

[0048] Under the control of processor 132, display devices 18 generate visual information for person 21. As shown in FIG. 1A, there are three layered display devices 18: a first, exterior or frontmost display device 18a, a second or intermediate display device 18b, and a third, interior, or backmost display screen 18c. The display devices 18a, 18b and 18c are mounted and oriented within the cabinet 12 in such a manner that a straight and common line of sight 20 intersects the display screens of all three display devices 18a, 18b and 18c. In addition, display devices 18a, 18b and 18c are all relatively flat and aligned about in parallel to provide a plurality of common lines of sight that intersect screens for all three.

[0049] The gaming machine may also include one or more light sources. In one embodiment, display devices 18 include LCD panels and at least one light source that provides light, such as white light, to the pixilated filter elements on each LCD panel. For example, a back lighting source (not shown) may be positioned behind display device 18c. The pixilated panel for each parallel display device 18a, 18b and 18c then filters white light from the backmost backlight to controllably output color images on each screen.

[0050] Other light sources may be used to illuminate a reflective or transmissive light filter. For example, each display device 18 may be individually illuminated using a white light source attached near the sides of each pixelating panel; the side light source may include a mini-fluorescence source and light guide that transmits light from the side light source, down the flat panel, and to all the pixilated filter elements in the planar LCD panel for pixilated image production. Other suitable light sources may include cold cathode fluorescent light sources (CCFLs) and/or light emitting diodes, for example.

[0051] In another embodiment, a distal and emissive display device is arranged behind a proximate and non-emissive display device, and provides light to the proximate display device, which then filters the light to create an image. For example, a flat OLED or plasma display device 18c may be used to a) produce an image and b) to emit light that is filtered by LCD panels 18a and 18b. In this case, the distal and emissive display device emits at least some white light. For example, video output of one or more reels may include significant white light that is also used to illuminate one or more LCD panels for pixilated filtering. In another embodiment, the proximate LCD panels use reflective light where the light comes from in front of the gaming machine, e.g., from the ambient room. As one of skill in the art will appreciate, more light is needed as the number of reflective or non-emissive light filter-type display device increases, e.g., from 1 to 2 pixilated LCD panels 18a and 18b.

[0052] The proximate display devices 18a and 18b each have the capacity to be partially or completely transparent or translucent. In a specific embodiment, the relatively flat and thin display devices 18a and 18b are liquid crystal display devices (LCDs). Other display technologies are also suitable for use. Various companies have developed relatively flat display devices that have the capacity to be transparent or translucent. One such company is Uni-Pixel Displays, Inc., Inc. of Houston Tex., which sells display screens that employ time multiplex optical shutter (TMOS) technology. This TMOS display technology includes: (a) selectively controlled pixels that shutter light out of a light guidance substrate by violating the light guidance conditions of the substrate and (b) a system for repeatedly causing such violation in a time multiplex fashion. The display screens that embody

TMOS technology are inherently transparent and they can be switched to display colors in any pixel area. A transparent OLED may also be used. An electroluminescent display is also suitable for use with proximate display devices 18a and 18b. Also, Planar Systems Inc. of Beaverton Oreg. and Samsung of Korea, both produce several display devices that are suitable for use herein and that can be translucent or transparent. Kent Displays Inc. of Kent Ohio also produces Cholesteric LCD display devices that operate as a light valve and/or a monochrome LCD panel.

[0053] FIG. 1B shows a display device arrangement suitable for use with a gaming machine in accordance with another embodiment of the present invention. In this arrangement, a touchscreen 16 is arranged in front of an exterior LCD panel 18a, an intermediate light valve 18e and a display device 18d with a curved surface. A common line of sight 20 passes through all four layered devices.

[0054] Light valve 18e selectively permits light to pass therethrough in response to a control signal. Various devices may be utilized for the light valve 18e, including, but not limited to, suspended particle devices (SPD), Cholesteric LCD devices, electrochromic devices, polymer dispersed liquid crystal (PDLC) devices, etc. Light valve 18e switches between being transparent, and being opaque (or translucent), depending on a received control signal. For example, SPDs and PDLC devices become transparent when applied with a current and become opaque or translucent when little or no current is applied. On the other hand, electrochromic devices become opaque when applied with a current, and transparent when little or no current is applied. Additionally, light valve 18e may attain varying levels of translucency and opacity. For example, while a PDLC device is generally either transparent or opaque, suspended particle devices and electrochromic devices allow for varying degrees of transparency, opacity or translucency, depending on the applied current level. Further description of a light valve suitable for use herein is described in commonly owned and co-pending patent application Ser. No. 10/755,657 and entitled "METHOD AND APPARATUS FOR USING A LIGHT VALVE TO REDUCE THE VISIBILITY OF AN OBJECT WITHIN A GAMING APPARATUS", which is incorporated herein by reference in its entirety for all purposes.

[0055] In one embodiment, the gaming machine includes a touchscreen 16 disposed outside the exterior display device 18a. Touchscreen 16 detects and senses pressure, and in some cases varying degrees of pressure, applied by a person to the touchscreen 16. Touchscreen 16 may include a capacitive, resistive, acoustic or other pressure sensitive technology. Electrical communication between touchscreen 16 and the gaming machine processor enable the processor to detect a player pressing on an area of the display screen (and, for some touchscreens, how hard a player is pushing on a particular area of the display screen). Using one or more programs stored within memory of the gaming machine, the processor enables a player to activate game elements or functions by applying pressure to certain portions of touchscreen 16. Several vendors known to those of skill in the art produce a touchscreen suitable for use with a gaming machine.

[0056] As the term is used herein, a common line of sight refers to a straight line that intersects a portion of each display device. The line of sight is a geometric construct used herein for describing a spatial arrangement of display devices and need not be an actual line of some sort in the gaming machine. If all the proximate display devices are transparent along the