

reflection areas 36BL, 36BC, 36BR, the light guide plate 35 and the liquid crystal panel 36 both of which constructs the liquid crystal display device 31, the player can see and recognize the symbols arranged on the reels. Therefore, in a case that the liquid crystal existing at the symbol display areas 12L, 21C, 21R is not driven, the LED lamps 29 and the fluorescent lamps 38a, 38b function as the illumination means for the symbols arranged on the reels 3L, 3C, 3R.

[0053] On the contrary, the light emitted from the fluorescent lamps 37a, 37b and led into the light guide plate 35 penetrates through the liquid crystal panel 34 and enters in eyes of the player. That is, the fluorescent lamps 37a, 37b function as the illumination means for the area in the liquid crystal panel 34 corresponding to the above window frame display areas 22L, 22C, 22R and the effect display area 23.

[0054] FIG. 7 (2) schematically shows function of each lamp when the liquid crystal existing at the symbol display areas 12L, 21C, 21R is driven (voltage is added between the transparent plates of portions corresponding to the symbol display areas in the liquid crystal panel 34).

[0055] A part of the light emitted from the fluorescent lamps 38a, 38b is reflected on the reel sheet. And a part of the light emitted from the LED lamps 29 penetrates through the reel sheet. Since a part of the above light is reflected on or absorbed in or penetrated through the areas that the liquid crystal is driven within the area of the liquid crystal panel 34, the player can see and recognize the effect display and the like displayed on the symbol display areas 21L, 21C, 21R. Therefore, in a case that the liquid crystal existing at the symbol display areas 12L, 21C, 21R is driven, the LED lamps 29 and the fluorescent lamps 38a, 38b function as the illumination means corresponding to the symbol display areas 21L, 21C, 21R within the area of the liquid crystal panel 34.

[0056] Here, in a case that a part of the areas corresponding to the symbol display areas 21L, 21C, 21R within the area of the liquid crystal panel 34 is driven, the LED lamps 29 and the fluorescent lamps 38a, 38b function as the illumination means for the symbols arranged on the reels 3L, 3C, 3R and as the areas corresponding to the liquid crystal not driven in the symbol display areas 21L, 21C, 21R within the liquid crystal panel 34.

[0057] FIG. 8 shows the circuitry construction including a main control circuit 41 for controlling game treatment operation in the gaming machine 1, peripheral devices electrically connected to the main control circuit 41, and a sub-control circuit 71 for controlling the liquid crystal display device 31 and speakers 12L, 12R based on the control command transmitted from the main control circuit 41. The main control circuit 41 and the sub-control circuit 71 construct the game result display control means. The main control circuit 41 has functions as the internal winning combination determination means, the first display control means and the beneficial state producing means. The internal winning combination determination means determines the internal winning combination among plural winning combinations based on the output from the game start instruction means. The first display control means controls the first display means based on the determined result by the internal winning combination determination means and the output by the game result leading means. The beneficial state producing means produces beneficial state for the player

when a predetermined game result is displayed on the game result display means. And the sub-control circuit 71 controls the second display means based on the determined result by the internal winning combination determination means and the output from the game result leading means.

[0058] The main control circuit 41 is mainly constructed from a microcomputer 42 arranged on the circuit board, in addition to a circuit for sampling random number. The microcomputer 42 includes a CPU 43 conducting control operation according to preset program, a ROM 44 and a RAM 45.

[0059] To the CPU 43, a clock pulse generator 46 generating reference clock pulses, a frequency divider 47, a random number generator 48 for generating random numbers sampled and a sampling circuit 49 are connected respectively. Here, as the means for sampling random number, it may construct that random number sampling is done according to the operation program of the CPU 43 in the microcomputer 42. In this case, the random number generator 48 and the sampling circuit 49 may be omitted, or these may be remained to back up random number sampling operation.

[0060] In the ROM 44 of the microcomputer 42, there are stored a probability lottery table utilized for judging random number sampling conducted every operation of the start lever 10 (start operation), a stop control table for determining stop combination of the reels according to operation of the stop buttons and various control instructions (commands) to transmit to the sub-control circuit 71. Here, the sub-control circuit 71 never transmits commands, information and the like to the main control circuit 41, but one-way transmission from the main control circuit 41 to the sub-control circuit 71 is only done.

[0061] In the circuit of FIG. 8, as main actuators controlled based on control signal from the microcomputer 42, there are various lamps (1-BET lamp 17a, 2-BET lamp 17b, MAX-BET lamp 17c), various display parts (bonus game information display part 16, payout display part 18, credit display part 19), a hopper 52 as the game value giving means (including drive part for payout) accumulating medals and paying out a predetermined number of medals according to instruction by a hopper drive circuit 51 and stepping motors 53L, 53C, 53R for driving the reels 3L, 3C, 3R to be rotated.

[0062] A motor drive circuit 54 for driving and controlling the stepping motors 53L, 53C, 53R, a hopper drive circuit 51 for driving and controlling the hopper 52 and a lamp drive circuit 56 for driving and controlling various lamps and a display drive circuit 56 for driving and controlling display parts are connected to the output part of the CPU 43 through an I/O port 57. These drive circuits controls operation in each of the actuators when receiving control commands such as drive commands each of which is output from the CPU 43.

[0063] Further, as for the input signal producing means mainly producing input signals which are necessary for the microcomputer 42 to produce the control commands, there are provided the BET switch 5, the medal sensor 6S for detecting the inserted medals, the C/P switch 7, the start switch 10S, the reel stop signal circuit 58, the reel position detecting circuit 59 and the payout completion signal circuit 60. These are also connected to the CPU 43 through the I/O port 57.