

GAMING MACHINE

CROSS REFERENCE TO THE RELATED APPLICATION

[0001] This application is based upon and claims the benefit of priority from the prior Japanese Patent Application No. P2002-335010, filed on Nov. 19, 2002; the entire contents of which are incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to symbol combination gaming machines such as slot machines and pachinko machines, having variably displaying means for variably displaying various kinds of symbols and the function of controlling the variable display and awarding a payoff to a player according to the outcome.

[0004] 2. Description of the Related Art

[0005] The slot machine is a typical gaming machine of this type. The slot machine has a plurality of rotary reels with a plurality of symbols arranged on their peripheries, and is designed to pay out coins or prizes upon winning which occurs when symbols on the reels which stop rotating are in a predetermined combination such as the alignment of the same symbols. It is a remarkable feature of the slot machine that it has "chance" factors, generally involving various sorts of chance to get a prize so that a player cannot fully control the outcome of a game by his or her skill.

[0006] Various methods have conventionally been taken to provide the "chance" factors. The recent mainstream of the slot machine adopts a control scheme called a "pre-stage determination" using a microcomputer, in which a winning combination selection is made by software and stop control of the reels is executed according to the selection. A slot machine described in Japanese Examined Patent Publication No. 3-72313, for example, relates to a slot machine with stop buttons, a so-called pachi-slo machine, having random number selecting means for selecting a random number in response to a player's operation of a start lever and a winning combination selecting table in which winning combinations are categorized into random number ranges of "large hit," "medium hit" and "small hit," according to the magnitudes of the symbols. When a random number selected is included in a winning area of the winning combination selecting table, the corresponding winning combination is determined as a winning combination, and the hit (winning) flag of the winning combination is set. Winning flags include those of a winning combination called a "small winning combination," which indicate that a combination of given symbols (such as "BELL" symbols or "CHERRY" symbols) along an activated pay line causes the payout of some ten coins, and those of a winning combination called a "bonus winning combination," which indicate that an alignment of given symbols (such as "7" symbols or "BAR" symbols) causes a state where winning is more likely to occur than in a normal game state during a certain number of games and leads to the payout of a large amount of some 100 to 400 coins.

[0007] A state in which a winning flag is set is generally called "internal winning," in which the winning combination along a pay line is enabled but a win does not yet actually

occur. To win, the operation of "observation push" in the timing (generally within four symbol segments) to stop rotating winning combination along a pay line is required. If the control timing is bad, no winning occurs despite internal winning, that is, what is a commonly called "miss" occurs.

[0008] The miss generally results from failure in observation push and has some patterns. In a first pattern, a target symbol is determined but a player cannot identify varying symbols and performs a stopping operation in a hit-or-miss manner and fails. In a second pattern, there is a plurality of possible winning combinations internally selected for a game and a player cannot determine which symbol to target for stopping and performs the stopping operation in a hit-or-miss manner and fails.

[0009] In the former, familiarization of observation push can increase precision to some degree. In the latter, a player even skilled in observation push cannot expect an increased precision of observation push because he or she needs to be aware of the internal winning state which cannot be seen.

[0010] If information about an internal winning combination is given, a game state like a bonus game in which a large amount of coins can be won can be provided even in a normal game state. There is a gaming machine employing such a gaming feature of the pachi-slo machine and having a function which is popularly called "assist time (AT)." When predetermined conditions are met, the gaming machine lets a player know of an internal winning and also the kind of internal winning combination to reduce misses and pays out a larger amount of coins than in a normal game which gives no information. AT is a "normal game state" among "game states" to be described below. An actual payout of coins may be made in a scheme comparable to that of a bonus game.

[0011] There is also a function of "super time (ST)" for making large or small payouts of coins by providing or not providing support for leading an "internal winning state" to a "win." A plurality of "stop tables" is prepared for determining the number of symbol segments by which a rotating reel for which a player presses the stopping button for stop control is rotated before being actually stopped from the symbol position at the stop control. Every time a winning combination is internally selected, a stop table for use is determined by random number selection. Winning does not occur unless a stopping operation is performed in a stop order specified in the stop table even if observation push are made in good timing to stop the winning combination along an activated pay line. Information on the stop table selected may be given or not given. Like the above-described "AT function," the "ST function" provides a payout of a large amount of coins as in a bonus game.

[0012] If there are three stopping buttons for stopping a left reel, center reel and right reel, for example, there are six pressing orders "left, center, right," "left, right, center," "right, center, left," "right, left, center," "center, right, left," and "center, left, right." Winning does not occur unless pressing is performed in an operating order specified in a stop table determined by random number selection.

[0013] During actual play, a game is switched between a special game state in which winning occurrence probability is increased as compared with a normal game as described above, and a normal game state in which the special game