METHOD FOR PROVIDING A FEATURE GAME

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ABSTRACT

A method of providing a feature game using a primary game outcome, comprising: evaluating a primary game outcome according to feature game rules, and when the primary game outcome comprises a feature-point-awardining outcome, modifying a total feature point value. The total feature point value is compared to a target range of values and a feature prize is awarded if the total feature point value is comprised in the target range of values.
Figure 2
Receiving credit information from a player

Receiving activation information from the player

Randomly generating a game outcome

Displaying the game outcome

Evaluating the game outcome according to game rules

Providing an award to the player

Figure 3
Evaluating primary game outcome according to feature game rules

Modifying a total feature point value

Is the total feature point value comprised in a target range of values?

Yes

Awarding feature prize

No

**Figure 4**
Evaluating primary game outcome according to feature game rules

Modifying a total feature point value

Is the total feature point value comprised in a target range of values?

Awarding feature prize

Has the total feature point value exceeded all target range of values?

No

No

Determining new target range of values or

Resetting the total point value to an initial value

Figure 5
Figure 6
<table>
<thead>
<tr>
<th>Winning Combinations</th>
<th>Credits</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>5</td>
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<td></td>
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<tr>
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<td>250</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>1050</td>
<td>1</td>
</tr>
</tbody>
</table>

Figure 8
Feature-point-awarding Outcome  

Points

Figure 9a

Feature-point-awarding Outcome  

Points

Figure 9b
Determining the bet level

Generating a primary game outcome

Selecting a set of target ranges of values according to bet level

Evaluating primary game outcome according to feature game rules

Modifying a total feature point value

Is the total feature point value comprised in a target range of values?

No

Yes

Awarding feature prize

Has the total feature point value exceeded all target range of values?

No

Yes

Determining new target range of values

or

Resetting the total point value to an initial value

Figure 10
METHOD FOR PROVIDING A FEATURE GAME

BRIEF DESCRIPTION OF THE DRAWINGS

[0001] Further features and advantages of the present invention will become apparent from the following detailed description, taken in combination with the appended drawings, in which:

[0002] FIG. 1 is a schematic diagram showing a perspective view of a gaming machine suitable for the present invention;

[0003] FIG. 2 is a block diagram illustrating the components of the gaming machine of FIG. 1;

[0004] FIG. 3 is a flowchart illustrating the steps of a game process as played on the gaming machine of FIGS. 1 and 2;

[0005] FIG. 4 is a flowchart illustrating the steps of a game process played in accordance with an embodiment of the present invention;

[0006] FIG. 5 is a flowchart illustrating the steps of a game process played in accordance with a second determination embodiment of the present invention;

[0007] FIG. 6 is a screen shot of a game played in accordance with an embodiment of the present invention;

[0008] FIG. 7 is a screen shot of the game of FIG. 5 at a later moment;

[0009] FIG. 8 is a partial pay table for a line game played in accordance with an embodiment of the present invention;

[0010] FIGS. 9a and 9b are feature point tables for a bingo game played in accordance with an embodiment of the present invention;

[0011] FIG. 10 is a flow chart illustrating the steps of a game process played in accordance with a bet-level dependent embodiment of the present invention; and

[0012] FIGS. 11a and 11b are representations of target ranges of values according to a bet-level dependent embodiment of the present invention.

[0013] It will be noted that throughout the appended drawings, like features are identified by like reference numerals.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

[0014] An embodiment of the present invention provides a method of providing a feature game using a primary game outcome, comprising: evaluating a primary game outcome according to feature game rules, and when the primary game outcome comprises a feature-point-awarding outcome, modifying a total feature point value. The total feature point value is compared to a target range of values and a feature prize is awarded if the total feature point value is comprised in the target range of values.

[0015] Another embodiment of the present invention provides a gaming machine comprising: evaluating means for evaluating a primary game outcome according to feature game rules; storing means for storing a total feature point value and a target range of values; modifying means for modifying said feature point value; controlling means for controlling said feature game, comprising monitoring whether said total feature point value is comprised in said target range of values; and awarding means for awarding a feature prize.

[0016] Yet another embodiment of the present invention provides a computer program, embodied on a computer readable medium or in processor-readable memory, or carried on an electrical or electromagnetic carrier signal, having codes adapted to: evaluate a primary game outcome according to feature game rules; modify a total feature point value when said primary game outcome comprises a feature-point-awarding outcome; compare said total feature point value to a target range of values; and award a feature prize if said total feature point value is comprised in said target range of values.

[0017] Another embodiment of the present invention is carried out on a gaming machine, as illustrated in FIGS. 1 and 2. Said gaming machine 10 comprises displaying means 12, such as a video screen, a LCD screen or mechanical reels; accepting means 14 such as a card reader, or a coin and/or bill acceptor; inputting means 16, such as buttons, levers or a touch screen; awarding means 18, such as a ticket printer, a card reader or a hopper; storing means 20 such as RAM, flash memory, a hard drive or a removable memory medium, and controlling means 22 such as a computer, computer codes, or a hardware controller. The controlling means comprises evaluating means 24 and modifying means 26, which also may correspond to a computer, computer codes or hardware components. In another embodiment, the controlling means 22 also comprises at least one of determining means (not shown) and resetting means (not shown).

[0018] Such a gaming machine 10 is designed, as shown on FIG. 3, to receive credit information from a player (at step 30) either in a physical format (such as coins or bills) or in an electronic format (such as a player card or a money transfer from a bank account), to receive activation information from the player (at step 32), to randomly generate (at step 34) and display (at step 36) a game outcome, to evaluate said game outcome according to game rules (a pay table for example) (at step 38), and to award a prize to the player for a winning game outcome (at step 40).

[0019] In other embodiments, the present invention may also be implemented on a computer program, or at a remote terminal, the game information (not shown) being distributed via a network, such as linked machines or the Internet, or broadcasted using an electrical or electro-magnetic signal.

[0020] An embodiment of the present invention describes a feature game wherein the player accumulates feature points awarded based on primary game outcomes in the objective of reaching a value included in at least one target range of values in a feature game. FIG. 4 describes the steps of such an embodiment. A primary game outcome is evaluated according to feature game rules (step 54) and when the primary game outcome comprises a feature-point-awarding outcome, a feature point value is modified (step 58), for example, by adding at least one feature point. It is then determined whether the total feature point value is comprised in at least one predetermined target range of values (step 62). If it is the case, a prize is awarded according to the achieved target range(s) of values (step 64).

[0021] In another embodiment, illustrated on FIG. 5, after the feature prize is awarded (step 64), at least one new target
The range of values is determined (step 68a) or the total feature point value is reset to an initial value (step 68b) (which may be zero or any other value inferior to the actual total feature point value). On the other hand, if the total feature point value was not comprised in at least one target range of values (step 62), it is determined whether the total feature point value exceeds all of the at least one target range of values (step 66). If it is the case, at least one new target range of values is determined (step 68a) or the total feature point value is reset to an initial value (step 68b) (which may be zero or any other value inferior to the actual total feature point value).

[0022] FIG. 6 illustrates a screen shot of a line game applying the embodiment of FIG. 4. The screen shot shows a total feature points counter 80 displaying the number of feature points gathered so far, a target range of values display 82, allowing the player to know the lowest and highest limits of each range (for forty-six (46) 84 and fifty-five (55) 86 for the largest range). Finally, if the total feature point value is close enough to the target ranges, a marker 88 may be added to the display. In this example, the player has gathered forty-four (44) feature points 80 before the present spin. Since the player has a line of three (3) “7” symbols, and the pay table of FIG. 7 associates five (5) feature points to that winning combination, five (5) feature points 92 are added to the total feature points counter 80.

[0023] FIG. 7 illustrates the next step in the line game of FIG. 6, i.e., after the feature points are added to the total feature points counter 80. The marker 88 is moved according to the awarded feature points. Since the new total feature point value is forty-nine (49) 80, which falls inside a target range 94, the player is awarded the feature prize 98 corresponding to this target range. In this embodiment, even though the largest target range 96 is also achieved, the player is awarded the prize associated with the smallest achieved range. Other embodiments may award a prize for each achieved target range. At least one new target range is determined before the next play.

[0024] FIG. 8 illustrates a portion of the pay table applied in the example of FIGS. 6 and 7. Since the target ranges in this example are rather small, the combinations easier to obtain give more feature points, rendering the achievement of a target range harder, while harder to get combinations would add to the total feature point value more slowly and thus make the achievement of a target range easier.

[0025] A feature-point-awarding outcome can consist in a predetermined combination of indicia, either awarding a prize in the primary game or not. Examples of a predetermined combination of indicia awarding a prize in the primary game would be a winning hand in a poker game, or a winning pattern in a bingo game, while examples of a predetermined winning combination awarding no prize in the primary game, would be to award feature points for a push in a BlackJack game or a line of similar, but not all identical, symbols (such as “all fruits”) in a line game. Another embodiment of feature-point-awarding outcome is to obtain predetermined special indicia, like a special symbol in a line game, a “marked” card in a poker or BlackJack game, or getting a special ball in a bingo, lotto or keno game.

[0026] The number of feature points to award may be linked to the value of the prize-awarding outcome (for example a Royal Flush would award more feature points than a pair in a poker game) or totally independent of it. Also, the number of feature points may be predetermined or randomly determined upon occurrence of a feature-point-awarding outcome. In the case of a random determination, a weight may be added in such a way that a hard-to-obtain feature-point-awarding outcome would, in average, award a more advantageous number of feature points (according to the size, number and even distance of the target ranges of values) than an easy to get feature-point-awarding outcome.

FIG. 9 illustrates an example of a feature point table for a bingo game wherein the feature-point-awarding outcomes correspond to prize-awarding outcomes in the primary game, and the target ranges of values are small. In this example, getting fewer feature points, and thus getting more slowly close to the target ranges of values, is desired. On the other hand, FIG. 9 illustrates a bingo game wherein some of the feature-point-awarding outcomes 100 are associated with ranges of feature point values 102 based on the distance (dist.) between the lowest limit of the smallest target range of values (the hardest to achieve and the one awarding the biggest prize) available to the player, and the size of this target range of values (highest limit—lowest limit).

[0027] The total feature point value is modified by applying a mathematical operation (such as addition, subtraction, multiplication, or division) or logical operation (such as and, or, >, <, etc.) using the feature points awarded upon occurrence of a feature-point-awarding outcome. Thus, the total feature point value may be lower or higher than its original value after the feature points have been used to modify it.

[0028] Another embodiment, for which steps are shown in FIG. 10, presents different sets of target ranges, each set of target range being associated with a bet level. Upon reception of a bet (step 110), the bet level is determined (step 112) and the corresponding set of target ranges of values is selected (step 114). A primary game outcome is generated (step 116) and evaluated according to feature game rules (step 118). When the primary game outcome comprises a feature-point-awarding outcome, a feature point value is modified (step 124), for example, by allowing the player to decide whether to add or subtract at least one feature point from the total feature point value. It is then determined whether the total feature point value falls inside at least one predetermined target range of values (step 126). If not, it is determined whether the total feature point value exceeds all of the at least one target range of values (step 128). If it is the case, at least one new target range of values is determined (step 130a) or the total feature point value is reset to an initial value (step 130b) (which may be zero or any other value inferior to the actual total feature point value). Finally, if the total feature point value falls inside at least one target range of values, a prize is awarded according to at least one achieved target range of values (step 132), and at least one new target range of values is determined (step 130a) or the total feature point value is reset to an initial value (step 130b) (which may be zero or any other value inferior to the actual total feature point value).

[0029] FIGS. 11a and 11b illustrate two nine-line-game examples of target range of values distribution according to bet levels. FIG. 11a presents an oval target 131, formed by prolonging the target range of values limits, forming target shapes. Each line 140, 142 and 144 determines a set of target ranges of values. A centered line 140 crosses the four target
ranges of values 132, 134, 136, and 138, available to a player betting at MAX BET, meaning a player placing the highest allowed bet on each and every lines of the game. A second line 142, crossing only two (2) of the target ranges of values 134 and 136, illustrates the target ranges of values available to a player placing a ALL LINES bet, i.e., placing a bet on each line, but lower than the highest possible bet on at least one line. Finally, a third line 144 indicates the only target range of values available for a player placing a bet on at least one line, but not all lines. FIG. 11b illustrates a round target.

In this example, the highest and lowest limits of a range vary depending on the position of the line indicating the bet level on the circle corresponding to this range. Accordingly, for a certain target range, the highest limit at ONE LINE bet level 152 is inferior to the one associated to the MAX BET level 154, while the lowest limit is superior at ONE LINE bet level 156 to the lowest limit at MAX BET level 158. This results in fewer and shorter target ranges of values when you play at low bet level. If only one target range of values is offered, the low roller (smaller bets) player has to be more precise to achieve the target range and to be awarded the corresponding prize than the high roller player.

In an example of the embodiment of FIG. 11b, only one target shape is provided, meaning only one target range of values is available at each bet level. Since the limits of the target range of values are different at each bet level, the size of the target range of values varies with the bet level. Accordingly, the size of the target range of values is bigger at Max Bet than at ONE LINE bet.

In another embodiment, the feature points and target ranges of values are shared by a plurality of players playing on linked machines, whether they form a bank or they are in different sites. Accordingly, the feature points and the target ranges of values are kept on a server or network processor. Each time a player obtains a feature-point-awarding outcome, the awarded feature points are added to the network feature point counter. The player awarded the feature points that achieve a target range of values receives the prize associated with the achieved target range of values. In another embodiment, the achievement of a target range of values is a trigger to select at least one feature winner using a random process or any other winner determination, such as providing a tournament, comparing an individual feature point counter, or providing a bonus game to some or all players playing on the linked machines.

The feature points may be associated to a machine, to a bank, to a network or to a player. Accordingly, if the feature points are associated to a machine or a bank or a network, the feature points are stored on the machine, by a bank controller or by a server, regardless of the person playing on the machine. On the other hand, if the feature points belong to a player, the feature points are stored on a player card, any removable memory medium or on a server, associated with the player identification, allowing the player to retrieve his feature points whenever he plays on a machine offering an embodiment of the present invention. Also, the target ranges of values may be associated to a machine, to a bank, to a network or to a player and information about them are stored accordingly.

A prize associated with the achievement of a target range of values may be, but is not limited to, money, credits, comps, access to a bonus, free spins, tickets to participate in a draw, an instant prize like jewels, cars, etc. If the prize is money or credits, the prize may be calculated in the pay table or come from a progressive jackpot account, the percentage awarded to the player depending on the achieved target range of values. In an example of such an embodiment, the player is provided with three (3) target ranges of values, each awarding a percentage of the progressive jackpot. The hardest to achieve awards ten percent (10%) of the progressive jackpot, the second five percent (5%) and the easiest two percent (2%).

While illustrated in the block diagrams as groups of discrete components communicating with each other via distinct data signal connections, it will be understood by those skilled in the art that the preferred embodiments are provided by a combination of hardware and software components, with some components being implemented by a given function or operation of a hardware or software system, and many of the data paths illustrated being implemented by data communication within a computer application or operating system. The structure illustrated is thus provided for efficiency of teaching the present preferred embodiment.

It should be noted that the present invention can be carried out as a method, can be embodied in a system, a computer readable medium, processor-readable memory or an electrical or electromagnetic signal.

The embodiments of the invention described above are intended to be exemplary only. The scope of the invention is therefore intended to be limited solely by the scope of the appended claims.

We claim:

1. A method of providing a feature game using a primary game outcome, comprising:
   - evaluating said primary game outcome according to feature game rules;
   - when said primary game outcome comprises a feature-point-awarding outcome, modifying a total feature point value;
   - comparing said total feature point value to a range of values; and
   - awarding a feature prize if said total feature point value is comprised in a target range of values.

2. The method of claim 1, further comprising determining a target range of values.

3. The method of claim 1, further comprising resetting said total feature point value to an initial value.

4. The method of claim 1, further comprising at least one of a) determining a target range of values and b) resetting said total feature point value to an initial value, if said total feature point value exceeds said target range of values.

5. The method of claim 1, wherein the step of modifying a total feature point value comprises applying a mathematical or logical operation using a feature point.

6. The method of claim 5, wherein the step of applying a mathematical or logical operation comprises using one or more feature points.

7. The method of claim 1, wherein the step of awarding a feature prize comprises at least one of a) determining at a target range of values and b) resetting said total feature point value to an initial value.
8. The method of claim 1, wherein a feature-point-awarding outcome comprises one of a) a predetermined combination of indicia and b) a predetermined combination of indicia.

9. The method of claim 8, wherein said predetermined combination of indicia comprises a winning combination in said primary game.

10. The method of claim 1, wherein the step of adding a feature point to said total feature point value comprises determining a number of feature points.

11. The method of claim 10, wherein the number of feature points is determined based at least in part on said feature-point-awarding outcome.

12. The method of claim 10, wherein the number of feature points is randomly determined.

13. The method of claim 12, wherein the number of feature points is determined based at least in part on said feature-point-awarding outcome.

14. The method of claim 12, wherein the number of feature points is determined based at least in part on the number of feature points separating at least one target range of values from said total feature point value.

15. The method of claim 1, wherein said total feature point value is compared to a single target range of values.

16. The method of claim 1, further comprising:

receiving a bet;

determining a bet level; and

selecting a set of target ranges of values according to said bet level.

17. The method of claim 1, wherein said feature prize comprises at least one of a) money, b) credits, c) a feature, d) a material prize, e) a rebate certificate, and f) a chance to win a prize.

18. The method of claim 17, wherein said feature prize corresponds to a percentage of a progressive jackpot.

19. The method of claim 1, wherein at least one of a) said total feature point value, b) said target range of values and c) said set of target ranges of values, is shared by a plurality of gaming machines.

20. The method of claim 1, wherein at least one of a) said total feature point value, b) said target range of values and c) said set of target ranges of values, is associated with a player.

21. The method of claim 20 wherein the at least one of a) said total feature point value, b) said target range of values and c) said set of target ranges of values, is stored on a removable memory medium.

22. A gaming machine comprising:

evaluating means for evaluating a primary game outcome according to feature game rules;

storing means for storing a total feature point value and a target range of values;

modifying means for modifying said feature point value;

controlling means for controlling said feature game, comprising monitoring whether said total feature point value is comprised in said target range of values; and

awarding means for awarding a feature prize.

23. The gaming machine of claim 22, wherein said controlling means monitors whether said total feature point value exceeds said target range of values.

24. The gaming machine of claim 22, comprising at least one of:

determining means for determining a target range of values; and

resetting means for resetting said total feature point value to an initial value.

25. A computer program, embodied on a computer readable medium or in processor-readable memory, or carried on an electrical or electromagnetic carrier signal, having codes adapted to:

evaluate a primary game outcome according to feature game rules;

modify a total feature point value when said primary game outcome comprises a feature-point-awarding outcome;

compare said total feature point value to a target range of values; and

award a feature prize if said total feature point value is comprised in said target range of values.

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