

screen (right side) of one embodiment showing the reel of 6D displayed to the player if the player moves to the player's right.

[0045] FIG. 7A is an exploded perspective view of an exterior flat display screen, an interior flat display screen and a light source of one embodiment of the present invention.

[0046] FIG. 7B is a perspective view of an exterior flat display screen, an interior flat display screen, and a cathod ray tube light source of another embodiment of the present invention.

[0047] FIG. 8A is a perspective view of the gaming device of one embodiment of the present invention, illustrating a display device which enables a player, by looking at and through the exterior display screen, to view a display which includes different images and information generated by the exterior display screen and the interior display screen.

[0048] FIG. 8B is a schematic block diagram of the electronic configuration of one embodiment of the gaming device of the present invention.

#### DETAILED DESCRIPTION OF THE INVENTION

[0049] Referring now to FIGS. 1A and 8B, the gaming device 10 of one embodiment of the present invention includes a cabinet or housing 12 which houses a display device 14, touch screen 16 and a processor 132 connected to a memory device 134 and in communication with the display device and the touch screen. The processor controls the operation of gaming device 10 and, in particular, the game(s) provided by the gaming device, player inputs using the touch screen, other input devices and the display device 14. It should be appreciated that the gaming device of the present invention can provide the display device without the touch screen 16.

[0050] In one embodiment, the display device 14, which, under the control of the processor, generates and displays three-dimensional images to a player, includes a plurality of display screens which each are adapted to generate images or parts of images. In one embodiment, the display device 14 includes at least one light source such as a back light which functions with the display screens to make the images viewable to the player. In the example illustrated in FIG. 1A, the display device 14 includes two display screens including a first, exterior or frontmost display screen 18a and a second, interior, backmost or underlying display screen 18b. The two display screens 18a and 18b are mounted and oriented within the cabinet 12 in such a manner that at least one straight line of sight 20 intersects both of the faces or display surfaces of the display screens 18a and 18b. Preferably, the screens are completely aligned as illustrated in FIG. 1A and provide a plurality of straight lines of sight which intersect both faces of the display screen. A back lighting source 19 is positioned behind and aligned with the screens 18a and 18b.

[0051] The two display screens 18a and 18b are separated by a predetermined distance D which is the distance from the display surface of display screen 18a to display surface of display screen 18b. This distance can be any suitable predetermined distance desired by the gaming device manufacturer. It should be appreciated that in one embodiment, the display screens can be positioned adjacent to each other such

that only the thickness of the display screens separates the display surfaces which provide three-dimensional image. In such case, the distance D depends on the thickness of the exterior display screen.

[0052] As discussed in more detail below, the exterior display screen 18a is translucent or transparent, or alternatively has the capacity to be translucent or transparent under the control of the processor. As discussed in more detail below, the interior display screen 18b can be any suitable device adapted to display the images. In one embodiment, the interior display screen is translucent or transparent, or has the capacity to be translucent or transparent. When the exterior display screen 18a is transparent or translucent, a player can see the images displayed on the exterior display screen 18a as well as the images displayed on the interior display screen (i.e., by looking through the transparent exterior display screen). Accordingly, the present invention can display co-acting or overlapping images to a player to enable a player to play a wagering game or provide other game functions or game related functions. In certain embodiments, the present invention also provides three dimensional images which comprise corresponding images on each display screen. The corresponding images on each display screen provide an image viewable to a player which has three actual dimensions based on the distance D between the display surfaces of the display screens. In the embodiment where the interior display screen 18b is transparent or translucent, the interior display screen preferably includes a light source such as a back light source 19.

[0053] The display screens 18a and 18b are preferably positioned in different but parallel planes. However, it should be appreciated that the display screens 18a and 18b can be positioned in planes which are not parallel to one another. Also, the display screens 18a and 18b are preferably substantially flat, although it should be appreciated that the display screens 18a and 18b can have any suitable shape, such as concave and convex shapes and non-uniform shapes.

[0054] As illustrated in FIGS. 1B, 1C and 1D, the two display screens 18a and 18b co-act to display a three dimensional image on the display device 14 such as a reel 24 of a slot machine. In the example illustrated in FIGS. 1B, 1C and 1D, the interior display screen 18b displays the image of the reel 24 including the symbols and the exterior display screen 18a displays the symbols 24b. As a result, the gaming device 10 displays a three-dimensional image of the reel 24 to the player as illustrated in FIG. 1D. This representation or image is formed in three actual dimensions. The depth or z-dimension of image of the symbols is equal to or otherwise based on or derived from the distance D which separates display surfaces of the display screens 18a and 18b. This type of three-dimensional representation is relatively highly engaging and interesting to players because the image of the reel and specifically symbols on the reel is actually formed or generated in all three dimensions.

[0055] The depth which a player sees in the three-dimensional image or representation is the actual depth D. Although not shown, the gaming device may also cause a player to perceive a depth which is based upon or derived from the actual depth D. For example, the gaming device can multiply the depth D by a numerical factor to generate a perceived depth which is greater than or less than the actual depth D. It should be understood that the gaming device can