

GAMING MACHINE

FIELD OF TECHNOLOGY

[0001] The present invention relates to a gaming machine having a liquid crystal display device.

DESCRIPTION OF RELATED ART

[0002] The present invention relates to a gaming machine having variable display means for variably displaying various symbols necessary for a game and control means such as microcomputer and the like for controlling the variable display, the gaming machine including so-called Japanese pachislot machine; slot machine; ball flipping machine such as the first grade~third grade Japanese pachinko machine, arrange ball machine, mah-jong ball gaming machine or slit-slot machine; video slot machine; video poker machine and the like.

[0003] For example, the Japanese pachislot machine has a mechanically variable display device in which it is provided a plurality of rotating reels each of which variably displays plural symbols within a display window arranged in front of the machine, the reels being parallel provided in plural lines. According to start operation by a player, the control means drives and controls the variable display device and the reels are rotated, thereby symbols on the reels are variably displayed. And rotation of each reel is stopped automatically or based on stop operation by the player. At that time, in a case that the symbols of each reel appearing within the display window comprises a predetermined combination (the winning mode), game media such as medals or coins are paid out, thereby a predetermined benefit is given to the player.

[0004] Further, it is previously proposed a gaming machine having a plurality of reel drums, reel strips each of which is arranged on an outer periphery of each reel drum and on each outer surface of which the symbols are described in a divided manner, light sources each of which illuminates the symbol division on each reel strip from the backside thereof and is arranged within each reel drum and control means for controlling illumination by the light sources. Here, in the reel strip, the symbol portion is made semitransparent and the background of the symbol is made transparent or semitransparent, and the light source is constructed from a plurality of luminous diodes arranged in a dot-matrix manner. The control means controls light emission of each luminous diode, thereby light emission of the light source is controlled so as to display characters or figures by the emitted diodes.

[0005] See, for example, Japanese unexamined Publication No. 2001-353255.

SUMMARY OF THE INVENTION

[0006] However, as mentioned above, in the gaming machine that the light source is arranged in each of the reel drums to illuminate the reel strips from the backside, the light source has only a use for illuminating the reel strip.

[0007] The object of the present invention is to provide a gaming machine in which each illumination means can illuminate with low cost so that the player can clearly see and recognize display contents with enough brightness, in spite whether the illumination means is exclusively provided

for each display means, comparing with a case that the illumination means is exclusively provided for each display means.

[0008] The gaming machine according to the present invention comprises: game result display means for displaying a game result thereon; and beneficial state generating means (for example, the main control circuit 41 mentioned later) for generating a beneficial state for a player when a predetermined game result is displayed on the game result display means; wherein the game result display means includes first display means (for example, the reels 3L, 3C, 3R mentioned later) and second display means (for example, the liquid crystal display device 31 mentioned later) arranged at a more front side than a display area of the first display means when seen from a front side of the gaming machine, and wherein common illumination means (for example, the LED lamps 29 or fluorescent lamps 38a, 38b) for illuminating both the first display means and the second display means is provided.

[0009] In the gaming machine of the present invention, the common illumination means may include front illumination means (for example, the fluorescent lamps 38a, 38b) for illuminating the first display means from a front side thereof and rear illumination means (for example, the LED lamps 29) for illuminating the first display means from a rear side thereof.

[0010] In the gaming machine of the present invention, the first display means may include a plurality of symbol display parts (for example, the reels 3L, 3C, 3R mentioned later) capable of variably displaying and stopping a symbol or plural symbols, and may be constructed so that one of the symbol display parts (for example, the reel sheets mentioned later) positioned between the second display means and the common illumination means has light transmittance; wherein the second display means may be constructed from a liquid crystal display device (for example, the liquid crystal display device 31 mentioned later) comprising a liquid crystal panel (for example, the liquid crystal panel 34 mentioned later), light guide means (for example, the light guide plate 35) arranged at a rear side of the liquid crystal panel, individual illumination means (for example, the fluorescent lamps 37a, 37b mentioned later) for guiding light to the light guide means and reflection means (for example, the reflection film 36 mentioned later) for reflecting light guided to the light guide means toward the liquid crystal panel positioned at a front side of the light guide means, and wherein an area (for example, the non-reflection area 36BL, 36BC, 36BR mentioned later) of the reflection means corresponding to the symbol display part may be made light transmitting part.

[0011] In the gaming machine of the present invention, the liquid crystal panel may be set to normally white.

[0012] The gaming machine of the present invention may further comprise: game start instruction means which is operable by a player; internal winning combination determining means for determination an internal winning combination based on an output from the game start instruction means; and game result display control means for conducting display control of the game result display means based on a determined result by the internal winning combination determination means; wherein the game result display control means may turn off all illumination means included in