

machines may be performed on the OLED displays **34**, **35**, and **36**. In addition, any bonus game can be easily performed where the symbols on displays **34**, **35**, and **36** are changed for the bonus game as a result of a special outcome of the main game. Display types other than an OLED may also be used.

[0034] Referring back to **FIG. 1**, display windows **8**, **9**, and **10** may be a transparent display screen that can display any image in the foreground of the reel strips. The reel strips may be conventional, or may be any of the reel strips described with respect to **FIGS. 2 and 4**. A suitable display window may be a liquid crystal display, which can selectively produce clear pixels or colored pixels, where red, green, and blue components of a backlight are selectively blocked by the pixels in the liquid crystal display. The display need not be electronic but may use reflection to present an image in front of the reels.

[0035] **FIG. 5** illustrates how the LCD windows **8**, **9**, **10** can be controlled to form a frame **40** around each symbol in a winning combination to highlight the combination, assuming two oranges and a cherry result in an award to the player.

[0036] **FIG. 6** illustrates how LCD windows **8**, **9**, and **10** can be controlled to highlight the pay line **42** that has a winning symbol combination across it.

[0037] The transparent display windows **8**, **9**, and **10** can additionally be a touch screen, where the X-Y position of a changed capacitance caused by a player's fingertip touching the screen is sensed. The X-Y position is cross-referenced with a function to be performed. The touch screen may be used to display information to the player or to designate a selection by the player. In **FIG. 7**, the gaming machine is the type that allows the player to hold a reel stationary for a next game if the player believes the displayed symbols are advantageous. A frame **44** (or other highlighting image) may appear around a reel or symbol that has been held by the player touching the screen in front of that reel. Any information or icons may be displayed by the windows **8**, **9**, and **10** in front of the reels. In another example, question marks may appear on windows **8**, **9**, and **10** asking the player to make a selection by touching one or more of the question marks to select a reel or symbol.

[0038] Control of an LCD display is well known and need not be described herein. The light that illuminates the reels may be the backlight for the LCD. Alternatively, additional backlighting sources may be optically coupled to the edges of the LCD display window. Such light sources may be red, green, and blue LEDs or a white light. Red, green, and blue pixels in the LCD display window are energized to display any symbol or any information on windows **8**, **9**, and **10**. The windows **8**, **9**, and **10** can be a single display panel or separate display panels. Other transparent display windows may be used instead of an LCD.

[0039] In another embodiment, display windows **8**, **9**, and **10** are transparent touch screens that do not have the capability to display images. Such touch screens are well known and include capacitive, piezoelectric, and other types of touch screens. One type of capacitive touch screen is described in U.S. Pat. No. 5,579,036, incorporated herein by reference. A player may "touch" a reel or symbol to hold the reel or symbol, or to otherwise make a selection, by touching an area of the touch screen corresponding to the selection.

[0040] In another embodiment, any portion of the top display glass **14** or the bottom display glass **16**, or both, may be OLED displays that can be controlled to display any image. As such, the display glass does not need to be replaced if the machine is configured to play a different game. Control of OLEDs is well known. The image displayed can be static to display information for a particular game or may change depending on the status of the game being played. For example, the display glass may have an attract mode, a play mode, and a celebration mode for a player win. The display glass may also be a LCD or any other type of programmable display.

[0041] Recently, flat panel displays with pixels that hold their on or off states even after power has been removed have become commercially available. Therefore, the programmable display glass may be programmed to display anything without further processing by the gaming machine's microcomputer until it is time to change the display. Such a display is sometimes referred to as electronic paper. Reconfiguring the gaming machine for a new game would require a one time reprogramming of the display glass. This display glass in combination with the OLED reels and other inventions described herein enable a gaming machine owner to change the game played and the appearance of the gaming machine with only a software change for the displays and a game program change. This reconfiguration may be done remotely via a server or performed at the gaming machine.

[0042] **FIG. 8** illustrates basic circuit blocks in a suitable gaming device incorporating the present invention. A control unit (CPU **60**) runs a gaming program stored in a program ROM **63**. A coin/bill/credit detector **61** enables the CPU **60** to initiate a next game. A pay table ROM **64** detects the outcome of the game and identifies awards to be paid to the player. A payout device **62** pays out an award to the player in the form of coins upon termination of the game or upon the player cashing out. The payout device **62** may instead generate a payout in the form of a coded paper ticket, credits on a smart card or magnetic strip card, or in any other form. A display controller **65** receives commands from the CPU **60** and generates signals for the various displays **66**, including the LCD and OLED displays. Player commands may be input through the buttons or touch screen into the CPU **60**.

[0043] Each feature described herein can be used in a gaming machine by itself or in combination with the other features. Having described the invention in detail, those skilled in the art will appreciate that, given the present disclosure, modifications may be made to the invention without departing from the spirit of the inventive concepts described herein. Therefore, it is not intended that the scope of the invention be limited to the specific embodiments illustrated and described.

What is claimed is:

1. A gaming device comprising:

a plurality of reels displaying a plurality of symbols on the periphery of each reel, a portion of the periphery of at least one reel being formed of an electronic display having pixels such that at least one symbol around the periphery of a reel is displayed by the electronic display, a remainder of the periphery displaying symbols not including an electronic display; and