

[0009] According to several embodiments of the present invention, the disclosed systems and methods involve a gaming machine adapted for accepting a wager, playing a game based on the wager and granting a payout based on the result of the game. This gaming machine can include an exterior housing arranged to contain a plurality of internal gaming machine components, an MGC adapted to control one or more game aspects, a reversible display device configured to display multiple visual images from multiple surfaces, and one or more optical devices adapted to redirect at least one of these visual images such that it is not viewed directly from the liquid crystal display cell. In addition to controlling various game aspects, the MGC can also be in communication with and control one or more aspects of the various internal components within the gaming machine. The reversible display device can be in communication with the MGC, can be located within or about the exterior housing of the gaming machine, and can have a plurality of virtual curtains that are adapted to alternate between blocking and permitting the display of various visual images.

[0010] In one particular embodiment, the reversible display device is an LCD configured to display a first visual image from a first surface and a second visual image from a second surface opposite the first surface. In addition to the virtual curtains, this LCD has an LCD cell and various illumination components, all of which are arranged such that light is reflected into and through the LCD cell in one direction to display the first visual image at the first surface and then in an opposite direction to display the second visual image at the second surface. This can involve a repeated pattern of darkening or “closing” one virtual curtain at a blocked surface and clearing or “opening” another virtual curtain at a viewed surface, along with a coordinated activation and deactivation of lamps or illumination components as appropriate. When repeated at a “frame rate” of an appropriate number of frames per second, a single LCD cell can be made to display multiple visual images in different directions, such as to both the first and second surfaces of the LCD. These multiple visual images can be the same or completely different, and can be repeated static images, video streams or a combination of both.

[0011] Video display devices other than an LCD can also be used, and such other devices can include an LED, a plasma display, a field emission display, a digital light processing display, and an electroluminescence display, among others. Such other display devices preferably have a cell or similar core display component, and can also use virtual curtains at multiple surfaces that alternate between blocking and displaying the content of the cell or other core display component. In the event that separate illumination sources are needed, such as for an LCD, then such lamps or illumination components can be similarly provided. Where the cell or core display component is self-illuminating, such as for an LED or EL display, then additional lamps or illumination components may not be necessary.

[0012] In another particular embodiment, a gaming system is provided. This gaming system includes a plurality of input and output devices adapted to accept wagers, play games and grant payouts based on the results of the games, an MGC in communication with at least one of these input and output devices and adapted to control one or more game aspects, and at least one single reversible display device in communication with the MGC and configured to display multiple

visual images of gaming events from multiple surfaces to one or more players. In one instance, one visual image of a gaming event is displayed from one surface to one player at a given viewing position, while another visual image of a gaming event is displayed from another surface opposite the first surface to another player at another viewing position separate from the first given viewing position. As in the foregoing embodiment, this reversible display device can have an LCD cell or other core display component, as well as a plurality of virtual curtains adapted to alternate between reflecting light into the LCD cell or other core display component and permitting light from the LCD cell or other core display component to pass therethrough and be displayed. One or more illumination components may also be included, if necessary. In addition, one or more optical devices may also be included, if desired.

[0013] In yet another embodiment, a method of displaying visual images at a gaming machine adapted for accepting a wager, playing a game based on the wager and granting a payout based on the result of the game is provided. This method can include the steps of providing a gaming machine having a reversible display device that is similar or identical to those as noted above, communicating various visual images to an LCD cell or similar core display component, opening and closing various virtual curtain such that light from the LCD cell or other such component can or cannot substantially pass therethrough as appropriate, and displaying the various visual images for various time intervals from their respective surfaces of the display device while the various virtual curtains are in appropriate states for such displays. In one particular embodiment under this method, such a process can include opening a first virtual curtain such that light can pass therethrough, closing a second virtual curtain such that light cannot substantially pass therethrough, and displaying a first visual image for a first time interval from a first surface of the reversible display device while the first virtual curtain is open and the second virtual curtain is closed. This particular embodiment can also include the steps of closing the first virtual curtain, opening the second virtual curtain, and displaying a second visual image for a second time interval from a second surface of the reversible display device while the first virtual curtain is closed and the second virtual curtain is open. Preferably, the second time interval does not overlap the first time interval. This process can then be repeated for a sufficient number of cycles per second, such that the first and second images can appear to be constantly displayed at the two different surfaces. Various additional steps can also be included, such as providing one or more optical devices within said gaming machine, and arranging such an optical device or devices to redirect a visual image such that it is not viewed directly from the display device.

[0014] In more detailed embodiments, the optical device or devices can include a lens or a mirror, such as a parabolic mirror adapted to redirect and enlarge a visual image. Such a lens, mirror, or set of lenses and/or mirrors can be adapted such that the first and said second visual images are simultaneously viewable by the same viewer or at the same viewing position despite any relative orientation of the original display device surfaces with respect to one another. A visual image can be viewable at a given viewing position directly from the LCD or other reversible display device, while another visual image is redirected by one or more mirrors, lenses or other optical devices such that it is also