



(19) **United States**

(12) **Patent Application Publication**

Leger et al.

(10) **Pub. No.: US 2011/011823 A1**

(43) **Pub. Date: May 12, 2011**

(54) **GAMING MACHINE WITH SPECIAL SYMBOLS THAT CHANGE OTHER SYMBOLS**

(52) **U.S. Cl. 463/20**

(75) **Inventors: Francois R. Leger, Dieppe (CA); Wesley S. Davis, Notre Dame (CA)**

(73) **Assignee: SPIELO MANUFACTURING ULC, Moncton (CA)**

(21) **Appl. No.: 12/614,262**

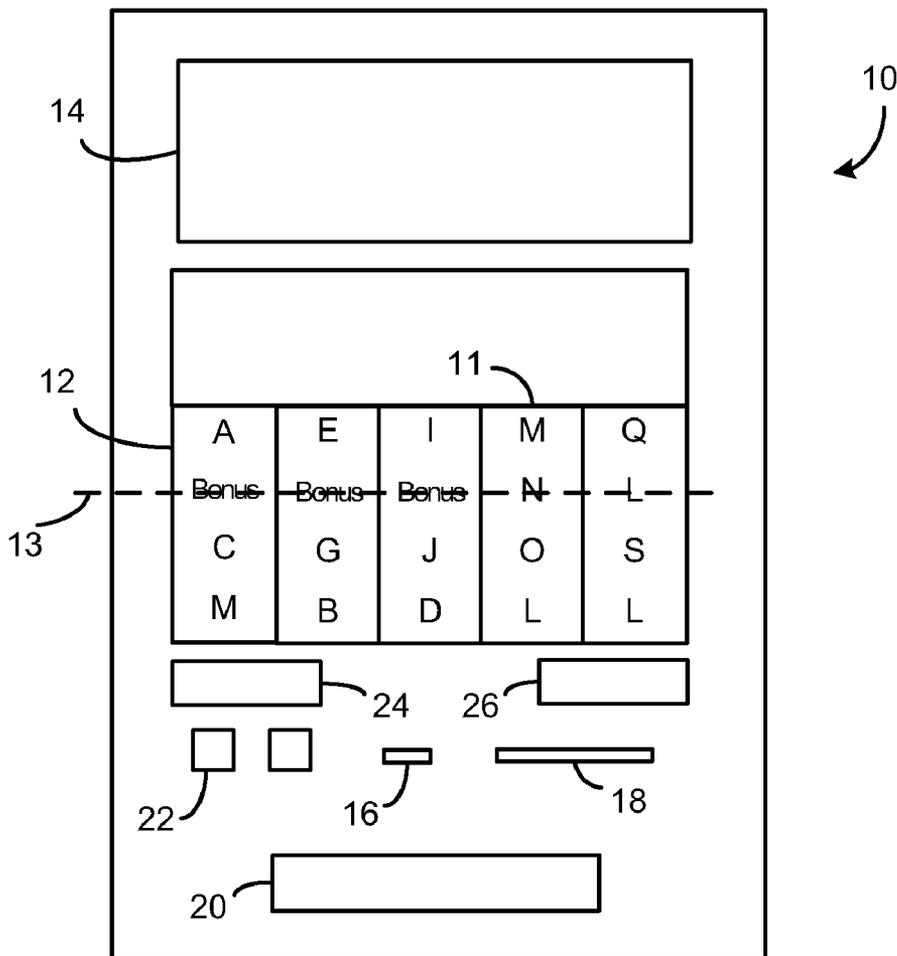
(22) **Filed: Nov. 6, 2009**

Publication Classification

(51) **Int. Cl. A63F 9/24 (2006.01)**

(57) **ABSTRACT**

In one embodiment, a base game played on a gaming machine may be a conventional 5x4 video reel-type game, where awards are granted for winning symbol combinations in the base game. If a bonus trigger has occurred, a number of free games are awarded. The symbols on the reel strips are then changed to at least include directional wild symbols, where wild symbols are associated with one of a variety of directions such as up, down, left-down-diagonally, right, etc. Obtaining such a directional wild symbol during a free game causes all symbols along that direction to be converted to a wild symbol. Overlapping wild symbols also act as award multipliers. Awards are then granted based on the symbol combinations and multipliers.



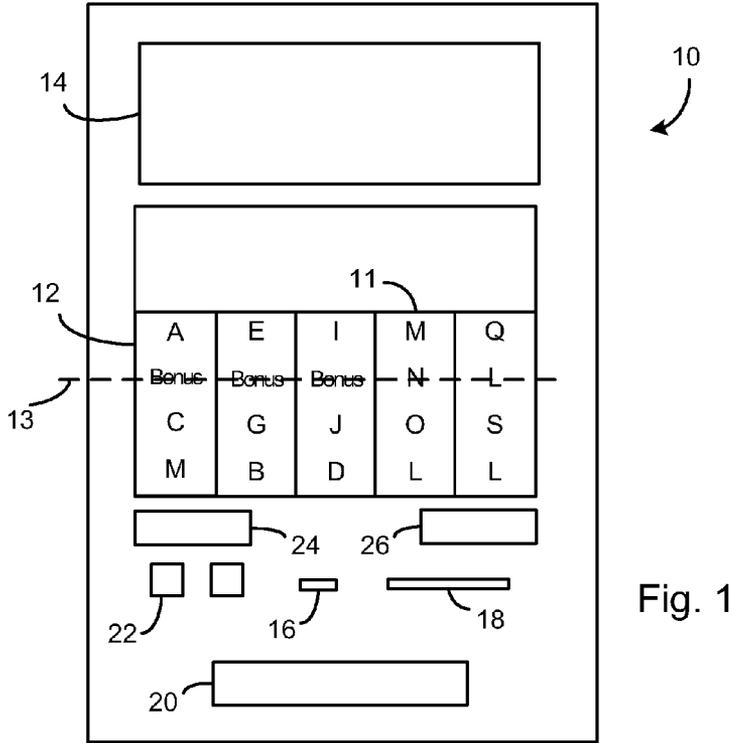


Fig. 1

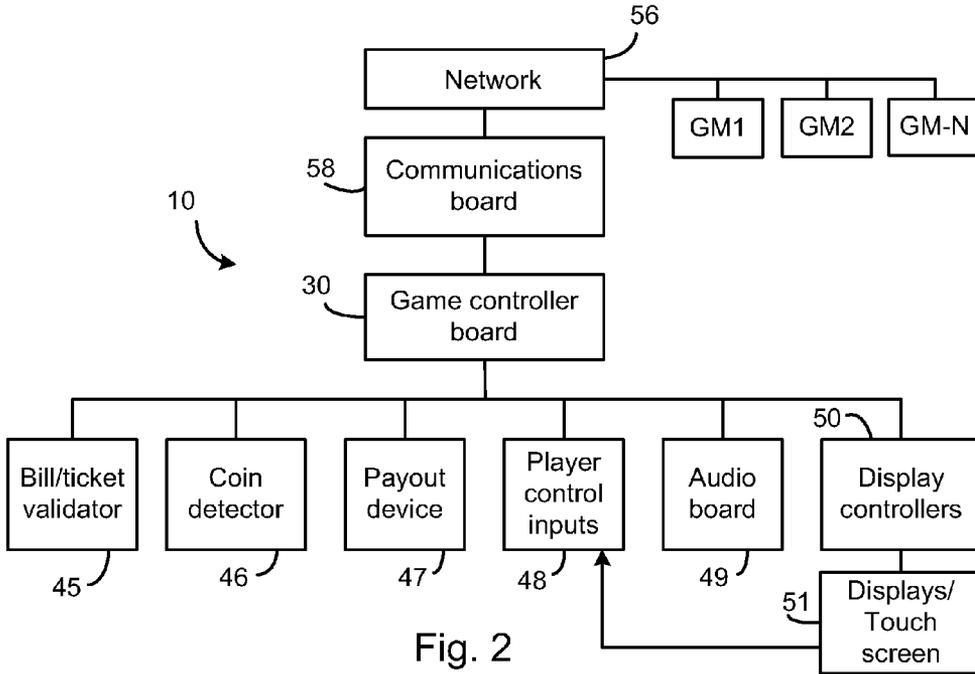


Fig. 2

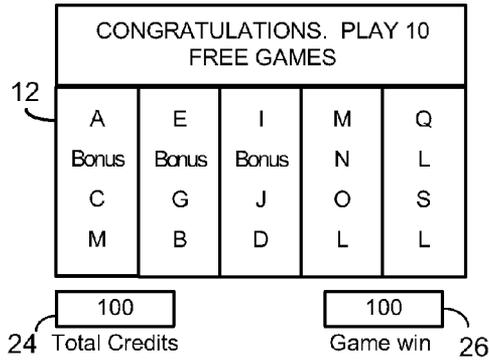


Fig. 3

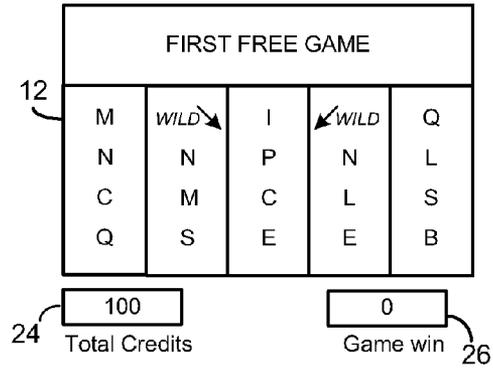


Fig. 4A

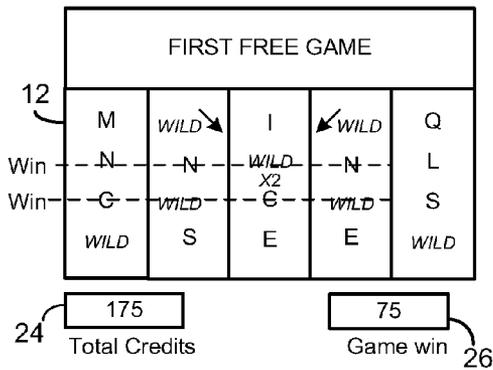


Fig. 4B

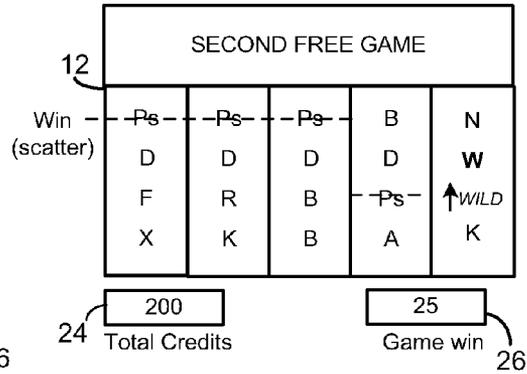


Fig. 5A

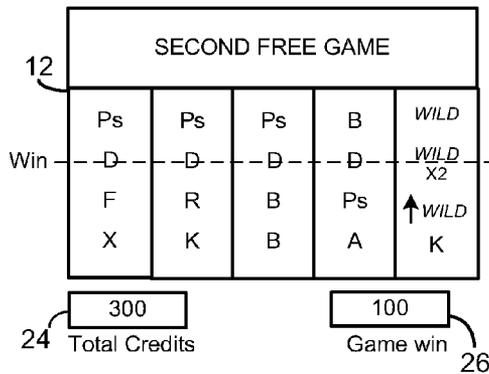


Fig. 5B

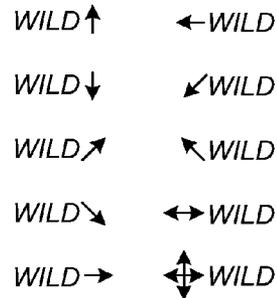


Fig. 6

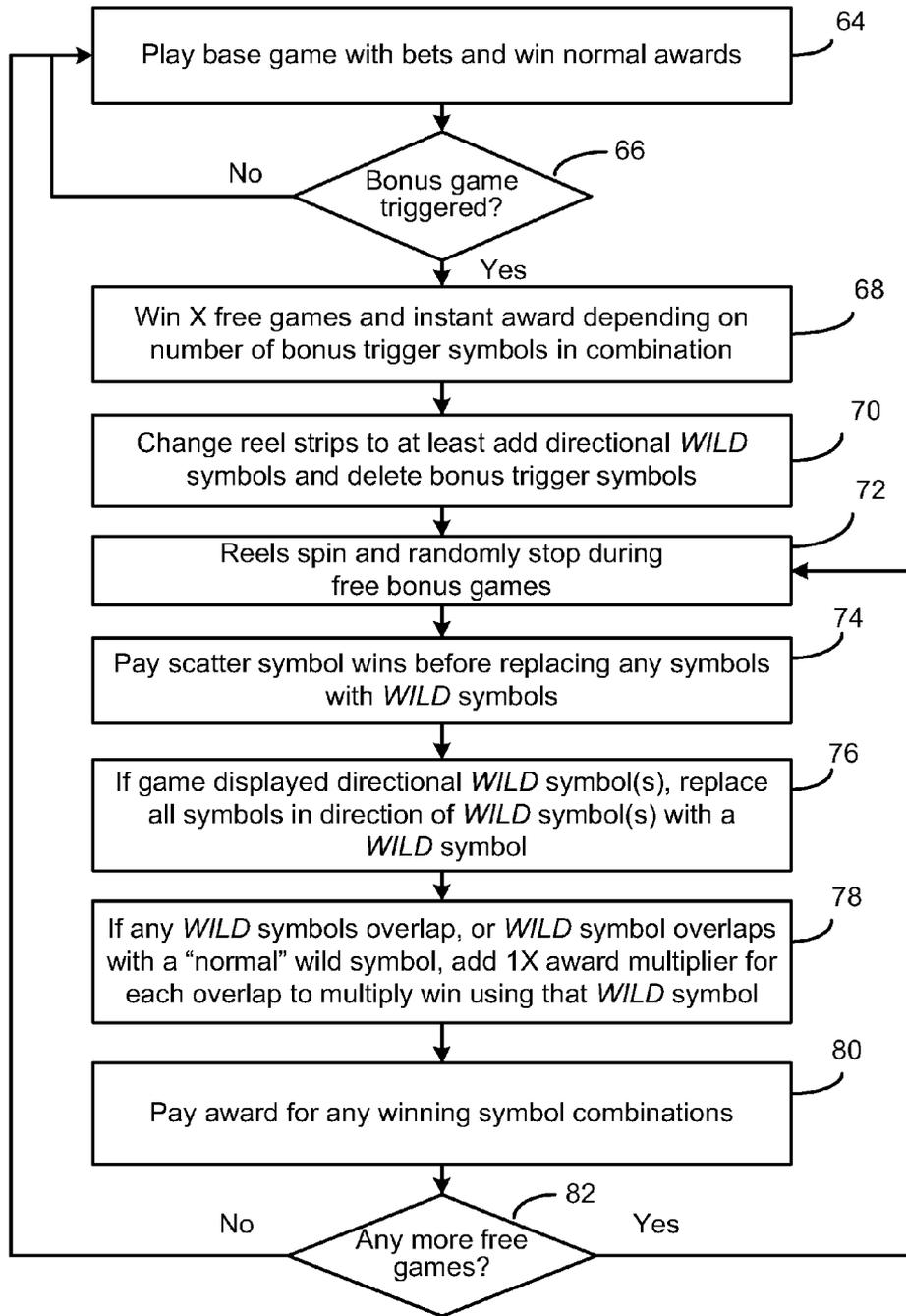


Fig. 7

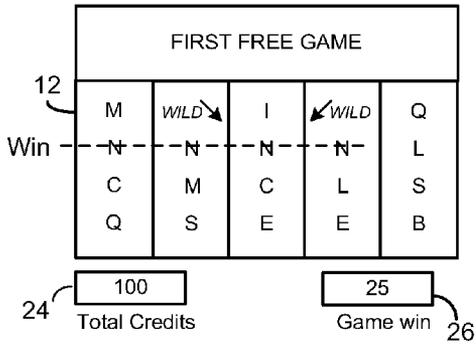


Fig. 8A

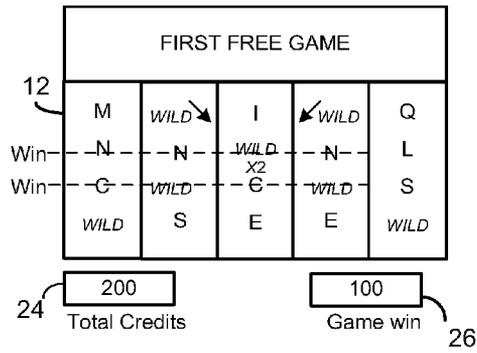


Fig. 8B

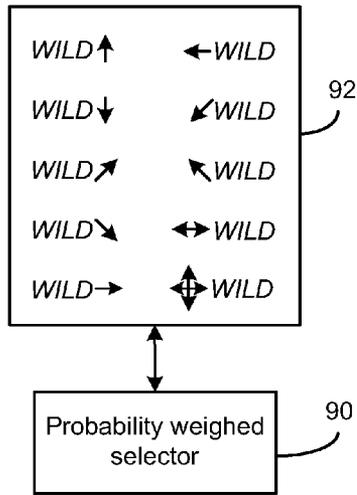


Fig. 9

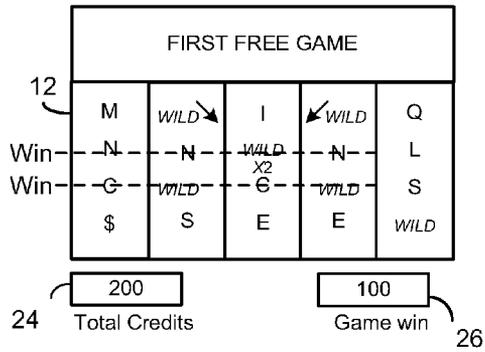


Fig. 10

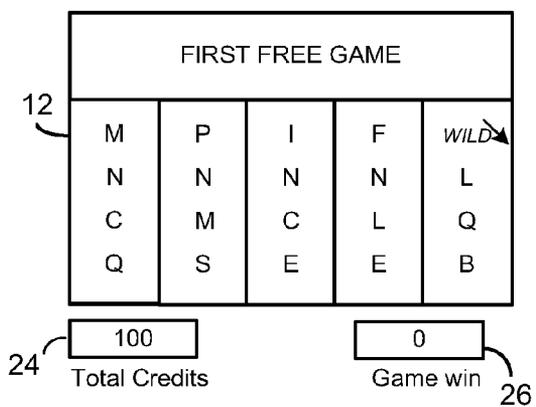


Fig. 11A

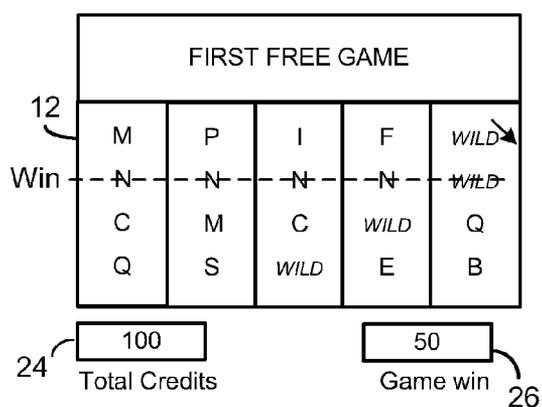


Fig. 11B

GAMING MACHINE WITH SPECIAL SYMBOLS THAT CHANGE OTHER SYMBOLS

FIELD OF THE INVENTION

[0001] This invention relates to gaming devices, such as video slot machines, and, in particular, to a bonus game played on a video slot machine.

BACKGROUND

[0002] Common video slot machines randomly select and display an array of symbols, using virtual reels, then grant an award to a player based on the occurrence of certain symbol combinations across paylines. Typically, the game ends after the symbols are displayed and the award, if any, is granted. Although these types of games are highly successful, it is advantageous to provide bonus games that occur once in a while to make the game more interesting to a player. The bonus games have rules different from the normal game rules and typically provide higher average payouts to the player. A more interesting bonus game will generate increased revenue to the casino by increased play of the gaming machine.

SUMMARY

[0003] The invention may be implemented by a conventional-platform video slot machine that is suitably programmed. The invention can also be implemented by a home computer playing a slot machine type game, or by an internet game, or by a personal device connected to a wireless network.

[0004] Various embodiments are described. In one embodiment, a base game played on the gaming machine may be a conventional video reel-type game that displays a randomly selected array of symbols, where combinations of symbols across one or more paylines are evaluated by circuitry to determine an award to be granted. The array may be formed by five reels, where four symbols on each reel are displayed when the reels stop (a 5x4 array). Other arrays, such as 3x3, 3x4, 4x4, and 5x3, may be used. In one embodiment, there are horizontal and zig-zag paylines, and consecutive winning symbol combinations starting from the leftmost reel are needed to win an award. The player may bet above a minimum bet per game, where either the awards are directly multiplied by the amount bet and/or additional paylines are activated.

[0005] During play of the base game, the virtual reel strips contain special bonus trigger symbols. Displaying at least three of the bonus trigger symbols across a payline initiates a series of free bonus games. The number of bonus trigger symbols on a payline determines the number of free games. In another embodiment, the free bonus games may be initiated by another type of random event, such as a mystery trigger.

[0006] Once the bonus round is initiated, the machine's game processor changes the reel strips to include directional wild symbols and to delete the bonus trigger symbols. Each directional wild symbol has a specific direction associated with it such as, up, down, left-up-diagonally, left-down-diagonally, right-up-diagonally, right-down-diagonally, left, right, and possibly bidirectional. If a directional wild symbol appears in a free game, all symbols along the direction dictated by the wild symbol (i.e., up to the edge of the array) are turned into a wild symbol. If multiple directional wild symbols appear at the same time in a free game and their direc-

tions intersect to create an "overlapping" wild symbol, that overlapped wild symbol then multiplies any award achieved using that wild symbol in a combination by the number of overlapped wild symbols it represents. For example, if there were three overlapping wild symbols at one symbol position, the multiplier would be 3x. If a normal wild symbol (i.e., not a special directional wild symbol) were overlapped, that wild symbol would also become a multiplier. The multiplier similarly applies if a directional wild symbol were overlapped due to the operation of another directional wild symbol.

[0007] After the bonus round is initiated, the free games are then played automatically or the player may need to press a spin button to start the spinning of the five reels. The reels then randomly stop to display a new set of symbols.

[0008] In each free game, any awards for a winning combination of scatter symbols are paid instantly, prior to changing any symbols to a wild symbol, since a scatter symbol possesses a scatter quality that would be lost had the scatter symbol been changed to a wild symbol.

[0009] If any directional wild symbols appear, all symbols in the designated direction are then converted to wild symbols. Overlapping wild symbols are also multipliers. Any awards for winning symbol combinations are then paid to the player. Such winning combinations include combinations with or without the wild symbols. In one embodiment, only combinations involving consecutive symbols starting from the leftmost reel can be a winning combination during the free games.

[0010] If there are multiple winning combinations in a single payline, only the highest is paid.

[0011] In one embodiment, the free games are played with the same bet and number of activated paylines that applied to the paid game that resulted in the bonus round trigger. The amount of the bet determines the award for each winning combination.

[0012] After all the free games are played, the player must wager credits to play the base game again.

[0013] Other variations are described herein. In one embodiment, a first round of awards is granted prior to symbols being converted to wild symbols. In another embodiment, the directional wild symbols are part of the base game. In another embodiment, the direction associated with a directional wild symbol is selected pseudo-randomly prior to the directional wild symbol affecting other symbols. In another embodiment, the direction associated with a directional wild symbol need not be a straight line and may be a zig-zag line or may dynamically change depending on other symbols in the path or the direction may be "reflected" by an outer boundary of the display.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] FIG. 1 illustrates a gaming machine that displays a base game and the bonus game in accordance with one embodiment of the present invention.

[0015] FIG. 2 is a block diagram of key components in the gaming machine of FIG. 1.

[0016] FIG. 3 illustrates the screen display on the gaming machine of FIG. 1, indicating that a bonus trigger combination has been obtained.

[0017] FIG. 4A illustrates the screen display immediately after the reels stopped after a first free game spin, prior to any symbols being converted to wild symbols by the directional wild symbols.

[0018] FIG. 4B illustrates the screen display after symbols have been converted to wild symbols in the first free game pursuant to the two, directional wild symbols that initially appeared in FIG. 4A.

[0019] FIG. 5A illustrates the screen display immediately after the reels stopped after a second free game, where an award for a scatter symbol (Ps) combination has been paid prior to symbols being converted to wild symbols.

[0020] FIG. 5B illustrates the screen display after symbols have been converted to wild symbols in the second free game pursuant to the directional wild symbol that initially appeared in FIG. 5A.

[0021] FIG. 6 illustrates the possible directional wild symbols that may be on the reel strips in the free bonus games.

[0022] FIG. 7 is a flowchart identifying various steps taken in carrying out the bonus game, in accordance with one embodiment of the invention.

[0023] FIG. 8A illustrates the screen display immediately after the reels stopped after a first free game spin, prior to any symbols being converted to wild symbols by the directional wild symbols, where awards are paid for all or some winning combinations prior to symbols being converted to wild symbols.

[0024] FIG. 8B illustrates the screen display after symbols have been converted to wild symbols in the first free game pursuant to the two, directional wild symbols that initially appeared in FIG. 8A, where awards for winning combinations including the wild symbols are paid.

[0025] FIG. 9 illustrates that the direction associated with a wild symbol may be pseudo-randomly selected, rather than being predetermined, prior to the directional wild symbol converting other symbols to wild symbols.

[0026] FIG. 10 illustrates the screen display after symbols have been converted to wild symbols, but certain special symbols (e.g., \$ symbols) are not converted due to their special nature.

[0027] FIG. 11A illustrates the screen display immediately after the reels stopped after a first free game spin, prior to any symbols being converted to wild symbols by the directional wild symbol.

[0028] FIG. 11B illustrates the screen display after symbols have been converted to wild symbols in the first free game pursuant to the directional wild symbol that initially appeared in FIG. 11A, where the direction changes due to being "reflected" off the edge of the display or changed due to other events (e.g., intersecting a special symbol).

DETAILED DESCRIPTION

[0029] Although the invention can typically be implemented by installing a software program in most types of modern video gaming machines, one particular gaming machine platform will be described in detail.

[0030] FIG. 1 illustrates a video gaming machine 10 that incorporates the present invention. The machine 10 includes a bottom display 12 that may be a thin film transistor (TFT) display, a liquid crystal display (LCD), a cathode ray tube (CRT), or any other type of display. In FIG. 1, the base game shown in display 12 is the conventional random selection of a 5x4 array of symbols, displayed on five virtual reels 11, where an award is granted based on symbol combinations across activated paylines, such as payline 13. In one embodiment, bets above the minimum bet activate additional paylines, including horizontal and zig-zag paylines. Also, bets above the minimum may be used to increase the payout for

each winning combination. In another embodiment, all paylines are activated with a single bet, and the awards are multiplied proportional to the amount bet. In one embodiment, there is a maximum of 40 paylines. The base game can be any type of symbol array game, and can involve any size array. A minimum size should be a 3x3 array.

[0031] A top display 14 is also a video screen that may be used to display aspects of the bonus game, described below.

[0032] A coin slot 16 accepts coins or tokens in one or more denominations to generate credits within the machine 10 for playing games. An input slot 18 accepts various denominations of banknotes or machine-readable tickets, and may output printed tickets for use in cashless gaming. A coin tray 20 receives coins or tokens from a hopper upon a win or upon the player cashing out. Player control buttons 22 include any buttons needed for the play of the games offered by the machine 10 including, for example, a bet button, a max-bet button, a spin reels button, a cash-out button, and any other suitable button. Pressing the bet button multiple times multiplies the bet. Buttons 22 may be replaced by a touch screen with virtual buttons.

[0033] Each bet deducts credits from a credit meter 24 that stores the accumulated credits from wins and the insertion of money. If the player cashes out, all the credits in the credit meter 24 are paid to the player. A game win meter 26 identifies the amount won for the present game.

[0034] FIG. 2 illustrates basic circuit blocks in the machine 10 of FIG. 1 and portions of a network. A game controller board 30 includes a processor (CPU) that runs the gaming program (including any or all aspects of the bonus game) stored in a program ROM, such as a CD. The program ROM may include a pseudo-random number generator program for selecting symbols and for making any other random selections. At least the active portion of the program is stored in a RAM on the board 30 for access by the processor. A pay table ROM on the board 30 detects the outcome of the game and identifies awards to be paid to the player. The pay table ROM may also identify a multiplier associated with various outcomes achieved during the bonus game. A bill/ticket validator 45 and coin detector 46 add credits for playing games. A payout device 47 pays out an award to the player in the form of coins or a printed ticket at the end of a game or upon the player cashing out. Player control inputs 48 receive push-button or touch screen inputs for making player selections. An audio board 49 sends signals to the speakers. A display controller 50 receives commands from the processor or network and generates signals for the various displays 51.

[0035] Modern gaming machines are connected within a network for remote monitoring of the machines. The game controller board 30 transmits and receives signals to and from a network 56 via a communications board 58. The network 56 includes servers and other devices that monitor the linked gaming machines 10 and GM1-GM-N.

[0036] In the below scenario, a software program for playing the base game and bonus game is installed in the gaming machine 10.

[0037] The below description of the game refers to steps in the flowchart of FIG. 7 and to certain screen displays shown in FIGS. 3-5B.

[0038] In step 64 of FIG. 7, the player of the gaming machine 10 enters a bet amount for playing the base game on the machine 10. In the example, the base game uses five video reels, where a stopped position of each reel displays four vertically aligned symbols. FIG. 1 shows a sample stopped

display of the symbols in a 5×4 array. There are many paylines across the array, where the paylines include horizontal paylines (e.g., payline 13) and zig-zag paylines. A player may make a minimum bet of, for example, 5 cents to activate a minimum number of paylines or may make an increased bet (e.g., \$2.00) to activate additional paylines, such as all paylines, and obtain increased award amounts. In another embodiment, all paylines are always activated, and an increased bet increases the awards proportionally. Any winning symbol combination on any one of the activated paylines will pay an award.

[0039] In FIGS. 3-5B, the credits from a present winning game are identified in the game win meter 26, which may be an area of the display 12. The total credits are shown in the credit meter 24, which may be an area of the display 12.

[0040] In step 66 of FIG. 7, it is determined whether the bonus game is triggered. FIG. 3 illustrates that the bonus round has been triggered by achieving at least three consecutive BONUS symbols from left to right. In one embodiment, the BONUS symbols are scatter symbols so do not have to all appear across a single payline. In another embodiment, the bonus game can be triggered by a mystery trigger, such as a random selection of an eligible player, a random number of games since the last bonus game, or other trigger. If there is a winning symbol combination at the time the bonus round is triggered, the player also wins the normal instant award. In one embodiment, the occurrence of the three or more BONUS symbols also grants a credit award. In the example, the three BONUS symbols granted the player 100 credits.

[0041] In step 68, the gaming machine 10 determines the number of free games awarded by the BONUS symbol combination. In one embodiment, 3 BONUS symbols grant 10 free games, 4 BONUS symbols grant 15 free games, and 5 BONUS symbols grant 20 free games.

[0042] In step 70, after the bonus round is triggered, the game processor on board 30 (FIG. 2) changes the symbols on the five reels strips to add special directional wild symbols, such as those shown in FIG. 6. Each directional wild symbol has a specific direction associated with it such as up, down, left-up-diagonally, left-down-diagonally, right-up-diagonally, right-down-diagonally, left, right, and possibly bidirectional and multidirectional. If a directional wild symbol appears in a free game, all symbols along the direction dictated by the wild symbol are turned into a wild symbol. If multiple directional wild symbols appear in a free game, and their overlapping directions cause overlapping wild symbols to occur, that overlapped wild symbol then multiplies any award achieved using that wild symbol by the number of wild symbols it represents. For example, if there were three overlapping wild symbols, the multiplier would be 3×. If a normal wild symbol (i.e., not a special directional wild symbol) were overlapped, that wild symbol would also become a multiplier. If a directional wild symbol were overlapped due to another directional wild symbol “converting” it to a wild symbol, that “converted” directional wild symbol would become a 2× multiplier (or higher depending on the number of overlaps).

[0043] In one embodiment, only the middle three reels (2, 3, and 4) contain a directional wild symbol. The directional wild symbol may be any image and need not identify its associated direction, since the conversion of symbols to wild symbols after a spin will convey the direction to the player.

[0044] The bonus trigger symbols are deleted from the reel strips during the bonus round. Various other symbols on the reels strips may be changed in the bonus games. In other

embodiments, the bonus trigger symbols remain on the reel strips during the bonus round so that the bonus round may be “re-triggered”.

[0045] The instructions and rules for the free games may be displayed on the upper or lower display screens 12, 14.

[0046] In step 72, the gaming machine processor initiates the first free spin or the player initiates the spin by pressing a spin reels button. The reels then randomly stop.

[0047] FIG. 4A illustrates the display 12 immediately after the reels stop during the first free game.

[0048] In step 74, any scatter symbol combination wins are paid to the player prior to any conversion of symbols to wild symbols, since scatter symbols possess a scatter quality that would be extinguished had a scatter symbol been converted to a wild symbol. In FIG. 4A, there are no scatter wins, and so there are no instant wins. However, there are two directional wild symbols (WILD) that appear in the display on the second and fourth reels. The directions associated with those wild symbols are shown, even though such directions need not be part of the symbol image.

[0049] In step 76, illustrated in FIG. 4B, the directional wild symbols convert all symbols in the designated direction to wild symbols. Symbols across all 5 reels may be changed depending on the location and designated direction of a wild symbol. In one embodiment, the directional wild symbols are only on reels 2-4, but symbols on reels 1 and 5 may be converted to wild symbols.

[0050] As seen in the example of FIG. 4B, the two directional wild symbols both caused the middle P symbol to become wild. Since the converted P symbol represent two overlapping wild symbols, that wild symbol also becomes a 2× multiplier of any award that results from using that wild symbol in a winning combination (step 78). Assuming that a winning combination is at least four identical symbols that are consecutive and start on reel 1, there are two winning combinations illustrated in FIG. 4B. The base award for the winning combination of four “N” symbols is multiplied by two by the WILD×2 symbol. The resulting award for the two wins is 75 credits in the example, and these credits are shown on the game win meter 26 and the credit meter 24 (step 80).

[0051] In step 82, it is determined whether there are any more free games. If not, the bonus round ends, and the player plays the normal base games by wagering credits.

[0052] If there are free games remaining, the process loops to step 72.

[0053] FIG. 5A illustrates the results of the second free game spin immediately after the reels stopped spinning. The Ps symbol represents a scatter symbol. With a scatter symbol, combinations of those symbols need not occur on a single payline. In FIG. 5A, there are four consecutive Ps symbols starting from reel 1 so the player wins an award for that winning combination. Such scatter combination awards are paid prior to the symbols being converted to wild symbols to preserve the scatter feature of the scatter symbols.

[0054] In FIG. 5A, there is one directional wild symbol (WILD) on reel 5, and its direction is an up direction. Also on reel 5 is a “normal” wild symbol W that has no directional feature.

[0055] FIG. 5B illustrates the screen after the directional wild symbol has converted all symbols on reel 5 to wild symbols since the directional wild symbol performed an up-direction conversion. This resulted in five D symbols along a payline, which is a winning combination. Since the normal wild symbol W has an overlapped wild symbol, that over-

lapped wild symbol is a 2× multiplier. Therefore, the base award for the five D symbols is multiplied by 2, and the award is paid to the player.

[0056] FIGS. 8-11 illustrate variations of the game.

[0057] While the previous embodiments converted symbols to wild symbols prior to determining awards for winning combinations (except for scatter combinations), awards may be increased by granting awards prior to and after the wild symbol conversion. In one embodiment, the award after the conversion is only paid for combinations that include a newly converted wild symbol. In one embodiment, granting such awards prior to the symbol conversion may only be for special symbol combinations.

[0058] FIG. 8A illustrates the screen display immediately after the reels stopped after a first free game spin, prior to any symbols being converted to wild symbols by the directional wild symbols, where an award is paid for a four-N symbol winning combination prior to symbols being converted to wild symbols.

[0059] FIG. 8B illustrates the screen display after symbols have been converted to wild symbols in the first free game pursuant to the two, directional wild symbols that initially appeared in FIG. 8A. Another award is paid for four N symbols (in addition to other winning symbol combinations) since a wild symbol is now in the combination, effectively making it a new combination of four N symbols. FIG. 4B is similar to FIG. 8B.

[0060] Instead of each directional wild symbol having a predetermined direction associated with it, its direction may be associated only after it is displayed, such as by a weighted random selection. FIG. 9 illustrates that the direction associated with a particular wild symbol may be pseudo-randomly selected after the wild symbol appears after a spin, or sometime after the wild symbol previously appeared. This may be done using a probability weighted selector 90 selecting a particular direction from a memory 92. The directions may be weighted for each position of a wild symbol in the array since some directions are more valuable than others. For example, a wild symbol on the left side of the array is more valuable if it is associated with a right-pointing arrow direction. The weightings may be programmed to achieve a desired average payout for the machine.

[0061] In some cases, it may not be appropriated to convert a symbol into a wild symbol, such as if the original symbol represented an instant award or a certain high value symbol or a multiplier. FIG. 10 illustrates the screen display after symbols have been converted to wild symbols, but certain special symbols (e.g., \$ symbols) are not converted due to their special nature. In FIG. 10, the \$ may represent an instant award symbol.

[0062] In another embodiment, the direction associated with a directional wild symbol may represent a zig-zag line or represent a dynamic direction that zig-zags as a result of the position of the directional wild symbol. For example, if a directional wild symbol on a rightmost reel is associated with a right-down-diagonal direction, the line of conversion may emulate a reflection of the line off the right side of the display boundary.

[0063] FIG. 11A illustrates the screen display immediately after the reels stopped after a first free game spin, prior to any symbols being converted to wild symbols by the directional wild symbol. In the example, there is a directional wild symbol on the right side with a right-down-diagonal direction,

which may either be predetermined or randomly selected on a game-by-game basis or on a use-by-use basis.

[0064] FIG. 11B illustrates the screen display after symbols have been converted to wild symbols in the first free game pursuant to the directional wild symbol that initially appeared in FIG. 11A, where the direction changes due to being “reflected” off the right edge of the display. In FIG. 11B, the initial right-down-diagonal direction of the wild symbol created a line that essentially reflected off a right outer boundary of the display to change into a left-down-direction. All symbols along the original and reflected lines are caused to act as wild symbols. A similar change in direction occurs when any direction line reflects off an outer boundary of the display. This “reflected-direction” feature may be intermittent as an extra feature such as a reward for a certain displayed outcome.

[0065] In another embodiment, the direction changes, such as emulating a reflection, when the original direction intersects a special symbol (e.g., another wild symbol). In this way, more symbols will likely be converted.

[0066] Therefore, a directional wild symbol may be associated with an initial direction that may ultimately change due to the wild symbol’s position in the array and due to other symbols in the array.

[0067] In one embodiment, the free games are played with the same bet and number of activated paylines that applied to the paid game that resulted in the bonus round trigger. The amount of the bet determines the award for each winning combination.

[0068] Although the game involving the directional wild symbols has been described as a bonus game, the game involving the directional wild symbols may be the base game, where the directional wild symbols are always active (no special triggers) and the reels strips do not change.

[0069] In one embodiment, any symbol converted into a wild symbol need not change the image of that symbol, although changing the image is preferred to better illustrate the operation to the player.

[0070] Although, in the examples, the directional symbol is a wild symbol that represents all symbols (except a scatter function), the directional symbol can instead be any other high value symbol. In one variation, the directional symbol causes all symbols in the designated direction to just be multipliers of any award using such a symbol without the symbol itself being converted to another type of symbol.

[0071] Although a stand-alone gaming machine has been described, the term “gaming machine” may also apply to a programmed home computer, or any other type of computer, including a cell phone, programmed to carry out the present bonus game.

[0072] The term “random” used herein refers to pure random as well as pseudo-random.

[0073] While particular embodiments of the present invention have been shown and described, it will be obvious to those skilled in the art that changes and modifications may be made without departing from this invention in its broader aspects and, therefore, the appended claims are to encompass within their scope all such changes and modifications as fall within the true spirit and scope of this invention. For example, the bonus trigger may be any symbols combination and only award one free game. Any of the features described herein may be combined into a game.

What is claimed is:

1. A method performed by a video gaming device, the method comprising:

- a. spinning and stopping a plurality of virtual reels, having symbols, in a game to generate an array of symbols, the symbols including at least one directional wild symbol, each directional wild symbol representing a plurality of other symbols for use in making symbol combinations, each directional wild symbol being associated with at least one direction, the at least one direction including left, right, and diagonal, wherein an appearance of a directional wild symbol in an array of symbols causes one or more symbols along the at least one direction associated with the directional wild symbol to act as a wild symbol;
 - b. if a directional wild symbol appears in an array of symbols, then causing one or more symbols along the at least one direction associated with that directional wild symbol to act as a wild symbol; and
 - c. achieving awards based on at least winning combinations of symbols, including combinations using the directional wild symbols and other symbols that have been caused to act as wild symbols by operation of the directional wild symbols
2. The method of claim 1 wherein, in a base game using the plurality of virtual reels, there are no directional wild symbols, the method further comprising:
- determining whether a bonus round trigger has occurred during the base game;
 - if a bonus round trigger has occurred, then performing the method comprising:
 - adding at least one directional wild symbol to the plurality of virtual reels;
 - granting the player one or more free bonus spins of the virtual reels, in a bonus round, to achieve arrays of randomly selected symbols with each spin;
 - carrying out steps b and c; and
 - after all free games have been played, terminating the bonus round.
3. The method of claim 1 wherein the direction associated with each directional wild symbol is predetermined and fixed.
4. The method of claim 1 wherein the direction associated with each directional wild symbol is pseudo-randomly selected prior to a directional wild symbol being used to cause one or more symbols along the at least one direction to act as a wild symbol.
5. The method of claim 1 wherein, if multiple directional wild symbols appear in the array, and a particular symbol is at an intersection of the directions associated with the multiple directional wild symbols, then causing that particular symbol to be a wild symbol and a multiplier of any award involving that wild symbol in a winning combination of symbols.
6. The method of claim 5 wherein a value of the multiplier is increased as more directions intersect the particular symbol by operation of directional wild symbols.
7. The method of claim 1 wherein the at least one direction includes up, down, left, right, up-right-diagonal, left-right-diagonal, up-left-diagonal, and down-left-diagonal.
8. The method of claim 1 wherein, if a directional wild symbol appears in an array of symbols, then causing all symbols along the direction associated with that directional wild symbol to act as a wild symbol.
9. The method of claim 1 wherein the direction associated with a directional wild symbol is a straight line direction that is either horizontal, vertical, or diagonal with respect to the array.
10. The method of claim 1 wherein the direction associated with a directional symbol includes zig-zag directions.
11. The method of claim 10 wherein, if a line along a direction associated with a directional wild symbol intersects a special symbol, the line changes direction, causing symbols along the line to act as a wild symbol.
12. The method of claim 10 wherein, if a line along a direction associated with a directional wild symbol reaches an outer boundary of the array, the line changes direction, causing symbols along the line to act as a wild symbol.
13. The method of claim 1 wherein, if a directional wild symbol appears in an array of symbols, then causing all symbols along the direction associated with that directional wild symbol to act as a wild symbol except for certain special symbols.
14. The method of claim 1 further comprising achieving awards based on winning combinations of symbols prior to any symbol being affected by any directional wild symbol, then achieving awards based on winning combinations of symbols including combinations using symbols that have been caused to act as wild symbols by operation of any directional wild symbols.
15. A gaming machine comprising:
- a display screen; and
 - a processing system programmed to carry out the following method:
 - a. spinning and stopping a plurality of virtual reels, having symbols, in a game to generate an array of symbols, the symbols including at least one directional wild symbol, each directional wild symbol representing a plurality of other symbols for use in making symbol combinations, each directional wild symbol being associated with at least one direction, the at least one direction including left, right, and diagonal, wherein an appearance of a directional wild symbol in an array of symbols causes one or more symbols along the at least one direction associated with the directional wild symbol to act as a wild symbol;
 - b. if a directional wild symbol appears in an array of symbols, then causing one or more symbols along the at least one direction associated with that directional wild symbol to act as a wild symbol; and
 - c. achieving awards based on at least winning combinations of symbols, including combinations using the directional wild symbols and other symbols that have been caused to act as wild symbols by operation of the directional wild symbols
16. The machine of claim 15 wherein the processing system is further programmed so that the direction associated with each directional wild symbol is predetermined and fixed.
17. The machine of claim 15 wherein the processing system is further programmed so that the direction associated with each directional wild symbol is pseudo-randomly selected prior to a directional wild symbol being used to cause one or more symbols along the at least one direction to act as a wild symbol.
18. The machine of claim 15 wherein the processing system is further programmed so that the at least one direction includes up, down, left, right, up-right-diagonal, left-right-diagonal, up-left-diagonal, and down-left-diagonal.
19. The machine of claim 15 wherein the processing system is further programmed so that, if a directional wild symbol appears in an array of symbols, then all symbols along the direction associated with that directional wild symbol are caused to act as a wild symbol.

20. The machine of claim **15** wherein the processing system is further programmed so that the direction associated with a directional wild symbol is a straight line direction that is either horizontal, vertical, or diagonal with respect to the array.

21. The machine of claim **15** wherein the processing system is further programmed so that the direction associated with a directional symbol includes zig-zag directions.

22. The machine of claim **15** wherein the processing system is further programmed so that, if a directional wild symbol appears in an array of symbols, then all symbols along the direction associated with that directional wild symbol are caused to act as a wild symbol except for certain special symbols.

* * * * *