

[0031] FIG. 1*b* is a side view of a game display according to embodiments of the invention and illustrates further details of the display 112. In some embodiments, display 112 includes a primary game display 120, and a secondary game display 122. In some embodiments, primary game display 120 may be a mechanical display, such as a plurality of reels for a slot machine (described further below), a wheel, including a roulette wheel, one or more dice, a pachinko board, or other board game. No embodiment of the invention is limited to any particular mechanical display. In alternative embodiments, primary game display may be a video based display such as a CRT or LCD. In further alternative embodiments, primary game display 120 may be a diorama presenting a three-dimensional model for a game environment. In some implementations the diorama may be stationary, while in other implementations the diorama may slide or move in one or more dimensions.

[0032] Secondary game display 122 is positioned over primary game display 120. In some embodiments, secondary game display 122 provides a video image that may be selectively made transparent or semi-transparent (opaque), thus allowing the display of images on secondary game display 122 while allowing selective portions of the primary game display 120 to be seen through secondary game display 122. In some embodiments, secondary display 122 is a transmissive liquid crystal display (LCD). Line of sight indicator 130 shows the viewing direction, wherein images on primary display 120 pass through transparent or semi-transparent portions of secondary game display 122 to a player.

[0033] Additionally, some embodiments of the invention include touch screen 124 mounted on secondary game display 122.

[0034] It should be noted that a secondary game display comprising a transmissive display may be positioned over top box display 40.

[0035] FIG. 1*c* is a side view illustrating a gaming machine 140 according to alternative embodiments of the invention. In some embodiments, a gaming machine cabinet 142 houses components of a gaming machine such as a processor and memory that control the operation of the gaming machine. A game display 144 is coupled to the processor of the gaming machine, and may be rotatably mounted to game machine cabinet 142. In some embodiments, game display 144 is placed in a substantially horizontal position when not in use, and is rotated to a non-horizontal position when a player desires to play a wagering game. Game display 144 may be a transmissive LCD device, thereby allowing a player to see through transparent or semi-transparent portions of the display.

[0036] FIG. 1*d* illustrates an embodiment of the invention where the primary game display comprises a spinning reel slot machine 10 that includes a plurality of mechanical rotatable reels 12*a*, 12*b*, 12*c* and a video display (see FIGS. 2*a* and 2*b*). In response to a wager, the reels 12*a*, 12*b*, 12*c* are rotated and stopped to randomly place symbols on the reels in visual association with a display area 16. Payouts are awarded based on combinations and arrangements of the symbols appearing in the display area 16. The video display provides a video image 18 occupying the display area 16 and superimposed on the reels 12*a*, 12*b*, 12*c*. The video image 18 may be interactive with the reels 12*a*, 12*b*, 12*c*, may be

static or dynamic, and may include such graphics as payout values, a pay table, pay lines, bonus game features, special effects, thematic scenery, and instructional information. In the illustrated embodiment, the slot machine 10 is an "upright" version in which the display area 16 is oriented vertically relative to the player. Alternatively, the slot machine 10 may be a "slant-top" version in which the display area 16 is slanted at about a thirty degree angle toward the player of the slot machine 10.

[0037] Referring to FIGS. 2*a* and 2*b*, the video image 18 in the display area 16 may be either a direct image (FIG. 2*a*) or a virtual image (FIG. 2*b*). If the video image 18 is a direct image, as in FIG. 2*a*, the direct image is preferably generated by a flat panel transmissive video display 14*a* positioned in front of the reels 12*a*, 12*b*, 12*c*. The transmissive display 14*a* may, for example, be a transmissive liquid crystal display (LCD) commercially available from LG Phillips LCD Co., Ltd., of Seoul, Korea. The transmissive display 14*a* may be outfitted with a touch screen mounted to a front surface of the display 14*a*. The touch screen contains soft touch keys denoted by the image on the underlying display 14*a* and used to operate the slot machine 10.

[0038] If the video image 18 is a virtual image, as in FIG. 2*b*, the virtual image is preferably generated by a projection arrangement including a video display 14*b* and a partially reflective mirror 20. The video display 14*b* and the partially reflective mirror 20 are relatively positioned to project the virtual image in front of the reels 12*a*, 12*b*, 12*c* between the reels and a player. The video display 14*b* is preferably mounted below the reels 12*a*, 12*b*, 12*c* and is generally perpendicular to the display area 16. The mirror 20 is preferably mounted in front of the reels 12*a*, 12*b*, 12*c* and is oriented at approximately a forty-five degree angle relative to both the video display 14*b* and the display area 16. The virtual image is generally parallel to the display area 16 and may, in fact, occupy the display area 16. Also, the virtual image may be three dimensional. In the embodiment of FIG. 2*b*, the display area 16 includes a glass cover/window. This cover is optionally outfitted with a touch screen that contains soft touch keys denoted by the virtual image and used to operate the slot machine 10.

[0039] The video display 14*b* in FIG. 2*b* may be a CRT, LCD, dot matrix, LED, electro-luminescent, or other type of video display known in the art. Also, instead of mounting the video display 14*b* below the reels 12*a*, 12*b*, 12*c*, the display 14*b* may be mounted above the reels with the mirror 20 still oriented at approximately a forty-five degree angle relative to both the video display 14*b* and the display area 16.

[0040] Referring back to FIG. 1*d*, the slot machine 10 is operable to play a basic slot game with the three mechanical spinning reels 12*a*, 12*b*, 12*c* and a bonus game triggered by a start-bonus outcome in the basic game. The number of mechanical reels may vary, for example, to include one or more additional reels. The mechanical reels may be mounted to a horizontal axis to spin vertically as shown or may, alternatively, be mounted to a vertical axis to spin horizontally. Also, instead of each column of symbols being associated with a single reel, each individual symbol may be associated with a single reel such that a symbol array of nine symbols is associated with nine distinct reels. As shown in FIG. 12, in some embodiments of the invention, superimposed video image 18 may be used to provide one or more