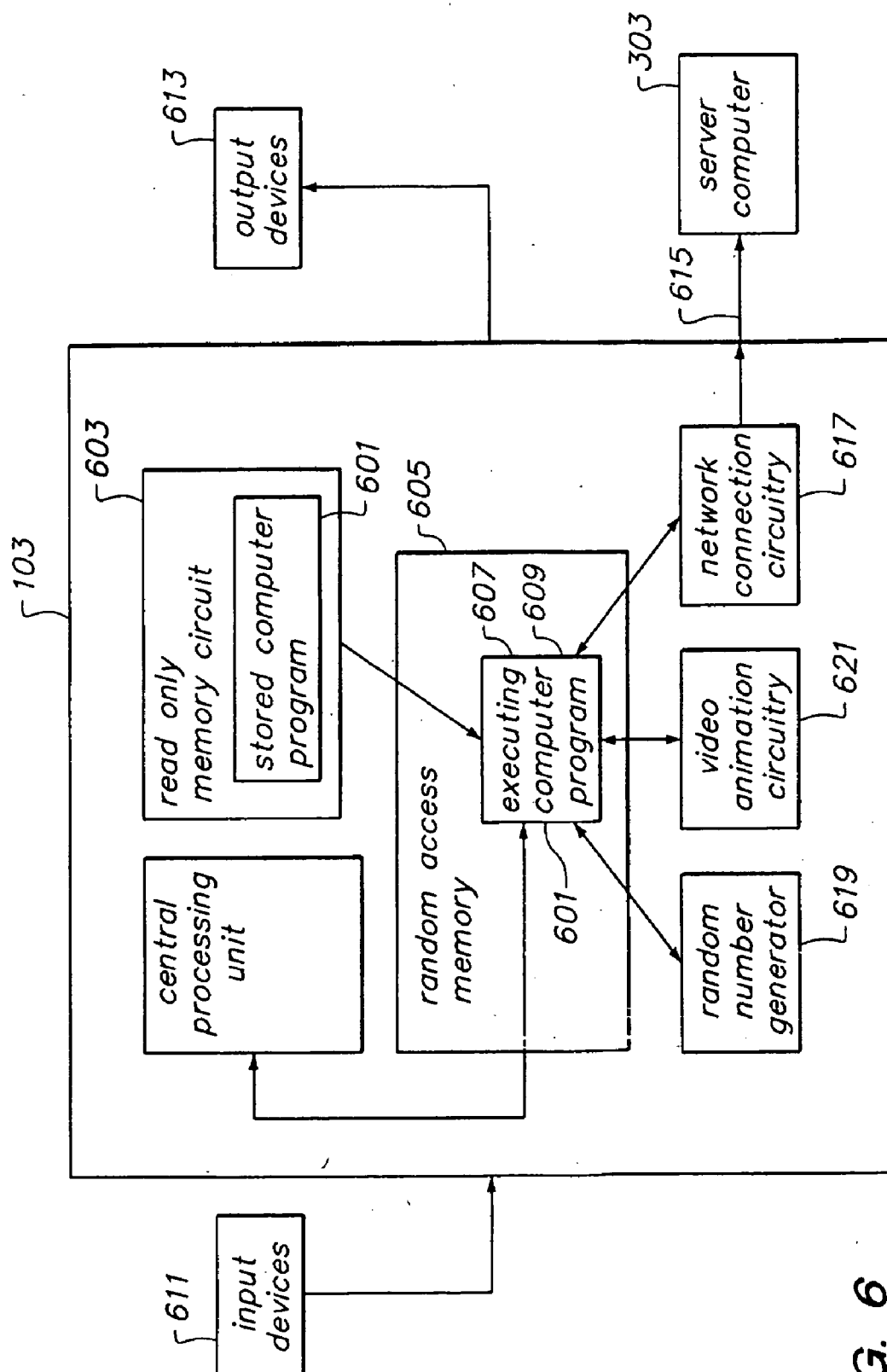


FIG. 6



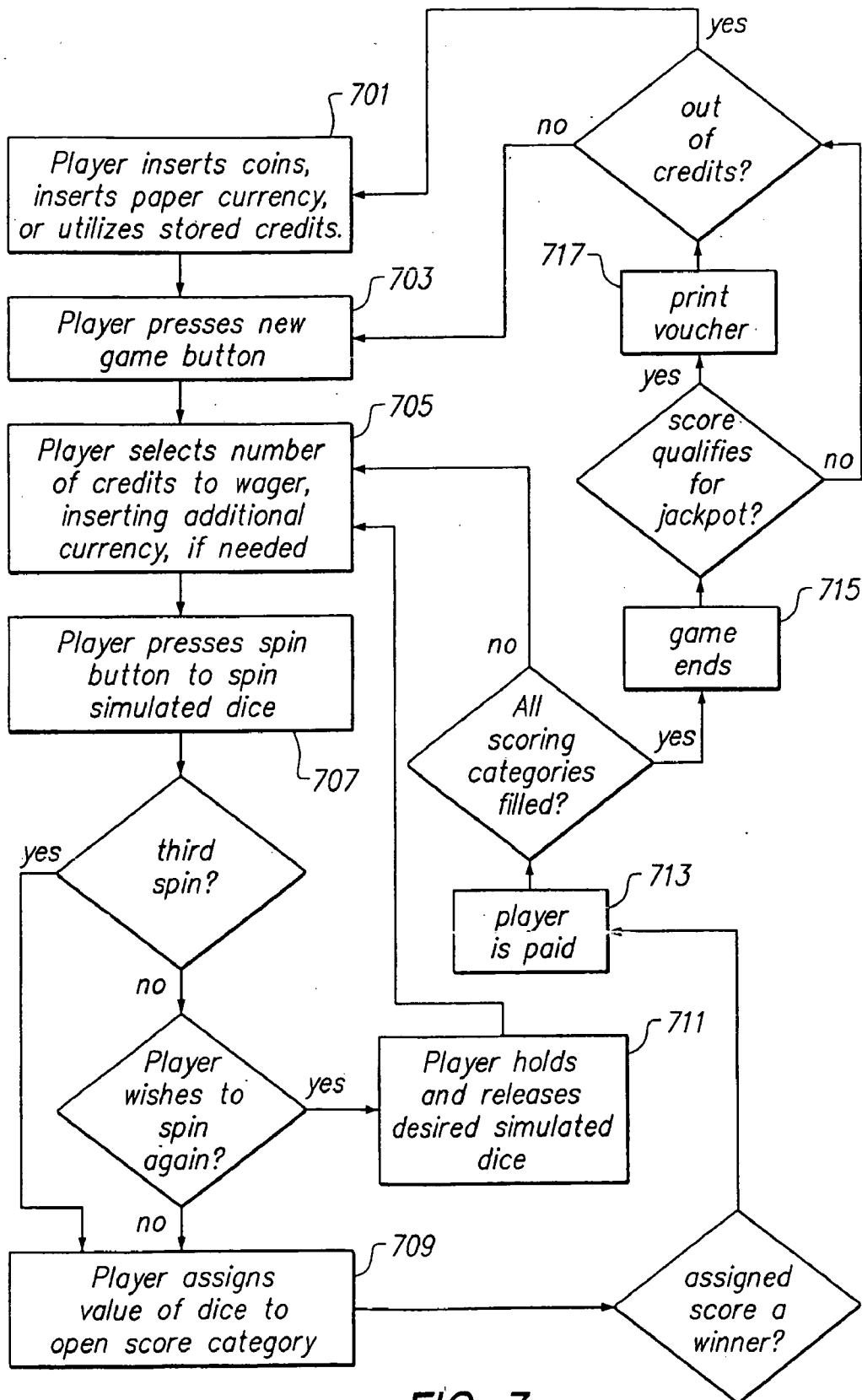


FIG. 7

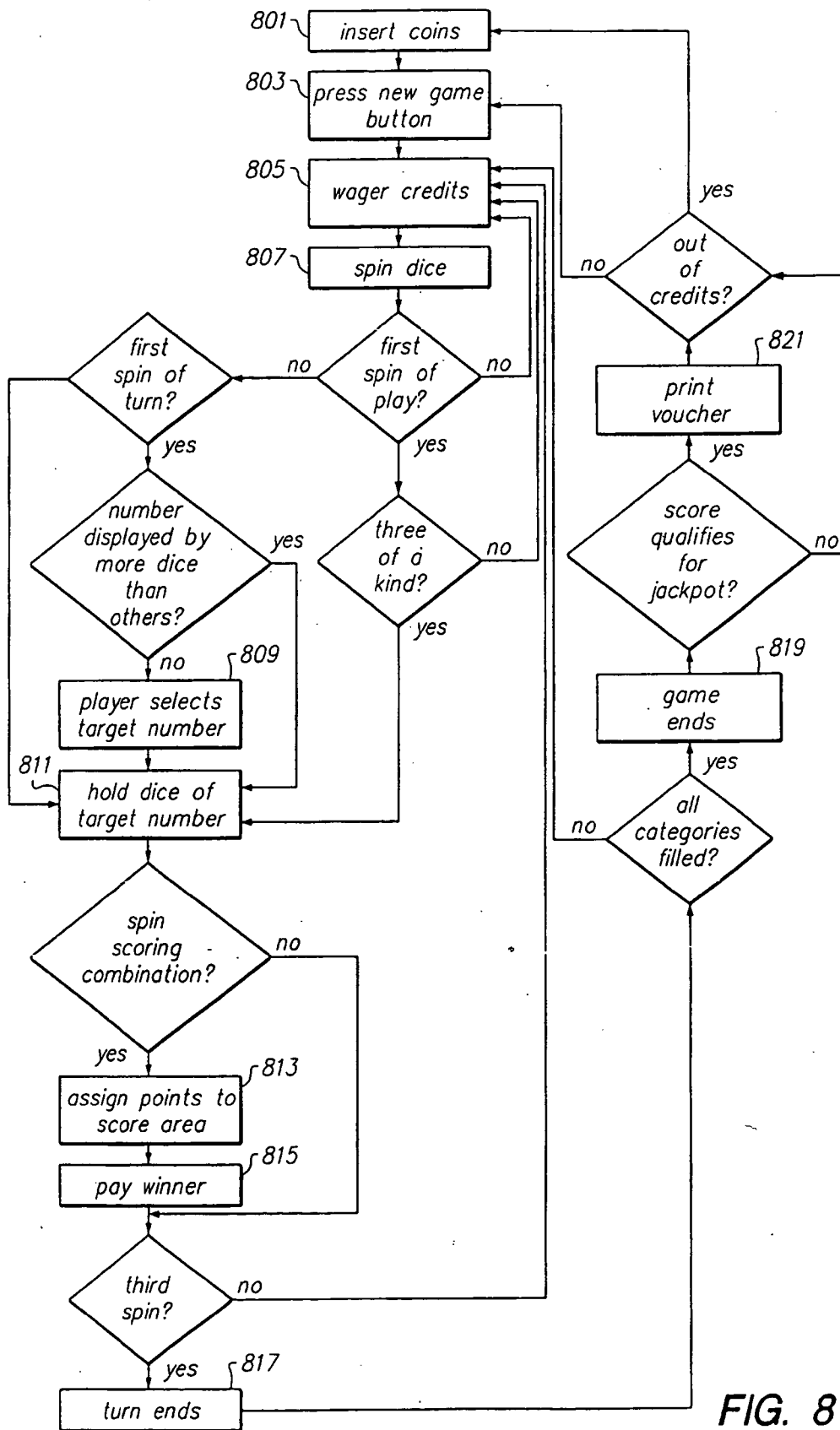
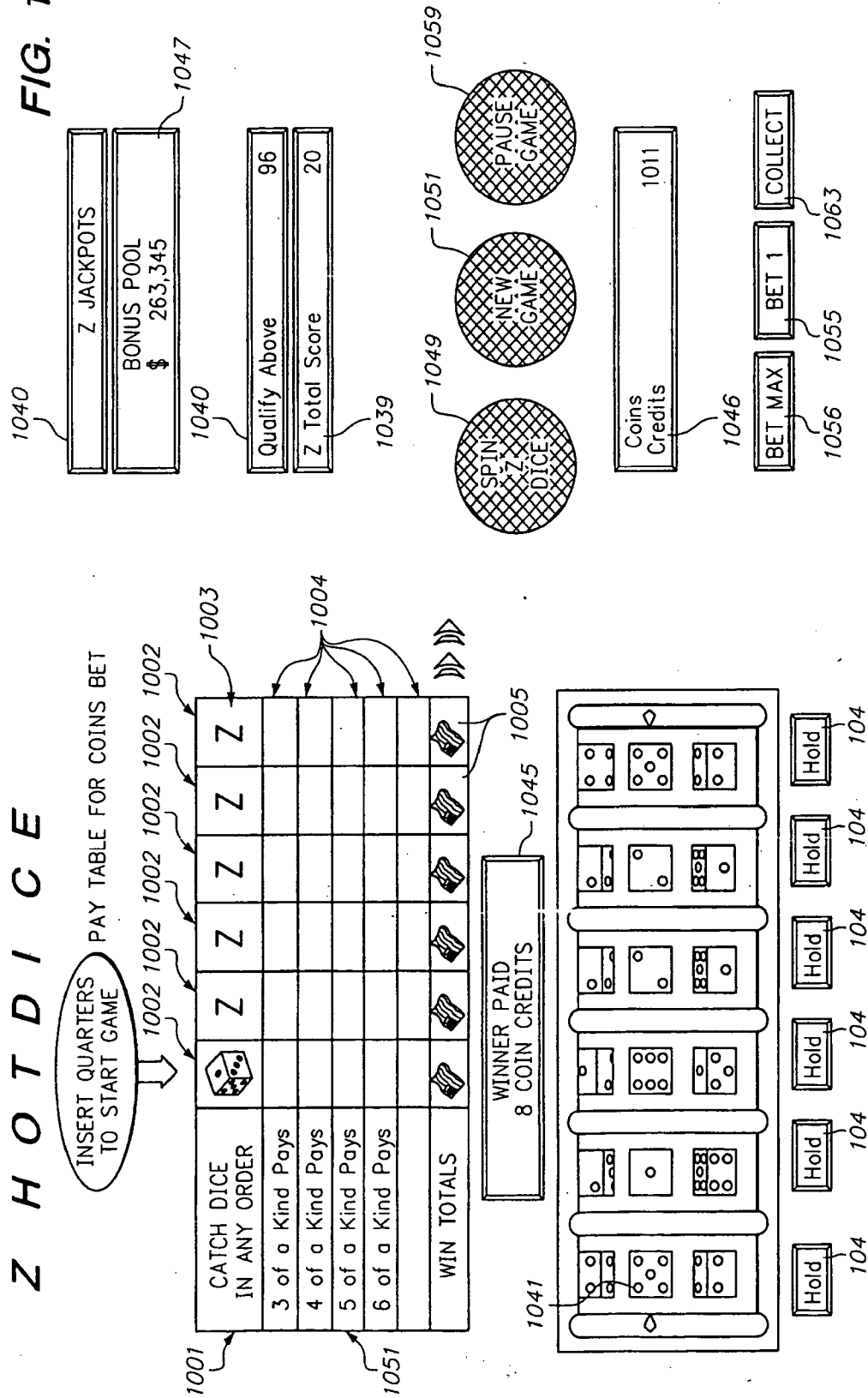
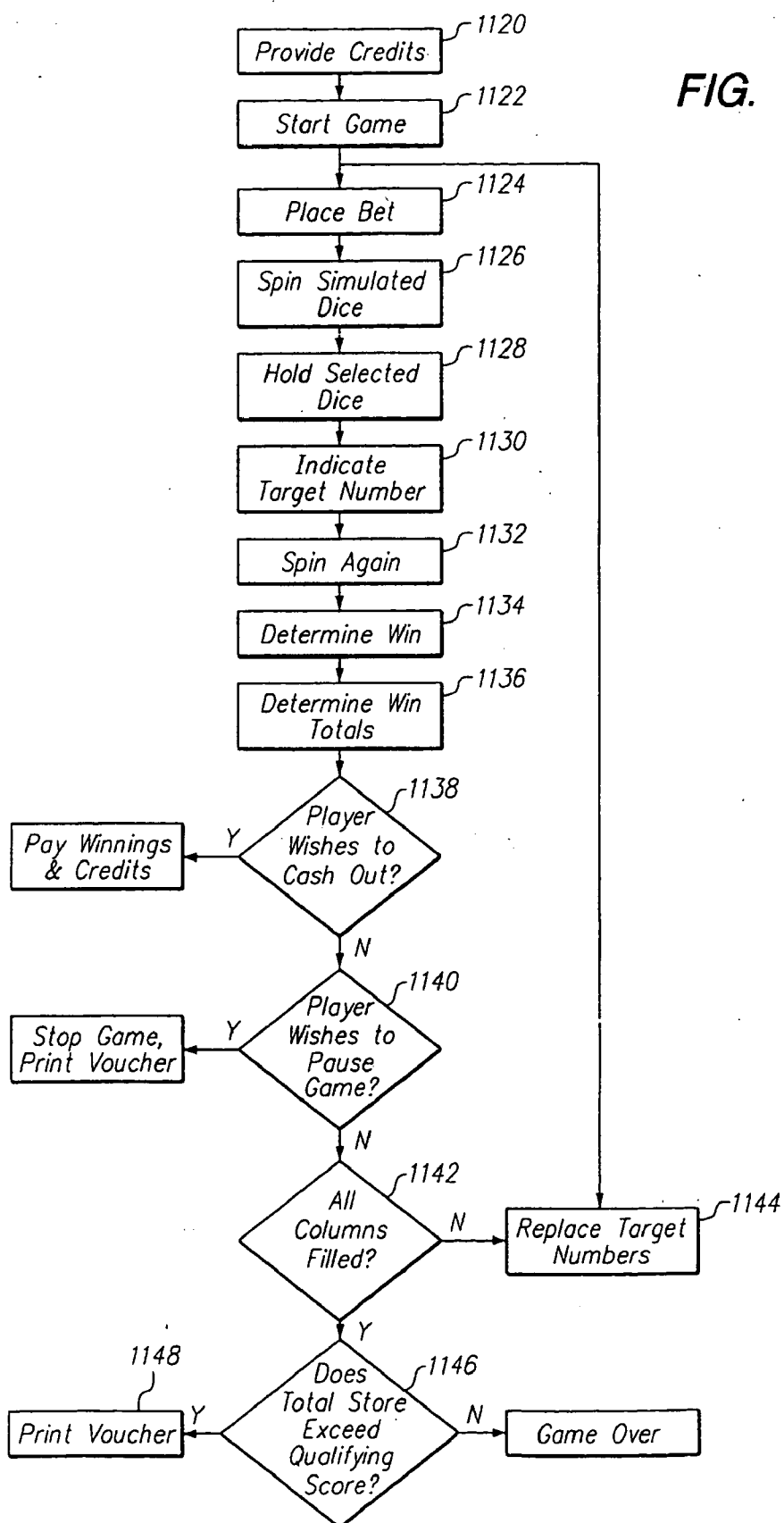


FIG. 8

FIG. 10



**FIG. 11**



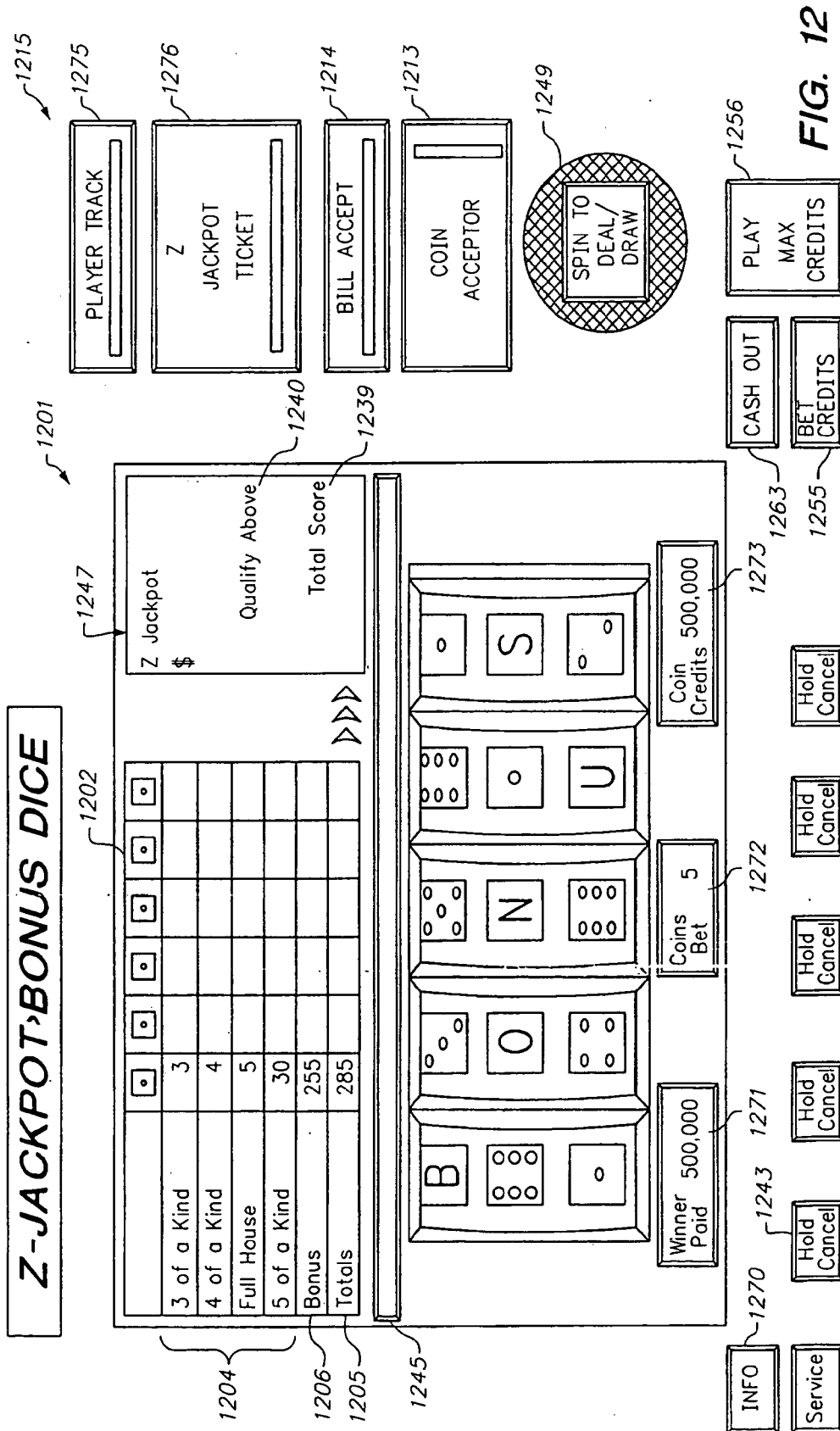


FIG. 12

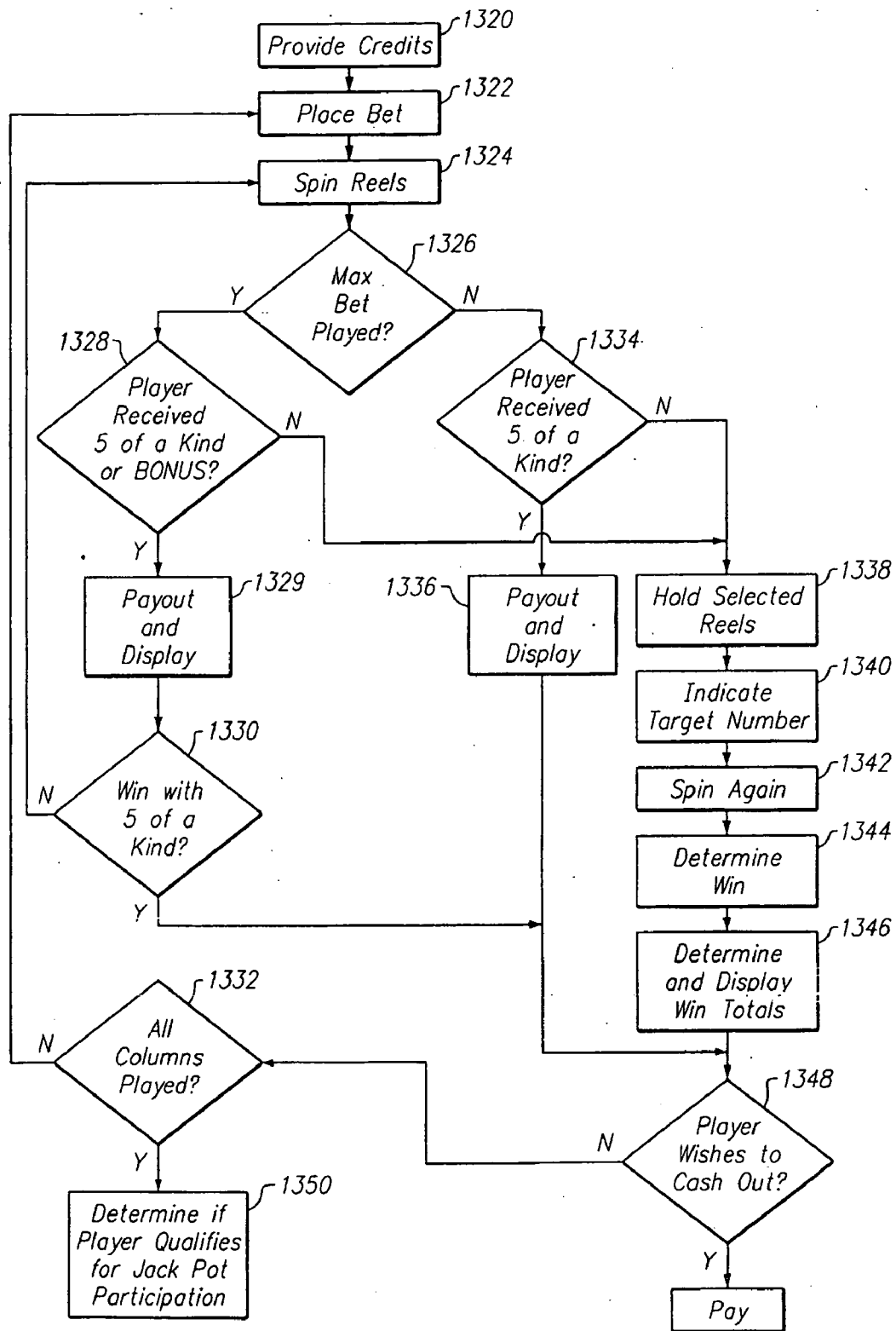


FIG. 13

**FIG. 14**

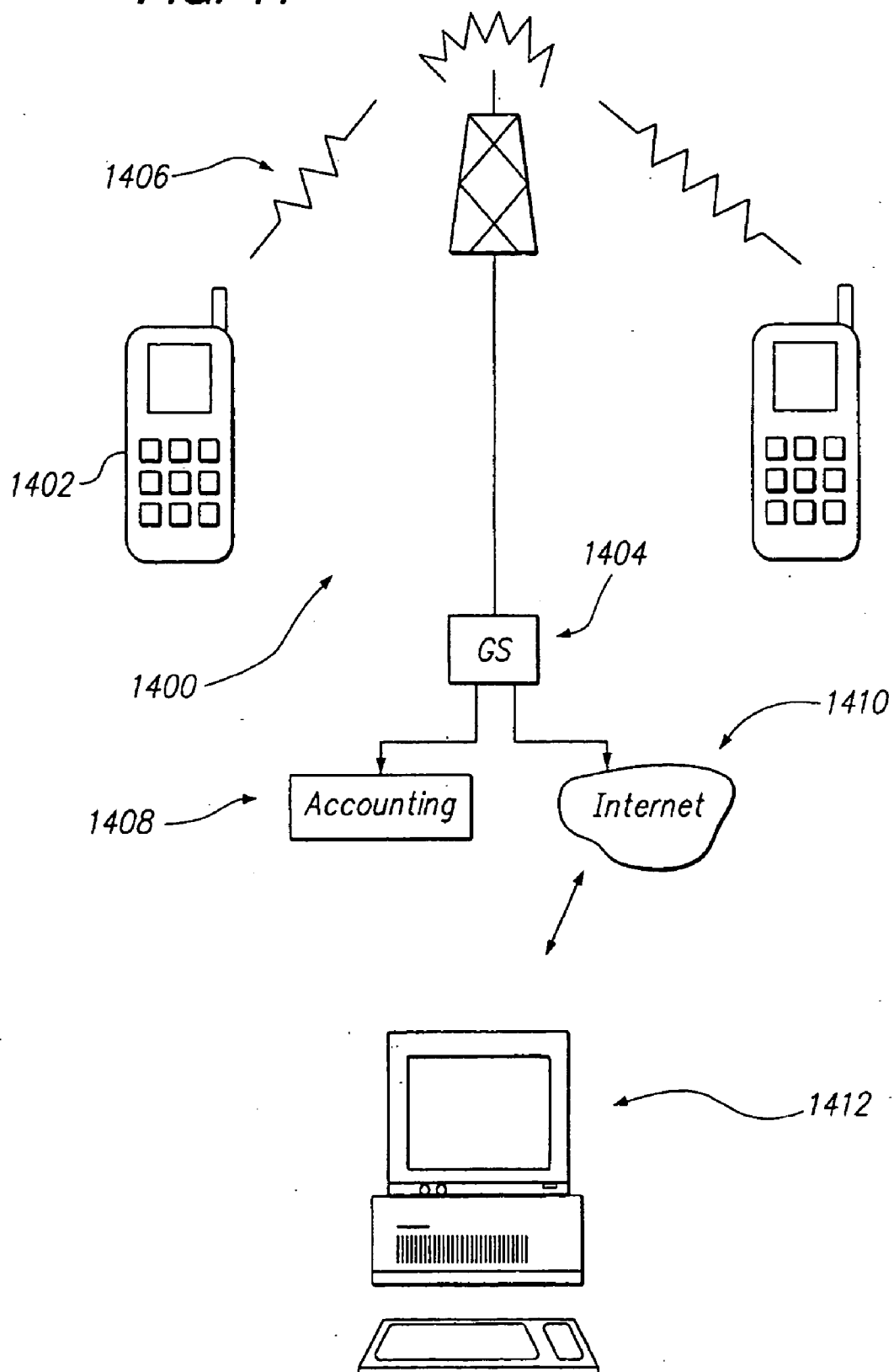
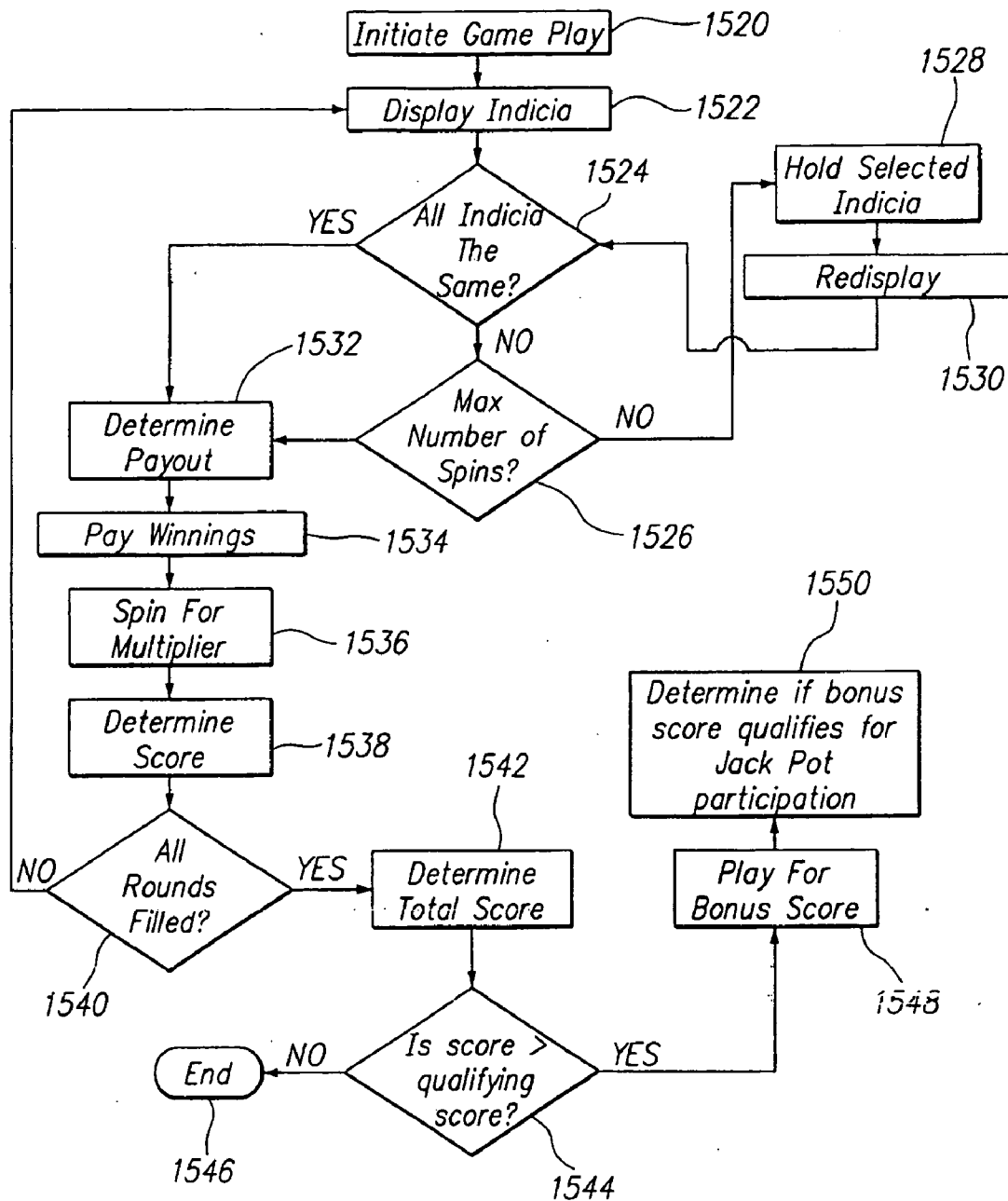


FIG. 15





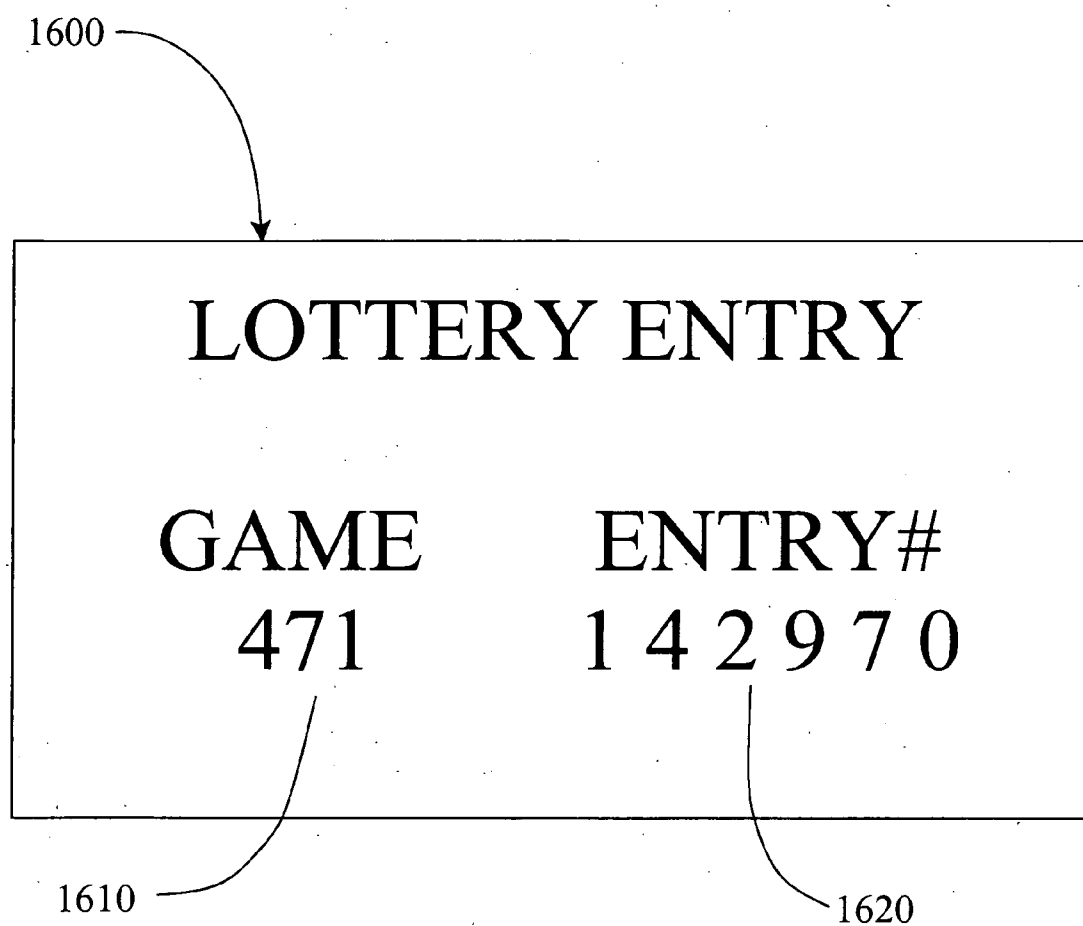


FIG. 16

## METHOD OF OPERATING A GAMING MACHINE WITH A SECONDARY LOTTERY

### RELATED APPLICATION DATA

[0001] This application is a continuation-in-part of commonly-owned U.S. patent application Ser. No. 10/636,828, filed Aug. 6, 2003, which is a continuation-in-part of U.S. patent application Ser. No. 09/553,915, filed Apr. 20, 2000 and issued as U.S. Pat. No. 6,605,001 on Aug. 12, 2004, which is a continuation-in-part of U.S. patent application Ser. No. 09/439,934, filed on Nov. 12, 1999 and issued as U.S. Pat. No. 6,656,047 on Dec. 2, 2003, which is a continuation-in-part of U.S. patent application Ser. No. 09/298,604 filed on Apr. 23, 1999, now abandoned, all of which are incorporated herein by this reference.

### FIELD OF THE INVENTION

[0002] The present invention relates to methods for playing of wagering games. More specifically, the present invention relates to methods for playing a game which offers a secondary game award consisting of a lottery ticket of indeterminate value.

### BACKGROUND OF THE INVENTION

[0003] Casino games are constantly seeking new and innovative award mechanisms to attract additional wagering activity. Gaming machines typically have bonus awards and bonus rounds; progressive jackpots are accumulated for all machines in a designated group, in a given casino, in a given town; casinos are offering bonus awards to all players actively gambling at the point in time that a jackpot is won. The tradeoff with such bonuses is to provide incentives which maximally incent play, at minimal incremental cost.

[0004] Traditional gaming machine play typically involves wagering on the spin of a mechanical or video-simulated reel or the simulated deal of cards. Player decision making need not be involved, other than the decision to play. In cases where no skill is involved, the outcome is based solely upon chance. Even where skill may be involved, chance is still a dominant factor in results achieved.

[0005] The awarding of prizes in a multi-machine environment using methods such as progressive jackpots is a known practice in casinos today. Such multi-machine implementations do not take full advantage of the potential created by the collective play of a plurality of gaming machines. In most cases, only minimal player interest is garnered by the additional potential award, and the amount of additional interest is directly related to the size and likelihood of winning the proffered award.

[0006] Additionally, the progressive jackpots offering the large awards which do attract attention typically involve traditional computer-controlled slot machines, which, although popular, do not involve a substantial skill element.

[0007] Furthermore, while traditional single gaming machine play is a solitary activity, jackpots create competition between players, but not against the house. If one player wins a jackpot, the other players know that one of them lost the jackpot. There is no spirit of camaraderie, of playing against a common opponent, namely the monolithic, impersonal, house. The implementation of such "common

enemy" gaming would be more socially interactive, and would facilitate a fun gaming dynamic.

[0008] There is thus a need for a secondary bonus award for gaming machines which award participation in a lottery-style event where the mechanics of the award procedure do not guarantee a winner, but rather select of winning entry of the possible entries, rather than the actual entries. By selecting from potential entries rather than actual entries, the expected value of the bonus is reduced in accordance with the number of entries issued, a reflection of the marketing impact gained. Furthermore, as players are aware that the house will keep the lottery pool in many cases, i.e. not award the pool if the selected entry has not been issued, the lottery is no longer a "zero sum game" where one player can win only if another loses. Now, the winner is likely taking the award away from the house.

### SUMMARY OF THE INVENTION

[0009] The current invention is a method of playing games of chance in a multi-player environment. In this invention, at least one individual game of chance is conducted to produce an outcome. If the outcome of the game does not meet one of a predetermined set of results, the game is ended. If the outcome of the game does meet one of a predetermined set of results, at least one lottery entry is issued to the player. Each lottery entry is described by a lottery entry identifier and, optionally, an indication of the lottery game to which it applies.

[0010] On a preset schedule, a lottery selection is performed. In the lottery selection, a pool of potential lottery entries are defined. The pool includes potential lottery entries, without regard to whether the lottery entry corresponding to the potential lottery entry has actually been issued. A lottery award amount is provided. A lottery entry is selected from the pool of potential lottery entries, and if the selected lottery entry has been issued, at least a portion of the lottery award amount is issued to any player holding the lottery entry selected. If the selected lottery entry has not been issued, the lottery award is retained. Optionally, lottery selection may select from a pool of potential lottery entry identifiers rather than potential lottery entries, and lottery awards may be issued to players holding lottery entries with lottery entry identifiers matching at least a designated portion of the winning entry selected. The lottery selection may be conducted across a single property, multiple properties, or a geographic region. The lottery selection may be conducted by a game operator, a state lottery operator, or a national lottery operator and the lottery selection may be integrated into a state or national lottery.

[0011] Lottery entry identifiers may be generated upon issuance or in advance. If generated upon issuance, they may be randomly generated or player-selected. Lottery entry identifiers may be alphanumeric, alphabetic, numeric, symbolic, or may reflect a combination of such sets of indicia or characters. Lottery entries may be generated directly by the gaming machine conducting the game of chance.

[0012] The game of chance could be a base game or could be a supplemental, bonus, or secondary game to a base game. The game of chance being played may include multiple rounds to be completed and the lottery entries may be issued based upon the results of two or more rounds. The game of chance may be video poker, may be a game using

a set of indicia and conducted in one or more rounds where the outcome is based on a comparison between two or more indicia, e.g. a dice game, a card comparison game (such as a game in which a player wins by selecting a card that outranks a randomly selected card), a war-type game, a match-type game, or the like, may be a reel slot game using reel symbols where the outcome is based upon a reel symbol combinations, or may be any other game of chance. Additionally, it is noted that the game of chance need not be a "base game" but could be a bonus game or any other game, round, or stage conducted in the course of a game of chance.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. 1 is a perspective view of a computer-controlled slot machine, in accordance with one embodiment of the gaming system of the present invention;

[0014] FIG. 2 is a perspective view of four computer-controlled slot machines assembled in a bar table according to another embodiment of the present invention for single or simultaneous multiple user play;

[0015] FIG. 3 is a block diagram of a local area network of computer-controlled slot machines, according to the present invention for progressive gaming activity;

[0016] FIG. 4 is a block diagram of a wide area network of computer-controlled slot machines, according to the present invention for progressive gaming activity;

[0017] FIG. 5A is a diagram of a touch-sensitive display of a computer-controlled slot machine, in accordance with one embodiment of the gaming method of the present invention;

[0018] FIG. 5B is a diagram of a touch-sensitive display of a computer-controlled slot machine, in accordance with an alternative embodiment of the gaming method of the present invention;

[0019] FIG. 6 is a block diagram of the microprocessor-controlled computer and the computer program which facilitate game play according to one embodiment of the present invention;

[0020] FIG. 7 is a flowchart illustrating the steps of game play according to one embodiment of the present invention;

[0021] FIG. 8 is a flowchart illustrating the steps of game play according to an alternative embodiment of the present invention;

[0022] FIG. 9 is illustrates score categories comprising two distinct display areas, according to one embodiment of the present invention;

[0023] FIG. 10 illustrates a user-interface for an alternate game of the present invention;

[0024] FIG. 11 is a flowchart illustrating the steps of game play of the game having the interface illustrated in FIG. 10;

[0025] FIG. 12 illustrates a user-interface for an alternate game of the present invention;

[0026] FIG. 13 is a flowchart illustrating the steps of game play of the game having the interface illustrated in FIG. 12;

[0027] FIG. 14 illustrates another environment for play of games in accordance with the present invention;

[0028] FIG. 15 is a flowchart illustrating yet another embodiment game of the present invention; and

[0029] FIG. 16 is an illustration of a lottery entry awarded in one optional embodiment of the present invention.

#### DESCRIPTION

[0030] The invention comprises methods for presenting and playing a game. In the following description, numerous specific details are set forth in order to provide a more thorough description of the present invention. It will be apparent, however, to one skilled in the art, that the present invention may be practiced without these specific details. In other instances, well-known features have not been described in detail so as not to obscure the invention.

[0031] In particular, while the description below centers about the invention as it pertains to dice games, other games of chance may be utilized as the game of chance as well. For example, traditional slot machines may form the basis for an embodiment, as may video poker gaming machines, keno machines and others with the attribute that they have an underlying game of chance that generates an outcome that can be used to determine whether the player of the game of chance qualifies for the issuance of a lottery ticket.

[0032] In an optional embodiment of the present invention, one or more games are presented for play on a computer-controlled slot machine, for example as shown in FIG. 1. The computer-controlled slot machine 101 includes a microprocessor-controlled computer 103 within a tamper proof and lockable cabinet 109 having a coin acceptor 111 for wagers and a bill validator 113 for wagers, and optionally including a touch-sensitive display 115 for player input and game display. In addition, the computer-controlled slot machine includes a sound speaker 117 for output of digital sound and voice simulations, a tower light 119 (not shown) to indicate jackpots and other game statistics, and a meter 121 to display progressive jackpot and lottery information and other text. The computer 103 controls release of coins to a coin hopper 123 for paying players, and controls a ticket printer 125 for generating vouchers. The computer 103 also controls a machine-readable medium reading and writing device 129 for saving and restoring games in progress.

[0033] An alternative embodiment of the computer-controlled slot machine is illustrated in FIG. 2. A "bar buddy" version of a computer-controlled slot machine 201 includes all of the features of the computer-controlled slot machine 101. Each "bar buddy" computer-controlled slot machine 201 contains multiple such computer-controlled slot machines 101, assembled within a bar table 203. Each of the touch-sensitive displays 115 for player input and game display are mounted in the surface of the bar table 203. The bar buddy computer-controlled slot machine 201 enables a one or more players to play games of the invention simultaneously, either against each other, against the house, or against both. Various optional embodiments of game play are detailed below.

[0034] Each computer-controlled slot machine 101 is optionally connected to a local area computer network as illustrated in FIG. 3. The local area computer network 301 is controlled by a microprocessor-controlled server computer 303 which controls game play, records game statistics, accounts for vouchers and jackpots, and links the games

together. The local area computer network **301** also optionally includes a progressive jackpot and lottery meter display **305** for showing progressive jackpot and lottery information, a flat rate award display **307** for showing flat rate jackpot information, and an additional display **309** for showing the scores or results which may qualify for jackpots or lottery entries on the local area network **301**. In the preferred embodiment of the present invention, all of the computer-controlled slot machines **101** are connected to the local area computer network **301** in conventional manner via private dedicated lines **311**. In an alternative embodiment, some or all of the computer-controlled slot machines **101** positioned at remote locations are connected to the local area computer network **301** via modems and public telephone lines operated in secure mode through encryption/decryption techniques.

[0035] Each local area network **301** of computer-controlled slot machines **101** may be connected to a wide area computer network as illustrated in FIG. 4. The wide area computer network **401** includes local area computer networks **301** at various physical locations. The wide area computer network **401** is controlled by a central-site computer **403** which operates in 24-hour-a-day communication with all local area computer networks **301** on the wide area computer network **401** for security, accounting, and verification of games and jackpots. If a local area computer network **301** is connected to a wide area computer network **401**, the progressive jackpot and lottery meter display **305**, the flat rate award display **307**, and the additional display **309** of that local area computer network **301** all display jackpot and lottery and other information pertaining to the entire wide area network **401**. For example, the additional display **309** of a local area computer network **301** which is connected to a wide area computer network **401** shows scores or results which may qualify for jackpots on the wide area network **401**. In the preferred embodiment of the present invention, each local area computer network **301** is connected to the wide area computer network **401** in conventional secured cryptographic manner via private dedicated lines **311**. In an alternative embodiment, some or all of the local area computer networks **301** are connected to the wide area computer network **401** in secured cryptographic manner via modems and public telephone lines.

[0036] In an optional embodiment of the present invention, the computer-controlled slot machine **101** includes a touch-sensitive display **115** for player input and game display. FIG. 5A illustrates the layout of the touch-sensitive display in accordance with an embodiment of the present invention for playing the game of Check. The touch-sensitive display **115** allows the player to make input selections conveniently, and displays game information in various ways, depending upon game state. The upper left area of the display **115** displays a scorecard **501** which includes thirteen dual purpose score areas **503** pertaining to the thirteen possible scoring categories. These areas are utilized to accept a player's selection of a scoring category after achieving a scoring spin, and also to display the score achieved by a player in that category, as detailed below with respect to game play.

[0037] The computer-controlled display scorecard **501** is divided into two portions. The upper portion **505** of the scorecard **501** includes dual purpose score areas **503** of the display for Ones (or Aces) **507**, Twos (or Deuces) **509**,

Threes **511**, Fours **513**, Fives **515**, and Sixes **517**. If the player exceeds a pre-determined score threshold on the upper portion **505** of the scorecard **501**, the player is awarded a bonus score which is displayed in the bonus score display area **519** of the upper portion **505** of the scorecard **501**. The upper portion **505** of the scorecard **501** also includes an upper portion score total display area **520** for displaying the total of all of the scores achieved in the scoring categories of the upper portion **505** of the scorecard **501**. A detailed explanation of scoring is provided below with respect to game play.

[0038] The lower portion **521** of the display scorecard **501** includes dual purpose score areas **503** for 3-of-a-Kind **523**, 4-of-a-Kind **525**, Full House **527**, a four-dice Straight **529**, a five-dice Straight **531**, the sum of all five dice (or Chance) **533**, and 5-of-a-Kind (or Check) **535**. The lower portion **521** of the scorecard **501** also includes a lower portion score total display area **537** for displaying the total of all of the scores achieved in the scoring categories of the lower portion **521** of the scorecard **501**.

[0039] The display **115** includes a grand total score display area **539** which displays a player's grand total score as the sum of the upper portion score total and the lower portion score total.

[0040] The bottom left area of the display **115** includes five simulated dice **541**. The bottom left area of the display **115** includes five hold buttons **543** immediately below the simulated dice **541**. These hold buttons **543** are touch-sensitive areas, and are for holding a specific simulated dice **541** on a series of spins (rolls) when the player is attempting to obtain a certain combination, as detailed below with respect to game play.

[0041] The middle left area of the display **115** includes a text message box **545** for informing players of games states, such as number of spins remaining, winning combinations, game over, and for informing players of the amount of payouts.

[0042] The upper right area of the display **115** includes a message area **547** showing the position of the current scorecard **501** in the daily, weekly, monthly, or yearly prize jackpot award and its potential eligibility for a lottery entry among multiple player networks for the prevailing scores. Alternatively, the message area **547** may show the range of scores that qualify for a jackpot, as well as the results which are required for issuance of a lottery entry.

[0043] The bottom right area of the touch-sensitive display **115** includes a number of touch-sensitive areas which facilitate configuration and control of the game of Check. Specifically, a touch-sensitive spin button **549** activates a spin (roll) of the simulated dice **541**, a touch-sensitive reset button **551** resets the scorecard **501**, and a touch-sensitive start game button **553** starts a game. A touch-sensitive wager button **555** allows a player to select the number of credits to wager, a touch-sensitive game mode selection button **557** allows a player to switch between game modes, and a touch-sensitive save-restore game button **559** allows a player to save or restore a game in progress to or from a card or voucher of machine-readable medium. Of course, the various buttons or control inputs, for example **543**, **549**, **551**, **553**, **555** and **557**, described herein as touch-sensitive areas on the display, **115** may also be provided as mechanical electrical input devices, as desired.

[0044] FIG. 5B illustrates the layout of the touch-sensitive display 115 in accordance with an embodiment of the present invention for playing the game of Z Sixty Six. The touch-sensitive display 115 allows the player to make input selections conveniently, and displays game information in various ways, depending upon game state. The upper left area of the display 115 displays a paytable 561 which indicates predetermined amounts to be paid for achieving specific scoring combinations. The paytable 561 is updated as the game progresses to reflect predetermined amounts to be paid for achieving scoring combinations at different stages of game play.

[0045] Below the paytable 561 are six score areas 503 of the display 115. There is a score area for Ones (or Aces) 507, for Twos (or Deuces) 509, for Threes 511, for Fours 513, for Fives 515, and for Sixes 517. Scoring combinations are assigned to appropriate score areas 503. A detailed explanation of scoring is provided below with respect to game play.

[0046] The bottom left area of the display 115 includes six simulated dice 541. In the embodiment shown in FIG. 5B, the simulated dice are in the form of a video simulated dice reels. Below the video simulated dice 541 is a touch sensitive spin button 549 that activates a spin (roll) of the simulated dice 541. In the embodiment illustrated in FIG. 5B, the spin button 549 is in the form of one spin bar common to all simulated dice 541 on the display 115.

[0047] The upper central area of the display 115 includes a text message box 545 for informing players of games states, such as number of spins remaining, winning combinations, game over, and for informing players of the amount of payouts. The upper right area of the display 115 includes a message area 547 showing the score needed for a jackpot of a lottery entry, as detailed below with respect to jackpots and lotteries. Alternatively, the message area 547 may show the position of the current score in the daily, weekly, monthly, or yearly prize jackpot awards or the number of lottery entries already issued for the current lottery event.

[0048] In the embodiment illustrated in FIG. 5B, a text message box 545 for informing players of payout amounts, and a text message box 545 for informing players of the number of accumulated credits are located below the message area 547.

[0049] The bottom right area of the touch-sensitive display 115 includes a number of touch-sensitive areas which facilitate configuration and control of the game of Z Sixty Six. A touch-sensitive reset button 551 resets the game, and a touch-sensitive start game button 553 starts a game. A touch-sensitive game mode selection button 557 allows a player to switch single and multiple-player game modes. A touch-sensitive save-restore game button 559 allows a player to save or restore a game in progress to or from a card or voucher of machine-readable medium. A touch-sensitive collect button 563 allows a player to collect accumulated winnings. In one embodiment, a touch-sensitive translate button 565 allows a player to select a language to be used for display output. Of course, the various buttons or control inputs, for example 551, 553, 557, and 559 described herein as touch-sensitive areas on the display 115, may also be provided as mechanical electrical input devices, as desired.

[0050] FIG. 6 illustrates an embodiment of a computer system that facilitates game play. In an optional embodiment

of the present invention for playing the game of Check, game play is facilitated by a computer program 601 executing in the microprocessor-controlled computer 103 within the computer-controlled slot machine 101. In the preferred embodiment of the present invention, the computer program is stored on a read-only memory integrated circuit 603 that is operatively coupled to the microprocessor-controlled computer 103 in the computer-controlled slot machine 101. Of course, in alternative embodiments, the computer program may be stored on various other storage media, such as semiconductor memory or optical or magnetic disk, or the like.

[0051] The computer program 601 executes from the random access memory 605 of the microprocessor-controlled computer 103 in the computer-controlled slot machine 101, and includes code 607 and data 609 to facilitate the play of the game of Check in accordance with the game rules, as detailed below with respect to game play.

[0052] The computer program 601 accepts user input from various user input devices 611 of the types previously described, including coin acceptor 111, bill validator 113, the touch-sensitive display 115, and the machine-readable medium reading and writing device 129. Other input devices including mechanical button type switches and lever-arm switch actuators may be used in alternative embodiments as desired.

[0053] The computer program 601 also controls computer operation of the various output devices 613 such as the display 115, the sound speaker 117, a tower light 119, the meter 121, the coin hopper 123, the ticket printer 125, and the machine-readable medium reading and writing device 129.

[0054] Optionally, the computer program 601 also controls communication with the microprocessor-controlled server computer 303 which controls the local area computer network 301. The computer program 601 controls this communication via a network port 615 and network connectivity circuitry 617 contained within the microprocessor-controlled computer 103.

[0055] The computer program 601 utilizes a random number generator 619 to produce random numbers that represent the results of the simulated rolling of the simulated dice 541. The computer program 601 utilizes animation circuitry 621 to produce the simulation of dice on the display 115.

[0056] FIG. 7 is a flowchart, illustrating play of the game of Check according to one embodiment of the present invention. The object of the game is to 'spin' the simulated dice 541 for scoring combinations, and to get the highest total score accumulated within scoring categories of possible dice combinations. A player begins by inserting 701 one or more coins into the coin acceptor 111, by inserting 701 one or more bills into the bill validator 113, or by utilizing credits. The player then presses 703 the touch-sensitive start game button 553 to begin game play. The player then selects 705 the number of credits to wager on the spin of the simulated dice 541 by utilizing the touch-sensitive wager button 555 which controls the selection of the number of credits to be wagered. The player next spins 707 the simulated dice 541 by pressing the touch-sensitive spin button 549. The computer program 601 utilizes the random number generator 619 to produce random numbers that represent the results of the simulated roll of the simulated dice 541.

[0057] On each turn, the player may spin **707** the simulated dice **541** up to three times in order to get the highest scoring combination for one of thirteen scoring categories. The thirteen scoring categories are illustrated by the following table:

How The Dice Score	
Upper Portion of Scorecard	
Ones (or Aces)	Total of dice showing Ones
Twos (or Deuces)	Total of dice showing Twos
Threes	Total of dice showing Threes
Fours	Total of dice showing Fours
Fives	Total of dice showing Fives
Sixes	Total of dice showing Sixes
Bottom Portion of Scorecard	
3 of a Kind	Total of all five dice
4 of a Kind	Total of all five dice
Full House	25
Four-dice straight (small straight)	30
Five dice straight (large straight)	40
5 of a Kind (or a Check)	50
Chance (any five dice)	Total of all five dice

[0058] After each spin the player may assign **709** the value of the simulated dice **541** to one of the possible scoring categories by utilizing the dual purpose score areas **503** of the touch-sensitive display **115**. If a player does so, the computer under program control senses the touched areas **503** and totals the value of the simulated dice **541** and calculates and displays the resulting score in the dual purpose score area **503** on the touch-sensitive display **115**. The total score of the upper portion **505** of the scorecard **501** is displayed on the upper portion score total display area **520** on the touch-sensitive display **115**. If the total score of the upper portion **505** of the scorecard **501** is 63 or higher, for example, then a bonus of 35 points, for example, is added to the upper portion score. This bonus is displayed on the bonus score display area **519** on the display **115**. The total score of the lower portion **521** of the scorecard **501** is displayed on the lower portion score total display area **537** on the display **115**. The grand total score is calculated by adding the upper portion and the lower portion scores together. The grand total score is displayed on the grand total score display area **539** on the display **115**.

[0059] Each scoring category can only be scored or selected once during a game. Once a category is used, it cannot be reused until the next game either when the game is over because the scorecard **501** is complete or the player presses the touch-sensitive reset button **551**. Pressing the touch-sensitive reset button **551** clears the entire scorecard **501** in preparation for the start of a new game.

[0060] Instead, if the player has not yet spun **707** three times during the present turn, the player may elect not to assign **709** the value of the simulated dice **541**, but instead to spin **707** again. If the player elects to spin **707** again, the player may hold **711** one or more of the simulated dice **541** by pressing one or more of the associated hold button(s) **543**. The player may also release **711** one or more of any held simulated dice **541** by again pressing the associated hold button(s) **543**. The player may also elect not to hold or release **711** any of the simulated dice **541**. The player then selects **705** the number of credits to wager on the spin of the

simulated dice **541** by utilizing the touch-sensitive wager button **555**. The player next spins **707** the simulated dice **541** by pressing the touch-sensitive spin button **549**.

[0061] A turn is over after a player has spun **707** three times, or has assigned **709** the value of the simulated dice **541** to one of the possible scoring categories by utilizing the dual purpose score areas **503** of the touch-sensitive display **115**. After a player has spun **707** three times, the player must assign **709** the value of the simulated dice **541** to one of the possible scoring categories by utilizing the dual purpose score areas **503** of the touch-sensitive display **115**. If the score cannot be placed into one of the categories because it does not correspond or qualify, then the player must utilize the dual purpose score areas **503** of the touch-sensitive display to assign **709** a zero to one of the remaining categories.

[0062] If the player has achieved a scoring combination and assigns **709** it to one of the scoring categories, the player is paid **713** via the coin hopper **123**. Alternatively, the player may elect to receive credits. The computer program **601** calculates payment according to a payable, which is based upon points scored per turn, and the number of spins needed to achieve the points, as shown, for example, in the following table:

Category	Number of Coins		
	× 3 Spin 1	× 2 Spin 2	× 1 Spin 3
Ones	Total of Ones × 3	Total of Ones × 2	Total of Ones
Twos	Total of Twos × 3	Total of Twos × 2	Total of Twos
Threes	Total of Threes × 3	Total of Threes × 2	Total of Threes
Fours	Total of Fours × 3	Total of Fours × 2	Total of Fours
Fives	Total of Fives × 3	Total of Fives × 2	Total of Fives
Sixes	Total of Sixes × 3	Total of Sixes × 2	Total of Sixes
3 of a Kind	Total × 3	Total × 2	Total × 1
4 of a Kind	Total × 3	Total × 2	Total × 1
Full House	75	50	25
Small Straight	90	60	30
Large Straight	120	80	40
Chance	Total × 3	Total × 2	Total × 1
Check	150	100	50
Check Bonus 1	300	250	100
Check Bonus 2	300	200	100
Check Bonus 3	300	200	100

Scorecard Bonuses	
Top Half 63 + Points	Add 35 Coins
All Categories Filled	Add 100 Coins
Score 250–299 Points	Add 50 Coins
Score 300–349 Points	Add 100 Coins
Score 350–399 Points	Add 150 Coins
Score 400–449 Points	Add 200 Coins
Score 450–499 Points	Add 250 Coins
Score 500–549 Points	Add 300 Coins
Score 550–599 Points	Add 350 Coins
Score 600–644 Points	Add 400 Coins
Perfect Score	Add 6000 Coins

[0063] If the player assigns **709** a zero score to one of the categories, the player is not paid. Alternative embodiments may employ different paytables, as desired.

[0064] The player may then proceed with the next turn and continue filling the scorecard **501**. To proceed with the next

turn, the player utilizes the touch-sensitive wager button **555** to select **705** the number of credits to be wagered on the spin of the simulated dice. The player next spins **707** the simulated dice **541** by pressing the touch-sensitive spin button **549** and plays a turn, as described above. The game ends **715** when the player has filled all thirteen categories with a score or a zero or is out of credits to play the computer-controlled slot machine **101**.

[**0065**] Once the game has ended, the computer program **601** may evaluate the player's scorecard **501** against other current scores to determine if a progressive jackpot will be awarded on a daily, weekly, monthly, or yearly basis. If the player has a currently qualifying scorecard **501**, the computer-controlled slot machine **101** prints **717** a voucher for the player with a control number and other pertinent information for later redemption, if the scorecard **501** is a winner.

[**0066**] In addition, the computer program **601** evaluates the results registered on the player's scorecard **501** to determine if the game played qualifies for at least one entry into the current lottery, discussed in greater detail before. If the player's scorecard **501** indicates that at least one lottery entry is indicated, the player is awarded the number of lottery entries for which results has qualified. Hard copy of such lottery entries may be manually delivered, typically using a floor change or service person, or such lottery entries may be printed utilizing the ticket printer **125** or the machine-readable medium reading and writing device **129** as shown in FIG. 1. In either case, an electronic record of the issuance of such lottery entries is made for potential subsequent selection. For example, a total of score of 620 or higher may qualify for a lottery entry, or a roll of any 5 of a Kind.

[**0067**] Utilizing a local area computer network **301** and a wide area computer network **401**, multiple players may play the game of Check against one another instead of "against the house." Utilizing a local area computer network **301**, each participating player deposits money into an individual computer-controlled slot machine **101** for each spin. The player who achieves the highest scorecard **501** of all of the players who are participating in that multiple player game on the local area computer network **301** wins the money deposited by the various participating players (typically, minus a percentage for the house). The same methodology can be utilized across a wide area computer network **401**, allowing players at different physical locations to compete against each other in real time.

[**0068**] FIG. 8 is a flowchart, illustrating play of the game of Z Sixty Six according to one embodiment of the present invention. The object of the game is to 'spin' the simulated dice **541** for scoring combinations, and to get the highest total score accumulated within scoring categories of possible dice combinations. A player begins by inserting **801** one or more coins into the coin acceptor **111**, by inserting **801** one or more bills into the bill validator **113**, or by utilizing credits. The player then presses **803** the touch-sensitive start game button **553** to begin game play. In one embodiment, three credits are automatically wagered **805** on each spin of the simulated dice **541**. In another embodiment, the player selects the number of credits to wager on the spin of the simulated dice **541** by utilizing the touch-sensitive wager button **555** which controls the selection of the number of credits to be wagered. The player next spins **807** the simu-

lated dice **541** by pressing the touch-sensitive spin button **549**. The computer program **601** utilizes the random number generator **619** to produce random numbers that represent the results of the simulated roll of the simulated dice **541**.

[**0069**] The player must achieve at least three of a kind on a single spin to begin play of an individual game. Until a spin generates at least three simulated dice **541** displaying identical numbers, the player must continue spinning **807** to attempt to generate the minimum achievement required for game entry. A wager is required for each spin of the simulated dice **541**. Once a spin generates at least three simulated dice **541** displaying identical numbers, those simulated dice **541** are automatically held **811**, and a predetermined number of points is automatically assigned **813** to the appropriate scoring area **503**. The number of points awarded is displayed in the appropriate score area **503**, which optionally changes color to indicate active status. The spin that generated the requisite achievement is counted as the first spin of a turn, and the scoring number becomes a target number for the remainder of the turn. A target number is a number that the player can receive points for generating during a given turn.

[**0070**] For example, if a first spin results in four aces (ones), the predetermined number of points for achieving four of a kind on the first spin of a first turn is automatically assigned **813** to the scoring area **503** for aces **507**. Aces becomes the target number for the remainder of the turn. Thus, on the subsequent spins of the turn, the player will receive additional points only for generating aces.

[**0071**] The requirement of generating at least three of a kind optionally applies only to the first turn. A player must achieve three of a kind to enter the game and begin the first turn. Once a player has generated the requisite achievement and entered the game, subsequent turns do not require a minimum achievement to begin.

[**0072**] On each turn, the player may spin **807** the simulated dice **541** up to three times in order to get the highest scoring combination for one of six scoring categories. The six scoring categories are illustrated by the following table:

Score Category	How the Dice Score
Ones (or Aces)	Dice Showing One Only
Twos (or Deuces)	Dice Showing Two Only
Threes	Dice Showing Three Only
Fours	Dice Showing Four Only
Fives	Dice Showing Five Only
Sixes	Dice Showing Six Only

[**0073**] After the first spin of a turn, the number displayed by the largest plurality of the video simulated dice **541** automatically becomes the target number for the current turn. The simulated dice **541** of the target number are automatically held **811**, and the score area **503** for the target number optionally changes color to indicate that it is the active score area **503** for the turn. If at least three dice **541** displaying the target number have been generated, a predetermined number of points is assigned **813** to the score area **503** for the target number.

[**0074**] If the first spin does not result in a largest plurality of dice **541** displaying any one number, the player selects

**809** a target number from amongst those displayed by an equal number of the simulated dice **541**. For example, if the first spin results in two aces, two deuces, one four and one five, the player may select **809** aces or deuces as the target number. The selection is made by touching the desired score area **503** of the touch-sensitive display **115**. Optionally, the score areas **503** which the player may touch to choose a target number blink or change color or size or otherwise provide visual indication of the choices available.

[**0075**] If the player has not yet spun **807** three times during the present turn, the player may spin **807** again. The player next spins **807** the simulated dice **541** by pressing the touch-sensitive spin button **549**. During the second and third spins of a turn, any generated dice **541** displaying the target number are held **811**. Preselected numbers of points are assigned **813** to the appropriate scoring area **503** for scoring three, four, five, or six of the target number.

[**0076**] After each spin, if the player has achieved a scoring combination, the player is paid **815** via the coin hopper **123**. Alternatively, the player may receive credits. The number of predetermined points awarded for various scoring achievements is displayed in a paytable **545** on the display **115**. The paytable **545** is adjusted as the game progress, reflecting predetermined numbers of points to be paid for various achievements at a particular stage of the game. For example, more points are awarded for achieving a six, of a kind on a first spin than on a third spin. Amounts to be paid are based upon the odds of achieving various scoring combinations at a given stage of game play, taking into account number of unheld dice to be spun, and numbers removed from possible generation. An example of paytable **545** for a first spin of a game appears below.

Achievement	Number of Points to be Paid
3 of a Kind	3
4 of a Kind	10
5 of a Kind	50
6 of a Kind	500

[**0077**] Alternative embodiments may employ different paytables **545**, as desired. A turn ends **817** after a player has spun **807** three times, or achieved six of the target number prior to the third spin.

[**0078**] Each scoring category can only be scored or selected once during a game. Once a category is used, it cannot be reused until the next game either when the game is over because a score has been assigned to each category, or the player presses the touch-sensitive reset button **551**. Pressing the touch-sensitive reset button **551** terminates the current game and starts a new game. Once a scoring category for a given number has been used, that number is replaced for the remainder of the game by a non-numerical symbol, for example the letter "Z" or a graphic symbol of a piece of fruit, or as desired. During subsequent turns, when the random number generator **619** generates the used number, the non-numerical symbol is displayed instead.

[**0079**] After completing a turn, the player may then proceed with the next turn and continue filling the score areas **503**. To proceed with the next turn, the player next spins **707** the simulated dice **541** by pressing the touch-sensitive spin button **549** and plays a turn, as described above.

[**0080**] The game ends **819** when the player has filled all six score areas **503** with a score, or is out of credits to play the computer-controlled slot machine **101**.

[**0081**] FIG. 9 illustrates an embodiment of the present invention in which each score area **503** comprises two distinct display areas. A first display area **901** is utilized to display accumulation of points for the associated scoring category. A second display area **903** identifies the associated scoring category, for example by displaying video simulated dice **905** displaying the number of the scoring category. Additionally, the second display area **903** is used to indicate a current target number for a turn, optionally by changing color to indicate that the number of the associated scoring category is the active target number. Also, the second display area **903** is optionally utilized to choose a target number from amongst those displayed by an equal number of the simulated dice **541** when necessary. The player chooses a target number by touching the second display areas **903** associated with the chosen target number. The second display area **903** which the player may touch to choose a target number blink or change color or size or otherwise provide visual indication of the choices available. Additionally, once a scoring category for a given number has been filled, the indicator for the associated second display area is replaced for the remainder of the game by a non-numerical symbol **907**, for example the letter "Z" or a graphic symbol of a piece of fruit, or as desired.

[**0082**] In alternative embodiments, display of accumulated points, identification of score category, indication of current target number, indication of available choices of target number, and indication of filled categories (and in other embodiments more or fewer functions as desired) are divided between at least two display areas, in various combinations as desired.

[**0083**] Once the game has ended, the computer program **601** may evaluate the player's score against other current scores to determine if a progressive jackpot will be awarded on a daily, weekly, monthly, or yearly basis. If the player has a currently qualifying score, the computer-controlled slot machine **101** prints **821** a voucher for the player with a control number and other pertinent information for later redemption, if the score is a winner. In various embodiments, jackpots are awarded for achieving high scores, for achieving high scores low scores, or for achieving both high and low scores as desired.

[**0084**] Likewise, once the game has ended, the computer program **601** evaluates the player's results to determine whether one or more lottery entries are to be awarded. If the player has a qualifying result, e.g. in total score or in achieving a specific category of results rolled, the indicated number of lottery entries are awarded, either by manual delivery, or by printing **821**, optionally on the ticket printer **125** or the machine-readable medium reading and writing device **129**.

[**0085**] Another embodiment of a game of the present invention will be described with reference primarily to FIGS. 10-11. This game is referred to herein as the game of Z Hot Dice. FIG. 10 illustrates a touch sensitive display **1015** for implementing the game of Z Hot Dice. A scorecard **1001** area is provided in an upper left-hand corner. The scorecard **1001** displays information regarding a particular event, the pay table for that event, prior played events, and win totals for each prior played event and the current event.



[0086] The scorecard **1001** includes six columns **1002**, the number of columns being the same as the number of sides of dice. During game play, as described below, a target number is associated with one of the columns **1002**, the target numbers comprising one of the numbers associated with a side of a dice (i.e. the numbers one through six). At a top of each column **1002** is provided a target number indicator **1003**. In one embodiment, before a target number has been selected, this indicator **1003** displays a “Z” or other symbol (or nothing). A central portion **1004** of each column **1002** indicates the payout which will be awarded to a player for receiving a particular combination of the target number(s).

[0087] In the embodiment illustrated, the central portion **1004** is arranged to display payouts for receiving 3 of a Kind, 4 of a Kind, 5 of a Kind or Six of a Kind of the target number. A win total **1005** is provided at the bottom of each column **1002** for indicating the total payout or winnings to the player for a particular event. Those of skill in the art will appreciate that other winning combinations may be provided, such as a full house (i.e. three of the target number along with two of another number).

[0088] The display **1015** displays a number of simulated dice **1041**, in a similar manner to that described above. Below each simulated dice area **1041** is a hold button **1043**. Each button **1043** is associated with one of the simulated dice **1041** and, as described in more detail below, arranged to permit a player to “hold” the particular simulated dice **1041** in a fixed position.

[0089] A number of other display areas are provided for displaying game information. For example, a message area **1047** is provided for displaying the amount of winnings in a jackpot pool. A grand total area **1039** is provided for indicating to the player their total score for the win totals **1005** of all columns **1002**. In addition, a qualify score **1040** is displayed so that the player may determine if his or her grant total is sufficiently high to qualify for a bonus or jackpot, or potentially for at least one lottery entry (as described below).

[0090] A new game button **1051** is provided for permitting a player to begin a new game. As described in more detail below, once a player has placed a wager, a text messages area **1045** displays winnings paid or other information for a player. The player may bet or wager credits in single increments with a “Bet 1” button **1055**, or may bet or wager a maximum allowed number of credits using a “Bet Max” button **1056**. A credits area **1046** displays the credits belonging to the player.

[0091] A spin button **1049** is provided for permitting a player to effectuate a spin of the simulated dice **1041**. A pause game button **1059** is provided for permitting a player to pause a game in progress. A player may elect to cash out by pressing a collect button **1063**.

[0092] As described in more detail below, while in one arrangement the user interface or screen comprises a touch screen arranged to display information to a player and receive input therefrom, the user interface may comprise a combination of electrical and mechanical devices. For example, one or more of the buttons may comprise electro-mechanical buttons which may be depressed by a player. Those of skill in the art will appreciate that many players like the “tactile” feel of buttons as compared to touch screen input. Further, while the display areas are discussed separately, they may be integrated or be arranged in a number of ways other than as shown.

[0093] A method of play of the game of Z Hot Dice will be described with reference to FIG. 11. In a first step **1120**, a player inserts a number of coins or provides other consideration for playing the game. The consideration may be dollar bills, credits from a player card or the like.

[0094] In a step **1122**, the player presses the new game button **1051** to initiate a new game. In one or more embodiments, the gaming apparatus is configured such that if the player presses the new game at any time during the pendency of a game, the player is prompted to press the new game button again if the player actually intends to start a new game. This serves to reduce the likelihood that the player may accidentally or unintentionally press the new game button **1051** and cause a new game to begin. The prompt message may be illuminated in the text message box **1045**.

[0095] In a step **1124**, the player places a wager or bet. In one embodiment, this step comprises the player pressing the “Bet 1” button **1055** or the “Bet Max” button **1056**. In one embodiment, a player is permitted to bet between one and five credits. Each credit may comprise any of a number of values, such as \$0.05 U.S., \$0.10 U.S., \$0.25 U.S. or the like. The player may utilize the “Bet 1” button **1055** to place wagers incrementally, or press the “Bet Max” button **1056** to place a maximum bet. The payouts displayed on the central portions **1004** of the columns **1002** may be updated, as necessary, to reflect an increased payout for achieving a predetermined winning combination when the player increases the amount wagered.

[0096] In a step **1126** the player presses the spin button **1049**. Upon depressing the spin button **1049**, the simulated dice **1041** spin or move (such as in a motion simulating a “reel” displaying die faces), and then stop, as described above to simulate the random roll of dice.

[0097] At this point, six simulated die **1041** are displayed to the player, each dice **1041** displaying one face, and thus one number, towards the player. In the arrangement illustrated in FIG. 10, the simulated die **1041** display a five, a one, a six, a two, another two, and another five.

[0098] In a step **1128**, the player is then permitted to “hold” the dice which that player wishes to play. The held dice identify a selected target number, the target number being that number shown on the face of the held dice. For example, in the arrangement illustrated in FIG. 10, the player may elect to hold the simulated die **1041** displaying fives. In such event, the player presses the right-most and left-most buttons **1043**, and the target number then comprises five.

[0099] In a step **1130**, when the player makes a selection, the target number is displayed in the first available column **1002** of the scorecard **1001**. In one embodiment, the first available column comprises the left-most column **1002** which has not been utilized during the game. Optionally, the target number is illustrated by replacing the “Z” or other symbol in the indicator **1003** with a dice displaying the target number. In the example given above, a dice displaying a five would be displayed in the left-most column **1002**.

[0100] In at least one optional embodiment, a player may not select as a target number a number which has already been played in a particular game. If the player attempts to do so, a message may be displayed in the text message box **1045** to the effect that the selected number has already been played and the player must either select a new target number or spin again. Another spin may be required where the first

spin does not result in the display of any available target numbers (as described below, after a target number has been played, it is optionally removed from the simulated die **1041** and will not be re-displayed). In addition, if the player selects more than one number (such as a simulated dice **1041** displaying a five and another displaying a two) the player be instructed that the action is not permitted and the player must select only one target number.

[0101] Optionally, when a number is selected, the particular column **1002** is highlighted, such as in brightness or a different color, to aid the user in identifying which information is pertinent to the present round of the game.

[0102] In one or more embodiments, the particular payout is dependent upon the player's wager, with the payout increasing with an increasing wager. Set forth below are possible paytables for wagers of one, two, three, four and five coins or bet increments for each target number. As will be appreciated, the payout increases as the number of target numbers played increases (for reasons described below). Of course, a variety of payouts may be different than those illustrated.

[0103] For 1 coin bet:

	First Target Number	Second Target Number	Third Target Number	Fourth Target Number	Fifth Target Number	Sixth Target Number
3 of a Kind	1	2	3	4	5	6
4 or a Kind	3	4	5	8	11	33
5 of a Kind	30	40	50	80	110	330
6 of a Kind	300	400	500	800	1100	3300

[0104] For 2 coins bet:

	First Target Number	Second Target Number	Third Target Number	Fourth Target Number	Fifth Target Number	Sixth Target Number
3 of a Kind	2	4	6	8	10	12
4 or a Kind	6	8	10	16	22	66
5 of a Kind	60	80	100	160	220	660
6 of a Kind	600	800	1000	1600	2200	6600

[0105] For 3 coins bet:

	First Target Number	Second Target Number	Third Target Number	Fourth Target Number	Fifth Target Number	Sixth Target Number
3 of a Kind	3	6	9	12	15	18
4 or a Kind	9	12	15	24	33	99
5 of a Kind	90	120	150	240	330	990
6 of a Kind	900	1200	1500	2400	3300	9900

[0106] For 4 coins bet:

	First Target Number	Second Target Number	Third Target Number	Fourth Target Number	Fifth Target Number	Sixth Target Number
3 of a Kind	4	8	12	16	20	24
4 or a Kind	12	16	29	32	44	132
5 of a Kind	120	160	200	320	440	1320
6 of a Kind	1200	1600	2000	3200	4400	13200

[0107] For 5 coins bet:

	First Target Number	Second Target Number	Third Target Number	Fourth Target Number	Fifth Target Number	Sixth Target Number
3 of a Kind	5	10	15	20	25	30
4 or a Kind	15	20	25	40	55	165
5 of a Kind	150	200	250	400	550	1650
6 of a Kind	1500	2000	2500	4000	5500	16500

[0108] If after the first spin and hold, the player has a winning combination of simulated dice **1041**, then the win total is indicated in the win total area **1005** of the scorecard **1001**, and the text message box **1045** may indicate the winnings. For example, in the event upon the first spin of the game the spin results in four simulated dice **1041** showing a five, then the player may hold these four simulated dice for a "4 of a Kind" of a target number of fives. The payout for this combination may then be indicated in the win total area for the first column **1002**, and the text message box **1045** indicate the winnings to be paid.

[0109] In one embodiment, payouts for combinations of target numbers which are eliminated may be removed from the scorecard **1001**. For example, in the above-referenced example, the payout for a 3 of a Kind may be removed from the first column **1002**, since the player has already received at least a 4 of a Kind. In addition, the payout which the player has already received upon the first spin for that target number may be highlighted to bring to the attention of the player that he or she has already won. This highlighting may be by displaying the payout in a distinguishing color or brightness or other means available. The word "paid" may be indicated in the particular area of the scorecard **1001** as well.

[0110] In accordance with the present inventions in a step **1132**, after holding one or more of the simulated dice **1041**, or after an indication that no dice can be held, then the player presses the spin button **1049** again. All of the simulated dice **1041** which were not held spin and then stop, again displaying a number.

[0111] In a step **1134**, the total number of simulated dice **1041** displaying the target number after the second spin are then counted for determining whether a payout is to be awarded. A win total is displayed in the win total area **1005** of the particular column. This win total may be 0, in the event the player did not receive a sufficiently high number of simulated dice **1041** displaying the target number (for example, a player may elect to hold two dice showing the

target number after the first spin and not receive any additional dice showing the target number after the second spin, thus not receiving a minimum three of the target number for an award). The payout for that "round" may then be updated in the text message box **1045**.

[0112] In a step **1136**, the win totals from all win total areas **1005** are summed and displayed as a total score in the total score area **1039**. Optionally, qualifying scores for jackpot awards and lottery entries are displayed in the qualifying score area **1040**, against which the player may compare their score.

[0113] In a step **1138** it is determined if the player wishes to cash out. This is indicated by a player pressing the collect button **963**. In such event, any accumulated winnings and credits are paid to the player. In that event, the game ends.

[0114] In a step **1140**, it is determined if the player wishes to pause the game. If the player wishes to pause the game, the player pushes the pause game button **1059**. A process is then initiated by which the player may leave the game and being play at a later time and even at different gaming machine, as described in more detail below.

[0115] If the player wishes to continue the game, it is determined in a step **1142** if all of the columns **1002** of the scorecard **1001** are filled. If so, then the player has completed the game. In a step **1146**, the player's total score is compared to the qualifying score to determine if the player qualifies for participation in the jackpot. If the player qualifies, then in a step **1148**, the player is provided with a voucher or the like, in similar manner to that described above with respect to the game of Z Sixty Six.

[0116] In a step **1144**, after a particular target number has been played in a round, that target number is replaced on each simulated dice **1041** with another symbol, is removed or is darkened. As described above, this may be a symbol, such as a "Z," or a picture of a fruit or the like. In one embodiment, it is preferred that the replacement symbols be different so that at no time can a player receive a sequence of the same symbols during a spin. Such may be confusing to a player and lead a player into believing that they have spun into a winning combination. For example, the replacement symbols may comprise an X on the first simulated dice **1041**, an O on the second simulated dice **1041**, an X on the third simulated dice **1041** and so on, so that if a player spins and the simulated dice stop on the replacement symbols, they display XOXOX.

[0117] In another embodiment, the replacement symbols may actually be arranged so that a player may spin into a new bonus combination for which a payout is awarded. For example, each number or dice face may be replaced with a \$ symbol, such that during later play if the player receives a display of all of these symbols after a spin, the player is awarded a special prize or payout.

[0118] If all of the columns **1002** of the scorecard **1001** are not filled, the player may, repeating again to step **1124**, place a bet or wager. The player may be provided with an indication in the text message box **945** after a given round that they may place a bet to continue with the game.

[0119] The game then continues as described above. It will be appreciated that after a first target number has been played, a spin of the simulated dice **1041** may result in a

display of all of the remaining numbers and/or the symbols used to replace the already played target number. As the number of played numbers increases, the probability of receiving a target number decreases. For this reason, as detailed above, the payout for receiving a winning combination of each target number increases as the game progresses.

[0120] The player may continue playing until each of the target numbers one through six, have been played (in any order). At such time, the total score for the player is compared to the qualifying score to determine if the player is entitled to participate in a jackpot or additional play. Regardless of the outcome, the player must then begin a new game to continue play.

[0121] Another embodiment of a game of the present invention will be described with reference primarily to FIGS. **12-13**. This game is referred to herein as the game of Z Jackpot Dice.

[0122] FIG. **12** illustrates an interface **1215** for implementing the game of Z Jackpot Dice. A scorecard **1201** area is provided in an upper left-hand corner. The scorecard **1201** displays information regarding a particular play event, the pay table for that event, prior played events, and win totals for each prior played event and the current event.

[0123] The scorecard **1201** is similar to that of the previous embodiment in many respects, and includes six columns **1202**, one for each of the six sides of a dice and the numbers associated therewith. At a top of each column **1202** is provided a target number indicator **1203**. In one embodiment, before a target number has been selected, this indicator **1203** comprises a blank dice. A central portion **1204** of each column **1202** indicates the payout for a particular combinations of the target number and/or other numbers. As illustrated, the central portion **1204** is arranged to display payouts for receiving 3 of a Kind, 4 of a Kind, and 5 of a Kind of the target number, as well as a full house, a full house comprising three of the target number and a pair of another number. Optionally, the payouts for all combinations are illustrated in the central portion **1204**, regardless of whether a particular column **1202** is active (as described below). However, it is desired that the payout information for the non-active column be displayed less brightly or less visibly than the information provided in the active column. In this manner, a player is provided with information regarding the possible payouts for receiving combinations in any particular column, but the player's attention is directed to the active column **1202** so as to avoid the player being confused as to which column **1202** is being played.

[0124] A bonus value **1206** is provided in the column **1202**. The bonus value **1206** comprises a payout value which the player may win in a manner described in more detail below. In an optional embodiment, the bonus value **1206** comprises a sum which is related to the amount of wagers placed by players when playing the game, such as a percentage of the wagers or retained winnings by the game provider/house.

[0125] A win total **1205** is provided at the bottom of each column **1202** for indicating the total payout or winnings to the player for a particular event.

[0126] The interface **1215** also includes a number of reels **1241**. In the preferred embodiment of this game, five reels

**1241** are provided. In an optional embodiment, each reel **1241** is capable of displaying one of nine symbols: one symbol each comprising a side of a dice, and three symbols comprising a letter in three different colors. Thus, each reel **1241** is capable of displaying dice sides having a one, two, three, four, five and six thereon. The first reel is optionally arranged to display the letter "B" in the colors of red, white and blue. The second reel is optionally arranged to display the letter "O" in the colors of red, white and blue. The third reel is optionally arranged to display the letter "N" in the colors of red, white and blue. The fourth reel is optionally arranged to display the letter "U" in the colors of red, white and blue. The fifth reel is optionally arranged to display the letter "S" in the colors of red, white and blue.

[**0127**] It will be appreciated that the reels **1241** may comprise a displayed image on a video display. In one or more other embodiments, the reels **1241** may comprise mechanical reels having one or more of the images printed thereon and/or capable of being displayed thereon. In general, each reel **1241** is arranged to simulate a throw or spin of an imaginary nine-sided dice having sides displaying the above-described numbers and symbols. Thus, as one aspect of the invention, dice or similar physical items are represented either graphically or on a physical reel.

[**0128**] Below each reel **1241** is a hold button **1243**. Each button **1243** is associated with one of the reels **1241** and, as described in more detail below, arranged to permit a player to "hold" the position of a particular reel **1241** in a fixed position.

[**0129**] A number of display areas are provided for displaying related game information. For example, a message area **1247** is provided for displaying the amount of winnings in a jackpot pool. A grand total area **1239** is provided for indicating to the player the total score of the win totals **1205** of all columns **1202**. In addition, a qualifying score **1240** is displayed so that the player may determine if his or her grand total is sufficiently high to qualify for a bonus or jackpot or for one or more lottery entries (as described below).

[**0130**] A new game button **1251** is provided for permitting a player to begin a new game. As described in more detail below, once a player has placed a wager, a text messages area **1245** may be used to display information, such as game play information. The game play information may be accessible by pressing an information button **1270**.

[**0131**] Display areas are provided for displaying winner paid information **1271**, bet information **1272**, and credit information **1273**. The player may bet or wager credits in single increments with a "Bet 1" button **1255**, or may bet or wager a maximum allowed number of credits using a "Bet Max" button **1256**.

[**0132**] A spin button **1249** is provided for permitting a player to effectuate a spin of the simulated dice **1241**. A player may elect to cash out by pressing a cash out button **1263**.

[**0133**] As illustrated, a coin acceptor **1213** and bill acceptor **1214** are provided for accepting wagers by a player. A player card reader **1275** is provided for reading a player card. The player card **1275** may contain credits which can be used to place bets, may contain player information for reading by the machine, and may store game information,

such as a qualifying score, as described in more detail below. A ticket dispenser **1276** is provided for dispensing tickets. As described in detail below, the ticket information may comprise game information, such as an in-progress or completed game information.

[**0134**] A method of play of the game of Z Jackpot Dice will be described with reference to FIG. **13**. In a first step **1320**, a player inserts a number of coins (as by coin acceptor **1213**), bills (as by bill acceptor **1214**) or provides other consideration for playing the game. Consideration may also comprise credits from a player card or the like.

[**0135**] In a step **1322**, the player places a wager or bet. In one embodiment, this step comprises the player pressing the "Bet 1" button **1255** or the "Bet Max" button **1256**. In one embodiment, a player is permitted to bet between one and five credits. Each credit may comprise any of a number of values, such as \$0.05 U.S., \$0.10 U.S., \$0.25 U.S. or the like. The player may utilize the "Bet 1" button **1255** to place wagers incrementally, or press the "Bet Max" button **1256** to place a maximum bet.

[**0136**] In a step **1324** the player presses the spin button **1249**. Upon depressing the spin button **1049**, the reels **1241** spin or move (either by mechanical rotation or by computer generated graphics) and then stop. At this point, one symbol is displayed in association with each reel **1241**. In the arrangement illustrated in FIG. **12**, the symbols six, white O, blue N, one and red S are displayed.

[**0137**] In a step **1326**, it is determined if the player placed the maximum bet. If so, then in step **1328** it is determined if the player has received a specific combination of displayed symbols on the reels **1241**. In one or more embodiments, a player is declared a winner if the player receives the symbols spelling BONUS. In one embodiment, if the player receives the symbols spelling BONUS in mixed colors, then the player is awarded the bonus amount in the display **1206** for the present column. If the player receives the symbols spelling BONUS in the same colors (i.e. all red, white or blue) then the player is awarded the bonus amount in the display **1206** for all columns **1202**.

[**0138**] In one or more embodiments, a player is declared a winner if the player receives the same number on each of the reels **1241** (i.e. all ones, twos), and that number has not already been played. In an optional embodiment, when the player receives the same number on each of the reels **1241**, then the player is awarded the payout for 5 of a Kind as well as the bonus amount.

[**0139**] If the player is a winner, then in step **1329**, the total of any winnings is displayed in the total **1205** portion of the column being played. In the preferred embodiment, the column being played is the left-most column **1202** which has yet to be played. The totals of all column **1202** totals are displayed in the total score area **1239**.

[**0140**] As an example, if a player receives BONUS spelled in other than symbols of a single color, then the player receives the bonus amount **1206** for that column. That amount is then placed into the total portion **1205** of that column and then indicated in the total score area **1239** along with any other previous total amounts. If a player receives BONUS spelled in a single color, then the player receives the bonus amount **1206** for each and every column. In such event, the totals **1205** for each column **1202** are updated to

reflect this winning, as is the player's total score. If a player receives a 5 of a Kind of a new target number, then the player is awarded the payout for a 5 of a Kind and the bonus amount, and the first open column **1202** is highlighted and the target number displayed thereabove.

[0141] In a step **1330**, once the player has been declared a winner, it is determined if the player received a win by a 5 of a Kind or receiving the BONUS symbols. If the player received a 5 of a Kind win, then in step **1332**, it is determined if the player wishes to cash out (as via a step **1348** as described below).

[0142] If the player won by receiving the BONUS symbols, then the player is entitled to respin again in an attempt to obtain a combination of target numbers, as in step **1224**. Of course, if the player again receives a win on the first spin, the process repeats. If the player received the same number on each of the reels, i.e. a 5 of a Kind, then the play for that particular target number is completed and the player moves to the next round. In one or more embodiments, the player may be required to place another bet in order to spin again after having received a win by hitting the BONUS win.

[0143] If in step **1326** it is determined that the player did not place a maximum bet, then in step **1334** it is determined if the player received a 5 of a Kind of a new target number. If so, then in step **1336**, the player is awarded the payout for that combination, and the award is displayed in the appropriate column. It is next determined if the player wishes to cash out in step **1348**.

[0144] If in steps **1326** and **1334** it is determined that the player did not receive a BONUS win or a 5 of a Kind, then in step **1338**, the player is permitted to "hold" any of the reels **1241** which display a number. When the player holds a particular number, that that number becomes the target number. For example, referring to FIG. **12**, the player may wish to hold the six displayed in the first column **1202**.

[0145] In a step **1240**, when the player makes a hold selection, the target number is displayed in the first available column **1202** of the scorecard **1201**. In one embodiment, the first available column comprises the left-most column **1202** which has not been utilized during the game. Optionally, the target number is illustrated by illustrating the target number on the dice at the top of the column. In the example given above, a dice displaying a six would be displayed in the left-most column **1002**.

[0146] In one or more embodiments, a player is not permitted to select as a target number a number which has already been played in a particular game. If the player attempts to do so, a message may be displayed in the text message box **1245** to the effect that the selected number has already been played and the player must either select a new target number or spin again. Another spin may be required where the first spin results in only numbers which have already been utilized. In addition, if the player selects more than one number (such as a simulated dice **1241** displaying a five and another displaying a two) the player be instructed that the action is not permitted and the player must select only one target number. Also, a player is not permitted to hold any of the non-numeric symbols, such as B, O, N, U or S.

[0147] Optionally, when a number is selected, the particular column **1202** is highlighted, such as in brightness or a

different color, to aid the user in identifying which information is pertinent to the present round of the game. In addition, once a particular target number is selected, the payouts are highlighted in the central payout portion **1204** of the scorecard **1201**.

[0148] In one or more embodiments, the particular payout is dependent upon the player's wager, with the payout increasing with an increasing wager. These payouts may be similar to those described and illustrated above.

[0149] In one embodiment, payouts for combinations of target numbers which are eliminated may be removed from the scorecard **1201**. For example, the payout for a 3 of a Kind may be removed from the column **1202** being played when the player has already received at least a 4 of a Kind. In addition, the payout which the player has already received upon the first spin for that target number may be highlighted to bring to the attention of the player that he or she has already won. This highlighting may be by displaying the payout in a distinguishing color or brightness or other means available. The word "paid" may be indicated in the particular area of the scorecard **1201** as well.

[0150] In accordance with the present invention, in a step **1342**, after holding one or more of the reels **1041**, or after an indication that no reels **1241** can be held, then the player presses the spin button **1249** again. All of the reels **1241** which were not held spin and then stop, again displaying a number.

[0151] In a step **1344**, it is determined if the player has received any predetermined winning combinations. If the player did not hold any of the reels **1241**, it is possible that on the second spin the player received the symbols spelling BONUS. Optionally, the player is awarded a win as described above for spelling BONUS, if the player has placed the maximum bet. In any event, if the player spells BONUS, that player is entitled to an extra spin in order to permit the player to receive the maximum number of the target numbers.

[0152] It is also determined if the player has received a combination of the target number which qualifies as a win. In the embodiment illustrated, the player is a winner if he or she receives at least three of the target number, such as 3 of a Kind, 4 of a Kind or 5 of a Kind of the target number, or if the player receives a full house (i.e. 3 of a Kind of the target number plus a pair of another number).

[0153] A win total is displayed in the win total area **1205** of the particular column. This win total may be 0, in the event the player did not receive a winning combination (for example, a player may elect to hold two dice showing the target number after the first spin and not receive any additional dice showing the target number after the second spin, thus not receiving a minimum three of the target number for an award). The total payout to the player may be updated in the winner paid display area **1271**.

[0154] In a step **1346**, the win totals from all win total areas **1205** are displayed, then summed and displayed as a total score in the total score area **1239**. Optionally, a qualifying score for a jackpot bonus is displayed in the qualifying score area **1240**, again which the player may compare their score.

[0155] In a step **1348** it is determined if the player wishes to cash out. This is indicated by a player pressing the collect

button **1263**. In such event, any accumulated winnings and credits are paid to the player. In that event, the game ends.

[0156] If the player wishes to continue the game, it is determined in a step **1332** if all of the columns **1202** of the scorecard **1201** are filled (i.e. all of the target numbers have been played). If so, then the player has completed the game. In a step **1350**, the player's total score is then compared to the qualifying score to determine if the player qualifies for participation in the jackpot. If the player qualifies, then in a step **1248**, the player is provided with a voucher or the like, in similar manner to that described above. This voucher may be dispensed by the ticket dispenser **1276**.

[0157] Similarly, once the game has ended, the player's results are examined to determine whether one or more lottery entries are to be awarded. If the player has a qualifying result, e.g. in total score or in achieving a specific category of results rolled, the indicated number of lottery entries are awarded, either by manual delivery, or by printing on the ticket dispenser **1276**.

[0158] If all of the columns **1202** of the scorecard **1201** are not filled, the player may, repeating again to step **1224**, place a bet or wager. The player may be provided with an indication in the text message box **1245** after a given round that they may place a bet to continue with the game.

[0159] In an optional embodiment, after a particular target number has been played in a round, that target number is removed from each reel **1241**. Optionally, the space for the removed target number is made blank. In other embodiments, as described above, the symbol may be replaced or may be darkened to indicate that is no longer usable.

[0160] Further, upon the beginning of the next round, the column **1202** for the last target number is darkened or the like so that the player's attention is directed to the now active column **1202**. It is preferred, however, that any winning amounts to the player still be displayed in the prior columns **1202** for identification by the player. In addition, it is preferred that the bonus amount for each played column be removed so as to not confuse the player. In such event, the bonus amount for each previously played column is placed in a bonus pool for award to the player in the event the player receives a combination of the letters BONUS in all of the same color.

[0161] The game then continues as described above. It will be appreciated that after a first target number has been played, a spin of the reels **1241** may result in a display of all of the remaining numbers and/or the symbols used to replace the already played target number. As the number of played numbers increases, the probability of receiving a target number decreases. For this reason, as detailed above, the payout for receiving a winning combination of each target number increases as the game progresses.

[0162] It will be appreciated that the particular symbols which are utilized in the game of Z Jackpot Dice may vary. For example, the non-numeric symbols need not comprise the letters B, O, N, U and S, and do not need to comprise one of each in three different colors. For example, the non-numeric symbols might comprise pictures of fruit or other items. Differing combinations of the non-numeric symbols may be achieved through color, size or other designation. In addition, a greater or lesser number of non-numeric symbols may be provided with each reel. For example, there may be

only two, or as many as four or more of each of the letters, each in different colors. **721** It will also be appreciated that in one or more embodiments, player may be permitted to hold one of the non-numeric symbols, i.e. B, O, N, U, and/or S, in an attempt to gain a winning combination of such symbols on a second spin or play.

[0163] While a specific order of events has been described for the play of Z Jackpot Dice, the order of events and activities may be varied from that above. For example, the times at which columns are highlighted, played numbers are indicated at the top of the columns and the like may vary from that described above. In this regard, the above-description is simply exemplary of an implementation of the concepts of the Z Jackpot Dice game.

[0164] One or more embodiments of the invention comprise a multi-player game. The multi-player game may involve the play of one of the games described above, or other games. For example, in one embodiment, utilizing a local area computer network **301** and a wide area computer network **401**, multiple players may play the games of the invention against one another instead of "against the house." Utilizing a local area computer network **301**, each participating player deposits money into an individual computer-controlled slot machine **101** for each spin. The player who achieves the highest game score of all of the players who are participating in that multiple player game on the local area computer network **301** wins the money deposited by the various participating players (typically, minus a percentage for the house). The same methodology can be utilized across a wide area computer network **401**, allowing players at different physical locations to compete against each other in real time.

[0165] As described above, in various games of the invention, a player may attempt to obtain a high total score for qualifying for a jackpot or a lottery entry. In one or more embodiments, the jackpot or lottery prize comprises a percentage of the monies wagered by the players of the game(s). In this manner, the such prizes continue to increase over time with play, and over time, may comprise multi-million dollars in size. The jackpot or lottery may comprise monies belonging to the establishment offering the game, and may comprise other than cash prizes.

[0166] In one or more embodiments, jackpot and lottery prizes are awarded at various intervals. The interval may be daily, weekly, monthly, yearly, or the like. The intervals may vary or be evenly spaced.

[0167] In an optional embodiment, jackpot prizes and lottery entries are awarded to such players as have achieved a high score playing the game. In one embodiment, a set number of players, such as twenty, who have achieved the highest scores playing the game during a jackpot interval may participate in the jackpot. For example, the jackpot may be awarded on the first of each month, with the players who have achieved the twenty highest scores during the previous month participating in the jackpot. Of course, a gaming establishment may determine the total number of participants.

[0168] In one optional embodiment, a jackpot is not directly awarded but awarded through a secondary lottery game. In one such optional embodiment, each qualifying game outcome from the game of chance results in the

issuance of at least one lottery entry. It is noted that the term “game of chance” refers to any game of chance, including a base game or a supplemental, bonus, or secondary game to a base game. For example, in a slot machine, a lottery entry may be awarded for a particular outcome in the slot game, or a particular outcome in a supplemental, bonus, or secondary game, or a particular outcome over multiple rounds of supplemental, bonus, or secondary games. Similarly, in a video poker game, a lottery entry may be awarded for a particular winning outcome, such as a designated hand of cards, or a particular outcome in a supplemental game, such as a card comparison game where the player wins for selecting a higher ranking card than a randomly selected card, or a particular outcome over multiple supplemental games, such as selecting a higher ranking card in a predetermined number of rounds of a card comparison game. An optional physical embodiment of a lottery entry is shown in FIG. 16, showing a lottery game 1610 for which the lottery entry is valid as well as a lottery entry identifier 1620.

[0169] At a predetermined time, a lottery selection is conducted. In one optional embodiment, the lottery selection could be conducted by the operator of the game of chance, such as a casino or card room. However, it is noted that the lottery selection could also be conducted across multiple casino or card room properties by a common game operator or across a geographic region by a game operator, state lottery operator, or national lottery operator. In the optional embodiment in which a state or national lottery operator conducts the lottery selection, the lottery operator may operate a separate lottery selection for lottery entries awarded through games of chance, or may include the lottery entries in the general lottery. That is, the lottery entries awarded through the game of chance could be lottery entries for a separate lottery, or could be lottery entries for the state-operated or nationally-operated lottery.

[0170] The lottery selection is made from a pool of potential lottery entries. The pool of potential lottery entries includes the lottery entries issued as well as the universe from which the lottery entries were generated. Thus, for example, if lottery entries consist of six numbers each between 0 and 9, the pool of potential lottery entries may consist of one million number combinations, 0-0-0-0-0-0 through 9-9-9-9-9-9, regardless of whether all these number combinations appear on issued lottery entries. In other words, even if only a portion of the potential lottery entries have been issued, the pool of potential lottery entries consists of the universe of possible lottery entries from which the lottery entries were generated. In an optional embodiment, lottery entries and potential lottery entries bear an identifier, such as a numeric, alphanumeric, symbolic, alphabetic, or other identifier. A potential lottery entry, or an identifier 1620 associated therewith, is selected, and any lottery entry 1600 bearing a matching lottery entry identifier 1620 for that particular lottery selection is a winner. As the winning lottery entry identifier 1620 is designated regardless of its issuance, it is possible, perhaps likely, that no issued lottery entry 1600 qualifies as a winner. In such case, no lottery award is issued for the game just completed. In the optional embodiment contemplated, the lottery prize is retained by the casino, and the expenditure is saved. In an alternate optional embodiment, the lottery prize not awarded is added to the lottery award of the next game, so that the full lottery prize is always awarded at some point.

[0171] In the optional embodiment illustrated, the lottery entry identifier 1620 is uniquely generated by the gaming machine conducting the game, or a lottery server communicating with the gaming machine. Thus, if there is a winner, there is one winner. In alternate optional embodiments, duplicate lottery entries 1600 may be issued, in which case multiple lottery entries 1600 may be designated as winners. In one such alternate optional embodiment, the announced lottery prize would be split among the designated winners. In another alternate optional embodiment, each designated winner would receive a duplicate, full, lottery prize. This latter embodiment is more likely in such instances as where non-monetary prizes are awarded, and sharing is impractical. In yet another optional embodiment, the lottery entry identifier 1620 may be player-selected.

[0172] In an optional embodiment, the lottery prize is awarded where the lottery entry identifier 1620 issued to a player completely matches the lottery entry identifier 1620 selected as the winning lottery entry identifier 1620 for the designated lottery game 1610. In alternate optional embodiments, lottery awards may be issued to those holding lottery entries 1600 matching less than the entire lottery entry identifier 1620 selected as the winning lottery entry identifier 1620. In such an optional embodiment, it is contemplated that less than the full lottery award amount may be awarded if the match is less than complete.

[0173] In addition, while the optional embodiment illustrated shows the issuance of a ticket representing a lottery entry 1600 containing the lottery entry identifier 1620 and lottery game 1610, and the selection in the lottery selection of a winning lottery entry 1600, identified by the lottery entry identifier 1620 and lottery game 1610, in alternate optional embodiments, the lottery selection may select the lottery entry identifier 1620 without selection of the lottery entry 1600 on which it may be printed, e.g. via an automated selection of the numeric value associated with the lottery entry identifier 1620.

[0174] In the optional embodiment illustrated, the lottery entry identifier 1620 issued is computer-selected, or otherwise controlled by the casino. In alternate optional embodiments, the player may be given the opportunity to select the lottery entry identifier 1620 to be issued, optionally either at the player's discretion, or from the pool of lottery entry identifiers 1620 not previously selected. Such lottery entry identifier 1620 selection may be accomplished at the time of award issuance, or alternately, the issuance may merely be scrip which is redeemed for a lottery entry 1600 with a player-selected lottery entry identifier 1620.

[0175] In embodiments in which the lottery entry identifier 1620 is selected by the casino, issuance may be random, or in a sequence otherwise determined by the casino.

[0176] In the optional embodiment illustrated, the lottery entry identifier 1620 is shown as a 6-digit number, i.e. a sequence of six numeric indicia, each from the set of indicia {0,1,2,3,4,5,6,7,8,9}. In alternate optional embodiments, the set of indicia may contain greater or fewer values, may be non-numeric or even non-alphanumeric, and need not be uniform for all sequential positions, i.e. some positions may be numeric, others alphabetic, and yet others symbolic.

[0177] It should be noted that by selecting lottery winners based upon potential entries rather than actual entries, par-

ticularly where lottery prizes not awarded are retained by the casino, the expected cost of a lottery may be drastically reduced. For example, if a \$1,000,000 lottery prize is announced, a six-digit lottery number is used (1,000,000 potential entry numbers), but only 10,000 unique entry numbers are issued, the expected value awarded is only \$10,000, rather than \$1,000,000, based upon there being a \$1,000,000 prize and a 1-in-a-100 chance ( $10,000/1,000,000 = 1/100$ ) of the designated winner having been issued. This permits the announcement of dramatically higher prizes, gaining the added publicity and enticement value, while statistically reducing the expected cost.

[0178] In embodiments involving a jackpot, the participation by the players in the jackpot may be even (i.e. divide the jackpot by the number of participating players) or may be on a sliding or other scale where the higher the player's ranking, the greater that player's participation in the jackpot. The jackpot may also be a fixed amount for each player, or be fixed based on their ranking.

[0179] Of course, the manner by which a player is determined to be entitled to participate in the jackpot may vary. For example, players having the lowest scores may be entitled to participate.

[0180] Those of skill in the art will appreciate the enticement of such a jackpot award system to a player. In this arrangement, a player need not receive any specific predetermined winning combination or point total. Instead, a player need only achieve a sufficiently high score to be included in the jackpot award. The high score is not fixed, but is dependent upon the scores of other players. Thus, during any particular jackpot interval, the score which a player needs to achieve to participate in the jackpot may vary.

[0181] In an embodiment where each player plays a slot machine 101, the player optionally places a wager or bet directly on or in association with the game to be played. For example, the player may place a wager of \$1.00 to play the game. The games of the invention, including the multi-player games, may be played on other than a slot or dedicated gaming machine. For example, the games may be presented in a networked environment using wireless devices such as cellular phones or personal data assistants (PDAs). Game data may be transmitted to and from these devices and a game server or other device or system in similar manner to the network 301 described above.

[0182] One embodiment of the invention is illustrated in FIG. 14. As illustrated therein, the network 1400 includes a variety of wireless devices 1402. These devices may comprise cellular phones, PDAs or the like. Each device 1402 is capable of communicating with a game server 1404 via a communication link 1406, at least a portion of which is wireless. As illustrated, in one embodiment, the game server 1404 is configured to generate and transmit game data to the wireless devices 1402. In one embodiment, a player may establish entitlement to play a game by paying for communication access to the game server 1404, such as by paying for air or connect time.

[0183] As illustrated, the game server 1404 may be in communication at one or more times with an accounting server 1408 or system. This system may track game play win and loss amounts, make credits of air time in the form of wagers or the like, as described below.

[0184] In one embodiment, the game server 1404 may also be in communication with other devices. As illustrated, a user may access the game server 1404 from a workstation 1412, such as a kiosk or home computer. Access may be provided via the Internet 1410 or other communication link.

[0185] As one aspect of the invention, bets or wagers, or the "value" otherwise required in order for the player to play the game for the opportunity to be paid winnings or be awarded an award, may be placed indirectly. For example, in the embodiment illustrated in FIG. 14, a player's wager may be associated with or comprise air or connect time. For example, a player may pay a certain monetary amount per minute in order to utilize their cellular phone or PDA or utilize a communication link established with their device. All or a portion of that amount may be attributed to a jackpot amount. In another embodiment, the player may pay an additional amount, such as a surcharge, to play the game and that surcharge or a portion thereof may be applied to the jackpot or lottery.

[0186] Referring to the embodiment system 1406 illustrated in FIG. 14. A player may pay for air or connect time through a wireless communication provider. The wireless communication provider may provide a communication link to the game server 1404. Players who access the game server 1404, such as by calling a telephone number associated with a communication link to the game server, may be charged an access surcharge. The access time and corresponding surcharge may be tracked by the accounting server. The surcharge amounts may be transmitted to the wireless communication provider for inclusion on the customer's bill. All or part of the surcharge amounts may be applied by the accounting server 1408 to the jackpot. The surcharge or fee may be calculated in a variety of manners. In one embodiment, the fee is based upon the time the player is connected to the game server via the communication link, from when the communication link is established to when it is terminated, similar to a cellular telephone call. In other embodiments, the fee or surcharge may only be applied during the time the player is actually playing the game.

[0187] It is noted that this arrangement may be applied to other gaming environments. For example, in one embodiment of the invention a player may access a game server from a home computer or the like via a wired or wireless communication link. The player may be charged a fee for this access time in a similar manner to that described above.

[0188] As described above, the game of the invention may be played with numerous variations. Another embodiment of a game of the invention will be described with reference to FIG. 15. This game has particular applicability to a system 1400 such as that illustrated in FIG. 14. In particular, this game is suited to generation of game data by execution of a gaming application at the game server 1404 and then transmission of game data to the devices 1402 for display. In addition, the game may be funded using air time or similar charges.

[0189] In a step 1520, game play is initiated. The game starts by play of a base or individual game. This step may comprise, for example, the player using their wireless device to access the game server.

[0190] Similar to the games described above, in one embodiment, the game is a multi-round game in which a



player plays for a score. In a step **1522**, game indicia are displayed to the player for use in a first round of play. The indicia may be generated at the game server and then corresponding display data may be transmitted to player's device for display. In one embodiment, the indicia comprise images of the sides of dice.

[0191] In a step **1524**, it is determined if all of the indicia are the same. If so, then in a step **1532**, a payout is determined. This step will be described in more detail below.

[0192] If in step **1524** all the indicia are not the same, then in a step **1526**, it is determined if the player has already used the maximum number of spins. If so, then the payout is determined in step **1532**. If not, then in a step **1528**, the player is permitted to hold selected indicia. This may be accomplished using buttons, a touch-screen, stylus or other means. The player may hold none, one or more of the indicia. In a step **1530**, the indicia which are not held are spun or re-displayed. This may comprise the game server randomly generating new indicia for replacement of the non-held indicia.

[0193] In one embodiment, the player may be permitted to hold and replace indicia two times. In other embodiments, the player may be not be permitted to hold and replace indicia at all, or may be permitted to do so other numbers of times. Once the player has exhausted their spins or they have received all of the same indicia, then in step **1532** a payout is determined. In one embodiment, the payout is determined based upon the combination of indicia which the player received. Optionally, higher payouts are provided for greater numbers of matching indicia. The payouts may be dependent upon the number of points the sum of the "pips" of the matching dice, or may be independent therefrom (such as based solely upon the particular combination received). In one embodiment, the payout is based upon the greatest number of matching indicia. In the event there are two or more sets of the same number of matching indicia, then the indicia having the largest value (i.e. 6>5) may be selected.

[0194] In a step **1534**, winnings are paid. Winnings may be paid in the form of credits or otherwise.

[0195] In a step **1536**, a multiplier is generated. In one embodiment, a multiplier is generated by "spinning" or otherwise displaying two dice. The outcome of the spin is summed, that sum comprising the multiplier. For example, if the player receives a 4 and a 3, then the multiplier is 12. The multiplier may be generated in other ways, such as by random selection of a number, player selection of hidden dice from a set of dice or the like.

[0196] In a step **1538**, a score for the round is determined. In one embodiment, the score comprises the sum of the pips or points of the greatest number of matching dice, multiplied by the multiplier. For example, if the player has received four 6s and a multiplier of 12, the total point score is  $4 \times 6 \times 12 = 288$ .

[0197] In a step **1540** it is determined if all of the rounds have been completed. In one embodiment, the game comprises a maximum of six rounds. If all rounds have not been completed, then the game returns to step **1522** with another set of indicia being displayed. If all rounds have been completed, then in a step **1542** a total game score is determined. In one embodiment, this score comprises the sum of the scores for each round.

[0198] In a step **1544** it is determined if the game score is greater than a qualifying score. If not, then the game ends in step **1546**. If so, then in a step **1548**, the game is played again in the form of a bonus game in which a player plays for a bonus score **1548**. Optionally, the play of the game for the bonus score is the same as that described above. Optionally, the player plays for a bonus score which entitles them to a jackpot amount in similar fashion to that described above. For example, the player attempts to receive a score, such as the highest score, for all bonus games played during a period of time. At the end of the predetermined period of time, in a step **1550** is determined if the player has won all or a portion of the jackpot. If so, the player is awarded a jackpot winning, such as a very large monetary award.

[0199] Additionally, in a step **1545** it is determined if the game results, whether based upon score or specific game events, qualify for one or more lottery entries **1600**. If so, then at least one lottery entry **1600** is issued to the player.

[0200] Optionally, the qualifying scores for bonus round and lottery entries is set sufficiently low that they are frequently attained, thus enticing the player to play the game in an attempt to play the bonus game and participate in lottery events. Round results, round scores, multipliers and the like are optionally displayed to the player, such as via a game board. Data representing the game board may be generated by the game server and transmitted to the player's device for generating the display.

[0201] Variations of the method of game play are contemplated. For example, when implementing the game with a system **1400** such as illustrated in FIG. 14, steps **1532** and **1534** may be eliminated. Instead, the player may play the game for a score only, attempting to reach the bonus round. If the player reaches the bonus round, the player may then be entitled to win the jackpot. In this embodiment, much higher jackpots may be awarded because no "intermediate" winnings are awarded for play of the main game. This also simplifies the game play, eliminating the need to pay remote players for round winnings. If a player wins the jackpot, the player may be paid via their wireless communication account or by using information associated with that account to identify the player to the game provider.

[0202] Use of a multiplier is preferred, but not required. The multiplier, as disclosed, has the benefit of creating a much larger score distribution, allowing for higher scores and more excitement.

[0203] Various numbers of indicia may be displayed per round, such as five or six dice indicia. In addition, a particular indicia has been used, that indicia may become inactive for the remainder of the game. As described herein, that indicia may be removed from play, may be darkened or the like to indicate that it is inactive. When indicia are removed from play, as described above, the payouts associated with remaining combinations may increase, reflecting the reduced odds of receiving combinations of indicia.

[0204] It is contemplated that various features of the game just described may be applied to other games, including the other games described herein. For example, a multiplier may be used in association with the generation of the scores of the other embodiment games of the invention.

[0205] The bonus, jackpot, and lottery features may also be applied to other games. For example, the jackpot and

lottery features may be applied to the well known game of video poker. In one embodiment, individual players play one or more games of video poker for a score, such as points or credits. In one embodiment, the players play multiple games, each game comprising a "round." The score achieved by the player as a result of their game play (such as the score for a single game or the aggregate of multiple, or all, rounds) is compared to a threshold. If the player qualifies, the player may be issued a lottery entry **1600**. Also, if the player achieves a designated poker hand, such as a Straight Flush or a Royal Flush, a lottery entry is issued.

[0206] This aspect of the game may be applied to other games, such as Blackjack, where a lottery entry may be issued for a suited Ace-Queen blackjack, for example.

[0207] These games may be modified so that points are awarded as well as credits or winnings for each individual game. Further, hands may be differentiated so that differing numbers of points are attainable. For example, in the game of video poker, 50 points may be awarded for a flush of Hearts, while only 45 points awarded for a flush of Diamonds. In this manner, a greater distribution of points can be provided. In addition, a multiplier or similar feature may also be utilized to generate the score for each game or round, again contributing to a wider range of scores for the games, and thus making qualifying more interesting.

[0208] As one aspect of the invention, where a bonus round play is employed, a player who qualifies is optionally permitted to play the game or games in the bonus round without placing an additional wager. This feature further entices players to play the base or main game to qualify, since once they qualify, it costs the player nothing to play the bonus game for a chance at winning the bonus or jackpot, or qualifying for a lottery entry.

[0209] As one aspect of the invention, a player may be permitted to play their bonus game or games for their bonus score at any time. For example, a player may desire to wait and play their bonus game close to the time the bonus interval is over, as at that time they may feel they have a better chance of winning.

[0210] In one embodiment, a player may track whether or not they are in the running to win the jackpot during a given payout interval. For example, the highest score or scores may be made available to the player, such as by being posted to the player's device, via a website or the like. The player may compare their score(s) against these scores to determine if they are still entitled to participate in the jackpot. A player may determine that their score is no longer high enough to qualify for jackpot participation (such as by reason of a number of later players receiving higher scores and displacing the player from the top twenty highest scores). In such event, a player may play one or more additional games before the award of the next jackpot so as to try to qualify for jackpot participation. Similarly, where the number of issued lottery entries is displayed, a player may want to play additional games to attempt to earn additional lottery entries if the number of competitive lottery entries is low. This enticement value of the lottery is effective despite the fact that it is statistically inapplicable. Players tend not to perform the necessary mathematical analysis in such cases.

[0211] In one embodiment, each game score is associated with a game number. The highest (or otherwise qualifying

game scores) may be posted with the game numbers. In one embodiment, game results may be printed on a player voucher. The player may then redeem the voucher for their jackpot award at a gaming establishment or other location.

[0212] Alternatively, achieving a predetermined score may be utilized for awarding a predetermined jackpot, as well as for issuing a lottery entry. For instance, if a player achieves a perfect score, meaning the theoretically highest score for each category, then a jackpot may be awarded and a lottery entry issued for such achievement.

[0213] It will be appreciated that the predetermined winning combinations and their payouts may vary from those described and illustrated herein. For example, instead of attempting to achieve matching indicia, a player may be directed to achieve a full house, a straight or other combinations. In one or more embodiments, especially when bonuses or jackpots are not awarded, winning combinations may include the more commonly obtained 2 pair or even a single pair. It will be appreciated that when a portion of the wager is diverted to the generation of bonus and jackpot payouts, paying on such commonly occurring combinations is less desirable, as the hold for the game may be minimal or non-existent to the house.

[0214] In addition, the total number of reels or simulated dice may be varied. In the examples illustrated, 5 or 6 of such simulated dice or reels are illustrated and described. However, the games may be played with a lesser number or greater number (i.e. such combination as 7 of a Kind being obtainable, or a maximum of 4 of a Kind). Those of skill in the art will appreciate that as the total number of available combinations changes, the payouts may need to be changed in order to both entice a player into playing and yet prevent the house from risking loss.

[0215] In the above-described games, and referring again to FIGS. **5B** and **10**, a player may optionally save a game in progress by pressing the touch-sensitive save-restore game button **559**/pause game button **1059**. The computer program **601** then utilizes the machine-readable medium reading and writing device **129** to write the present scores and game states to a card, voucher (such as a printed ticket or token) or other medium which the player can take with them. The player may later resume the saved game by inserting such card or voucher of machine-readable medium into the reading and writing device **129** of any computer-controlled slot machine **101**. The saved game information is then read from the card or voucher to initialize the conditions and states of the computer-controlled slot machine **101**. In various embodiments, a magnetic or optical or semiconductor medium may be used as desired to store and transfer scores and game states and other pertinent data on such card or voucher produced by the video slot machine **101**. In one or more embodiments, when the player elects to pause or save a game in progress, game state information is generated. This information may be stored to the medium which is provided to the player, or may be stored remotely, such as at a central server associated with the games when they are linked. In such event, a code or other information need only be stored or associated with the medium provided to the player. When the code is read or inputted into a game at a later time, the code may cause the game to access the game state information stored separately from the medium. In this manner, a player may be permitted to cease playing a game

at a first time and pickup that same game at a later time, and even at a different gaming station offering the game. It will be appreciated that such a similar function may be applied to the various game described herein as well as other games now known or later invented. Further, it should be noted that the games may be arranged so that a player may engage the pause function, as well as the cash-out and other features of the games, at times other than those specifically described above. For example, a player may be permitted to pause a game at any point, and not specifically only after the completion of a given round of play.

[0216] It will be appreciated that games in accordance with the invention need not be the same as those described above. In one or more embodiments, the game may comprise simply implementation of the basic concept. In such an arrangement, the game may include the steps of a player placing a wager, the providing of a set of symbols, displaying a number of the symbols from the set of symbols, the player having the opportunity to hold none, one or more of the symbols, displaying replacement symbols to those which are not held, comparing the final set of displayed symbols to predetermined winning combinations of symbols to determine if the player is entitled to a winning payout, and then removing from the set of symbols at least one of the symbols, thereby reducing the possible number of combinations achievable thereafter by the player. Optionally, as the number of combinations which the player may achieve are reduced, the payout for achieving a winning combination increases.

[0217] In various embodiments, the symbols or indicia used in the play of the game comprise or include the faces or sides of dice (simulated or real). Of course, such games may utilize other indicia. For example, such aspects of the game may be applied to a "slot-type" machine which includes reels displaying symbols such as cherries, 7s, bells and the like, video poker machines, where indicia include playing card images, and results are based upon the poker ranking of hands created. As rounds, hands or the like of play are completed, the symbols may be removed randomly or in accordance with winnings combinations received by the player.

[0218] In such a game, other features such as jackpots, lotteries, and bonuses may be omitted. On the other hand, any combination of jackpots or bonuses as described herein may be applied to a variety of other games besides the games herein.

[0219] A number of other alternate embodiments or alternate arrangements to the games other than as described above are contemplated. First, it will be appreciated that one or more of the features of any one game described above may be applied to another. By way of example, a player may be permitted to "hold" the simulated dice in the game of Z Sixty Six as well as in the games of Check and Z Hot Dice. In addition, the replacement symbols utilized in the games of Check and Z Sixty Six may, as in the case of Z Hot Dice, comprise symbols which either prevent a player from obtaining what appears to be a unique or winning combination of replacement symbols, or may comprise a combination of symbols which permits a player to receive a winning combination of replacement symbols.

[0220] In any of the embodiments, the replacement symbols may comprise no symbol at all, but comprise a blank. In other embodiments, instead of "replacing" the symbols, the symbols may be "deactivated." In one embodiment, the

"deactivation" may be denoted by darkening the symbol or changing its color to denote the difference between that symbol and "active" symbols.

[0221] A variety of criteria may be applied to the games of the invention for determining when a player has qualified or completed a round or category. For example, as described above, a player may be required to receive at least 3 of a Kind to start play. In one or more embodiments, a player may be required to play until they achieve at least a 3 of a Kind before any score is attributed to a particular category or round (i.e. not just the first). For example, after completing a first target number if on the next two spins the player achieves at most a pair, the player may be required to place an additional wager and utilize two more spins in an attempt to gain at least 3 of a Kind. In other embodiments, such as described above, the player may receive a zero score if they do not receive a winning combination on each set of spins. For example, after completing a first target number or category, if on the next two spins a player receives only a pair of the same indicia, the score for that category may be credited as zero, and then the player forced to move to the next target number or category.

[0222] In one or more embodiments of the invention, a player may be declared a winner for receiving other combinations of symbols/events. For example, a player may be paid a special award or winning or receiving at least 4 of a Kind of each target number. For example, in the embodiment illustrated in FIG. 12, an additional column 1202 may be provided which indicates the amount of a bonus the player may receive for obtaining a 3 of a Kind, 4 of a Kind or the like of each of the target numbers in the other columns. Such a bonus may be utilized in addition to a "per-column" bonus as described above in the game of Z Jackpot Dice or the jackpot as described herein.

[0223] In one or more embodiments of the invention, may as described above with respect to the game of Check, not include the step of removing one or more of the symbols as game progresses. Instead, the player may continue play, attempting to achieve winning combinations, jackpots, bonuses (or other of the features/elements) using the same set of symbols as play progresses.

[0224] As used herein, the term "computer-controlled slot machine" denotes a computer controlled machine which optionally facilitates wagering. As disclosed above, such a wager may be placed directly or indirectly. It will be appreciated that one or more aspects of the machine, including the interface or what is referred to herein as the touch sensitive display may be electrical, mechanical and/or electromechanical in nature. For example, while the buttons may comprise touch-sensitive areas of a display, they may comprise electromechanical buttons which are activated by mechanical movement (such as depression) by a player. In addition, the simulated dice may, instead of comprising solely computer generated images, actually comprise dice or dice faces mounted on a rotating reel and arranged to stop in controlled positions. The simulated dice or other symbols may be provided in a variety of other manners, such as by laser light generation. The dice or other symbols are referred to in certain instances as "simulated," but could actually comprise faces of actual physical dice. The displays and display areas may comprise CRT type displays, LCD or LED displays or any other means for displaying information now known or later developed.

[0225] It will be appreciated that various features of the present invention may be applied to existing games or games

later developed. For example, the feature of permitting a player to “pause” a game and then continue the game at one or one of several gaming machines may be applied to present or future games. For example, the pause feature may be applied to video poker games or the like. Likewise, the feature of having bonuses associated with more than one event and/or cumulative bonuses may be applied to present or future games. For example, a typical slot machine may be configured to include particular winning combinations which, when received by a player, entitle the player to a first bonus. Additional bonuses may be won by receiving other combinations, and a total bonus may be awarded for receiving yet another special combination.

[0226] Another feature which may be applied to the games of the invention involves the duplication of displayed dice or symbols after a spin into additional “hands.” For example, after a first spin, a player may elect to hold a target number which is displayed three times (i.e. a 3 of a Kind). These same symbols may then be displayed in one or more additional rows or hands. The player may then be permitted to spin again, in an attempt to achieve a winning combination in any or all of the hands or rows. In the example given, either 2 or 3 additional symbols (depending on whether each row had a maximum of 5 or 6 symbols) would be displayed randomly to fill each row. The combination of the newly displayed symbols and the three originally held symbols would then be evaluated to determine if the player had won. The player may be awarded a payout for each winning row, or only for rows for which the player placed a wager. Alternatively, the player might be permitted to retain the highest winning combination from the several rows for determining the payout to be awarded in the column for that target number.

[0227] It will be understood that the above described arrangements of apparatus and the method therefrom are merely illustrative of applications of the principles of this invention and many other embodiments and modifications may be made without departing from the spirit and scope of the invention as defined in the claims.

I claim:

1. A method of playing games of chance in a multi-player environment comprising:

conducting at least one individual game of chance to produce an outcome;

determining if said outcome of said game meets one of a predetermined set of results;

ending said game if said outcome of said game does not meet said predetermined set of results;

issuing to said player at least one lottery entry if said outcome of said game meets any of said predetermined set of results; and

conducting a lottery selection upon a preset schedule, said lottery selection comprising:

providing a lottery award amount;

defining a pool of potential lottery entries for said lottery selection, independent of whether said lottery entries have actually been issued;

selecting a lottery entry from said pool of potential lottery entries;

if said selected lottery entry has been issued, issuing at least a portion of said lottery award amount to a player holding the lottery entry selected; and

if said selected lottery entry has not been issued, retaining said lottery award.

2. The method of claim 1 wherein said lottery entries and potential lottery entries each include an identifier, and said lottery award is issued to a player holding a lottery entry with an identifier matching at least a portion of said selected entry.

3. The method of claim 2 wherein said identifier for said issued lottery entries are generated upon issuance.

4. The method of claim 2 wherein said identifier is a randomly generated alpha-numeric identifier.

5. The method of claim 2 wherein said identifier is a player-selected alpha-numeric identifier.

6. The method of claim 1 wherein said game of chance is conducted at a gaming machine and said lottery entries are issued electronically by said gaming machine.

7. The method of claim 1 wherein said game of chance includes multiple rounds to be completed and said lottery entry is issued upon an outcome comprising completion of two or more rounds.

8. The method of claim 1 wherein said game of chance is poker using playing cards where said outcome is produced as a final hand of playing cards.

9. The method of claim 1 wherein said game of chance is a game using indicia conducted in one or more rounds where said outcome is produced as a comparison between two or more indicia.

10. The method of claim 1 wherein said game of chance is a reel slot game using reel symbols where said outcome is produced as a reel symbol combination.

11. A method of playing games of chance in a multi-player environment comprising:

conducting at least one individual game of chance having at least one round, said game of chance producing an outcome;

determining if said outcome of said game meets one of a predetermined set of results;

ending said game if said outcome of said game does not meet said predetermined set of results;

issuing to said player at least one lottery entry if said outcome of said game meets any of said predetermined set of results, said lottery entry including an identifier; and

conducting a lottery selection upon a preset schedule, said lottery selection comprising:

providing a lottery award amount;

defining a pool of potential lottery entry identifiers for said lottery selection, independent of whether said potential lottery entry identifiers match identifiers on lottery entries that have actually been issued;

selecting an identifier from said pool of potential lottery entry identifiers according to a predetermined random selection method;

if said selected identifier matches an identifier on a lottery entry that has been issued, awarding at least a portion of said lottery award to the player holding a lottery entry with an identifier matching said selected identifier; and

if said selected identifier does not match an identifier on a lottery entry that has been issued, retaining said lottery award.

**12.** The method of claim 11 wherein said identifiers on said lottery entries are generated upon issuance.

**13.** The method of claim 11 wherein said identifier is a randomly generated alpha-numeric identifier.

**14.** The method of claim 11 wherein said identifier is a player-selected alpha-numeric identifier.

**15.** The method of claim 11 wherein a portion of said lottery award is issued to a player with an issued lottery entry if the selected identifier matches less than the entirety of an identifier on an issued lottery entry.

**16.** The method of claim 11 wherein said game of chance is conducted at a gaming machine and said lottery entries are issued electronically by said gaming machine.

**17.** The method of claim 11 wherein said game of chance includes multiple rounds to be completed and said lottery entry is issued upon an outcome comprising completion of two or more rounds.

**18.** The method of claim 11 wherein said game of chance is poker using playing cards where said outcome is produced as a final hand of playing cards.

**19.** The method of claim 11 wherein said game of chance is a game using indicia conducted in one or more rounds where said outcome is produced as a comparison between two or more indicia.

**20.** The method of claim 11 wherein said game of chance is a reel slot game using reel symbols where said outcome is produced as a reel symbol combination.

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