



(19) **United States**

(12) **Patent Application Publication**

Geiger

(10) **Pub. No.: US 2003/0224849 A1**

(43) **Pub. Date: Dec. 4, 2003**

(54) **MULTIPLE SPIN SLOT MACHINE**

Publication Classification

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(51) **Int. Cl.⁷** **A63F 9/24**
(52) **U.S. Cl.** **463/20**

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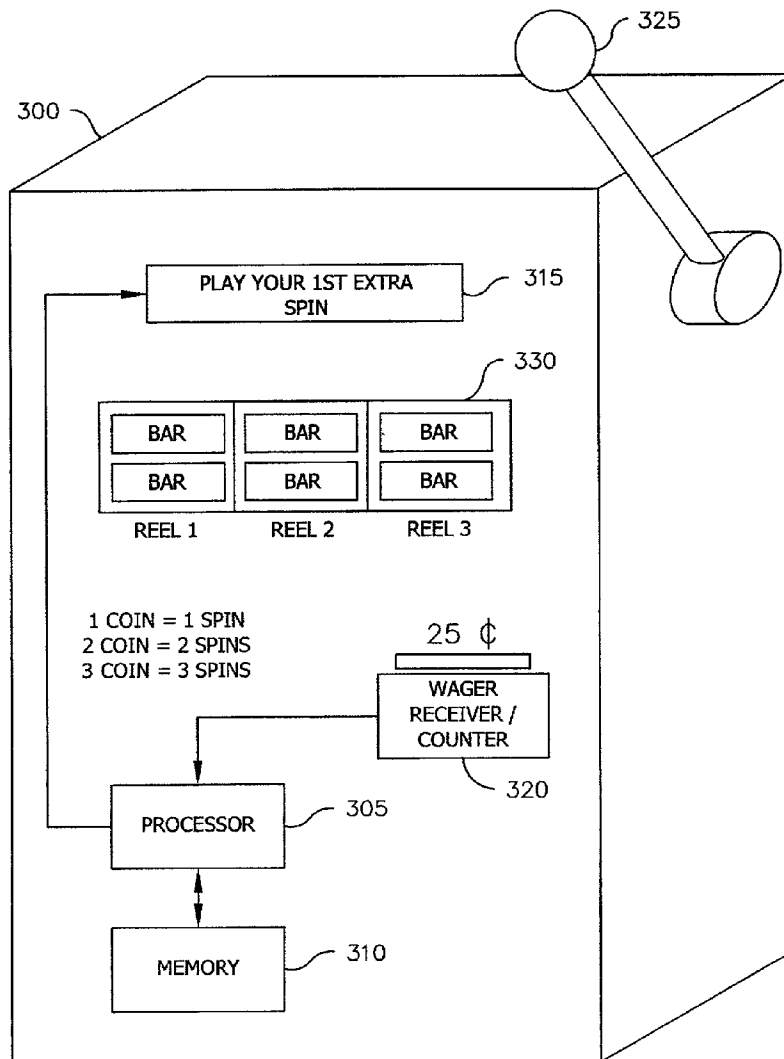
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(21) Appl. No.: **10/159,978**

(22) Filed: **May 31, 2002**

(57) **ABSTRACT**

A slot machine offers a player an increased number of pulls on the slot machine in return for additional wager amounts at the beginning of a new game. Depending upon the amount of the additional wager, the slot machine will offer the player one or two additional pulls of the slot machine. If the additional wager is in an amount sufficient to pay for one additional pull, after the first pull occurs and the reels of the slot machine come to rest, the player is informed by the slot machine that an extra pull can be made at no additional cost. If the additional wager is in an amount sufficient to pay for two additional pulls, after the second pull, the player is again informed by the slot machine that a second extra pull can be made at no additional cost.



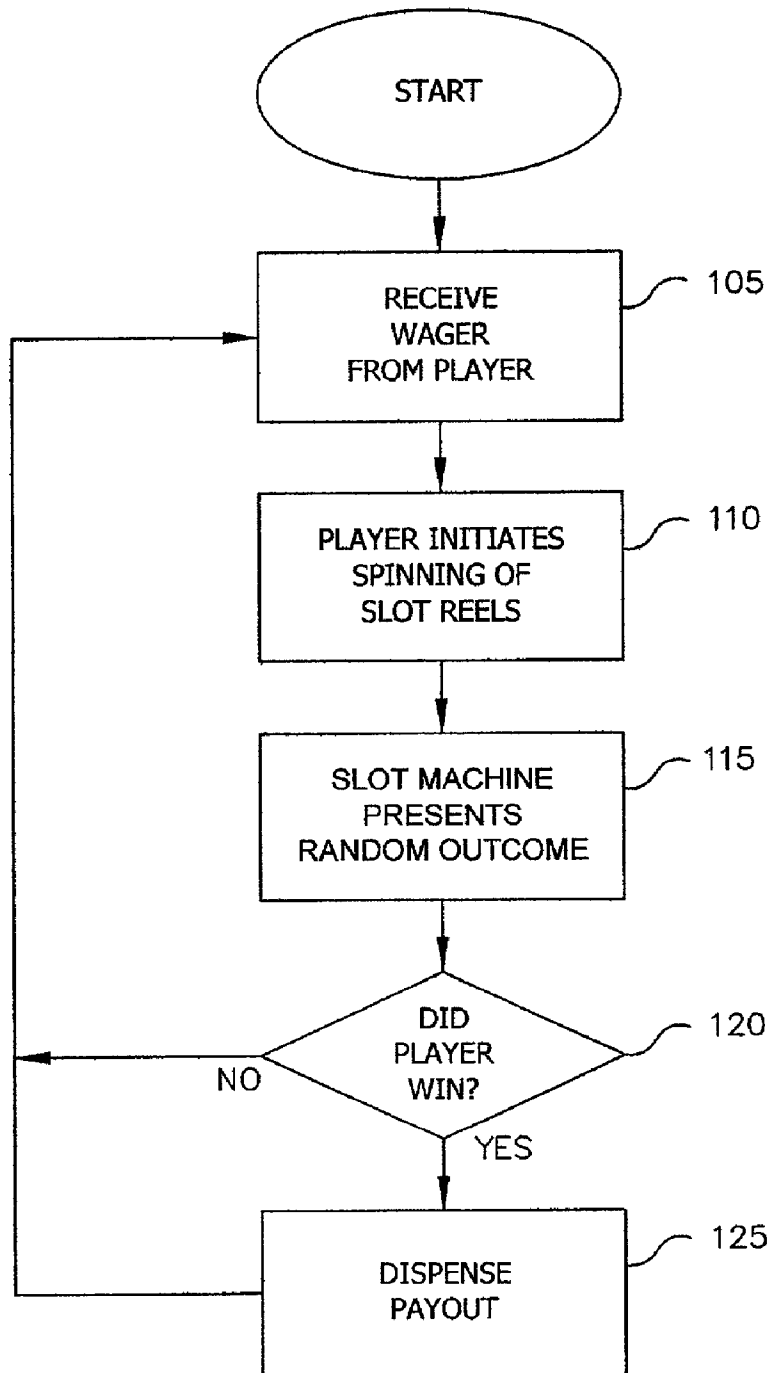


Fig. 1
(Prior Art)

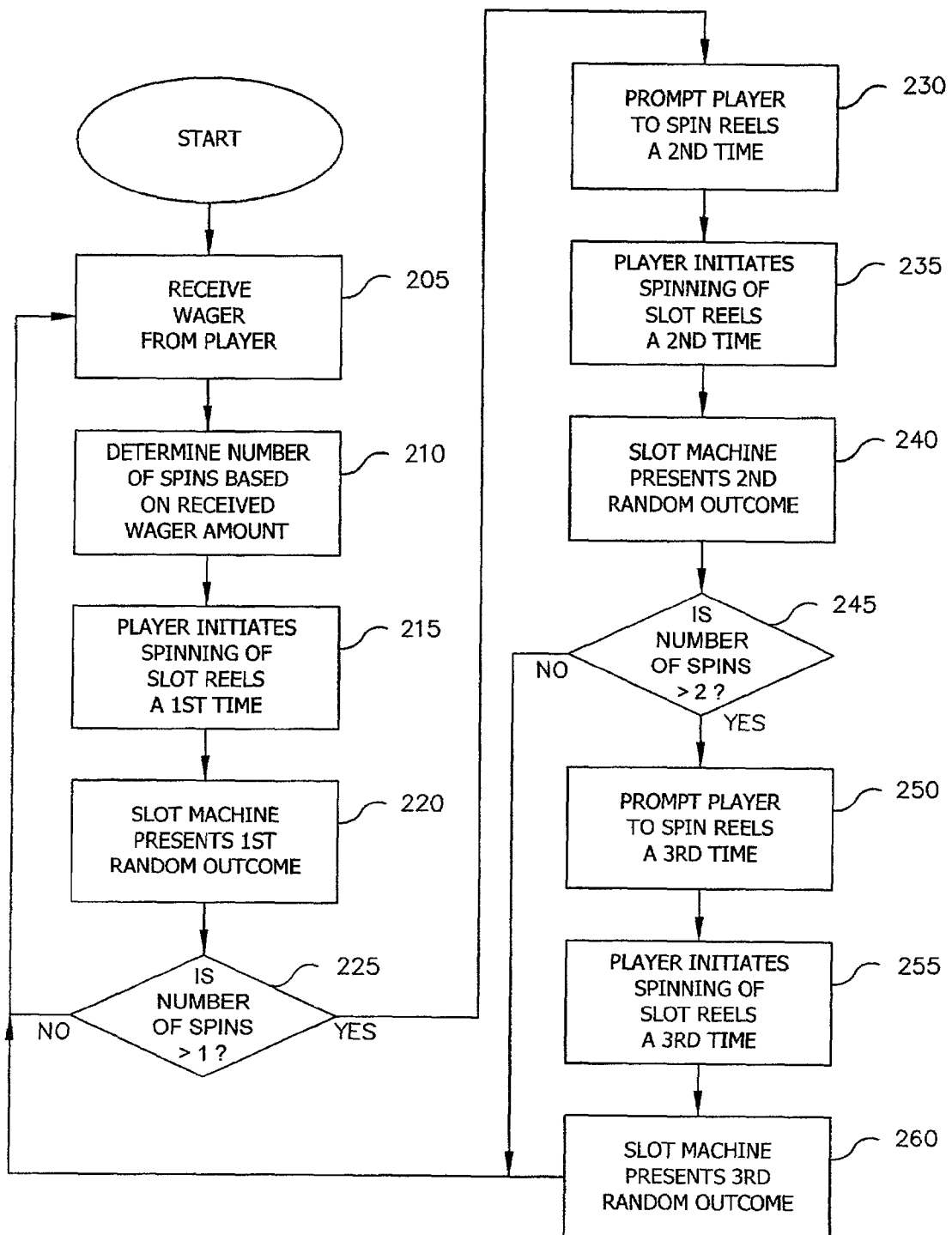


Fig. 2

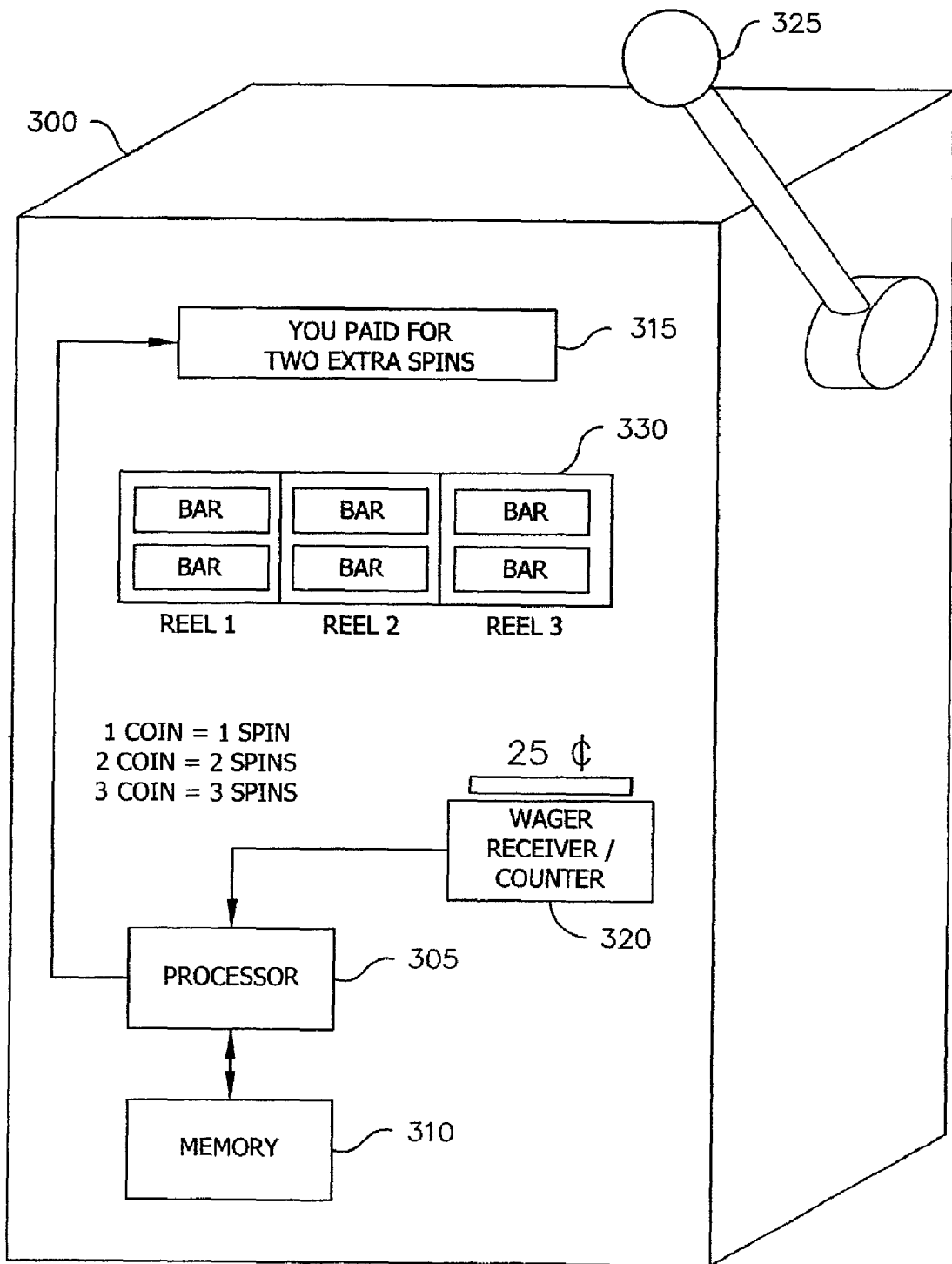


Fig. 3A

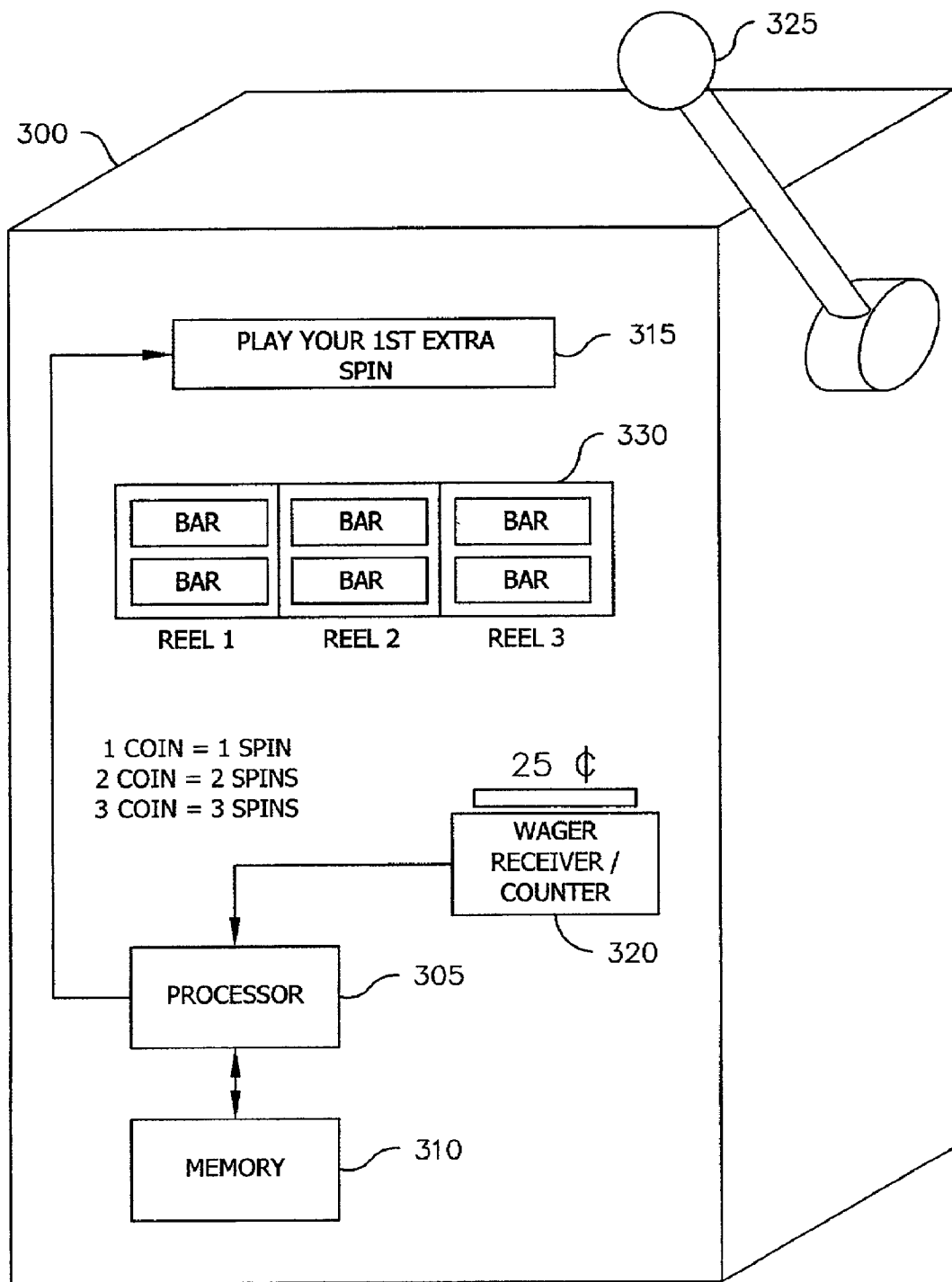


Fig. 3B

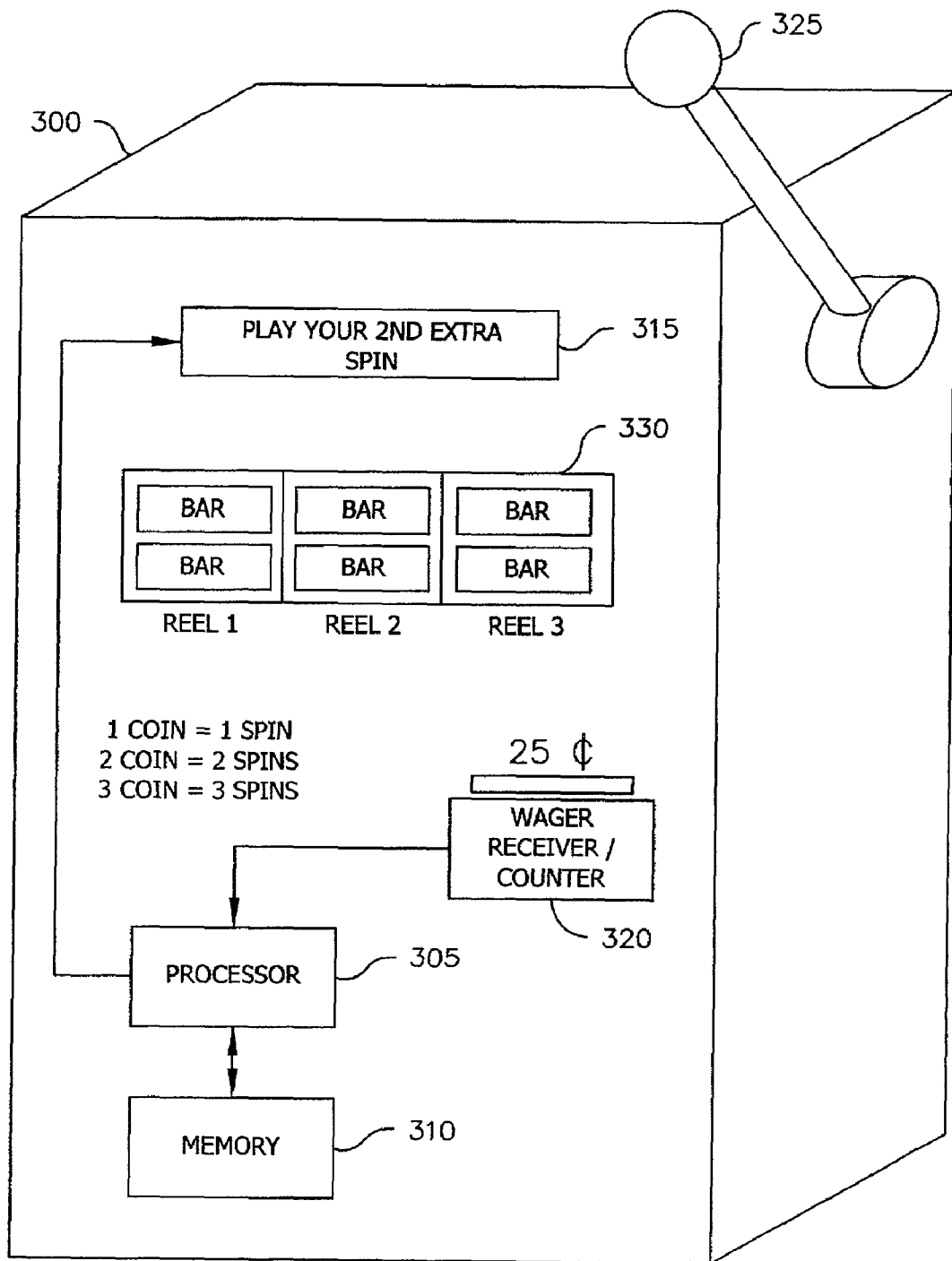


Fig. 3C

400

WINNERS ON ANY PULL		DD DD DD PAYS 1000 CREDITS ON ANY PULL WITH MAXIMUM BET
DD DD DD	800	
7 7 7	100	
3B 3B 3B	40	
2B 2B 2B	25	
1B 1B 1B	10	
AB AB AB	5	
ANY 2 CH	5	
ANY 1 CH	2	

Fig. 4

MULTIPLE SPIN SLOT MACHINE

BACKGROUND OF THE INVENTION

[0001] In conventional schemes used in slot machines, additional wager amounts may be input prior to a spin or pull of a slot machine. In a multiplier game, as more coins (wager amounts) are put in, the resultant payouts are multiplied. In a buy game ("buy-a-pay"), the more coins (wager amounts) that are put in, the more combinations of symbols on a single line can be a winner. Each coin buys a specific section of the pay table. In multi-line game (e.g., 3 line pay, 5 line pay), as more coins (wager amounts) are put in, additional lines can be a winner. The lines may be straight across, or may make patterns that cross over into adjacent lines. The lines are referred to as "pay lines" (paylines). In such conventional schemes, when extra wager amounts are paid to the slot machine, the player is provided only one opportunity to spin the reels of the slot machine. Thus, game play lasts only as long as the time it takes to complete the one spin.

[0002] In another conventional scheme, a "hold-and-re-spin" slot game permits a player to hold the results of one or more reels and spin the remaining reels a second time in an attempt to improve the resulting random outcome presented by the reels. Only one payout results from this scheme.

[0003] When additional coins are dropped into mechanical one line pay stepper reel slot machines before the reel is pulled, the additional coins drop down into the pay hopper or return coin hopper, and are not held by the machine as a credit for another spin. Thus, such slot machines have no ability to allow for multiple pulls for additional wager amounts.

[0004] FIG. 1 shows how a conventional slot machine operates. In step 105, the slot machine receives a wager from a player. The wager may consist of one or more coins, or may be debited from an account associated with the player through the use of a debit or credit card. In step 110, the player initiates the spinning of the slot reels by "pulling" on a lever or pressing a button on the slot machine. In step 115, the spinning reels of the slot machine come to rest and the slot machine presents a random outcome. If a winning outcome is presented by the slot machine (step 120), a payout is dispensed to the player by the slot machine (slot 125). Thus, the pace of the game is very rapid, and the player must provide a new wager for each opportunity to spin the reel(s) of the slot machine.

[0005] It is desired to extend the time of game play and increase the interaction time between the slot player and the slot machine without altering the overall payback percentages of the slot machine. The present invention fulfills this need by providing a new category of slot machine that accepts additional wager amounts. The slot machine plays a "single-line" game. The number of coins initially dropped into the slot machine, or credited using a debit arrangement, determines the number of extra pulls (spins) that the player may initiate.

BRIEF SUMMARY OF THE INVENTION

[0006] The present invention allows a player to play a game of chance on a slot machine. The slot machine has a plurality of reels which present a random outcome each time the reels spin and come to rest. One or more wager units are

received from a player to play the game. Before the slot reels begin to spin, the slot machine determines the number of spins that are to be initiated by the player without requiring receipt of an additional wager unit, based on the number of the wager units received from the player. The number of spins may be greater than one depending upon the number of received wager units. The number of wager units may be proportional to the determined number of spins.

[0007] In another embodiment of the present invention, a wager is received from the player to play the game. Before the slot reels begin to spin, the slot machine determines the number of spins that are to be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player. The number of spins may be greater than one depending upon the amount of the received wager.

[0008] The player may initiate the spinning of the slot reels a first time. The slot machine may present a first random outcome when the slot reels come to rest a first time. If the determined number of spins is greater than one, the slot machine may prompt the player to initiate the spinning of the slot reels a second time without requiring receipt of an additional wager.

[0009] The player may initiate the spinning of the slot reels a second time. The slot machine may present a second random outcome when the slot reels come to rest a second time. If the determined number of spins is greater than two, the slot machine may prompt the player to initiate the spinning of the slot reels a third time without requiring receipt of an additional wager.

[0010] In yet another embodiment of the present invention, the slot machine dispenses a payout if the presented random outcome matches one of a plurality of winning outcomes as determined by the slot machine. One or more wager units are received from a player to play the game. The sum of the received wager units is less than or equal to a maximum wager limit. The player initiates the spinning of the slot reels a first time. The slot machine presents a random outcome when the slot reels come to rest a first time. A payout is dispensed if the random outcome matches one of the winning outcomes. The size of the payout is larger if the sum of the received wager units is equal to the maximum limit and the random outcome matches a specific one of the winning outcomes.

[0011] In yet another embodiment of the present invention, a wager is received from a player to play the game. Before the slot reels begin to spin, the slot machine determines a number of extra spins of the slot reels that can be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player.

[0012] The player may be informed of the determined number of extra spins. The player initiates the spinning of the slot reels a first time. The slot machine presents a first random outcome when the slot reels come to rest a first time. If the determined number of extra spins is greater than zero, the slot machine informs the player that the spinning of the slot reels can be initiated a second time without requiring receipt of an additional wager.

[0013] The player may initiate the spinning of the slot reels a second time. The slot machine may present a second

random outcome when the slot reels come to rest a second time. If the determined number of extra spins is greater than one, the slot machine may inform the player that the spinning of the slot reels can be initiated a third time without requiring receipt of an additional wager.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0014] The following detailed description of preferred embodiments of the invention will be better understood when read in conjunction with the appended drawings. For the purpose of illustrating the invention, there are shown in the drawings embodiments which are presently preferred. It should be understood, however, that the invention is not limited to the precise arrangements and instrumentalities shown.

[0015] In the drawings:

[0016] **FIG. 1** shows a high-level functional flowchart including steps implemented by a conventional slot machine;

[0017] **FIG. 2** shows a high-level functional flowchart including steps implemented in accordance with the present invention;

[0018] **FIGS. 3A, 3B and 3C** show an example of a slot machine in accordance with a preferred embodiment of the present invention; and

[0019] **FIG. 4** shows a payout table in accordance with one embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0020] The basic premise of the present invention is to increase the reel spin value for the time that a slot player is using a specific slot machine. A player is allowed to make additional spins (i.e., additional pulls of the wheel) during the play period. A desired percentage hold is implemented by a single-line (one-payline) game wherein one coin (one wager amount) would entitle the player to two pulls or spins (2 for 1), two coins (two wager amounts) would entitle the player to three pulls (3 for 1), and so on. A pay table is used by the slot machine to play a "single-line game." The number of coins initially dropped into the machine (or credited using a debit arrangement) determines the number of extra pulls (spins).

[0021] If the player inserts only a single wager amount at the start of game play (e.g., one coin or the equivalent in debits), the player gets one pull and can win on only one line. This is similar to the manner in which a conventional slot machine operates.

[0022] In one embodiment of the present invention, if the slot player inserts an additional wager amount at the start of game play (i.e., double the single wager amount), the player gets a total of two pulls, but can still only win on one line for each of the pulls. The player is informed at the start of the game play that the additional wager amount entitles the player to an extra pull. The extra pull occurs after the all of the reels come to rest after the first pull. The slot machine prompts the player at the end of the first pull that an extra pull can be made, for example by indicating to the player to

"play your extra spin." The player must initiate the second pull. All of the reel positions are spun again during the second pull.

[0023] In another embodiment of the present invention, if the player inserts two additional wager amounts at the start of game play (i.e., triple the single wager amount), the player gets a total of three pulls, but can still only win on one line for each of the pulls. The player is informed at the start of the game play that the additional wager amounts entitle the player to two extra pulls. The details of the three-pull scheme are identical to the two-pull scheme, except that the player is informed twice (instead of once) during game play that an extra pull can be made.

[0024] In one preferred embodiment of the present invention, the top awards for a particular random outcome presented by the reels of the slot machine are paid at a premium rate when the player buys extra spins with additional coins. The promotional information on the slot machine will encourage the player to play "max coin" or "max bet" (i.e., put in 3 coins, instead of just 1) to get extra spins and extra payouts. The odds of winning a payout (irrespective of its value) is higher for the two and three spin options, than when making a single wager for only one spin.

[0025] The slot machine may be marketed as a "2 for 1" or "3 for 1" game. For example, the one play wager amount and the additional wager amount may be marketed as a single wager amount for which the player receives two spins. Likewise, the one play wager amount and the two additional wager amounts may be marketed as a single wager amount for which the player receives three spins. Effectively, the player is paying for extra spins with extra coins just as if the slot machine was fed a single coin, spun, fed another coin, spun, and so on. The one noted difference is that the odds of winning are better for the player when using the multiple spin option provided by the slot machine.

[0026] **FIG. 2** shows a preferred embodiment of the present invention wherein a wager for three pulls of a slot machine is received by the slot machine. The present invention is not necessarily limited to the preferred embodiment, as any number of pulls may be associated with a wager in accordance with the present invention. In step 205, the slot machine receives a wager from a player. The wager may consist of one or more coins, or may be debited from an account associated with the player through the use of a debit or credit card. In step 210, a processor in the slot machine determines the number of credited spins that the player may initiate without an additional wager. The number of credited spins is determined based on the wager that the slot machine receives from the player prior to the first spin. In step 215, the player initiates the spinning of the slot reels of the slot machine a first time by "pulling" on a lever or pressing a button on the slot machine. In step 220, the spinning reels come to rest and the slot machine presents a first random outcome. If the determined number of credited spins is not greater than one (i.e., it is one), the slot machine will not allow the player to initiate the spinning of the reels a second time until another wager is received by the slot machine. If the determined number of credited spins is greater than one (step 225), the player is prompted to initiate the spinning of the reels a second time (step 230). In step 235, the player initiates the spinning of the slot reels a second time. In step 240, the spinning reels come to rest and the slot machine

presents a second random outcome. If the determined number of credited spins is greater than two (step 245), the player is prompted to initiate the spinning of the reels a third time (step 250). In step 255, the player initiates the spinning of the slot reels a third time. In step 260, the spinning reels come to rest and the slot machine presents a third random outcome. If any of the random outcomes are winning outcomes, a payout is dispensed to the player by the slot machine for each winning outcome. After the third random outcome, the player must provide a new wager before again spinning the reels of the slot machine.

[0027] FIGS. 3A, 3B and 3C illustrate an example of a slot machine 300 operating in accordance with the preferred embodiment described above. The slot machine 300 includes a processor 305, a memory 310, a display 315, a wager receiver/counter 320, a means 325 for initiating the spinning of the slot reels of slot machine 300, and random outcome means 330 for presenting a random outcome. Random outcome means 330 includes one or more slot reels (e.g., see reels 1, 2 and 3).

[0028] A game of chance is played on slot machine 300 which presents a random outcome each time the slot reels of the slot machine 300 spin and come to rest. The wager receiver/counter 320 receives a wager from a player to play the game. The wager may consist of one or more coins (e.g., one, two or three quarters), or may be debited from an account associated with the player through the use of a debit or credit card. Before the slot reels begin to spin, the processor 305 in slot machine 300 determines the number of spins that are to be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player by wager receiver/counter 320. As shown in FIG. 3A, if an additional wager unit is received by wager receiver/counter 320, the display 315 informs the player that he or she is entitled to at least one extra spin (e.g., "you paid for two extra spins"). The player initiates the spinning of the slot reels a first time by activating the means 325 for initiating the spinning of the slot reels of slot machine 300 (e.g., the player pulls a handle/lever, or pushes a button). The random outcome means 330 of slot machine 300 presents a first random outcome when the slot reels of the random outcome means come to rest a first time. If the first random outcome is a winning outcome, a payout is dispensed to the player by the slot machine 300.

[0029] As shown in FIG. 3B, if the number of spins determined by processor 305 is greater than one (or the number of extra spins is at least one), the display 315 of slot machine 300 prompts the player to initiate the spinning of the slot reels a second time (e.g., "play your 1st extra spin") without requiring receipt of an additional wager. When the player initiates the spinning of the slot reels a second time, the slot machine 300 presents a second random outcome when the slot reels come to rest a second time. If the second random outcome is a winning outcome, a payout is dispensed to the player by the slot machine 300.

[0030] As shown in FIG. 3C, if the number of spins determined by processor 305 is greater than two (or the number of extra spins is at least two), the display 315 of slot machine 300 prompts the player to initiate the spinning of the slot reels a third time without requiring receipt of an additional wager (e.g., "play your 2nd extra spin"). When the player initiates the spinning of the slot reels a third time,

the slot machine 300 presents a third random outcome when the slot reels come to rest a third time. If the third random outcome is a winning outcome, a payout is dispensed to the player by the slot machine 300.

[0031] The wager received by the wager receiver/counter 320 may consist of one or more wager units (e.g., coins). The processor 305 determines the number of spins that are to be initiated by the player without requiring receipt of an additional wager unit, based on the number of the wager units. The number of wager units can be proportional to the determined number of spins (e.g., one coin per spin, two coins per spin, etc.).

[0032] In another embodiment of the present invention, the slot machine 300 dispenses a payout if the presented random outcome matches one of a plurality of winning outcomes as determined by the slot machine 300. One or more wager units are received from a player to play the game. The sum of the received wager units is less than or equal to a maximum wager limit. The player initiates the spinning of the slot reels a first time. The slot machine 300 presents a random outcome when the slot reels come to rest a first time. The slot machine 300 dispenses a payout if the random outcome matches one of the winning outcomes. The size of the payout is larger if the sum of the received wager units is equal to the maximum limit and the random outcome matches a specific one of the winning outcomes.

[0033] FIG. 4 shows an example of a payout table 400 (also referred to as a "pay schedule" or "paytable") used for determining the amount of a payout that is to be disbursed by the slot machine 300 when a winning outcome results. As described above, when a maximum wager is received by the slot machine 300, a special payout is paid if a specific winning outcome results (e.g., 1000 credits for DD DD DD). If the maximum wager is not received, a smaller payout is disbursed (e.g., 800 credits for DD DD DD).

[0034] The coding for the example in FIG. 4 is as follows:

[0035] DD=Double Diamond;

[0036] 7=Seven;

[0037] 3B=Triple Bar;

[0038] 2B=Double Bar;

[0039] 1B=Single Bar;

[0040] AB=Any Bar (i.e., a single, double or triple bar);

[0041] 2 CH=Two Cherries; and

[0042] 1 CH=Single Cherry.

[0043] The scope of the present invention includes embodiments with any number of slot reels, including only one slot reel. The present invention may be implemented with any combination of hardware and software. If implemented as a computer-implemented apparatus, the present invention is implemented using means for performing all of the steps and functions described above.

[0044] The present invention may be implemented with any combination of hardware and software. The present invention can be included in an article of manufacture (e.g., one or more computer program products) having, for instance, computer useable media. The media has embodied

therein, for instance, computer readable program code means for providing and facilitating the mechanisms of the present invention. The article of manufacture can be included as part of a computer system or sold separately.

[0045] It will be appreciated by those skilled in the art that changes could be made to the embodiments described above without departing from the broad inventive concept thereof. It is understood, therefore, that this invention is not limited to the particular embodiments disclosed, but it is intended to cover modifications within the spirit and scope of the present invention.

What is claimed is:

1. A method of playing a game of chance on a slot machine, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the method comprising:

- (a) receiving one or more wager units from a player to play the game; and
- (b) before the slot reels begin to spin, the slot machine determining the number of spins that are to be initiated by the player without requiring receipt of an additional wager unit, based on the number of the wager units received from the player, wherein the number of spins may be greater than one depending upon the number of received wager units.

2. The method of claim 1 wherein the number of wager units is proportional to the determined number of spins.

3. A method of playing a game of chance on a slot machine, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the method comprising:

- (a) receiving a wager from a player to play the game; and
- (b) before the slot reels begin to spin, the slot machine determining the number of spins that are to be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player, wherein the number of spins may be greater than one depending upon the amount of the received wager.

4. The method of claim 3 further comprising:

- (c) the player initiating the spinning of the slot reels a first time;
- (d) the slot machine presenting a first random outcome when the slot reels come to rest a first time; and
- (e) if the determined number of spins is greater than one, the slot machine prompting the player to initiate the spinning of the slot reels a second time without requiring receipt of an additional wager.

5. The method of claim 4 further comprising:

- (f) the player initiating the spinning of the slot reels a second time;
- (g) the slot machine presenting a second random outcome when the slot reels come to rest a second time; and
- (h) if the determined number of spins is greater than two, the slot machine prompting the player to initiate the spinning of the slot reels a third time without requiring receipt of an additional wager.

6. A method of playing a game of chance on a slot machine, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the slot machine dispensing a payout if the presented random outcome matches one of a plurality of winning outcomes as determined by the slot machine, the method comprising:

- (a) receiving one or more wager units from a player to play the game, the sum of the received wager units being less than or equal to a maximum wager limit;
- (b) the player initiating the spinning of the slot reels a first time;
- (c) the slot machine presenting a random outcome when the slot reels come to rest a first time; and
- (d) dispensing a payout if the random outcome of step (c) matches one of the winning outcomes, wherein the size of the payout is larger if the sum of the received wager units is equal to the maximum limit and the random outcome matches a specific one of the winning outcomes.

7. A method of playing a game of chance on a slot machine, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the method comprising:

- (a) receiving a wager from a player to play the game; and
- (b) before the slot reels begin to spin, the slot machine determining a number of extra spins of the slot reel that can be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player, wherein the number of spins may be greater than one depending upon the amount of the received wager.

8. The method of claim 7 further comprising:

- (c) informing the player of the determined number of extra spins;
- (d) the player initiating the spinning of the slot reels a first time;
- (e) the slot machine presenting a first random outcome when the slot reels come to rest a first time; and
- (f) if the determined number of extra spins is greater than zero, the slot machine informing the player that the spinning of the slot reels can be initiated a second time without requiring receipt of an additional wager.

9. The method of claim 8 further comprising:

- (g) the player initiating the spinning of the slot reels a second time;
- (h) the slot machine presenting a second random outcome when the slot reels come to rest a second time; and
- (i) if the determined number of extra spins is greater than one, the slot machine informing the player that the spinning of the slot reels can be initiated a third time without requiring receipt of an additional wager.

10. A slot machine for playing a game of chance on a slot machine, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the slot machine comprising:

- (a) means for receiving one or more wager units from a player to play the game; and
 - (b) means for determining, before the slot reels begin to spin, the number of spins that are to be initiated by the player without requiring receipt of an additional wager unit, based on the number of the wager units received from the player, wherein the number of spins may be greater than one depending upon the number of received wager units.
- 11.** The slot machine of claim 10 wherein the number of wager units is proportional to the determined number of spins.
- 12.** A slot machine for playing a game of chance, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the method comprising:
- (a) means for receiving a wager from a player to play the game; and
 - (b) means for determining, before the slot reels begin to spin, the number of spins that are to be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player, wherein the number of spins may be greater than one depending upon the amount of the received wager.
- 13.** The slot machine of claim 12 further comprising:
- (c) means for prompting the player to initiate the spinning of the slot reels a second time without requiring receipt of an additional wager, after the player initiates the spinning of the slot reels a first time and if the determined number of spins is greater than one.
- 14.** The slot machine of claim 13 further comprising:
- (d) means for prompting the player to initiate the spinning of the slot reels a third time without requiring receipt of an additional wager, after the player initiates the spinning of the slot reels a second time and if the determined number of spins is greater than two.
- 15.** A slot machine for playing a game of chance, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the slot machine dispensing a payout if the presented random outcome matches one of a plurality of winning outcomes as determined by the slot machine, the slot machine comprising:
- (a) means for receiving one or more wager units from a player to play the game, the sum of the received wager units being less than or equal to a maximum wager limit; and
 - (b) means for dispensing a payout if the random outcome matches one of the winning outcomes, wherein the size of the payout is larger if the sum of the received wager units is equal to the maximum limit and the random outcome matches a specific one of the winning outcomes.
- 16.** A slot machine for playing a game of chance, the slot machine having a plurality of slot reels which present a random outcome each time the slot reels spin and come to rest, the method comprising:
- (a) means for receiving a wager from a player to play the game; and
 - (b) means for determining, before the slot reels begin to spin, a number of extra spins of the slot reel that can be initiated by the player without requiring receipt of an additional wager, based on the amount of the wager received from the player, wherein the number of spins may be greater than one depending upon the amount of the received wager.
- 17.** The slot machine of claim 16 further comprising:
- (c) means for informing the player of the determined number of extra spins;
 - (d) means for informing the player, after the player initiates the spinning of the slot reels a first time, that the spinning of the slot reels can be initiated a second time without requiring receipt of an additional wager if the determined number of extra spins is greater than zero.
- 18.** The slot machine of claim 17 further comprising:
- (e) means for informing the player, after the player initiates the spinning of the slot reels a second time, that the spinning of the slot reels can be initiated a third time without requiring receipt of an additional wager if the determined number of extra spins is greater than one.

* * * * *