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(54) GAMING SYSTEM SECONDARY GAME
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## ABSTRACT

A gaming system is disclosed that comprises a plurality of gaming devices in communication with a server. Each gaming device is configured to play a primary game as well as a secondary game in the form of a draw game such as bingo or keno. The server advertises a draw game to the gaming devices allowing players to place additional draw wagers and play the draw game simultaneously with the primary game. For accepting gaming devices, the server selects a subset of gaming symbols for display on a draw game card display of the gaming devices. The server then draws gaming symbols and communicates the drawn gaming symbols to the gaming devices so that the draw game displays may be updated. The draw of gaming symbols continues until a winning outcome at one or more of the gaming devices occurs or a predetermined number of gaming symbol draws have been made.



Figure 1


Figure 2


Figure 3


Figure 4


Figure 5

## GAMING SYSTEM SECONDARY GAME

## CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority to U.S. provisional patent application Ser. No. 60/888,745, filed Feb. 7, 2007 the content of which is herein incorporated by reference.

## FIELD OF THE INVENTION

[0002] The present invention relates to gaming systems and devices and in particular to gaming systems and devices utilizing a secondary game.

## BACKGROUND

[0003] Gaming devices such as slot machines are common in gaming establishments. The mechanism of playing a slot machine is well known. A player advances a wager in respect of a single gaming event. In modem slot machines, the single gaming event is typically the generation of a random number that is compared against a pay table to determine if the single gaming event produced a winning outcome. A winning outcome will pay a multiple of the wager with the multiple being dependent on the probability of that winning outcome.
[0004] Different slot machines generally have a similar look and feel. Therefore, in order for a gaming device to be successful, it is advantageous if that gaming device is easily understood and requires minimal learning by a player. In addition, gaming devices will tend to be more successful if they increase the excitement of playing a game. One way to increase excitement is by interaction with other players.

## SUMMARY OF ONE EMBODIMENT OF THE INVENTION

Advantages of One or More Embodiments of the Present Invention
[0005] The various embodiments of the present invention may, but do not necessarily, achieve one or more of the following advantages:
[0006] the ability to play a lottery style draw game as a secondary game on a gaming device;
[0007] provide opportunity to play a game that involves other players;
[0008] provide a readily understandable secondary game;
[0009] allow the player to simultaneously play both a primary game and a secondary game; and
[0010] provide additional visual and audible stimulations associated with a bingo game.
[0011] These and other advantages may be realized by reference to the remaining portions of the specification, claims, and abstract.

## BRIEF DESCRIPTION OF ONE EMBODIMENT OF THE PRESENT INVENTION

[0012] In one aspect, the invention relates to a gaming system comprising at least one gaming device and at least one display configured to display primary game information and display secondary game information. The secondary game information may comprise a representation of a draw game such as a bingo game or a keno game.
[0013] In one aspect, the invention relates to a method of playing a gaming apparatus comprising receiving a wager on a primary game and determining an outcome of the primary
game. The method also comprises receiving a wager on a secondary game comprising at least one draw game, providing a plurality of gaming symbols, displaying a representation of the draw game including a subset of the plurality of gaming symbols. The secondary game comprises drawing a gaming symbol from the plurality of gaming symbols and, if the subset comprises the drawn gaming symbol, updating the representation to indicate the draw of the drawn gaming symbol.
[0014] In one aspect, the invention relates to a gaming device comprising means for allowing a player to place a wager, at least one primary game and a secondary game. The secondary game comprises a display configured to display a representation of a draw game card and a subset of gaming symbols on the draw game card. The gaming device also comprises means for drawing of a gaming symbol and means for updating the display if the drawn gaming symbol is in the subset of gaming symbols
[0015] The above description sets forth, rather broadly, a summary of one embodiment of the present invention so that the detailed description that follows may be better understood and contributions of the present invention to the art may be better appreciated. Some of the embodiments of the present invention may not include all of the features or characteristics listed in the above summary. There are, of course, additional features of the invention that will be described below and will form the subject matter of claims. In this respect, before explaining at least one preferred embodiment of the invention in detail, it is to be understood that the invention is not limited in its application to the details of the construction and to the arrangement of the components set forth in the following description or as illustrated in the drawings. The invention is capable of other embodiments and of being practiced and carried out in various ways. Also, it is to be understood that the phraseology and terminology employed herein are for the purpose of description and should not be regarded as limiting.

## BRIEF DESCRIPTION OF THE DRAWINGS

[0016] FIG. 1 is substantially a schematic view of one embodiment of a gaming system of the present invention;
[0017] FIG. 2 substantially illustrates a gaming device;
[0018] FIG. 3 substantially illustrates a process flow of a draw game;
[0019] FIG. 4 substantially illustrates a bingo game card; and
[0020] FIG. 5 substantially illustrates a keno game card.

## DESCRIPTION OF CERTAIN EMBODIMENTS OF THE PRESENT INVENTION

[0021] In the following detailed description of the preferred embodiments, reference is made to the accompanying drawings, which form a part of this application. The drawings show, by way of illustration, specific embodiments in which the invention may be practiced. It is to be understood that other embodiments may be utilized and structural changes may be made without departing from the scope of the present invention.
[0022] The present invention comprises a gaming system, generally indicated by reference number 10. The gaming system 10 includes one or more gaming devices 12 which may be provided with any suitable game allowing a player to place a wager and play a game. An example of a gaming device 12, shown in more detail in FIG. 2, includes a coin slot

11 for receiving wagers such as coins or tokens and a payout slot 13 through which winnings may be paid. The person skilled in the art will readily understand that the gaming device $\mathbf{1 2}$ is depicted schematically and many variants may be made. For example, the gaming device 12 may be configured to receive bills, casino tokens, credit cards or many other forms of payment. Similarly, winnings may be paid by tokens, tickets, credit or through other facilities of the gaming establishment.
[0023] With reference again to FIG. 1, the gaming devices 12 are operatively associated with a server 20 , which may include components such as a processor 21, memory 22 and random number generator 23. While the random number generator $\mathbf{2 3}$ is shown as a distinct component, the person skilled in the art will readily understand that the random number generator $\mathbf{2 3}$ may be embodied within the processor 21. The server 20 may be provided within the vicinity of the gaming devices $\mathbf{1 2}$ or may be provided elsewhere in the gaming establishment and communicate with the gaming devices $\mathbf{1 2}$ through a communication link (not shown), as is known.
[0024] Each of the gaming devices 12 are configured to operate a game program that allows players to place wagers and play games. The server $\mathbf{2 0}$ may store game programs and information, which can be downloaded to the gaming devices 12 and gaming devices 12 may transmit information to the server 20. A gaming device $\mathbf{1 2}$ may offer a plurality of different games. When a player selects one of the games, the selected game may be downloaded from the server along with game related information, such as pay tables. Pay tables are used to determine the outcome of each game and they control the odds of winning a game and the amounts paid out. The gaming devices may be in one location, such as a casino, or they may be in different locations.
[0025] Referring to FIG. 2, in one embodiment, each gaming device 12 comprises a primary game, such as may be played in a known manner using video reels 14 provided on a primary game display area 15 . The primary game may be played using control buttons 17, as is known. In addition to the primary game, the gaming device 12 may be configured with a secondary game provided as a lottery style draw game. Draw games include those games where indicators, most commonly numbers, are drawn from a pool of available numbers. A player selects or is provided with a subset of the available numbers. If a player's subset of numbers contains any of the drawn numbers, that player may be entitled to a prize. Example draw games include a bingo game or a keno game. In a bingo game example, bingo game information 18 may be displayed on a bingo game display 19 of the gaming device 12.
[0026] In one embodiment, during normal operation of the gaming system 10, the server 20 may send a message to certain gaming devices $\mathbf{1 2}$ advertising that a bingo game is about to start. For a period of time gaming devices $\mathbf{1 2}$ may give players an option to place a wager to play bingo. Players may also be allowed to place additional wagers to be entered in the bingo game multiple times. This is similar to purchasing multiple bingo cards in a traditional bingo game. At the end of the time period the bingo game is closed to new players and the bingo game would then begin.
[0027] When a player elects to play the bingo game, the server 20 provides each entered gaming device $\mathbf{1 2}$ with a representation of a bingo card on the bingo game display 19 of the gaming device 12. A traditional bingo gaming card $\mathbf{4 0}$ is
illustrated in FIG. 4 which includes columns of numbers. It will be apparent to the person skilled in the art that while a traditional representation of a bingo card may be generated and displayed on the gaming device display, the bingo card and/or the symbols may be presented in many non-traditional configurations. In one embodiment, a pool of gaming symbols are provided including numbers, letters, pictures of objects, and the like and any and all combinations of the above. A random subset of the gaming symbols 16 is dealt to the player and displayed on the bingo card.
[0028] The game commences by the server 20 randomly drawing gaming symbols 16 from the pool of gaming symbols and communicating the drawn symbols to the gaming devices 12. If a drawn symbol appears within a player's subset as shown on the player's bingo card display, the bingo card display is updated to indicate that that symbol has been drawn. The bingo game stops when particular gaming outcomes are achieved, as will be described below.
[0029] A process flow 100 illustrating playing of the bingo game is shown in FIG. 3. At step 101, a player places a bingo wager in order to be involved in the bingo game. A bingo card is then displayed on the player's gaming device (step 102) and the player is dealt a subset of gaming symbols onto the bingo card (step 103). The game commences by the server randomly drawing a first gaming symbol (step 104) and, if the drawn gaming symbol appears on a player's bingo card, the bingo card display is updated (step 105). The gaming device 12, and/or the server 20 then assesses whether a winning outcome has yet occurred (step 106), in which case, the game may cease and prizes may be awarded (step 107). If no winning outcome has yet occurred, the server 20 then determines if a threshold number of selections have been made which would indicate the end of the game (step 108). If the game is to continue, then another gaming symbol draw is made (step 104), or, alternatively, if the game is to cease, the server 20 and/or gaming devices $\mathbf{1 2}$ assess whether any winning outcomes have occurred and award any winnings (step 109)
[0030] In one embodiment, a winning outcome occurs when all of the gaming symbols on the bingo card of one of the player's have been drawn. In one embodiment, a winning outcome occurs when the randomly drawn symbols form a pattern, e.g., horizontal, vertical or diagonal lines which need not involve all of the gaming symbols of a player's bingo card. Examples of horizontal patterns are shown by dotted lines 26 in FIG. 2. Other, traditional patterns that may be used, for example, on the bingo card 40, include two lines, four corners, center cross, postage stamp, inner square ( $4 \times 4$ ), roving square ( $3 \times 3$ ), and roving kite (a $3 \times 3$ diamond). Lines can be made horizontally, vertically, or diagonally. Other non traditional patterns can be created dependent on the layout of the bingo card.
[0031] In one embodiment, the drawing of gaming symbols continues until one player has achieved a winning outcome.
[0032] In one embodiment, the drawing of gaming symbols terminates when a predetermined number of draws have been made. In this embodiment, each player's bingo card may be assessed to determine if that player has achieved a winning outcome, such as a collection of all symbols or achieving particular patterns of drawn gaming symbols on the player's card. This embodiment has an advantage over a "first to win" system by providing multiple possible winning outcomes such that a more probable outcome may pay out less than a less probable outcome. In addition, more than one gaming device is capable of achieving a winning outcome.
[0033] A non-winning outcome may occur if no player achieves a winning outcome prior to a predetermined number of draws being performed.
[0034] In one embodiment, the video display device is in addition to the primary game display and it is located in an upper area of the gaming device. In one embodiment of the present invention, the drawn symbols are automatically marked on the video screen. Colors, highlighting or additional indicia such as circle 27 (FIG. 2) may be used to indicate when a gaming symbol has been drawn. When the drawn symbols form a predetermined pattern on a player's depicted game card, the player of the gaming device is a winner of the bingo game and the player is awarded a prize.
[0035] Once there is one or more winners or a predetermined number of symbols have been drawn, the computer system $\mathbf{2 0}$ may terminate the bingo game and clear all of the secondary game displays. The secondary game process may then be repeated.
[0036] The draw of the gaming symbols may be accompanied by additional visual or audible effects. In one embodiment, an audible effect includes a call of the drawn symbol using a playback of a human voice, in order to mimic the call made by a caller in a traditional bingo game.
[0037] One of the advantages of the present invention is that players are given the opportunity to play a game that involves other players. This is enjoyable to many players because they gain a sense of community. Another advantage is that players may play a secondary game while they continue to play a primary game. Since the randomly drawn symbols of the present invention can be automatically marked on the video screen, the bingo game may not require significant player input. Therefore, the player can continue to play the primary game, which increases the system operator's revenue.
[0038] In another embodiment, the secondary game offered by the system is a lottery style game similar to keno. The keno game would be conducted as described above, however, the player is required to select one or more symbols from a plurality of symbols. A sample keno game card $\mathbf{5 0}$ is illustrated in FIG. 5 and may be provided on the bingo game display 19 of the gaming device 12 . While the sample keno game card 50 shows numbers 1 to 80 , as per a traditional keno game, a pool of gaming symbols as described may be used. That is, the player may select gaming symbols from a pool of gaming symbols including numbers, letters, images of objects, and the like. In one embodiment, the player can select more symbols if the player places an additional wager. Once the player has selected symbols, the server randomly draws symbols and transmits them to the relevant gaming devices. If the symbols selected by the player match a predetermined number of symbols drawn by the server, the player is awarded a prize. The keno game may be played as a secondary game simultaneously with the playing of the primary game.
[0039] In one embodiment, draw games such as bingo and keno may be provided as a bonus game with entry into the draw game being by way of achieving a particular winning outcome in the primary game of the gaming device within a required time period. An advantage of this embodiment is that it encourages increased play of the primary game.
[0040] The bonus game may be played as described above, i.e. as a community game involving players at other gaming devices. In an alternative embodiment, a draw game may be played as a secondary game, e.g. a bonus game, within a particular gaming device in isolation of any other gaming devices. In such an embodiment, entry into the secondary
game may be triggered by achieving particular winning outcomes in the primary game of the gaming device. When playing the bonus draw game, the draw of gaming symbols may occur at regular timed intervals, such as every 10 seconds, or may be triggered by completion of a primary game, e.g. so that a gaming symbol is drawn each time a primary game is played. Winning outcomes can occur as described above, i.e. if particular patterns are achieved, or if all gaming symbols are drawn, prior to a predetermined number of draws occurring. In addition, the draw game may be configured to end if a predetermined time period elapses. The draw game may be played by accepting additional wagers from the player, as described above. Alternatively, the draw game, when operating as a bonus game, may be played to determine a multiple of the winnings on a primary game. A player may simultaneously play multiple bonus draw games by achieving additional bonus game generating events in the primary game. If the draw game is played internally of the gaming device 12, then the gaming device need not receive draw game information from an external server. Instead, the draw game card and gaming numbers may be generated by means such as a processor within the gaming device 12.
[0041] Although the description above contains many specifications, these should not be construed as limiting the scope of the invention but as merely providing illustrations of some of the embodiments of this invention. Thus, the scope of the invention should be determined by the appended claims and their legal equivalents rather than by the examples given

What is claimed is:

1. A gaming system comprising:
(A) at least one gaming device allowing a player to place a wager and play a primary game and a secondary game;
(B) at least one display configured to:
(a) display a primary game information; and
(b) display a secondary game information; and
(C) wherein secondary game information comprises a representation of at least one draw game.
2. The gaming system according to claim $\mathbf{1}$ wherein the secondary game information comprises a subset of gaming symbols.
3. The gaming system according to claim 2 further comprising a server that:
(A) generates the secondary game information; and
(B) communicates the secondary game information to the at least one gaming device.
4. The gaming system according to claim $\mathbf{3}$ wherein the server advertises the secondary game to the at least one gaming device.
5. The gaming system according to claim $\mathbf{4}$ wherein the server receives an acceptance to the secondary game from the at least one gaming device.
6. The gaming system according to claim $\mathbf{5}$ wherein, in response to receiving the acceptance from the at least one gaming device, the server generates the subset of gaming symbols and communicates the subset of gaming symbols to the at least one gaming device.
7. The gaming system according to claim $\mathbf{3}$ wherein the server:
(A) draws at least one gaming symbol; and
(B) communicates the draw of a gaming symbol to the at least one gaming device.
8. The gaming system according to claim 7 wherein the at least one gaming device updates a display of the secondary game information if the drawn gaming symbol matches a
gaming symbol in a subset of gaming symbols displayed in the secondary game information.
9. The gaming system according to claim 7 wherein the server determines whether a winning outcome has occurred at the at least one gaming device.
10. The gaming system according to claim 9 wherein the winning outcome comprises forming a predetermined pattern of drawn gaming symbols on the display of secondary game information.
11. The gaming system according to claim $\mathbf{1 0}$ wherein the predetermined pattern comprises all of the gaming symbols in the display of secondary game information.
12. The gaming system according to claim $\mathbf{1 0}$ comprising a plurality of winning outcomes, wherein a prize is awarded dependent on a probability of a winning outcome.
13. The gaming system according to claim 9 wherein a prize is awarded to a single one of the at least one gaming device.
14. The gaming system according to claim 9 wherein a prize is awarded to a plurality of the gaming devices that achieve a winning outcome.
15. The gaming system according to claim 1 wherein the secondary game information comprises a representation of at least one bingo game.
16. The gaming system according to claim 1 wherein the secondary game information comprises a representation of at least one keno game.
17. The gaming system according to claim 16 wherein the at least one gaming device allows a player to generate a subset of the gaming symbols.
18. A method of playing a gaming apparatus comprising:
(A) receiving a wager on a primary game;
(B) determining an outcome of the primary game;
(C) receiving a wager on a secondary game comprising at least one draw game;
(D) providing a plurality of gaming symbols;
(E) displaying a representation of a draw game, the representation comprising a subset of the plurality of gaming symbols;
(F) drawing a gaming symbol from the plurality of gaming symbols; and
(G) if the subset comprises the drawn gaming symbol, updating the representation to indicate the draw of the drawn gaming symbol.
19. The method according to claim 18 further comprising repeating the drawing and updating steps until a gaming outcome occurs.
20. The method according to claim 19 wherein the gaming outcome comprises that the drawing step has been performed a predetermined number of times.
21. The method according to claim 19 wherein the representation comprises an arrangement of the subset and wherein the gaming outcome comprises that drawn ones of the gaming symbols form a predetermined pattern on the arrangement.
22. The method according to claim 19 wherein the gaming outcome comprises drawing each gaming symbol of the subset.
23. The method according to claim 18 wherein one or more of the gaming symbols has an associated audible sound and wherein drawing a gaming symbol further comprises playing a sound associated with a drawn gaming symbol.
24. The method according to claim 18 further comprising a player selecting the subset of the plurality of gaming symbols.
25. A gaming device comprising:
(A) means for allowing a player to place a wager;
(B) at least one primary game;
(C) a secondary game comprising:
(a) a display configured to display:
(i) a representation of a draw card;
(ii) a subset of gaming symbols on the draw card;
(b) means for drawing a gaming symbol; and
(c) means for updating the display if the drawn gaming symbol is in the subset of gaming symbols.
26. The gaming device according to claim 25 wherein the secondary game is offered as a bonus game to the primary game.
27. The gaming device according to claim 25 wherein the primary game and the secondary game can be played simultaneously.
28. The gaming device according to claim $\mathbf{2 5}$ wherein the gaming device receives the subset from a server and wherein the means for drawing a gaming symbol comprises means for receiving a drawn gaming symbol from the server.
29. The gaming device according to claim 25 wherein the gaming device further comprising means allowing a player to select the subset.
30. The gaming device according to claim 25 further comprising means for generating the subset of gaming symbols.
