

and are often not perceived to be realistic emulations of an actual physical wheel, such as those that can be used as part of a top box diorama or the huge sit-down Wheel of Fortune® Super Spin™ game made by IGT.

[0010] While existing designs and systems for providing realistic and entertaining wheel games on processor-based gaming machines, and particularly the presentation of spinning wheels on the video displays thereof, have been adequate in the past, improvements are usually welcomed and encouraged. In light of the foregoing, it is desirable to develop improved processor-based gaming machines that provide a realistic emulation of physical wheels for wheel based games played thereupon.

#### SUMMARY

[0011] It is an advantage of the present invention to provide processor-based gaming machines that are adapted to present wheel-based games thereupon, such that the presented gaming wheels are realistic and appealing to players. This can be accomplished at least in part through the use of simulated or “virtual” gaming wheels that are presented on a specialized multi-layer display at a respective gaming machine or gaming terminal.

[0012] In various embodiments of the present invention, a processor-based 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. The gaming machine can include an exterior housing arranged to contain various internal gaming machine components therein, a master gaming controller in communication with various internal gaming machine components and adapted to execute or control one or more aspects of the wager based game, and a display device in communication with the master gaming controller and adapted to present at least one gaming wheel having a plurality of wheel stops distributed thereupon. The display device can be a multi-layer display that includes at least one display controller adapted to generate or transmit one or more display signals, a first display screen in communication with the display controller and adapted to present a first visual display thereupon based on the display signal or signals, and a second display screen in communication with the display controller and adapted to present a second visual display thereupon based upon the display signal or signals. The second display screen can be positioned behind the first display screen such that the first and second visual displays are adapted to combine for a single visual presentation that includes at least one spinning gaming wheel to a viewer thereof.

[0013] In various embodiments, the first visual display can include a first portion of a spinning gaming wheel and the second visual display includes a second portion of that same spinning gaming wheel. The combined single visual presentation that includes a spinning gaming wheel can include a graphical representation, a recorded video clip and/or a live video feed of the spinning gaming wheel or wheels.

[0014] In addition, the processor-based gaming machine can include one or more speakers in communication with the master gaming controller and adapted to present sounds with respect to a spinning gaming wheel. The speakers can be dedicated wheel speakers located in close proximity to the display of said at least one spinning gaming wheel. The processor-based gaming machine can also include a wheel sound generator in communication with the master gaming controller and/or speakers, with the wheel sound generator being

adapted to provide sounds to one or more speakers with respect to said at least one spinning gaming wheel. In addition, a specialized wheel processor in communication with the master gaming controller and/or the display device can be provided, wherein the wheel processor is adapted to vary one or more display parameters of a spinning gaming wheel from one game play to another of wheel-type games presented on the processor-based gaming machine.

[0015] Also included can be a network interface coupling the gaming machine to one or more remotely located networked components, with such a network interface being adapted to facilitate the downloading of wheel spin times, wheel sounds, and/or other wheel spin parameters to the gaming machine. In various embodiments, a wager-based system having a plurality of the foregoing gaming machines can be provided. A remote host can be provided with such a system, and a specialized wheel processor and/or other system components can be located on such a remote host.

[0016] In still further embodiments, various methods of presenting a spinning gaming wheel on a processor-based gaming machine are provided. Such methods can include the steps of displaying on a multi-layer display device a gaming wheel in a first static, non-spinning position, accepting a monetary value wager from a player, accepting a game-related input from the player, initiating the play of a wager-based game as a result of the game-related input, determining one or more wheel spin parameters for the gaming wheel, and presenting on the multi-layer display the gaming wheel in a spinning motion, wherein such presentation is based at least in part on the determined wheel spin parameters for said gaming wheel. The multi-layer display can be similar to that which is provided above, and the wheel spin parameters can vary from one game play to another of wheel-type games on said processor-based gaming machine in order to provide a more realistic emulation of a physical wheel.

[0017] Further process steps can include generating wheel sounds for the gaming wheel, presenting the generated wheel sounds on one or more speakers, displaying on the multi-layer display device the gaming wheel in a second static, non-spinning position, capturing a video clip or feed of an actual physical gaming wheel, and/or providing the video clip or feed to the multi-layer display device for display thereon.

[0018] Additional embodiments can include a wager-based gaming machine similar to the foregoing and having a display device adapted to present a plurality of gaming wheels thereupon, wherein the plurality of gaming wheels are viewed in combination to provide a wager-based game outcome. Such a wager based gaming machine can also include at least one specialized wheel processor adapted to vary one or more display parameters of the plurality of gaming wheels from one game play to another of wheel-type games that are played on the wager-based gaming machine. As in the foregoing embodiments, the display device can comprise a multi-layer display having a plurality of display screens positioned front to back with respect to each other, such that a combined visual image is presented.

[0019] Such a wager-based gaming machine having a plurality of gaming wheels can have the wheels be arranged in concentric fashion with respect to each other. In various embodiments, a first gaming wheel is presented on a first display screen of a respective multi-layer display device, and a second gaming wheel is presented on a second display screen of that multi-layer display device. Such an arrangement can involve wheels that are arranged concentrically