

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.

**[0028]** A transparent OLED may also be used. An electroluminescent display may also be 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 the uses described 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. Other multi-layer display devices are discussed in detail in co-pending U.S. patent application Ser. No. 11/514,808, entitled "Gaming Machine With Layered Displays," filed Sep. 1, 2006, which is incorporated herein by reference in its entirety and for all purposes.

**[0029]** Regardless of the exact technology used, LCD or otherwise, it will be readily appreciated that each display screen or device **18a**, **18b**, **18c** is generally adapted to present a graphical display thereupon based upon one or more display signals. While each display screen **18a**, **18b**, **18c** is generally able to make its own separate visual presentation to a viewer, two or more of these display screens are positioned (i.e., "stacked") in the multi-layer display such that the various graphical displays on each screen are combined for a single visual presentation to a viewer.

**[0030]** The layered display screens **18** may be used in a variety of manners to present visual images to a user or player. In some cases, video data and other visual images displayed on the display devices **18a** and **18c** are positioned such that the images do not overlap (that is, the images are not superimposed). In other instances, the images do overlap. It should also be appreciated that the images displayed on the display screen can fade-in fade out, pulsate, move between screens, and perform other inter-screen graphics to create additional affects, if desired.

**[0031]** In another specific embodiment, layered display screens or devices **18** provide 3-D effects. Generic device **1** or gaming machine **10** may use a combination of virtual 3-D graphics on any one of the display screens—in addition to 3-D graphics obtained using the different depths of the layered display devices. Virtual 3-D graphics on a single screen typically involve shading, highlighting and perspective techniques that selectively position graphics in an image to create the perception of depth. These virtual 3-D image techniques cause the human eye to perceive depth in an image even though there is no real depth (the images are physically displayed on a single display screen, which is relatively thin). Also, the predetermined distance, D (between display screens for the layered display devices) facilitates the creation of 3-D effects having a real depth between the layered display devices. 3-D presentation of graphic components may then use a combination of: a) virtual 3-D graphics techniques on one or more of the multiple screens; b) the depths between the layered display devices; and c) combinations thereof. The multiple display devices may each display their own graphics and images, or cooperate to provide coordinated visual output. Objects and graphics in an overall visual presentation may then appear on any one or multiple of the display devices, where graphics or objects on the proximate screen(s) can block the view of graphics or objects on the distal screen(s), depending on the position of the viewer relative to the screens. This provides actual perspective between the graphi-

cal objects, which represents a real-life component of 3-D visualization (and not just perspective virtually created on a single screen).

**[0032]** Other effects and details may be used with respect to such multi-layer displays and their respective devices and systems, and it will be readily appreciated that such other effects and details may also be present with respect to the invention disclosed herein to be used with multi-layer displays, as may be suitable. In addition, although embodiments of multi-layer displays having two and three display screens have been presented and discussed, it will be readily appreciated that further display screens may be added to the multi-layer display in a similar manner. Such multi-layer displays could potentially have four, five or even more display screens arranged front-to-back in a relatively stacked arrangement, as in the case of the illustrated embodiments having two and three display screens.

#### Gaming Machines and Systems

**[0033]** Referring next to FIGS. **2A** and **2B**, an exemplary processor-based gaming machine is illustrated in perspective view. Gaming machine **10** includes a top box **11** and a main cabinet **12**, which generally surrounds the machine interior (not shown) and is viewable by users. This top box and/or main cabinet can together or separately form an exterior housing adapted to contain a plurality of internal gaming machine components therein. Main cabinet **12** includes a main door **20** on the front of the gaming machine, which preferably opens to provide access to the gaming machine interior. Attached to the main door are typically one or more player-input switches or buttons **21**, which collectively form a button panel, one or more money or credit acceptors, such as a coin acceptor **22** and a bill or ticket validator **23**, a coin tray **24**, and a belly glass **25**. Viewable through main door **20** is a primary display monitor **26** adapted to present a game and one or more information panels **27**. The primary display monitor **26** will typically be a cathode ray tube, high resolution flat-panel LCD, plasma/LED display or other conventional or other type of appropriate monitor. Alternatively, a plurality of gaming reels can be used as a primary gaming machine display in place of display monitor **26**, with such gaming reels preferably being electronically controlled, as will be readily appreciated by one skilled in the art.

**[0034]** Top box **11**, which typically rests atop of the main cabinet **12**, may contain a ticket dispenser **28**, a key pad **29**, one or more additional displays **30**, a card reader **31**, one or more speakers **32**, a top glass **33**, one or more cameras **34**, and a secondary display monitor **35**, which can similarly be a cathode ray tube, a high resolution flat-panel LCD, a plasma/LED display or any other conventional or other type of appropriate monitor. Alternatively, secondary display monitor **35** might also be foregone in place of other displays, such as gaming reels or physical dioramas that might include other moving components, such as, for example, one or more movable dice, a spinning wheel or a rotating display. It will be understood that many makes, models, types and varieties of gaming machines exist, that not every such gaming machine will include all or any of the foregoing items, and that many gaming machines will include other items not described above.

**[0035]** With respect to the basic gaming abilities provided, it will be readily understood that gaming machine **10** may be adapted for presenting and playing any of a number of gaming events, particularly games of chance involving a player wager