

a touch-sensitive screen. Motion sensors may also be employed to cooperate with the display units **68, 69, 70** to provide a motion-sensitive screen to monitor a player's movements to detect when a button was touched. In such a case, the player may not need to physically touch the button, but rather a three-dimensional video image offers the perception that the player is touching the button. By reading the player's movements, the gaming unit **20** may determine which button the player selected.

Gaming Unit Electronics

[0053] FIG. 3 is a block diagram of a number of components that may be incorporated in the gaming unit **20**. Referring to FIG. 3, the gaming unit **20** may include a controller **100** that may comprise a program memory **102**, a microcontroller or microprocessor (MP) **104**, a random-access memory (RAM) **106**, a three-dimensional image controller **107** and an input/output (I/O) circuit **108**, all of which may be interconnected via an address/data bus **110**. It should be appreciated that although only one microprocessor **104** is shown, the controller **100** may include multiple microprocessors **104**. Similarly, the memory of the controller **100** may include multiple RAMs **106** and multiple program memories **102**. Although the I/O circuit **108** is shown as a single block, it should be appreciated that the I/O circuit **108** may include a number of different types of I/O circuits. The RAM(s) **106** and program memories **102** may be implemented as semiconductor memories, magnetically readable memories, and/or optically readable memories, for example.

[0054] Although the program memory **102** is shown in FIG. 3 as a read-only memory (ROM) **102**, the program memory of the controller **100** may be a read/write or alterable memory, such as a hard disk. In the event a hard disk is used as a program memory, the address/data bus **110** shown schematically in FIG. 3 may comprise multiple address/data buses, which may be of different types, and there may be an I/O circuit disposed between the address/data buses.

[0055] FIG. 3 illustrates that the control panel **66**, the coin acceptor **52**, the bill acceptor **54**, the card reader **58** and the ticket reader/printer **56** may be operatively coupled to the I/O circuit **108**, each of those components being so coupled by either a unidirectional or bidirectional, single-line or multiple-line data link, which may depend on the design of the component that is used. The speaker(s) **62** may be operatively coupled to a sound circuit **112**, that may comprise a voice- and sound-synthesis circuit or that may comprise a driver circuit. The sound-generating circuit **112** may be coupled to the I/O circuit **108**. The three-dimensional display units **68, 69** and the two-dimensional display unit **70** may be operatively coupled to the I/O circuit **108** via unidirectional or bidirectional, single-line or multiple-line data link, to send and receive signals for video images to be displayed. One or more motions sensors **111** may be operatively coupled to the I/O circuit **108** which may be used to facilitate the control over the gaming unit **20**.

[0056] As shown in FIG. 3, the components **52, 54, 56, 58, 66, 112** may be connected to the I/O circuit **108** via a respective direct line or conductor. Different connection schemes could be used. For example, one or more of the components shown in FIG. 3 may be connected to the I/O

circuit **108** via a common bus or other data link that is shared by a number of components. Furthermore, some of the components may be directly connected to the microprocessor **104** without passing through the I/O circuit **108**.

Overall Operation of Gaming Unit

[0057] One manner in which one or more of the gaming units **20** (and one or more of the gaming units **30**) may operate is described below in connection with a number of flowcharts which represent a number of portions or routines of one or more computer programs, which may be stored in one or more of the memories of the controller **100**. The computer program(s) or portions thereof may be stored remotely, outside of the gaming unit **20**, and may control the operation of the gaming unit **20** from a remote location. Such remote control may be facilitated with the use of a wireless connection, or by an Internet interface that connects the gaming unit **20** with a remote computer (such as one of the network computers **22, 32**) having a memory in which the computer program portions are stored. The computer program portions may be written in any high level language such as C, C++, C#, Java or the like or any low-level assembly or machine language. By storing the computer program portions therein, various portions of the memories **102, 106** are physically and/or structurally configured in accordance with computer program instructions.

[0058] FIG. 4 is a flowchart of a main operating routine **200** that may be stored in the memory of the controller **100**. Referring to FIG. 4, the main routine **200** may begin operation at block **202** during which an attraction sequence may be performed in an attempt to induce a potential player in a casino to play the gaming unit **20**. The attraction sequence may be performed by displaying one or more video images on the display units **68, 69, 70** and/or causing one or more sound segments, such as voice or music, to be generated via the speakers **62**. The attraction sequence may include a scrolling list of games that may be played on the gaming unit **20** and/or video images of various games being played, such as video poker, video blackjack, video slots, video keno, video bingo, etc.

[0059] During performance of the attraction sequence, if a potential player makes any input to the gaming unit **20** as determined at block **204**, the attraction sequence may be terminated and a game-selection display may be generated on the display unit **69** at block **206** to allow the player to select a game available on the gaming unit **20**. The gaming unit **20** may detect an input at block **204** in various ways. For example, the gaming unit **20** could detect if the player presses any button on the gaming unit **20**; the gaming unit **20** could determine if the player deposited one or more coins into the gaming unit **20**; the gaming unit **20** could determine if player deposited paper currency into the gaming unit; etc. While the following description may describe various displays that may be generated on the display unit **69**, the same or similar displays may be generated on the display units **68, 70**.

[0060] The game-selection display generated at block **206** may include, for example, a list of video games that may be played on the gaming unit **20** and/or a visual message to prompt the player to deposit value into the gaming unit **20**. While the game-selection display is generated, the gaming unit **20** may wait for the player to make a game selection.