

REALISTIC VIDEO REELS

CROSS REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority under 35 U.S.C. §119(e) to U.S. Provisional Patent Application No. 60/858,741 filed on Nov. 13, 2006, which is incorporated herein by reference in its entirety for all purposes.

FIELD OF THE INVENTION

[0002] This invention relates to gaming machines. In particular, embodiments described herein relate to video data, for output on a gaming machine, that simulates a realistic visual attributes of a mechanically driven reel slot machine.

BACKGROUND

[0003] As technology in the gaming industry progresses, the traditional mechanically driven reel slot machines are being replaced by electronic machines having an LCD video display or the like. Processor-based gaming machines are becoming the norm. One reason for their increased popularity is the nearly endless variety of games that can be implemented using processor-based technology. The processor-based gaming machines permit the operation of more complex games, incorporate player tracking, improve security, permit wireless communications, and add a host of digital features that are not possible on mechanical-driven gaming machines. The increasing cost of designing, manufacturing, and maintaining complex mechanical gaming machines has also motivated casinos and the gaming industry to abandon these older machines.

OVERVIEW

[0004] The present invention provides a gaming machine configured to output video data that simulates mechanical reels in a traditional mechanical slot machine. Embodiments detailed herein contribute to the emulation and perception of a mechanical machine by providing video data adaptations that each simulate a realistic visual attribute of a mechanical reel gaming machine.

[0005] In one aspect, the present invention relates to a gaming machine. The gaming machine includes a first video display device, a second video display device, and a cabinet defining an interior region of the gaming machine. The cabinet is adapted to house a plurality of gaming machine components within or about the interior region. The first video display device is disposed within or about the interior region, is configured to output a visual image in response to a control signal, and includes one or more controllably transparent portions. The second video display device is arranged relative to the first video display device such that a common line of sight passes through a portion of the first video display device to a portion of the second video display device. The gaming machine also includes at least one processor configured to execute instructions, from memory, that: a) display video data for multiple video reels on the second video display device, wherein the video data for each of the multiple video reels depicts a reel strip with multiple reel game symbols; b) permit game play of a reel game of chance that uses the multiple video reels displayed by the second video display device, and c) display video data, on the second video display device, that includes a video data adaptation to the video data for the

multiple video reels, wherein the video data adaptation simulates a realistic visual attribute of a real mechanical reel in a gaming machine.

[0006] In another aspect, the present invention relates to a method of providing a game of chance on a gaming machine. The method includes displaying the game of chance using a first video display device and/or a second video display device included in the gaming machine. The second video display device is arranged relative to the first video display device such that a common line of sight passes through a video window portion of the first video display device to a video reel portion of the second video display device. The game of chance includes multiple video reels displayed on the second video display device and each video reel includes multiple video symbols on a video reel strip. The method also includes, during the game, simulating the movement of symbols on each video reel in the multiple video reels on the second video display device. The method further includes for one or more of the video reels in the set of video reels, displaying a video data adaptation to video data for one or more of the multiple video reels, wherein the video data adaptation simulates a realistic visual attribute of a real mechanical reel in a gaming machine.

[0007] In yet another aspect, the present invention relates to logic encoded in one or more tangible media for execution and, when executed, operable to provide a game of chance on a gaming machine.

[0008] These and other features and advantages of the invention will be described in more detail below with reference to the associated figures.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] FIG. 1A shows a simple depiction of perspective viewing of a gaming machine with mechanical reels.

[0010] FIG. 1B shows a simple depiction of changing position in front of a video reel gaming machine with windows on a front panel and the effect of changing position on visibility of a rear display device.

[0011] FIG. 1C shows a simple depiction of perspective for curved mechanical reels when viewing from in front of a mechanical reel gaming machine.

[0012] FIG. 1D shows a fore-lighting technique used in some mechanical reel gaming machines with opaque reel strips.

[0013] FIG. 2A shows video output on layered displays and configured to realistically simulate mechanical reels in accordance with one embodiment.

[0014] FIG. 2B shows the video output of FIG. 2A separated into front and back video for display on front and back displays, respectively, in accordance with one embodiment.

[0015] FIG. 2C illustrates the video data output on rear display device of FIG. 2B in greater detail in accordance with a specific embodiment.

[0016] FIG. 3A shows a video reel strip with slight curvature on its lateral sides in accordance with one embodiment.

[0017] FIG. 3B shows a graphical simplification of perspective video adaptations applied to reel symbols sides in accordance with one embodiment.

[0018] FIG. 3C shows a simplified version of simulated preferential lighting of a reel strip in accordance with one embodiment.

[0019] FIG. 3D shows a simplified version of simulated back-lighting for reel strip in accordance with one embodiment.