

Gaming Machine With Media Display

5 TECHNICAL FIELD

The present invention relates broadly to a gaming machine with media display and to a method of displaying media.

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BACKGROUND

In the gaming industry, gaming machines typically comprise two screens whereby one screen is a main screen and the other screen is known as a top screen. For such a gaming machine, the main screen is where the game(s) are typically displayed for a player to interact with while the top screen is where media, such as moving displays or video etc., are displayed. Typically, the top screen is used to display game celebrations for attracting attention and entertaining the player. For example, for a reel game, if a winning sequence of the reels is obtained, a celebration or announcement of the type of reel game reward may be displayed.

However, for the above arrangement, it has been recognised by the inventors that the player is typically not motivated to focus attention on a screen other than the main screen. Rather, the player would typically focus on the main screen, during e.g. display of a game celebration on the top screen, and wait for a next round of the game(s).

Thus, to better attract the attention of the player, it has been proposed by the inventors to provide media display on a main screen of a gaming machine.

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Typically, according to industry practices, a network server-controlled gaming machine comprises an interface circuit board and a separate game module. The interface circuit board functions to interface and communicate with a game control server. Typically, the interface circuit board is primarily in control of accounting and logging/recording operations such as transmitting amount of playing time, amount of

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game wins etc. to one or more databases/servers. The game control server can be implementing global accounting functions in addition to monitoring game sequences/results of the gaming machine. The game module is typically used to implement game functions such as points/rewards calculations etc. The game functions typically include implementing mathematics functions/models etc. installed in the gaming machine.

In some scenarios, for example for a mystery-type server/network game, the game control server may inform the gaming machine via a message sent to the interface circuit board that a winning instance, independent of the game(s) running on the gaming machine, has been obtained. The interface circuit board may then inform the game module of the message. The game module takes over informing the player of the winning instance of the server/network game and may in addition perform processing of points/rewards calculations based on the winning instance of the server/network game.

In other scenarios, for example for a theme-type base game, the game module may, upon detecting a winning instance of a base game installed in the gaming machine, inform the interface circuit board of the winning instance. The game module takes over informing the player of the winning instance of the base game and performs processing of points/rewards calculations based on the winning instance of the base game. The interface circuit board in turn informs the game control server of the winning instance, for example, for recording purposes or even for taking part in a mystery-type server/network game (such as an external lucky draw) that is independent of the base game.

Typically, the communications between the interface circuit board and the game module are in a proprietary language based on the programming of the game module. The interface circuit board performs conversions etc. such that information can be communicated, typically in the standard Slot Accounting System (SAS) protocol, to the game control server.

Thus, the inventors recognize that the game module is highly dependent on the interfacing performed by the interface circuit board with the game control server. The interface circuit board also has a high processing load because of various functions such as logging operations and conversion operations. Thus, the gaming machine may be limited by the reliability of the interface circuit board being used.

Furthermore, due to certification issues, in the gaming industry, a game module is preferably maintained unmodified after it has been installed in a gaming machine, because any significant modification, such as thematic changes, to the game module would cause the game module to undergo re-certification which may be time consuming and raises cost.

In addition, modifying the interface circuit board to include gaming functions, i.e. other than interfacing with the game control server, can cause a gaming machine manufacturer to be unduly limited to using an interface circuit board manufacturer..

Therefore, in view of the above, there exists a need for a gaming machine with media display and a method of displaying media that seek to address at least one of the above problems.

SUMMARY

In accordance with an aspect of the present invention, there is provided a gaming machine with media display, the machine comprising a screen for displaying one or more games of the gaming machine; a game module configured to implement the one or more games; wherein the game module is arranged to suspend playing of the one or more games upon receipt of a trigger signal and to provide a media display on the screen whereby the media is accessible external the gaming machine.

The gaming machine may further comprise an interface circuit board for communicating with a game control server.

The trigger signal may be based on a message transmitted from the game control server to the interface circuit board, and wherein the interface circuit board may be arranged to generate the trigger signal.

The trigger signal may be generated internal the gaming machine.

The trigger signal may be based on the playing of the one or more games.

The gaming machine may further comprise a media module for communicating with a media storage server, wherein the media display comprises a media contents download from the media storage server by the media module.

5 The media module may be integrally formed with the game module.

The media display may be displayed overlay the one or more games.

A result of the one or more games may be displayed after the media display.

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One or more interactive buttons may be provided to pause and/or stop the media display.

The media display may comprise a variable opacity.

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The media display may comprise streaming video.

In accordance with another aspect of the present invention, there is provided a method of displaying media, the method comprising displaying one or more games on a screen of a gaming machine; implementing playing of the one or more games; suspending the playing of the one or more games upon receipt of a trigger signal; and displaying the media on the gaming machine whereby the media is accessible external the gaming machine.

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25 The method may further comprise communicating with a game control server using an interface circuit board of the gaming machine.

The trigger signal may be based on transmitting a message from the game control server to the interface circuit board, and the method may comprise generating the trigger signal at the interface circuit board.

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The method may further comprise generating the trigger signal internal the gaming machine.

35 The trigger signal may be based on the playing of the one or more games.

The method may further comprise communicating with a media storage server using a media module of the gaming machine, and the step of displaying the media on the screen may comprise downloading media contents from the media storage server using the media module.

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The media module may be integrally formed with a game module for implementing playing of the one or more games.

10 The method may further comprise displaying the media overlay the one or more games.

The method may further comprise displaying a result of the one or more games after the step of displaying the media.

15 The method may further comprise providing one or more interactive buttons to pause and/or stop the displaying of the media.

The displaying the media may comprise displaying with a variable opacity.

20 The displaying the media may comprise streaming video.

In accordance with yet another aspect of the present invention, there is provided a method of transmitting media, the method comprising receiving at a media storage server a request signal from a media module of a gaming machine; retrieving media contents from a database of the media storage server based on the request signal; transmitting the media contents as a content signal from the media storage server to the media module for displaying media on the gaming machine based on the media contents.

30 In accordance with yet another aspect of the present invention, there is provided a computer readable medium having stored thereon instructions for instructing a processor of a gaming machine to execute a method of displaying media, the method comprising displaying one or more games on a screen of a gaming machine; implementing playing of the one or more games; suspending the playing of the one or more games upon receipt of a trigger signal; and displaying the media on the gaming machine whereby the media is accessible external the gaming machine.

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In accordance with another aspect of the present invention, there is provided a computer readable medium having stored thereon instructions for instructing a processor of a media storage server to execute a method of transmitting media, the method comprising receiving a request signal from a media module of a gaming machine; retrieving media contents from a database based on the request signal; transmitting the media contents as a content signal to the media module for displaying media on the gaming machine based on the media contents.

10 BRIEF DESCRIPTION OF THE DRAWINGS

Example embodiments of the invention will be better understood and readily apparent to one of ordinary skill in the art from the following written description, by way of example only, and in conjunction with the drawings, in which:

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Figure 1 is a schematic front view diagram of a front panel of a gaming machine in an example embodiment.

Figure 2 is a schematic front view diagram of a gaming machine with a front panel opened in part from a gaming machine in an example embodiment.

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Figure 3(a) is a schematic network diagram illustrating a network system in an example embodiment.

Figure 3(b) is a schematic illustration of a reel game implemented on a gaming machine in an example embodiment.

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Figure 4(a) is a screenshot of a video display in an example embodiment.

Figure 4(b) is a screenshot of a video display in an example embodiment.

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Figure 4(c) is a screenshot of a video display in an example embodiment.

Figure 5 is a schematic flowchart for illustrating a method for displaying media in an example embodiment.

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Figure 6 is a schematic drawing of a computer system suitable for implementing an example embodiment.

Figure 7 is a schematic flowchart for illustrating a method of transmitting media in an
5 example embodiment.

DETAILED DESCRIPTION

10 Example embodiments described below can provide a gaming machine with media display and a method of displaying media. Media in the description is taken to mean any means of communication to a person, such as video, audio or the like.

The terms "coupled" or "connected" as used in this description are intended to cover
15 both directly connected or connected through one or more intermediate means, unless otherwise stated.

The description herein may be, in certain portions, explicitly or implicitly described as algorithms and/or functional operations that operate on data within a computer memory or an
20 electronic circuit. These algorithmic descriptions and/or functional operations are usually used by those skilled in the information/data processing arts for efficient description. An algorithm is generally relating to a self-consistent sequence of steps leading to a desired result. The algorithmic steps can include physical manipulations of physical quantities, such as electrical, magnetic or optical signals capable of being stored, transmitted, transferred,
25 combined, compared, and otherwise manipulated.

Further, unless specifically stated otherwise, and would ordinarily be apparent from the following, a person skilled in the art will appreciate that throughout the present specification, discussions utilizing terms such as "scanning", "calculating", "determining",
30 "replacing", "generating", "initializing", "outputting", and the like, refer to action and processes of a instructing processor/computer system, or similar electronic circuit/device/component, that manipulates/processes and transforms data represented as physical quantities within the described system into other data similarly represented as physical quantities within the system or other information storage, transmission or display devices etc.

The description also discloses relevant device/apparatus for performing the steps of the described methods. Such apparatus may be specifically constructed for the purposes of the methods, or may comprise a general purpose computer/processor or other device selectively activated or reconfigured by a computer program stored in a storage member.

5 The algorithms and displays described herein are not inherently related to any particular computer or other apparatus. It is understood that general purpose devices/machines may be used in accordance with the teachings herein. Alternatively, the construction of a specialized device/apparatus to perform the method steps may be desired.

10 In addition, it is submitted that the description also implicitly covers a computer program, in that it would be clear that the steps of the methods described herein may be put into effect by computer code. It will be appreciated that a large variety of programming languages and coding can be used to implement the teachings of the description herein. Moreover, the computer program if applicable is not limited to any particular control flow and
15 can use different control flows without departing from the scope of the invention.

Furthermore, one or more of the steps of the computer program if applicable may be performed in parallel and/or sequentially. Such a computer program if applicable may be stored on any computer readable medium. The computer readable medium may include
20 storage devices such as magnetic or optical disks, memory chips, or other storage devices suitable for interfacing with a suitable reader/general purpose computer. The computer readable medium may even include a wired medium such as exemplified in the Internet system, or wireless medium such as exemplified in bluetooth technology. The computer program when loaded and executed on a suitable reader effectively results in an apparatus
25 that can implement the steps of the described methods.

The example embodiments may also be implemented as hardware modules. A module is a functional hardware unit designed for use with other components or modules. For example, a module may be implemented using digital or discrete electronic components,
30 or it can form a portion of an entire electronic circuit such as an Application Specific Integrated Circuit (ASIC). A person skilled in the art will understand that the example embodiments can also be implemented as a combination of hardware and software modules.

35 Figure 1 is a schematic front view diagram of a front panel of a gaming machine in an example embodiment. The gaming machine 100 comprises the front panel 101 that in turn

comprises a top screen 102, a main screen 104, a player transactions panel 106 and a player interaction panel 108. The gaming machine 100 may optionally comprise a printer outlet 110, a tower light 112 and a poster display portion 114. The gaming machine 100 allows a player to play one or more games installed or network-implemented by the gaming machine 100.

In the example embodiment, the top screen 102 can be used to display game celebrations, promotional/advertising information or other information that is typically not primarily related to a progression of the games of the gaming machine. The main screen 104 is used to display the games of the gaming machine 100, for the player's attention. Typically, the main screen 104 is the screen that the player focuses on for playing the games.

In the example embodiment, the player transactions panel 106 is provided for the player to transact with the gaming machine 100. The term "transactions" is taken to mean extraction of remaining points/credits that the player possesses or insertion of points/credits that the player possesses, for example, in a magnetic identification card or a radio frequency identification (RFID) card or any stored-value card. The term should not be limited to monetary transactions. The player transactions panel 106 comprises a liquid crystal display (LCD) information screen 116 and a card insert slot 118. The card insert slot 118 is used for receiving, in the case of a card insert slot, an identification card containing the points/credits and/or identification belonging to the player. The points/credits can be extracted from the card into the gaming machine 100 for playing the games installed in the gaming machine 100. Upon the player deciding to end play at the gaming machine 100, the player transactions panel 106 can store the latest/updated points/credits information in the stored-value card. For example embodiments relating to using player identification cards, the player transactions panel 106 can retrieve points/credits information of the player from an external server or database based on player identification. The retrieved information can then be used at the gaming machine 100 for playing the games. For such embodiments, upon the player deciding to end play at the gaming machine 100, the player transactions panel 106 can transmit the latest/updated points/credits information to be stored on the external server or database based on the player identification. It will be appreciated that the card insert slot 118 can be in other forms depending on the type of identification card used by the player. For example, if the player is using a RFID card, the transactions module 118 can be a RFID reader/writer. The LCD information screen 116 is used to display e.g. the points/credits information contained in the card.

The player interaction panel 108 comprises push buttons e.g. 120 provided to allow the player to actuate the buttons e.g. 120 for interacting with the games being played on the gaming machine 100. For example, the player can use the buttons e.g. 120 to make player
5 selections being displayed on the main screen 104. A bill validator 122 can be provided for a player to use paper money to buy credits for playing the games of the gaming machine 100. This is similar to, for example, using paper money at a vending machine to buy drinks/food.

10 It will be appreciated that although a card-in (using the card insert slot 118) and bill-in (using the bill validator 122) has been discussed above, the gaming machine is not limited as such and can comprise mechanisms to allow coin-in, key-in, ticket-in etc. for playing the games in the gaming machine.

15 It will be appreciated that the main screen 104 can be in the form of a touch-sensitive screen that may complement or replace the player interaction panel 108. The touch-sensitive screen can be a capacitive-type sensing screen, pressure-type sensing screen or the like. That is, the main screen 104 may be a touch-sensitive screen that allows the player to interact with the gaming machine 100 using touch commands.

20 In the example embodiment, the printer outlet 110 may be provided for the gaming machine 100 to output information in printed form to the player. For example, the gaming machine 100 may print a sticker or reward voucher for the player. The gaming machine 100 may also print a receipt or record of the points transaction for the
25 player. The tower light 112 may be provided to light up during game celebrations. This may attract the attention of spectators or the player. The tower light 112 can also be used for highlighting technical issues, requesting assistance or service etc. The poster display portion 114 may be provided for e.g. game information to be displayed.

30 In the example embodiment, the front panel 101 may be opened or detached in whole or in part from the gaming machine 100 body to allow, for example, maintenance on the circuits or components encased in the gaming machine 100.

35 Figure 2 is a schematic front view diagram of a gaming machine with a front panel opened in part from the gaming machine in an example embodiment. The gaming machine 200 functions substantially identically to the gaming machine 100 described with reference to

Figure 1. Like numerals are used to refer to substantial identical components already described. As shown, the front panel 101 is opened from the gaming machine 200, and opened in part containing the main screen 104 and the player transactions panel 106, to reveal the internal portion of the gaming machine 200.

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The gaming machine 200 comprises a power supply unit 202 for powering the various components of the gaming machine 200. The power supply unit 202 is coupled to a main board circuits cage 204. The main board circuits cage 204 is used to contain and protect a game module 206. The game module 206 implements the games on the gaming machine and also implements game functions such as points/rewards calculations. The game module 206 also drives visual contents, for example of the games, on the main screen 104 and, for example, audio content from the gaming machine 200. Speakers (not shown) are provided to output audio. The game module 206 comprises integrally, or is coupled to, a media module 208 and a message interface module 210. The gaming machine 200 further comprises an interface circuit board 212 coupled to the game module 206 via the message interface module 210, and a bill validator module 214 coupled to the game module 206. The bill validator module 214 comprises circuitry for implementing bill validation and counting. In the example embodiment, if a printer outlet 110 is provided, a printer 216 is also comprised in the gaming machine 200 for performing the printing functions.

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It will be appreciated that the gaming machine 200 may further comprise other components that are not described here for clarity of illustration of the example embodiments.

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The interface circuit board 212 is provided to communicate with a game control server (not shown) that can e.g. monitor the results of the games of the gaming machine 200, for example for logging results of theme-type base games of the gaming machine 200. In some example embodiments, the game control server (not shown) can e.g. control the gaming machine 200, for example for informing of a winning instance of an external mystery-type server/network game implemented at the game control server. The server/network game is typically independent of the base games installed at the gaming machine 200. The communication with the game control server may be over a wired or wireless network.

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For example, for a network game, the game control server can instruct or inform the interface circuit board 212 that a favourable result, specifically for the gaming machine

200, has been obtained. This may be due to, for example but not limited to, a predetermined playing time being reached by the player, or a random generated number internal the gaming machine matching a predetermined number stored in a database on the game control server etc. The interface circuit board 212 can then trigger the game module 206 to perform relevant game functions comprising displaying media e.g. based on the favourable result of the network game.

For another example, for a base game result, a particular winning arrangement/sequence, for example, of a reel game, may be obtained at the gaming machine 200, and the game module 206 can instruct or inform the interface circuit board 212 that a favourable result has been obtained. The game control server can be informed via the interface circuit board 212. The favourable result triggers the game module 206 to perform relevant game functions comprising displaying media e.g. based on the favourable result.

Thus, depending on the implementation, a trigger is obtained at the game module 206 that may be generated internal or external the gaming machine 200. It will be appreciated that if the trigger is generated internal the gaming machine 200, for example for a base game result based on a particular sequence of e.g. a reel game played at the gaming machine 200, communication with the game control server may not be needed.

In some example embodiments whereby the trigger is generated external the gaming machine, for example based on a network game, the instruction to the interface circuit board 212 can cause a trigger to be sent from the interface circuit board 212 to the game module 206 via the message interface module 210. The message is sent using a language suitable for communication with the game module 206 and may be a proprietary language. The game module 206 can then be triggered to take over, for example, processing of the points to be rewarded to the player and performance of celebratory displays on the top screen 102, and a media display on the main screen 104.

In the example embodiment, the game module 206 is triggered to instruct the media module 208 to communicate with a media server (not shown) to download media contents, such as streaming video contents or a video file, for display by the game module 206 on the main screen 104. The communication with the media server may be over a wired or wireless network. The communication with the media server can be over any open standard such as the Transmission Control Protocol/Internet Protocol (TCP/IP) protocol.

In the example embodiment, the media contents can be displayed on the main screen 104 as a media display so as to capture the attention of the player. The media contents can be advertising information, promotional information, broadcast information or the like. The media display may be displayed over or overlay the games displayed on the main screen 104.

In the example embodiment, during the media display, the games are stopped/suspended by the game module 206 until the media display is completed, after which, preferably, the rewards or type of the favourable result is informed to the player via a display.

Thus, advantageously, the media module is not dependent on, or limited to, any proprietary communication language required by communication between the game module 206 and the interface circuit board. Further, the processing load on the interface circuit board is not added to by the media display. In addition, separating the media module from the interface circuit board can reduce reliance on the manufacturer of the interface circuit board. Further, preferably, having a media server separate from the game control server can reduce reliance on the game control server for implementation of the media display. The media module can therefore be easily installed on any gaming machine to communicate with a media server using, for example, the TCP/IP protocol. Further, providing the media display on the main screen can more easily capture the attention of the player as compared to, for example, only displaying it on the top screen 102. Further, as the player would be interested in knowing the rewards of the favourable result or the type of favourable result, the player is more likely to concentrate on the media display until completion. The media display may also be more effective for advertisers to reinforce themes on the gaming machines, for example, if the media contents belong to a desired theme.

Figure 3(a) is a schematic network diagram illustrating a network system in an example embodiment. The system 300 comprises at least one gaming machine 302, 304, a game control server 306 and a media storage server 308. The system 300 can be a wired or wireless network connecting the various gaming machines and servers. In the description here, only one gaming machine 302 is described for ease of understanding.

The gaming machine 302 comprises a player LCD touch-screen 310 (compare 104 of Figure 1) for playing games on the gaming machine 302. An interface circuit board 312 is provided coupled to a game module 314. The interface circuit board 312 is for

communicating with the game control server 306. The touch screen 310 is coupled to the game module 314. The game module 314 comprises a message interface module 316 and a media module 318. The message interface module 316 facilitates communication between the game module 314 and the interface circuit board 312. The media module 318 facilitates communication with, and e.g. media contents download from, the media storage server 308.

Figure 3(b) is a schematic illustration of a reel game implemented on the gaming machine 302 in the example embodiment. It will however be appreciated that the games on the gaming machine are not limited as such and can be in other forms such as arcade-type games. For example, the game can be an arcade-type aircraft simulator game that requires a predetermined amount of credits of buy-in for the player to play the game for a predetermined period of time. Furthermore, the games implemented on the gaming machine 302 such as the reel game may, in some example embodiments, provide no rewards or awards to the player. That is, such games may be entertainment games whereby the player buys in to play for entertainment, for graphics etc., without expecting any rewards or awards.

In the example embodiment, the reel game is displayed on the main screen or known as the touch-screen 310 of the gaming machine 302. A sample screenshot 320 shows the reel game 322. The gaming machine incorporates touch screen technology to enable a player to play the reel game via the touch-screen 310. The reel game 322 involves matching of a pre-determined sequence of graphical symbols e.g. 324 on the reels. The reels are shown in a 3X3 matrix and are rotatable mechanically behind or graphically on the touch-screen 310. A buy-in display 326 is provided to show the player the points/credits required to play, for example, each turn of the reel game. A play button 328 is provided to allow the player to operate or initiate the gaming machine 302. The player can touch the play button 328 to play, for example, a turn of the reel game.

In the example embodiment, a transactions module (compare 118 of Figure 1) receives a game card or a stored-value credits/points card from the player for transferring credits to play the games in the gaming machine 302. The stored-value card may also allow the player to transfer unused credits from a previous gaming session to play the games in the gaming machine 302. Any existing points/credits are transferable both to and from the gaming machine 302 using the stored-value card.

An end-play button 330 is provided to allow the player to request for transaction processing for the stored-value card, e.g. outstanding points/credits to be transferred back to the stored-value card, when the player stops playing the gaming machine 302.

5 For example embodiments relating to using player identification cards, the transactions module can retrieve points/credits information of the player from an external server or database, e.g. the game control server 306, based on player identification. The retrieved information can then be used at the gaming machine 302 for playing the games. For such embodiments, upon the player deciding to end play at the gaming machine 302,
10 the transactions module can transmit the latest/updated points/credits information to be stored on the external server or database based on the player identification.

 During play, the player touches the play button 328 to rotate the reels for one turn. The game module 314 deducts the points/credits of the player based on the amount shown
15 in the buy-in display 326. There can be different permutations of winning combinations/sequences of the symbols e.g. 324 for different types of wins of the reel game 322. For example, three same symbols in a row may be classified as a flush win while two same symbols in a row may be classified as a minor win. The wins may be governed based on an odds table stored or programmed in the gaming machine 302.

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 The interface circuit board 312 assists in conveying messages between the gaming machine 302 and the game control server 306. When a win is detected at the gaming machine 302, for example a flush win or a minor win etc., a trigger is sent to the game module 314. The game module 314 via the message interface module 316 instructs the
25 interface circuit board 312 to inform the game control server 306 of the win. In an alternative example embodiment, the trigger to the game module 314 may be sent via the interface circuit board 312 from the game control server 306 based on a favourable result of an external network game conducted at the game control server 306. The game module 314 is triggered to suspend/stop the reel game 322 and to instruct the media module 318 to access
30 and download media contents from the media storage server 308, such as streaming video contents or a video file, for display by the game module 314 on the touch-screen 310, for example, over or overlay the display of the reel game 322. In the example embodiment, the media content is a video display that lasts for about 10 to 20 seconds.

35 After the video display, the gaming machine 302 displays the winning level, for example a flush win or a minor win etc., and optionally, a corresponding prize on the screen

310, over or overlay the display of the reel game 322. Subsequently, the player is allowed by the game module 314 to play another turn of the reel game. In the example embodiment, the media download process is performed upon every win.

5 In some embodiments, the player is provided with an interactive button to momentarily pause and/or request a repeat of the video. In some embodiments, for example relating to a network game external the gaming machine 302 and conducted at the game control server 306, the game control server 306 may be the originating entity sending the trigger to the game module 314 via the interface circuit board 312, for adding additional prizes to the reel game, e.g. via a separate lucky draw game win.

Thus, in the above example embodiment, although the trigger to the game module 314 is described as a reel game win, the trigger is not limited as such. The trigger to the game module 314 may be external to the gaming machine 302 and sent from the game control server 306. That is, the trigger may be, for example but not limited to, a predetermined playing time being reached by the player and monitored at the game control server 306, or a random generated number sent from the gaming machine 302 matching a predetermined number stored in a database of the game control server 306. That is, a trigger obtained at the game module 314 may be generated internal or external the gaming machine 302. It will be appreciated that if the trigger is generated internal the gaming machine 302, for example based on a particular sequence of a reel game played at the gaming machine 302, communication with the game control server may not be needed.

In the example embodiment, the media module 318 communicates with the media storage server 308 using Transmission Control Protocol/Internet Protocol (TCP/IP) protocol.

In the example embodiment, the media display functions to capture the attention of the player. The media contents can be advertising information, promotional information, broadcast information or the like. Thus, advantageously, the media module is not dependent on, or limited to, any proprietary communication language required by communication between the game module and the interface circuit board.. The media module can therefore be easily installed on any gaming machine to communicate with a media server using, for example, the TCP/IP protocol. Further, providing the media display on the main screen can more easily capture the attention of the player as compared to, for example, only displaying it on the top screen (compare 102 of Figure 1). Further, as the player would be interested in knowing the rewards of the favourable result or the type of favourable result, the player is

more likely to concentrate on the media display until completion. The media display may also be more effective for advertisers to reinforce themes on the gaming machines, for example, if the media contents belong to a desired theme.

5 In addition, the processing load on the interface circuit board is not added to by the media display. In addition, separating the media module from the interface circuit board can reduce reliance on the manufacturer of the interface circuit board. Further, preferably, having a media server separate from the game control server can reduce reliance on the game control server for implementation of the media display.

10 Furthermore, in the example embodiment, having a media storage server 308 can enable easier update or loading of media contents, for display on a plurality of gaming machines 302, 304.

15 Figure 4(a) is a screenshot 402 of a video display in an example embodiment. As shown, the video display 404 is overlay over the reel game 406.

20 Figure 4(b) is a screenshot 408 of a video display in an example embodiment. As shown, the video display 410 is ongoing and has not ended. There is provided an interactive button 412. The button 412 allows a player to momentarily pause the video display. In the example embodiment, the player is not allowed to skip the video display.

25 Figure 4(c) is a screenshot 414 of a video display in an example embodiment. As shown, the video display 416 has ended and a result of the trigger is displayed. There is provided an interactive button 418. The button 418 allows a player to request a repeat of the video display.

30 In an example embodiment, to effect download of media contents from a media storage server by a media module, a request signal is sent from the media module to a receiver module of the media storage server. The receiver module performs a search on a lookup table to locate suitable media contents based on the request signal. The located media contents are retrieved from a database of the media storage server and transmitted as a content signal to the media module. Upon receipt of the content signal, the media module can transmit the media contents for display by the game module, for example, as
35 streaming video on a main screen of a gaming machine.

Figure 7 is a schematic flowchart 700 for illustrating a method of transmitting media in an example embodiment. At step 702, a request signal from a media module of a gaming machine is received at a media storage server. At step 704, media contents from a database of the media storage server are retrieved based on the request signal. At step 706, the media contents are transmitted as a content signal from the media storage server to the media module for displaying media on the gaming machine based on the media contents.

Figure 5 is a schematic flowchart 500 for illustrating a method for displaying media in an example embodiment. At step 502, one or more games are displayed on a screen of a gaming machine. At step 504, playing of the one or more games is implemented. At step 506, the playing of the one or more games is suspended upon receipt of a trigger signal. At step 508, the media is displayed on the gaming machine whereby the media is accessible external the gaming machine.

Different example embodiments can be implemented in the context of data structure, program modules, program and computer instructions executed in a computer implemented environment. A general purpose computing environment is briefly disclosed herein. One or more example embodiments may be embodied in one or more gaming machines in a computer system 600, such as is schematically illustrated in Figure 6.

One or more example embodiments may be implemented as software, such as a computer program being executed within the computer system 600, and instructing the computer system 600 to conduct a method of an example embodiment.

The computer system 600 comprises a computer unit 602 that may be embodied within a gaming machine, input modules such as a touch-screen keyboard 604 and pointing device 606 and a plurality of output devices such as a display 608, and printer 610. A user can interact with the computer unit 602 using the above devices. One or more other input devices (not shown) such as a joystick, game pad, or the like can also be connected to the computer unit 602. The display 608 may include a cathode ray tube (CRT), liquid crystal display (LCD), field emission display (FED), plasma display or any other device that produces an image that is viewable by the user.

The computer unit 602 can be connected to a computer network 612 via a suitable transceiver device 614, to enable access to e.g. the Internet or other network systems such as Local Area Network (LAN) or Wide Area Network (WAN) or a personal network. The

network 612 can comprise a server, a router, a network personal computer, a peer device or other common network node, a wireless telephone or wireless personal digital assistant. Networking environments may be found in offices, enterprise-wide computer networks and home computer systems etc. The transceiver device 614 can be a modem/router unit
5 located within or external to the computer unit 602, and may be any type of modem/router such as a cable modem or a satellite modem.

It will be appreciated that network connections shown are exemplary and other ways of establishing a communications link between computers can be used. The existence of any
10 of various protocols, such as TCP/IP, Frame Relay, Ethernet, FTP, HTTP and the like, is presumed, and the computer unit 602 can also be operated in a client-server configuration to permit a user to retrieve web pages from a web-based server. Furthermore, any of various web browsers can be used to display and manipulate data on web pages.

15 The computer unit 602 in the example comprises a processor 618, a Random Access Memory (RAM) 620 and a Read Only Memory (ROM) 622. The ROM 622 can be a system memory storing basic input/ output system (BIOS) information. The RAM 620 can store one or more program modules such as operating systems, application programs and program data.

20 The computer unit 602 further comprises a number of Input/Output (I/O) interface units, for example I/O interface unit 624 to the display 608, and I/O interface unit 626 to the keyboard 604. The components of the computer unit 602 typically communicate and interface/couple connectedly via an interconnected system bus 628 and in a manner known
25 to the person skilled in the relevant art. The bus 628 can be any of several types of bus structures including a memory bus or memory controller, a peripheral bus, and a local bus using any of a variety of bus architectures.

It will be appreciated that other devices can also be connected to the system bus
30 628. For example, a universal serial bus (USB) interface can be used for coupling a video or digital camera to the system bus 628. An IEEE 1394 interface may be used to couple additional devices to the computer unit 602. Other manufacturer interfaces are also possible such as FireWire developed by Apple Computer and i.Link developed by Sony. Coupling of devices to the system bus 628 can also be via a parallel port, a game port, a PCI board or
35 any other interface used to couple an input device to a computer. It will also be appreciated that, while the components are not shown in the figure, sound/audio can be recorded and

reproduced with a microphone and a speaker. A sound card may be used to couple a microphone and a speaker to the system bus 628. It will be appreciated that several peripheral devices can be coupled to the system bus 628 via alternative interfaces simultaneously.

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An application program can be supplied to the user of the computer system 600 being encoded/stored on a data storage medium such as a CD-ROM or flash memory carrier. The application program can be read using a corresponding data storage medium drive of a data storage device 630. The data storage medium is not limited to being portable and can include instances of being embedded in the computer unit 602. The data storage device 630 can comprise a hard disk interface unit and/or a removable memory interface unit (both not shown in detail) respectively coupling a hard disk drive and/or a removable memory drive to the system bus 628. This can enable reading/writing of data. Examples of removable memory drives include magnetic disk drives and optical disk drives. The drives and their associated computer-readable media, such as a floppy disk provide nonvolatile storage of computer readable instructions, data structures, program modules and other data for the computer unit 602. It will be appreciated that the computer unit 602 may include several of such drives. Furthermore, the computer unit 602 may include drives for interfacing with other types of computer readable media.

20

The application program is read and controlled in its execution by the processor 618. Intermediate storage of program data may be accomplished using RAM 620. The method(s) of the example embodiments can be implemented as computer readable instructions, computer executable components, or software modules. One or more software modules may alternatively be used. These can include an executable program, a data link library, a configuration file, a database, a graphical image, a binary data file, a text data file, an object file, a source code file, or the like. When one or more computer processors execute one or more of the software modules, the software modules interact to cause one or more computer systems to perform according to the teachings herein.

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The operation of the computer unit 602 can be controlled by a variety of different program modules. Examples of program modules are routines, programs, objects, components, data structures, libraries, etc. that perform particular tasks or implement particular abstract data types. The example embodiments may also be practiced with other computer system configurations, including handheld devices, multiprocessor systems, microprocessor-based or programmable consumer electronics, network PCs,

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minicomputers, mainframe computers, personal digital assistants, mobile telephones and the like. Furthermore, the example embodiments may also be practiced in distributed computing environments where tasks are performed by remote processing devices that are linked through a wireless or wired communications network. In a distributed computing environment, program modules may be located in both local and remote memory storage devices.

It will be appreciated by a person skilled in the art that other variations and/or modifications may be made to the specific embodiments without departing from the spirit or scope of the invention as broadly described. The present embodiments are, therefore, to be considered in all respects to be illustrative and not restrictive.

For example, if desired, the gaming machine can function without an interface circuit board and the game module is triggered directly e.g. by the games on the gaming machine to perform media contents download. Furthermore, the game module can receive different triggers generated both internal and external the gaming machine in a single example implementation. Further, although the game control server and the media storage server are described as separate servers, it will be appreciated that the media storage can be located in a database of a same game control server, i.e. without a separate media storage server. In addition, in addition or instead of, a transactions module for receiving a stored value card from a player, the gaming machine can comprise a bill validator for allowing cash to be used e.g. to buy into playing the games of the gaming machine.

Further, although the media display is described as a video display, the display is not limited as such and can include, but not limited to, audio with a blanked out screen, a holographic display, a 3D display etc. Further, the media display is not limited to overlay over the games of the gaming machine and can include, but not limited to, 50% transparency/opacity or 10% transparency/opacity etc. over the screen displaying the games.

Furthermore, the game is not limited to a reel game but can include e.g. any game of chance or game of skill that can provide the player with entertainment.

In addition, the prizes awarded are not limited to credits and can include game points, loyalty points etc.

The gaming machines may be implemented as physical or virtual gaming machines, such as via the Internet, interactive TV, Local Area Network (LAN)-based or other service networks. The virtual gaming machines may be implemented on desk top devices or portable devices. For gaming machines implemented as physical gaming machines, although touch screen keys have been described in the example embodiments, other actuators such as mechanical keys or pull/push handles may also be used to play the games contained in the gaming machine.

Furthermore, although the gaming machine is described generally as implementing a reel game, the game can take different forms and graphical representations of games including, but not limited to, table games, card games, numbers games, sports games, medal games, redemption games, vending games, video games, music games, amusement games etc.. The winning combinations may also be governed by different game rules.

CLAIMS

1. A gaming machine with media display, the machine comprising,
a screen for displaying one or more games of the gaming machine;
5 a game module configured to implement the one or more games;
wherein the game module is arranged to suspend playing of the one or more games
upon receipt of a trigger signal and to provide a media display on the screen whereby the
media is accessible external the gaming machine.

10 2. The gaming machine as claimed in claim 1, further comprising an
interface circuit board for communicating with a game control server.

3. The gaming machine as claimed in claim 2, wherein the trigger signal is
based on a message transmitted from the game control server to the interface circuit
15 board, and wherein the interface circuit board is arranged to generate the trigger signal.

4. The gaming machine as claimed in any one of claims 1 to 3, wherein the
trigger signal is generated internal the gaming machine.

20 5. The gaming machine as claimed in claim 4, wherein the trigger signal is
based on the playing of the one or more games.

6. The gaming machine as claimed in any one of claims 1 to 5, further
comprising a media module for communicating with a media storage server, wherein the
25 media display comprises a media contents download from the media storage server by
the media module.

7. The gaming machine as claimed in claim 6, wherein the media module is
integrally formed with the game module.

30 8. The gaming machine as claimed in any one of claims 1 to 7, wherein the
media display is displayed overlay the one or more games.

9. The gaming machine as claimed in any one of claims 1 to 8, wherein a
35 result of the one or more games is displayed after the media display.

10. The gaming machine as claimed in any one of claims 1 to 9, wherein one or more interactive buttons are provided to pause and/or stop the media display.

11. The gaming machine as claimed in any one of claims 1 to 10, wherein the
5 media display comprises a variable opacity.

12. The gaming machine as claimed in any one of claims 1 to 11, wherein the media display comprises streaming video.

10 13. A method of displaying media, the method comprising,
displaying one or more games on a screen of a gaming machine;
implementing playing of the one or more games;
suspending the playing of the one or more games upon receipt of a trigger signal;
and
15 displaying the media on the gaming machine whereby the media is accessible
external the gaming machine.

14. The method as claimed in claim 13, further comprising communicating
with a game control server using an interface circuit board of the gaming machine.
20

15. The method as claimed in claim 14, wherein the trigger signal is based on
transmitting a message from the game control server to the interface circuit board, and
generating the trigger signal at the interface circuit board.

25 16. The method as claimed in any one of claims 13 to 15, further comprising
generating the trigger signal internal the gaming machine.

17. The method as claimed in claim 16, wherein the trigger signal is based on
the playing of the one or more games.
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18. The method as claimed in any one of claims 13 to 17, further comprising
communicating with a media storage server using a media module of the gaming
machine, and the step of displaying the media on the screen comprises downloading
media contents from the media storage server using the media module.
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19. The method as claimed in claim 18, wherein the media module is integrally formed with a game module for implementing playing of the one or more games.

20. The method as claimed in any one of claims 13 to 19, further comprising
5 displaying the media overlay the one or more games.

21. The method as claimed in any one of claims 13 to 20, further comprising displaying a result of the one or more games after the step of displaying the media.

10 22. The method as claimed in any one of claims 13 to 21, further comprising providing one or more interactive buttons to pause and/or stop the displaying of the media.

23. The method as claimed in any one of claims 13 to 22, wherein the
15 displaying the media comprises displaying with a variable opacity.

24. The method as claimed in any one of claims 13 to 23, wherein the displaying the media comprises streaming video.

20 25. A method of transmitting media, the method comprising,
receiving at a media storage server a request signal from a media module of a gaming machine;
retrieving media contents from a database of the media storage server based on the request signal;
25 transmitting the media contents as a content signal from the media storage server to the media module for displaying media on the gaming machine based on the media contents.

26. A computer readable medium having stored thereon instructions for
30 instructing a processor of a gaming machine to execute a method of displaying media, the method comprising,
displaying one or more games on a screen of a gaming machine;
implementing playing of the one or more games;
suspending the playing of the one or more games upon receipt of a trigger signal;
35 and

displaying the media on the gaming machine whereby the media is accessible external the gaming machine.

27. A computer readable medium having stored thereon instructions for
- 5 instructing a processor of a media storage server to execute a method of transmitting media, the method comprising,
- receiving a request signal from a media module of a gaming machine;
- retrieving media contents from a database based on the request signal;
- transmitting the media contents as a content signal to the media module for
- 10 displaying media on the gaming machine based on the media contents.