

GAMING MACHINE

FIELD OF TECHNOLOGY

[0001] This invention relates to a gaming machine comprising a transparent electric display panel disposed in front of variable display means for variably displaying designs.

DESCRIPTION OF RELATED ART

[0002] Conventionally, this type of gaming machine includes, for example, a slot machine. The slot machine comprises three reels embedded behind its front panel. Each reel comprises a reel band affixed on the outer periphery of its reel drum, and various designs are drawn on the outer periphery of the reel band. These designs may be viewed by a player through three windows formed in the front panel.

[0003] A slot machine game is started when the player's operation of a start lever causes each reel to rotate and a moving sequence of designs is variably displayed in each window. Subsequently, the player's operation of a stop button causes each reel to stop rotating, and designs corresponding to the operation timing of the stop button are stop-displayed in each window. At this time, if any predetermined combination of designs is stop-displayed in the windows, a winning occurs.

[0004] During the game, the slot machine game provides effects such as blinking lamps embedded in each reel or displaying character designs on a liquid crystal display device provided below the windows of the front panel.

SUMMARY OF THE INVENTION

[0005] In conventional gaming machines described above, the novelty of game effects is maintained by changing the blinking pattern of the lamps embedded in the reels, changing effect contents given by character designs displayed on the liquid crystal display device, or otherwise. However, in the conventional gaming machines described above, the machine components of the gaming machine for effecting game effects have been well-established. Accordingly, there are some difficulties in maintaining the novelty of game effects.

[0006] To solve these problems, this invention provides a gaming machine comprising: variable display means for variably displaying designs; and front display means disposed in front of the variable display means, wherein the front display means includes a transparent liquid crystal display panel through which said variable display means is able to be seen, a light guiding plate for guiding light emitted from a light source to the entire of said liquid crystal display panel, and diffusion means for diffusing the light guided by the light guiding plate to equalize the light which illuminates said liquid crystal display panel, and in these light guiding plate and diffusion means, transparent areas for ensuring the visibility of the variable display of said variable display means are formed.

[0007] According to this configuration, the liquid crystal display panel disposed in front of the variable display means for variably displaying designs serves as a new machine component for performing game effects. Further, in the light guiding plate and diffusion means, since transparent areas for ensuring the visibility of the variable display of the

variable display means are formed respectively, there is ensured the visibility of the designs variably displayed on the variable display means.

BRIEF DESCRIPTION OF DRAWINGS

[0008] FIG. 1 is a front view showing an appearance of a slot machine in accordance with an embodiment of this invention;

[0009] FIG. 2 shows how the pay lines depicted on the display windows of the slot machine in accordance with this embodiment are sequentially activated;

[0010] FIG. 3 is a vertical cross-sectional view of the reel display window unit of the slot machine in accordance with this embodiment;

[0011] FIG. 4 is an exploded perspective view of the reel display window unit shown in FIG. 3;

[0012] FIG. 5 shows symbols drawn on the outer periphery of the reels of the slot machine in accordance with this embodiment;

[0013] FIG. 6 is a perspective view showing a rotatable reel unit of the slot machine in accordance with this embodiment;

[0014] FIG. 7 is a perspective view showing a structure of a rotatable reel constituting the rotatable reel unit shown in FIG. 6;

[0015] FIG. 8 shows a symbol combination drawn on a payout display unit of the slot machine in accordance with this embodiment;

[0016] FIG. 9 is a block diagram showing a circuit configuration arranged on a main control board of the slot machine in accordance with this embodiment; and

[0017] FIG. 10 is a block diagram showing a circuit configuration arranged on a sub-control board of the slot machine in accordance with this embodiment.

DETAILED DESCRIPTION OF THE INVENTION

[0018] An embodiment will now be described in which a gaming machine in accordance with this invention is applied to a slot machine.

[0019] FIG. 1 is a front view showing an appearance of a slot machine 1 in accordance with this embodiment.

[0020] Inside a cabinet at the center of the main body of the slot machine 1, three reels 2, 3, and 4 are rotatably provided. These reels 2, 3, and 4 constitute variable display means for variably displaying various designs used for a game in a plurality of rows. On the outer periphery of each reel 2, 3, 4, a plurality of kinds of designs (hereinafter referred to as symbols) are drawn to form a symbol sequence. A reel display window unit 39 is provided in front of these reels 2-4. Through display windows 5, 6, and 7 formed in the reel display window unit 39, symbols drawn on the reels 2, 3, and 4 are observed, three symbols for each reel. A total of five pay lines are provided on the reel display window unit 39 where three of them are horizontal and two diagonal. Furthermore, below the display windows 5-7, on