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(54) **GAMING APPARATUS INCLUDING AN ELECTRONIC GAMING MACHINE AND A DIGITAL NAMEPLATE DEVICE**

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(57) **ABSTRACT**

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A gaming apparatus includes an electronic gaming machine and a digital nameplate device. The electronic gaming machine includes a storage medium for storing a game software that has corresponding game information, a game processor operable to execute the game software, a display module controlled by the game processor to generate game images, and a machine housing for housing the storage medium and the game processor and on which the display module is mounted. The digital nameplate device is mounted on the machine housing, and includes a memory unit, a controller coupled to the memory unit and the game processor, and a nameplate display coupled to the controller. The game processor is configured to control the controller to store the game information in the memory unit. The controller is configured to access the game information stored in the memory unit and to control the nameplate display to display the game information.

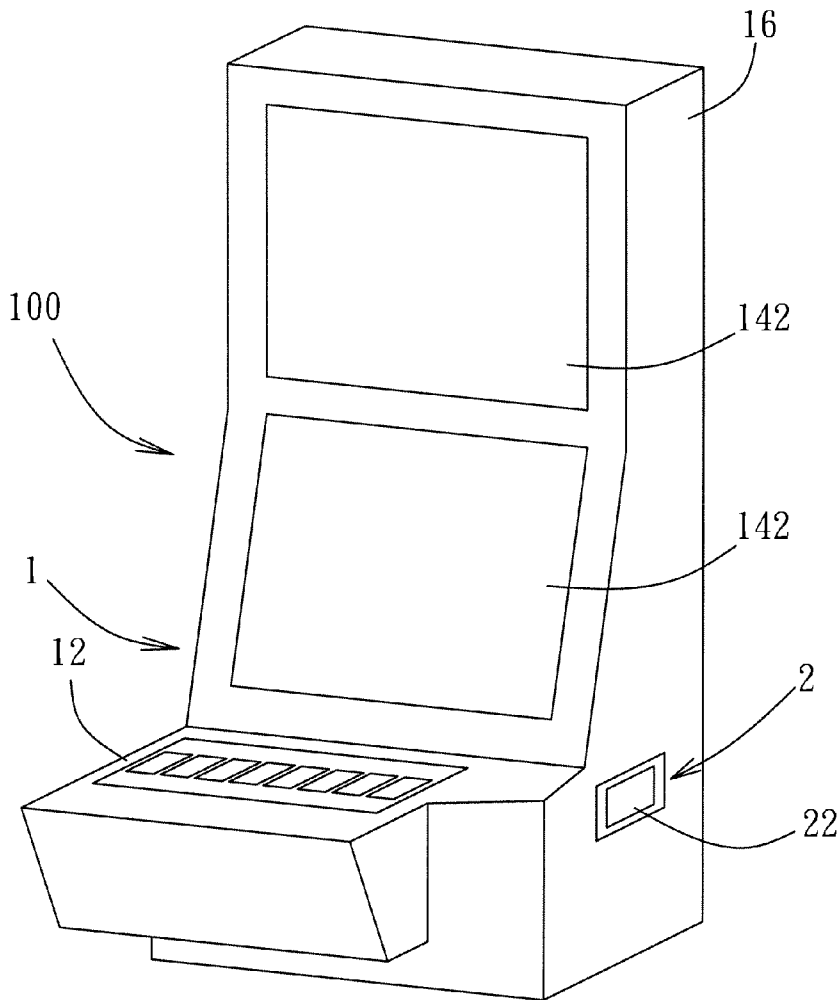
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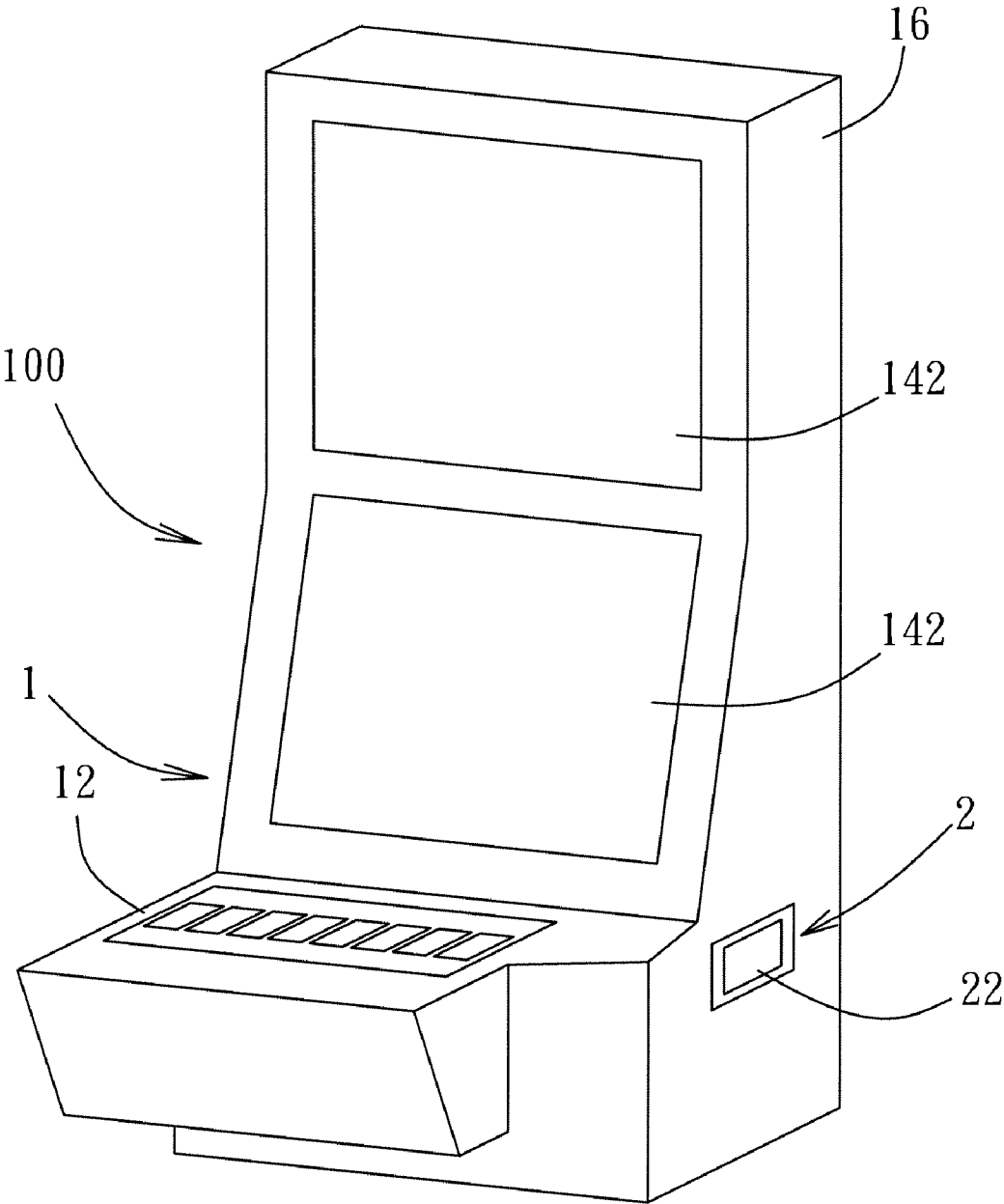
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F I G. 1

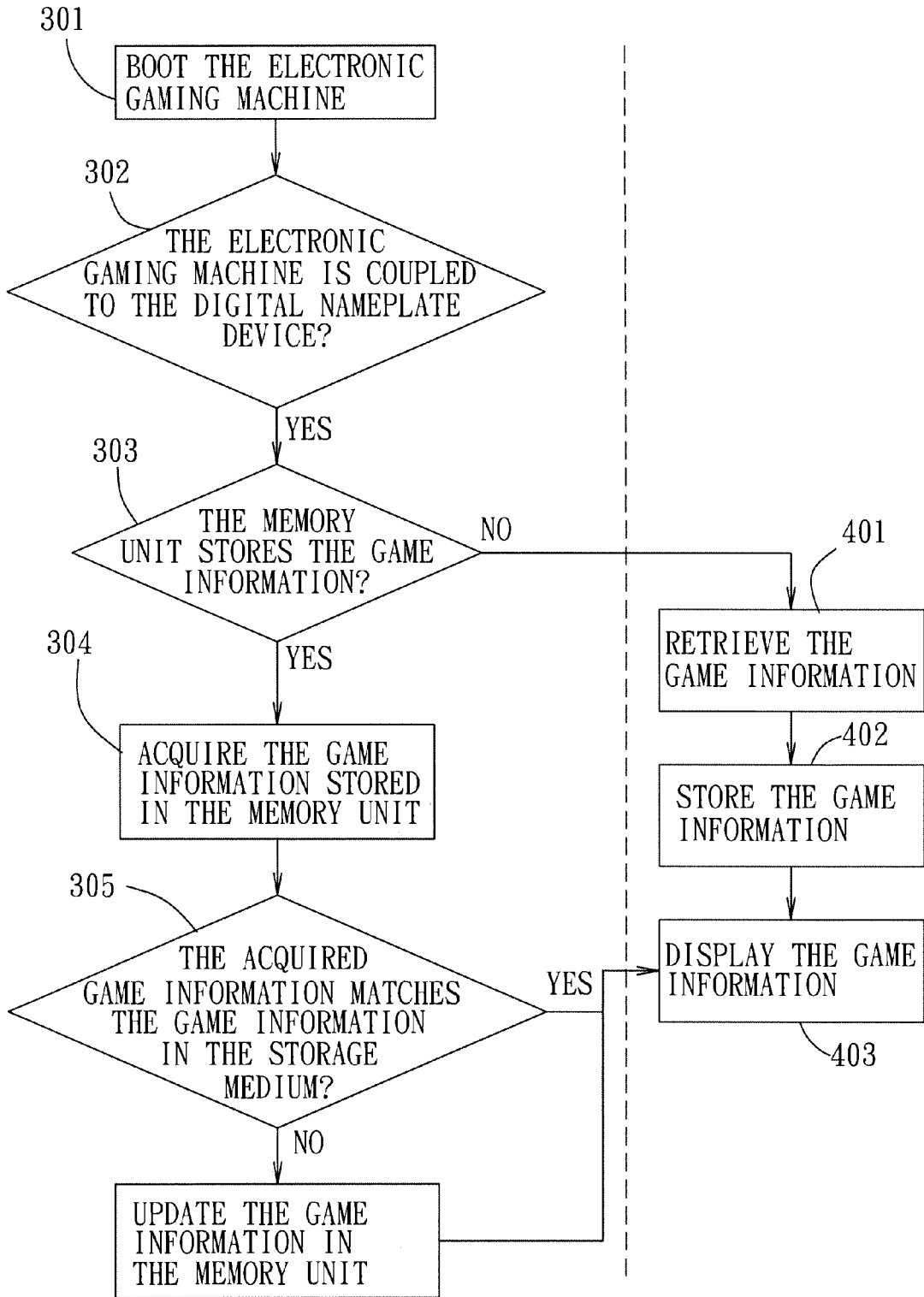


FIG. 3

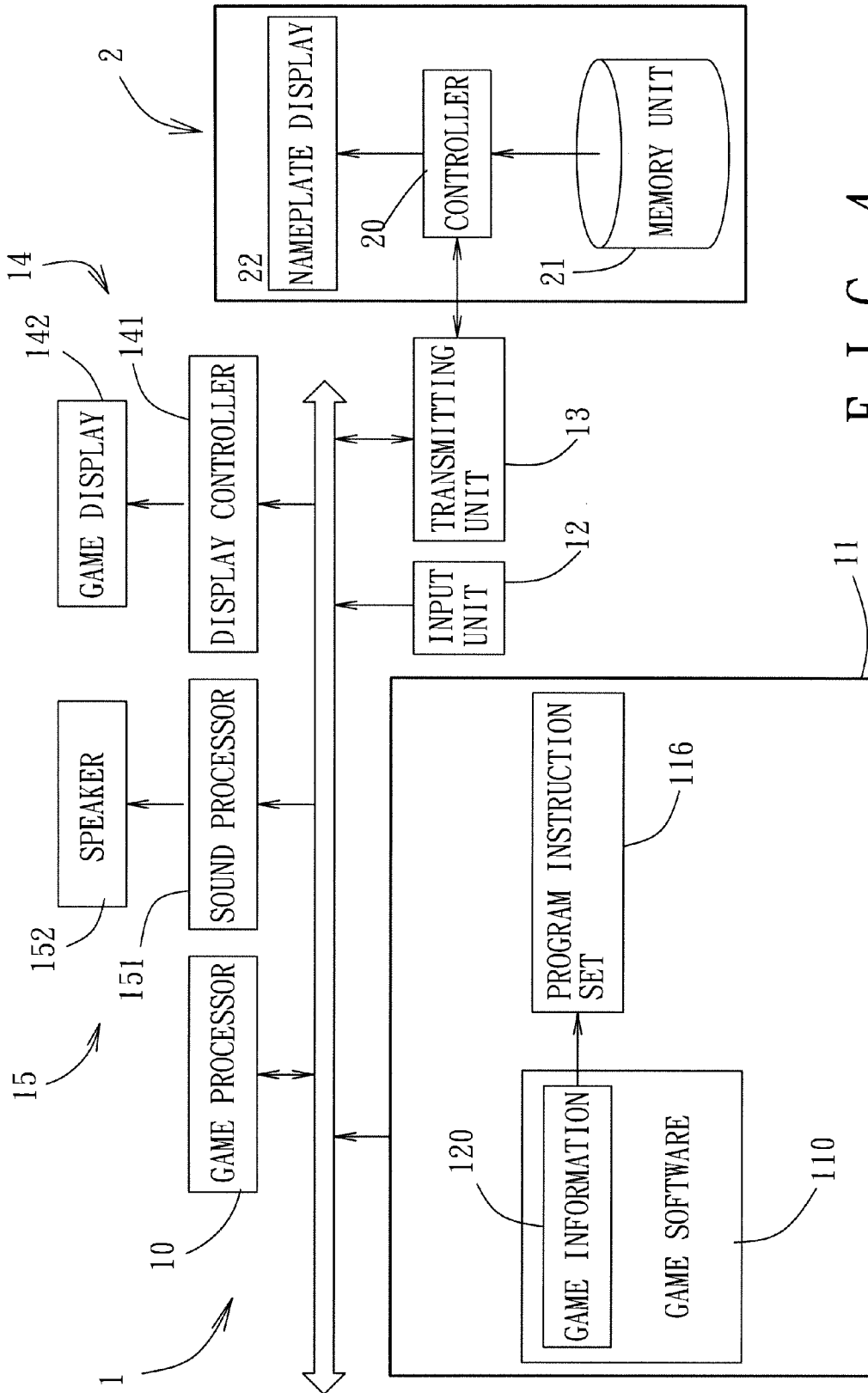


FIG. 4

GAMING APPARATUS INCLUDING AN ELECTRONIC GAMING MACHINE AND A DIGITAL NAMEPLATE DEVICE

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims priority of Taiwanese Application No. 097141783, filed on Oct. 30, 2008.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to a gaming apparatus, more particularly to a gaming apparatus including an electronic gaming machine and a digital nameplate device.

[0004] 2. Description of the Related Art

[0005] A nameplate is used for identifying and displaying specification or use of an object, such as a plate hung on a door of a conference room or a bathroom, and a plate attached to a product. A machine or an electronic device is usually provided with a nameplate for identifying the model and the specification thereof. The conventional nameplate is usually made of metal, such as iron, copper and aluminum, or plastics, and is usually printed or engraved with information of the object.

[0006] A gaming machine is generally provided with the conventional nameplate for displaying information about a name and a version of game software installed therein. The conventional nameplate is mounted on a housing of the gaming machine for convenience of inspection and management. However, a service life of the gaming machine is usually much longer than a life cycle of the game software installed therein. Thus, the nameplate attached to the gaming machine requires replacing each time the game software is replaced. Moreover, there is a currently available single gaming machine installed with different game software and capable of optionally executing a desired one of the game software. Therefore, the conventional nameplate cannot conform with a current trend, i.e., the game software is updated and replaced frequently.

SUMMARY OF THE INVENTION

[0007] Therefore, an object of the present invention is to provide a gaming apparatus including a digital nameplate device that does not require replacement when a game software stored in the gaming apparatus is replaced.

[0008] Accordingly, a gaming apparatus of the present invention comprises an electronic gaming machine and a digital nameplate device.

[0009] The electronic gaming machine includes a storage medium for storing a game software that has corresponding game information, a game processor coupled to the storage medium and operable to execute the game software, a display module coupled to and controlled by the game processor to generate game images, and a machine housing for housing the storage medium and the game processor and on which the display module is mounted. The digital nameplate device is mounted on the machine housing of the electronic gaming machine, and includes a memory unit, a controller coupled to the memory unit and the game processor, and a nameplate display coupled to the controller.

[0010] The game processor is configured to retrieve the game information stored in the storage medium and to control the controller to store the game information retrieved by the

game processor in the memory unit. The controller is configured to access the game information stored in the memory unit and to control the nameplate display to display the game information accessed thereby.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] Other features and advantages of the present invention will become apparent in the following detailed description of the preferred embodiment with reference to the accompanying drawings, of which:

[0012] FIG. 1 is a schematic perspective view illustrating a first preferred embodiment of a gaming apparatus of the present invention;

[0013] FIG. 2 is a schematic block diagram illustrating an electronic gaming machine and a digital nameplate device of the gaming apparatus of the first preferred embodiment;

[0014] FIG. 3 is a flow chart to illustrate operation of the first preferred embodiment for displaying game information; and

[0015] FIG. 4 is a schematic block diagram illustrating the electronic gaming machine and the digital nameplate device of the gaming apparatus of a second preferred embodiment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0016] Before the present invention is described in greater detail, it should be noted that like elements are denoted by the same reference numerals throughout the disclosure.

[0017] Referring to FIGS. 1 and 2, a first preferred embodiment of a gaming apparatus 100 of the present invention includes an electronic gaming machine 1 and a digital nameplate device 2.

[0018] The electronic gaming machine 1 includes a game processor 10, a storage medium 11, an input unit 12, a transmitting interface 13, a display module 14, a sound module 15, and a machine housing 16. The machine housing 16 is used for housing the game processor 10, and the storage medium 11. The sound module 15, the display module 14 and the input unit 12 are mounted on the machine housing 16.

[0019] In this embodiment, the storage medium 11 is, but not limited to, a memory card for storing a game software 110 that has corresponding game information 120. In other embodiments, the storage medium 11 can be a hard drive or a memory device. The game processor 10 is coupled to the storage medium 11, and is operable to execute the game software 110.

[0020] The input unit 12 is coupled to the game processor 10, and is operable by a user of the gaming apparatus 100 to generate control commands for the game processor 10. The display module 14 includes a display controller 141 coupled to the game processor 10, and a game display 142 coupled to the display controller 141. The display controller 141 is controlled by the game processor 10 to send image signals to the game display 142 for generating game images. The sound module 15 includes a sound processor 151 coupled to the game processor 10, and a speaker 152 coupled to the sound processor 151. The sound processor 151 and the speaker 152 cooperate to generate audible sound corresponding to the game images generated by the game display 142. Since techniques of the display module 14 and the sound module 15 are well known to those skilled in the art, and since the feature of this invention does not reside therein, further details thereof will be omitted herein for the sake of brevity.

[0021] The digital nameplate device 2 is mounted on a lateral side of the machine housing 16 of the electronic gaming machine 10, and includes a memory unit 21, a controller 20 coupled to the memory unit 21, and a nameplate display 22 coupled to the controller 20. The controller 20 is further coupled to the game processor 10 via the transmitting interface 13, such as a Recommended Standard 232 (RS232) or a Universal Serial Bus (USB) interface.

[0022] The game processor 10 is configured to retrieve the game information 120 stored in the storage medium 11 and to control the controller 20 to store the game information retrieved by the game processor 10 in the memory unit 21. The controller 20 is configured to access the game information stored in the memory unit 21 and to control the nameplate display 22 to display the game information accessed thereby.

[0023] The storage medium 11 includes first program instructions 111, second program instructions 112, third program instructions 113, fourth program instructions 114, and fifth program instructions 115. Operation of the first preferred embodiment for displaying the game information 120 will now be described with reference to FIGS. 2 and 3.

[0024] In step 301, the electronic gaming machine 1 is booted. In step 302, the first program instructions 111 configure the game processor 10 to detect electrical connection between the game processor 10 and the controller 20 of the digital nameplate device 2.

[0025] When the game processor 10 is coupled to the controller 20, the second program instructions 112 configure the game processor 10 to automatically determine whether the memory unit 21 of the digital nameplate device 2 stores the game information in step 303. The flow goes to step 304 when the determination made in step 303 is affirmative, and goes to step 401 when otherwise.

[0026] In step 401, the second program instructions 112 configure the game processor 10 to retrieve the game information 120 stored in the storage medium 11. The second program instructions 112 further configure the game processor 10 to control the controller 20 for storing the game information retrieved by the game processor 10 in the memory unit 21 in step 402, and for controlling the nameplate display 22 to display the game information stored in the memory unit 21 in step 403.

[0027] In step 304, the third program instructions 113 configure the game processor 10 to automatically acquire the game information stored in the memory unit 21 from the controller 20. Then, the fourth program instructions 114 configure the game processor 10 to automatically compare the game information acquired from the controller 20 with the game information 120 stored in the storage medium 11 in step 305. The flow goes to step 403 when the game information acquired from the controller 20 matches the game information 120 stored in the storage medium 11, and goes to step 306 when otherwise.

[0028] In step 306, the fifth program instructions 115 configure the game processor 10 to control the controller 20 for updating the game information in the memory unit 21 using the game information 120 in the storage medium 11. Then, the flow goes to step 403.

[0029] Referring to FIG. 4, a second preferred embodiment of the gaming apparatus of this invention is shown to be similar to the first preferred embodiment. In this embodiment, the program instructions 111-115 are replaced by a program instruction set 116 for configuring the game processor 10 to automatically retrieve the game information 120 stored in the

storage medium 11 and to automatically control the controller 20 to store the game information retrieved by the game processor 10 in the memory unit 21 each time the electronic gaming machine 1 is booted.

[0030] In sum, when the game software 110 stored in the electronic gaming machine 1 is replaced or the electronic gaming machine 1 is installed with various game software 110, the game processor 10 is capable of automatically retrieving the game information 120 stored in the storage medium 11, and controlling the digital nameplate device for storing and displaying the game information. Therefore, replacement of the digital nameplate device 2 is not required when replacing the game software 110.

[0031] While the present invention has been described in connection with what are considered the most practical and preferred embodiments, it is understood that this invention is not limited to the disclosed embodiments but is intended to cover various arrangements included within the spirit and scope of the broadest interpretation so as to encompass all such modifications and equivalent arrangements.

What is claimed is:

1. A gaming apparatus comprising:

an electronic gaming machine including

- a storage medium for storing a game software, the game software having corresponding game information,
- a game processor coupled to said storage medium and operable to execute the game software,
- a display module coupled to and controlled by said game processor to generate game images, and
- a machine housing for housing said storage medium and said game processor and on which said display module is mounted; and

a digital nameplate device that is mounted on said machine housing of said electronic gaming machine, and that includes a memory unit, a controller coupled to said memory unit and said game processor, and a nameplate display coupled to said controller;

wherein said game processor is configured to retrieve the game information stored in said storage medium and to control said controller to store the game information retrieved by said game processor in said memory unit; and

wherein said controller is configured to access the game information stored in said memory unit and to control said nameplate display to display the game information accessed thereby.

2. The gaming apparatus as claimed in claim 1, wherein said storage medium includes:

first program instructions for configuring said game processor to detect electrical connection between said game processor and said controller; and

second program instructions for configuring said game processor to retrieve the game information stored in said storage medium, and to control said controller for storing the game information retrieved by said game processor in said memory unit.

3. The gaming apparatus as claimed in claim 2, wherein said storage medium further includes:

third program instructions for configuring said game processor to acquire the game information stored in said memory unit from said controller;

fourth program instructions for configuring said game processor to compare the game information acquired from said controller with the game information stored in said storage medium; and

fifth program instructions for configuring said game processor to control said controller for updating the game information in said memory unit using the game information in said storage medium when the game information acquired from said controller does not match the game information stored in said storage medium.

4. The gaming apparatus as claimed in claim 3, wherein said third program instructions configure said game processor to automatically acquire the game information stored in said memory unit from said controller, and said fourth program instructions configure said game processor to automatically compare the game information acquired from said controller

with the game information stored in said storage medium each time said electronic gaming machine is booted.

5. The gaming apparatus as claimed in claim 1, wherein said game processor is configured to automatically retrieve the game information stored in said storage medium and to automatically control said controller to store the game information retrieved by said game processor in said memory unit each time said electronic gaming machine is booted.

6. The gaming apparatus as claimed in claim 5, wherein said storage medium includes a program instruction set for configuring said game processor to automatically retrieve the game information stored in said storage medium and to automatically control said controller to store the game information retrieved by said game processor in said memory unit each time said electronic gaming machine is booted.

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