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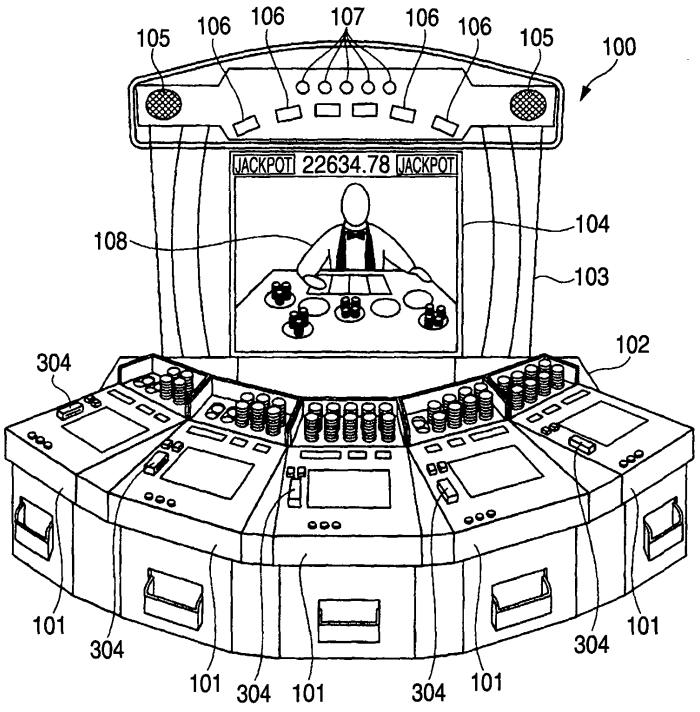
(54) Gaming machine

(57) A gaming machine includes: a display; an operation unit; a processor; and a printer. The processor is operable with the display to: provide a game using a suit of cards to a player by displaying the cards on the display and by allowing the player to input operations through the operation unit; and select a card from among the cards in accordance with a progress of the game. The printer prints an image of the selected card on a blank card to be provided as a printed card to the player.

FIG. 1



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Description

TECHNICAL FIELD

[0001] The present invention relates to a gaming machine, more specifically to a gaming machine that provides a player with a game using card shaped item such as playing cards.

BACKGROUND

[0002] A large number of gaming machines that provides a player to play a game using a card such as playing cards, for example, poker, blackjack and Baccarat, have been developed and become widespread.

[0003] It is desirable that this kind of gaming machine provides a sense of reality akin to that of a game played in actual game arcades or in casinos.

[0004] As a technique of providing such a sense of reality, a gaming machine has been proposed which includes a player terminal having a display that displays a video image of the cards actually handled by a human dealer being filmed in advance. An example of such gaming machine is disclosed in JP-A-2005-168664.

[0005] Also, as a technique of providing such a sense of reality, a gaming machine has also been proposed which is provided with, instead of a display for displaying a video image of playing cards, a card table that stores an actual playing cards and a device that deals and turns (turning a face down card to face up) the playing cards. An example of such gaming machine is disclosed in JP-A-2005-058572. However, in the conventional gaming machine thus configured, as the playing cards are stored inside the card table, it is not possible for the player to pick up in the player's hands.

[0006] In the conventional gaming machines that are configured to display video image of the playing cards, or to use an actual playing cards that are stored in the card table, the player is unable to play with the actual playing cards in the player' s hands. Accordingly, the conventional gaming machines are unable to let the player savor the sense of reality, tension, and excitement compared with that of playing with an actual card game played in a gaming place such as gaming arcades and casinos. Especially, the conventional gaming machine is unable to let the player enjoy an action called "peeking" performed in the actual card game, that is, an action of lifting or folding back an edge of a card dealt in a face down state (for example, a so-called "Hole Card" dealt to the dealer), looking little by little at a portion of a card front face, and confirming what the card is to determine the card's suit and rank.

SUMMARY

[0007] One of objects of the present invention is to provide a gaming machine that enables the player to play a card game with cards actually in hand, and enables the player to perform the action called "peeking".

[0008] According to a first aspect of the invention, there is provided a gaming machine including: a display; an operation unit; a processor; and a printer. The processor is operable with the display to: provide a game using a suit of cards to a player by displaying the cards on the display and by allowing the player to input operations through the operation unit; and select a card from among the cards in accordance with a progress of the game. The printer prints an image of the selected card on a blank card to be provided as a printed card to the player.

[0009] According to a second aspect of the invention, there is provided a gaming machine including: a display; an operation unit; a processor; and a printer. The processor is operable with the display to: provide a game using a suit of cards to a player by displaying the cards on the display and by allowing the player to input operations through the operation unit; and select a card from among the cards in accordance with a progress of the game. The printer prints an image of the selected card on a blank card to be provided as a printed card to the player. Wherein the processor provides the game by displaying at least one of the cards dealt to the player in a faced-down state. Wherein the processor selects at least one of the faced-down cards to be printed by the printer.

[0010] According to a third aspect of the invention, there is provided a gaming machine including: a plurality of player terminals that are provided for each of a plurality of players that simultaneously participate in a game using a suit of cards; a display including: (1) a main display that is disposed to be visible from the players that participate in the game; and (2) a plurality of terminal displays, each of which being provided in each of the player terminals; a plurality of operation units, each of which being provided in each of the player terminals; a processor that is operable with the display to: (a) provide the game by displaying main information on the main display while displaying at least one of the cards dealt to each of the players in a faced-down state on each of the terminal displays, and by allowing the players to input operations through the operation units; and (b) select at least one of the faced-down cards in accordance with a progress of the game; and a plurality of printers, each of which being provided in each of the player terminals and prints an image of the selected card on a blank card to be provided as a printed card to each of the players.

BRIEF DESCRIPTION OF THE DRAWINGS

[0011] In the accompanying drawings:

Fig. 1 is an external view of a gaming machine according to an embodiment of the present invention;
Fig. 2 is an enlarged view of a player terminal of the gaming machine;
Fig. 3 is a block diagram showing a configuration example of a control system of the gaming machine;
Fig. 4 is a perspective view showing an example of

an elevation mechanism;

Fig. 5 is a perspective view showing another example of the elevation mechanism;

Fig. 6 is a perspective view showing still another example of the elevation mechanism;

Fig. 7 is a block diagram showing a configuration example of a card printer of the gaming machine;

Fig. 8A is a figure to show a card before being printed by the card printer, and Fig. 8B is a figure to show the card after being printed by the card printer;

Fig. 9 is a view showing a condition in which the printed card has been ejected from the card printer;

Fig. 10 is a view showing a condition in which a player is performing a "peeking" on the printed card ejected from the card printer;

Fig. 11 is a block diagram showing a configuration example of a control system of the gaming machine;

Fig. 12 is a functional block diagram of a microcomputer of a main controller of the control system;

Fig. 13 is a block diagram showing an example of a control system of the player terminal;

Fig. 14 is a flowchart showing an example of a main process performed by the gaming machine; and

Fig. 15 is a flowchart showing an example of a card compilation process performed by the gaming machine.

DETAILED DESCRIPTION

[0012] Fig. 1 shows an external view of a gaming machine according to an embodiment of the present invention. As shown in the figure, a gaming machine 100 includes: a table unit 102 that is provided with a plurality of player terminals 101 called "satellites" being arranged in an approximate fan-shaped manner; and a panel unit 103 that is provided behind the table unit 102. In an example shown in the figure, five player terminals 101 are provided in the table unit 102 being arranged at a near side to the players with respect to the panel unit 103 in the fan-shaped manner.

[0013] The panel unit 103 includes: a main display 104 having a display device such as a liquid crystal display panel; speakers 105; lamps 106; and LED's 107. The main display 104 displays an image for notifying information (main information) related to a game in which players participate. The main display 104 is designed to display a notification of information such as a start of a bet reception time, a notification of a bet finish, and a notification of win/lose of the game, by displaying a video image including an animation of a dealer 108.

[0014] In order to allow the player to perform an action called "peeking", a card printer (printer) 304 that prints out a card to be "peeked" by the player is provided at left side on an upper surface of each of the player terminals 101. The card to be peeked by the player is, for example in a game of Baccarat, a "Hole Card" (faced-down card) dealt to the "Banker".

[0015] Fig. 2 shows an enlarged view of the player terminal 101. Hereafter, a description will be given, while referring to Fig. 2, of the player terminal 101.

[0016] The player terminal 101 is provided with, in the upper surface, a liquid crystal display (terminal display) 201 for providing information related to the game to the player. The liquid crystal display 201 is covered by a transparent touch panel 202 and displays an input interface screen. The player terminal is further provided with a button group 203 that is disposed in front of the liquid crystal display 201. The button group 203 is configured by a plurality of buttons, such as a PAYOUT button and a BET button, which the player uses in the game.

[0017] A coin insertion slot 204, into which the player inserts a game medium, is provided to a right of the button group 203. The game medium may be a coin, a medal or a chip (hereafter simply referred to as a "coin"). A bill insertion slot 205, into which the player inserts a bill, is provided below the coin insertion slot 204. A coin sensor (not shown) is provided inside the coin insertion slot 204. When a coin is inserted in the coin insertion slot 204, a coin detection signal is sent to the player terminal 101 via the coin sensor. A bill sensor (not shown) is provided inside the bill insertion slot 205. When a bill is inserted in the bill insertion slot 205, a bill detection signal is sent to the player terminal 101 via the bill sensor.

[0018] The card printer 304 is provided to a left of the liquid crystal display 201. A card printed by the card printer 304 is ejected from the card printer 304 via a slot 305 formed in a side surface of the card printer 304. The ejected card is placed in a face down condition on the upper surface of the player terminal 101. When the card is ejected, it is possible for the player to perform the "peeking" by turning up or lifting an edge of the card.

[0019] A coin payout opening 206 is provided in a lower front portion of the player terminal 101. When the player presses the PAYOUT button, which is one of the button group 203, a number of coins corresponding to all or a part of a credit value belonging to the player stored in the player terminal 101 is ejected from the coin payout opening 206, enabling the player to take possession of them.

[0020] A transparent acrylic panel 207 is provided beyond the liquid crystal display 201 at a side toward the panel unit 103. The transparent acrylic panel 207 is formed to have three faces opened toward the player. A three-dimensional model chip presentation unit 208 is provided in an area surrounded by the transparent acrylic panel 207. The three-dimensional model chip presentation unit 208 is provided with; three-dimensional model chips 209; a bottom plate 211 provided with apertures 210 for the three-dimensional model chips 209 to protrude outward from an interior of the player terminal 101, or to retract three-dimensional model chips 209 into the player terminal 101; and an elevation mechanism (to be described hereafter) for raising and lowering the three-dimensional model chips 209.

[0021] The three-dimensional model chips 209 are formed as a model of a pile of chips, and are manufactured, for example, by molding a resin. The three-dimen-

sional model chips 209 may be formed to have different units of chips. For example, there may be configured that three-dimensional model chips representing a pile of chips worth one credit each, three-dimensional model chips representing a pile of chips worth ten credits each, three-dimensional model chips representing a pile of chips worth one hundred credits each, and so on are prepared.

[0022] The three-dimensional model chips 209 are raised and lowered by the elevation mechanism in accordance with a number of chips by which the player operating the player terminal 101 on which the three-dimensional model chip presentation unit 208 is provided is in credit with the gaming machine 100, that is, an owned credit value. For example, in the event that the player currently has an owned credit value of "251", the three-dimensional model chips representing a pile of chips worth one credit each are raised or lowered so as to protrude from the bottom plate 211 to a height equivalent to a thickness of one chip, and a raising or lowering of the three-dimensional model chips representing a pile of chips worth ten credits each is performed so that they protrude from the bottom plate 211 to a height equivalent to a thickness of five chips, while a raising or lowering of the three-dimensional model chips representing a pile of chips worth a hundred credits each is performed so that they protrude from the bottom plate 211 to a height equivalent to a thickness of two chips.

[0023] All the players that participate in the game can ascertain promptly and intuitively of any of the player's owned credit value by looking at a height to which the three-dimensional model chips 209 protruding from the bottom plate 211, and experience a sense of reality just as though actual chips are increasing and decreasing in front of their eyes.

[0024] Fig. 3 is a schematic block diagram showing an example of an internal configuration of the gaming machine 100. A main controller 301 is stored in the gaming machine 100. The main controller 301 is provided with a processor that performs a game program and peripheral devices that is connected to the processor. The main controller 301 is connected to each of the player terminals 101 so as to perform two-way communication. The main controller 301 receives a notification of a player selection such as a number of coins bet, a betting subject and the like from the player terminals 101. The main controller 301 performs to: start an execution of the game in the event that predetermined conditions is met; determine the outcome of the game; and transmit a result to the player terminals 101.

[0025] Each of the player terminals 101 performs an increase or a reduction of the owned credit value of the relevant player in accordance with the notification from the main controller 301. For example, in the event that the player wins the game, each player terminal 101, in accordance with the notification from the main controller 301, adds a credit value equivalent to a number of chips obtained to the owned credit value, and updates a memory while, in the event that the player loses the game, each player terminal 101, in accordance with the notification from the main controller 301, subtracts a credit value equivalent to a number of coins bet from the owned credit value, and updates the memory.

[0026] The main controller 301 also transmits an image signal to be displayed on the main display 104, controls the lamps 106 and the LED's 107, and controls the speakers 105.

[0027] Each of the player terminals 101 is provided with an elevation mechanism 302 and a illumination unit 303.

[0028] The elevation mechanism 302, in the embodiment, is provided with a stepping motor as a power source for raising and lowering the three-dimensional model chips 209. However, the elevation mechanism 302 may be provided with a regular motor combined with a position controlling mechanism, instead of the stepping motor.

[0029] A description will be given of a specific configuration of the elevation mechanism 302, while referring to Fig. 4.

[0030] The elevation mechanism 302 shown in Fig. 4 includes: a rotation drive shaft 402 attached to a stepping motor 401; contact members 403_1 to 403_5 fixed to the rotation drive shaft 402, which rotate along with a rotation of the rotation drive shaft 402; arms 405_1 to 405_5 rotatably attached by a support shaft 404 in a position in which one end is in contact with contact surfaces 403_1P to 403_5P which are included in the contact members 403_1 to 403_5; and tables 406_1 to 406s attached to the other end of the arms 405_1 to 405_5. The three-dimensional model chips 209 are fixed in place on an upper surface of the tables 406_1 to 406_5. The tables 406_1 to 406_5 are guided by a guide rail 407, and are regulated in such a way that the three-dimensional model chips 209 pass correctly through the apertures 210.

[0031] The example shown in Fig. 4 is a configuration which raises and lowers five kinds of three-dimensional model chips 209 configured by five contact members 403_1 to 403_5, the contact surfaces 403_1P to 403_5P, the arms 405_1 to 405_5 and the tables 406_1 to 406_5, and described with a suffix attached in order to distinguish between each of the members provided for each of the five kinds of the three-dimensional model chips 209. Hereafter, in a case in which it is not necessary to distinguish the members for the five kinds, they will be marked simply as a contact member 403, a contact surface 403P, an arm 405 and a table 406, without attaching a suffix.

[0032] Next, a description will be given of an operation of the elevation mechanism 302 shown in Fig. 4.

[0033] On the stepping motor 401 driven by the player terminal 101 rotating the rotation drive shaft 402, the contact member 403 rotates. As the rotation continues, the contact member 403 comes into contact with the one end of the arm 405. In the embodiment, the contact surface 403_5P contacts earliest with the one end of the arm 405_5, after which the contact surface 403_4P, the contact sur-

face 403_3P, the contact surface 403_2P and the contact surface 403_1P come into contact in order with the one end of the corresponding arms 405_4 to 405_1, respectively.

[0034] After the contact surface 403P has made contact with the one end of the arm 405, and the contact member 403 further rotates, the contact surface 403P pushes down the one end of the arm 405.

[0035] The arm 405 of which the one end has been pushed down revolves around the support shaft 404, so that the other end is pushed upward. As a result, the table 406 fixed to the other end is also pushed upward, and the three-dimensional model chips 209 positioned on the table 406 also rise along with the table 406. As a result, it is possible to cause a part or the whole of the three-dimensional model chips 209 to pass through the apertures 210, protrude from the bottom plate 211, and be exposed, in accordance with a degree of rotation of the rotation drive shaft 402 due to the stepping motor 401.

[0036] Also, by causing the stepping motor 401 to rotate in a reverse direction, a part or the whole of the three-dimensional model chips 209 once caused to protrude from the bottom plate 211 and be exposed can be stored below the bottom plate 211.

[0037] In the configuration example shown in Fig. 4, as a form of the contact members 403_1 to 403_5 is fixed in such a way that a timing by which the contact surfaces 403_1P to 403_5P come into contact with the one end of the corresponding arms 405_1 to 405_5 differs, the three-dimensional model chips 209 at a right end of the figure start to rise the earliest, after which the three-dimensional model chips 209 on a left side of the three-dimensional model chips 209 on the right side start to rise in order. Using this feature, by individuating a color or pattern of the three-dimensional model chips 209 in such a way that a value of one of the three-dimensional model chips 209 at the farthest right end is made low (for example, one credit each), after which a value of one chip is made higher while moving to the left (for example, five credits each, ten credits each, one hundred credits each, one thousand credits each), it is possible to express a wide range, such as one to one hundred thousand, of owned credit values by means of an amount of protrusion of the three-dimensional model chips 209.

[0038] Next, another configuration example of the elevation mechanism 302 is shown in Figs. 5 and 6. Fig. 5 is a perspective view of a basic unit of the another configuration example of the elevation mechanism 302. One elevation mechanism 302 is configured by collecting a plurality of the basic units.

[0039] In the basic unit of the elevation mechanism 302, a table 503 is attached to a rotation drive shaft 502 rotatably driven by a stepping motor 501.

[0040] As in the previously described example, the three-dimensional model chips 209 are positioned on an upper surface of the table 503. The three-dimensional model chips 209 being formed of a left and right hollow semi-cylinder stuck together to make one set of three-dimensional model chips 209, Fig. 5 shows one side of the hollow semi-cylinder before sticking together. Although not shown, it is the same as the previously described example in that the three-dimensional model chips 209 rise and descend in such a way as to protrude from or retreat into the apertures 210 in the bottom plate 211.

[0041] A nut 504 is fixed underneath the table 503. A screw thread and a screw groove (not shown) are formed in a peripheral surface of the rotation drive shaft 502, and the nut 504 and the rotation drive shaft 502 are screwed together.

[0042] The table 503 is restricted so as not to rotate along with a rotation of the rotation drive shaft 502. For example, it is acceptable to provide a guide rail, as in the previously described example, to restrict a rotation of the table 503 (a movement in an upward and downward direction is not restricted), or to bring it into slidable contact with an interior wall or the like of the gaming machine 100 to restrict the rotation of the table 503 (the movement in the upward and downward direction is not restricted).

[0043] By causing the rotation drive shaft 502 to rotate, the table 503 threadedly advances and retreats. That is, by controlling the stepping motor 501, it is possible to control a rising and lowering of the table 503, that is, of the three-dimensional model chips 209 positioned thereon.

[0044] Fig. 6 is a perspective view showing an example of a case in which the elevation mechanism 302 is configured using a plurality of the basic units. In the example of the elevation mechanism 302, it is configured of a line of five basic units on each of which one set of the three-dimensional model chips 209 is positioned, and a line of five basic units on each of which another set of the three-dimensional model chips 209 is positioned. As each basic unit has a stepping motor 501, it is possible to perform an up-down control of the three-dimensional model chips 209 for each basic unit independently.

[0045] Accordingly, when using an elevation mechanism 302 with this kind of configuration, it is possible not only to use the rising and lowering of the three-dimensional model chips 209 to display the owned credit value, but also to cause it to perform another display, for example, to operate in order to perform an effect such as causing the three-dimensional model chips 209 to be raised and to be lowered like a swelling of a wave, from right to left, or from left to right, in the event of the player of the player terminal acquiring a large win.

[0046] Returning to Fig. 3, the description of the outline configuration of the gaming machine 100 will be continued.

[0047] The player terminal 101 is connected to the illumination unit 303, and controls a light emitting operation of the illumination unit 303. The illumination unit 303 is a circuit having a light source such as a plurality of LED's, serves as a light source which can emit different colors (for example, red, blue, green, white etc.) and change a brightness. Light emitted from the illumination unit 303 is guided by the acrylic panel 207, and emitted

to an exterior of the gaming machine 100, in particular in a direction visible to the player.

[0048] Also, the card printer 304 is attached to the upper surface of the player terminal 101. The card printer 304 being connected to the main controller 301, it performs a printing of a card 1305 and a discharge of the printed card in accordance with an instruction from the main controller 301. The card 1305 ejected from the card printer 304 is placed in the face down position on the upper surface of the player terminal 101.

[0049] Fig. 7 shows a configuration example of the card printer 304. The card printer 304 includes a card case 702 that stores a card stock 701, which is a pile of a plurality of so-called blank cards stacked up. All the blank cards configuring the card stock 701 are stacked up in a condition in which a back surface of the card is facing up, and a blank front surface of the card is facing down.

[0050] Fig. 8A shows one of a blank card 701A which configures the card stock 701 stored in the card case 702. As shown in the figure, although a pattern common to all the cards has already been printed on a card back surface 801, the front surface of the card is in a blank condition in which nothing is printed, and no card suit (a mark such as a heart or a spade), rank (a letter or number such as A, Q, J, 10, ..., 3, or 2), or picture (a figure such as a king, a queen or a jack) exists.

[0051] Returning to Fig. 7, the description of the card printer 304 will be continued.

[0052] A plate 703 is provided at a bottom inside the card case 702 in such a way as to be slidable with respect to an interior side surface of the card case. The plate 703 being constantly urged upward by a spring 704, the plate 703 is pushed upward as the cards are consumed from the card stock 701, and the card stock 701 is also pushed upward.

[0053] A roller 705 for conveying the blank cards toward an image formation unit 708, to be described hereafter, is provided on a front side of the card stock 701. On the roller 705 rotating, an uppermost blank card 701A of the card stock 701 is conveyed in such a way as to pass over the image formation unit 708. The image formation unit 708 is means, such as a printer head, which can print an image on the card surface.

[0054] The card suit (a mark such as the heart or the spade), rank (a letter or number such as A, Q, J, 10, ..., 3, or 2), and picture (a figure such as the king, the queen or the jack) is printed by the image formation unit 708 on the front surface of the blank card 701A. The printed card 701B is sent on by a roller 706, provided on a front side of the image formation unit 708, to a slit provided in a side of the card printer 304, and ejected to an exterior of the card printer 304 through the slit 305. Fig. 8B shows an example of a card in a condition in which an image has been printed on the front surface. The back surface 801 remains unchanged from before the printing. Contrary, a printing having been performed on the front surface, it is in a completed condition as a card. The details of the images to be printed (the suit, the rank, the picture) on the blank card 701A are determined by the main controller 301, and the image formation unit 708 prints out the printed card 701B in accordance with details determined by the main controller 301.

[0055] The printed card 701B is output on the liquid crystal display 201 to be performed with the "peeking" action by the player.

[0056] Fig. 9 shows a condition in which the card printer 304 has finished discharging the printed card 701B. The printed card 701B is placed on the upper surface of the player terminal 101 in a condition in which the card back surface faces upward. In this condition, the player cannot know the details of the printed card 701B.

[0057] Fig. 10 shows a condition in which the player is performing the "peeking" on the printed card 701B, after the condition in Fig. 9. The player lifts up an edge of the printed card 701B with a finger FIN or the like, and looks at a portion of a card front surface 802. By means of the "peeking", only the player who has performed the "peeking" can predict or know the details of the relevant card, as a result of which, only the player can predict or know an outcome (a result) of the game.

[0058] Returning to Fig. 7, the description of the card printer 304 will be continued.

[0059] The card printer 304 further includes a control circuit 709 and a roller drive motor 707. The control circuit 709, being means of controlling the image formation unit 708 and the roller drive motor 707, is, for example, a circuit which includes a microcomputer. The roller drive motor 707 is a motor which drives the rollers 705 and 706. The control circuit 709, being connected to the main controller 301, performs a control of the image formation unit 708 and the roller drive motor 707 in accordance with a card printing instruction from the main controller 301.

3. A configuration example of the main controller

[0060] Next, a description will be given of a configuration example of the main controller 301, while referring to Fig. 11.

[0061] The main controller 301 includes a microcomputer 1105 including a CPU 1101, an RAM 1102, an ROM 1103, and a bus 1104 for performing a reciprocal data transfer between them. The ROM 1103 and the RAM 1102 are connected to the CPU 1101 via the bus 1104. Various kinds of program, data table and the like for performing processes necessary for a controlling of the gaming machine 100 are stored in the ROM 1103. The RAM 1102 is a memory that temporarily stores various data calculated by the CPU 1101.

[0062] The microcomputer 1105, being connected to an image processing circuit 1107 via an I/O interface 1106, the image processing circuit 1107 is connected to the main display 104, and controls a drive of the main display.

[0063] The image processing circuit 1107 is configured of a program ROM, an image ROM, an image control

CPU, a work RAM, a VDP (Video Display Processor), a video RAM and the like. An image control program and various selection tables related to a display on the main display 104 are stored in the program ROM. Dot data (bitmap data) for forming an image, such as, for example, dot data for forming an image on the main display 104, are stored in the image ROM. The image control CPU, based on parameters set by the CPU 1101, in accordance with the image control program stored in advance in the program ROM, determines an image to be displayed on the main display 104 from among the dot data stored in advance in the image ROM. The work RAM is configured as a temporary memory device when executing the image control program with the image control CPU. The VDP generates image data in accordance with display details determined by the image control CPU, and transmits them to the main display 104. The video RAM is configured as a temporary memory device when forming the image with the VDP.

[0064] The microcomputer 1105 is connected to the speakers 105 via a sound circuit 1108. The speakers 105, based on an output signal from the sound circuit 1108, generate various sound effects, background music and the like when performing various effects.

[0065] The microcomputer 1105 is connected to the lamps 106 and the LED's 107 via a lamp drive circuit 1109. A plurality of the lamps 106 and LED's 107 is arranged on a front of the gaming machine 100, and are controlled as to an illumination by the lamp drive circuit based on a drive signal from the CPU 1101, to thereby perform various effects.

[0066] The microcomputer 1105 is connected to each player terminal 101 via a communication interface 710. The two-way communication can be performed between the CPU 1101 and the player terminals 101. As the CPU 101, by means of the communication interface 710, can perform a transmission and reception of an instruction, a transmission and reception of a request and the like with each main player terminal 101, the main controller 301 and the player terminals 101 cooperate in controlling a progression of the game.

[0067] The microcomputer 1105 is connected via a communication interface 1110 to each card printer 304 so that communication is possible. The microcomputer 1105 controls each card printers 304 independently. That is, as well as being possible to cause only one of the card printers 304 to print and eject a card, it is also possible to cause all or a plurality of the card printers 304 to print and eject a card simultaneously.

4. Functions of the main controller

[0068] Functions of the main controller 301 according to the embodiment are mainly realized by the microcomputer 1105, executing the program stored in the ROM 1103. Hereafter, a description will be given of functions realized by the microcomputer 1105, executing the program.

[0069] Fig. 12 is a functional block diagram of the main controller 301. In the example shown in the figure, the CPU 1101 serves as a management process 1201, a game execution process 1202 which performs an exchange of data with the management process 1201, a card printing destination determination process 1203, and a card printing instruction process 1204.

4.1. Management process

[0070] The management process 1201 collectively controls each circuit 1107 to 1109 in the main controller 301, the communication interface 1110, the game execution process 1202, the card printing destination determination process 1203, as well as the card printing instruction process 1204 and each card printer 304. More specifically, the management process 1201 receives each signal, command, request and the like from each player terminal 101 and, in accordance with the received signal and the like, instructs the game execution process 1202, the card printing destination determination process 1203 and the card printing instruction process 1204 to boot up and perform a process. Also, the management process 1201 receives a card printing instruction generated by the card printing instruction process 1204, and controls the communication interface 1110 in such a way that it transmits the card printing instruction to the card printer 304 which is a destination of the card printing instruction (the card printer 304 to be the destination is determined in accordance with details of the card printing instruction).

[0071] The management process 1201, while performing a communication with each player terminal 101, determines a start, an execution and a finish of the game and, based on the determination, sends an instruction, a request, a notification and the like to each player terminal 101.

[0072] The management process 1201 transmits an image generation instruction to the image processing circuit 1107 so as to cause it to display an effect image including the dealer 108 on the main display 104. Also, in order to perform an effect suited to a progress condition of the game, it transmits a drive instruction to the lamp drive circuit 1109 and the sound circuit 1108, driving the lamps 106, the LED's 107 and the speakers 105, thereby executing an effect with a light and a sound.

[0073] The game execution process 1202, the card printing destination determination process 1203 and the card printing instruction process 1204 controlled by the heretofore described management process 1201 have a kind of function described hereafter.

4.2. Game execution process

[0074] The game execution process 1202, being booted by a game start determination of the management process 1201, performs the game program stored in advance in the ROM 1103 and, in conjunction with each

player terminal 101, causes the player to play the game.

[0075] More specifically, the game execution process 1202 determines cards to be dealt in accordance with a progress of the game. In the event that the game is Baccarat, the details (the suit and the rank) of an up card and a "Hole Card" to be dealt to the "Banker", and two cards to be dealt to the player, are determined as the cards to be dealt. The details of the determined dealt cards are stored in the RAM 1102 as dealt card information 1206. Also, the game execution process 1202 generates bet status information 1207, based on a condition of a bet of each player relayed from each player terminal, and stores it in the RAM 1102. The bet status information 1207 is information including an amount bet by each player, a bet input time and the like for a single round of the game (or a so-called "unit game"). The single round of the game is defined as a process from a bet reception to a payout of an award in accordance with a game result.

[0076] The game execution process 1202 sends an image display instruction to the image processing circuit 1107 so as to cause it to display a game screen, which constantly changes along with the progression of the game, on the main display 104. In accordance with the instruction, the image processing circuit 1107, using a background image, a stripe and the like stored in an image ROM, generates image data, and causes an image based on the image data to be displayed on the main display 104.

4.3. Card printing destination determination process

[0077] The card printing destination determination process 1203 performs a process determining which card printer 304 should perform the card printing. Although a criterion for determining which card printer 304 should perform the printing can be determined as appropriate, as an example, employing kinds of criteria described hereafter can be considered.

1) Cause the card printer 304 corresponding to the player terminal 101 into which a highest value of bet has been input to perform the card printing.

[0078] In the event that the card printing destination determination process 1203 determines which card printer 304 should perform the card printing based on such a criterion, it is possible to give a player who has acquired the printed card 701B from the card printer 304 a feeling of superiority over other players, and to increase a desire to play.

2) Cause the card printer 304 corresponding to the player terminal 101 with an earliest bet input time to perform the card printing.

[0079] In the event that the card printing destination determination process 1203 determines which card printer 304 should perform the card printing based on such a criterion, it is possible to reduce a time taken for one game, as a result of which it is possible to improve a gaming machine operating rate, and to increase a profit obtained from the gaming machine. Also, it is possible to give the player who has acquired the printed card 701B from the card printer 304 the feeling of superiority over other players, and to increase the desire to play.

3) Cause the card printer 304 corresponding to the player terminal 101 which has purchased a right to perform the "peeking" to perform the card printing, regardless of the heretofore described 1) and 2).

[0080] In the event of employing the criteria described heretofore, even in a case in which another player who consistently places a bet of a high value is playing simultaneously, when a certain player wants to go for a win, it is possible to perform the "peeking" by purchasing the right to the "peeking". It is possible for an administrator of a game arcade, in which the gaming machine 100 is installed, to obtain a profit as a purchase price of the right to the "peeking", even from a player who does not place the bet of the high value.

[0081] The action to "purchase a right" described herein is performed by the player by betting a credit, which is a payment of the price, and by inputting a specific operation through the operation unit (such as button groups 201 and the touch panel 202) in order to receive the printed card in the current round of the game.

[0082] The operation thus made by the player is notified to the main controller 301. The main controller (processor) 301 determines that at least one of the printers, which is provided in the player terminals having the operation unit through which an operation for receiving the printed card is input in a current round of the game, is to be controlled to output the printed card.

[0083] The gaming machine 100 may be configured that the processor controls the printer to output the printed card in accordance with a specific operation made through the operation unit without any requirement of the payment of credits or game values by the player.

[0084] It is not necessarily only one card printer 304 which is caused to perform the card printing. For example, in a case of a style whereby the card printing destination determination process 1203 performs the determination based on the criterion in 1) described heretofore, in the event that a bet of a same value from two or more players is the highest value of bet, it is acceptable to cause all the card printers corresponding to the two or more players to perform the card printing. By doing this, it is possible for many players to simultaneously enjoy the "peeking", which only one player can normally do in the game, enabling all the players taking part in the game to experience a tension and an excitement which can be savored in a genuine game.

[0085] The card printing destination determination process 1203 which has determined which card printer 304 should perform the printing, based on the kind of

criteria describe heretofore, stores information specifying the determined card printer 304 (for example, a card printer identification number) and information specifying a card which is to be a printing subject (the suit and rank) in the RAM 1102 as card printing information 1208.

4.4. Card printing instruction process 1204

[0086] The card printing instruction process 1204 generates the card printing instruction based on the stored card printing information 1208. The generated card printing instruction stores destination information such as a network address of the card printer 304 which is to perform the card printing, which is the destination of the instruction, and information specifying a card to be printed. The card printing instruction is transferred to the management process 1201, and sent to the card printer 304 which is the destination via the communication interface 1110. After finishing the card printing instruction, the card printing instruction process 1204 deletes the stored card printing information 1208, and prepares to issue a new card printing instruction in a next game.

5. A configuration example of the player terminal

[0087] Next, a description will be given of a configuration example of the player terminal 101, while referring to Fig. 13. Fig. 13 is a functional block diagram showing a control system of the player terminal 101.

[0088] The player terminal 101 being basically configured to have as its nucleus a microcomputer 1305, which includes a CPU 1301, an RAM 1302, an ROM 1303, and a bus 1304 for performing a reciprocal data transmission between them, the ROM 1303 and the RAM 1302 are connected to the CPU 1301 via the bus 1304. Various kinds of program, data table and the like for performing processes necessary for a controlling of the player terminal 101, for example, an operation control of the elevation mechanism 302, an on/off control of the light source and the like, are stored in the ROM 1303. Also, the RAM 1302 is a memory which temporarily stores various data calculated by the CPU 1301.

[0089] The microcomputer 1305 (CPU 1301), being connected to a liquid crystal panel drive circuit 1307 via an I/O interface 1306, the liquid crystal panel drive circuit 1307 is connected to the liquid crystal display 201, and controls a drive of the liquid crystal display 201.

[0090] The microcomputer 1305, being connected to a touch panel drive circuit 1308 via the I/O interface 1306, the touch panel drive circuit 1308 transmits coordinate data of a contact position on the touch panel 202.

[0091] A hopper 1314 is connected to the microcomputer 1305, via a hopper drive circuit 1309. When a drive signal is transmitted from the CPU 1301 to the hopper drive circuit 1309, the hopper 1314 pays out a predetermined number of coins from the coin payout opening 206. Also, a coin detection unit 1315 is connected to the CPU 1301 via a payout completion signal circuit 1310. The coin detection unit 1315 being disposed inside the coin payout opening 206, when detecting that the predetermined number of coins has been paid out from the coin payout opening 206, a coin payout detection signal is transmitted from the coin detection unit 1315 to the payout completion signal circuit 1310, based on which the payout completion signal circuit 1310 transmits a payout completion signal to the CPU 1301.

[0092] The microcomputer 1305 is connected to a stepping motor control circuit 1311 which rotationally drives the stepping motor 401 (or 501) for driving the elevation mechanism 302. When a motor drive signal is transmitted from the CPU 1301 to the stepping motor control circuit 1311, the stepping motor 401 (or 501) is rotationally driven by the stepping motor control circuit 1311. Accordingly, the elevation mechanism 302 operates, and a raising and lowering of the three-dimensional model chips 209 is performed.

[0093] The microcomputer 1305 is connected to an LED drive control circuit 1312 for driving the illumination unit 303. In the embodiment, the illumination unit 303 being configured of a plurality of LED's, the LED drive control circuit 1312, in response to an LED drive instruction from the CPU 1301, supplies drive power to an LED from among all the LED's which is a subject of the drive instruction. Accordingly, it is possible to perform an on/off control of the LED's in a desired pattern under a control of the CPU 1301.

[0094] In the embodiment, the illumination unit 303 being configured of five red LED' s, five blue LED's and five white LED's, the LED drive control circuit 1312 is a circuit which can selectively supply power in such a way as to individually and independently turn on and off the five red LED's, the five blue LED's and the five white LED's.

[0095] Further still, the microcomputer 1305, being connected to the main controller 301 via a communication interface 1313, a two-way communication can be performed between the CPU 1301 and the main controller 301. As the CPU 1301 can perform a transmission and reception of an instruction, a transmission and reception of a request and the like with the main controller 301 by means of the communication interface 1313, the main controller 301 and the player terminal 101 cooperate in controlling the progression of the game.

6. An operating example of the gaming machine

[0096] Next, a description will be given of an operating example of the gaming machine 100 while referring to Fig. 14 and Fig. 15. Fig. 14 is a flowchart showing an example of a main process of the gaming machine 100, while Fig. 15 is a flowchart showing an example of a card compilation process during the main process.

[0097] In the main process, the gaming machine 100 firstly performs a bet reception process (S1401). The bet reception process is a process which awaits the player's betting operation (an insertion of a coin, a press of the BET button etc.) and, in the event that the betting oper-

ation has been performed, stores the amount bet. Specifically, when each player inserts a number of coins to be bet on one game into the coin insertion slot 204 or, in the event that the player has credits accumulated in the gaming machine 100, more specifically the player terminal 101, presses BET buttons provided in the button group 203, the bet reception process is complete.

[0098] When the bet reception process is complete, the gaming machine 1, more specifically the main controller 310 or the game execution process 1202, performs a dealt card determination process (S1402). The dealt card determination process is a process which determines a card necessary in the game to proceed with or determine the game. For example, in the event that the game is the Baccarat game, it is a process which determines the cards to be dealt to the ""Banker"" and the cards to be dealt to the "player".

[0099] Next, the gaming machine 1, more specifically the main controller 301 and/or the player terminal 101, performs a dealt card display process (S1403). The dealt card display process is a process which, in accordance with the card determined in the previous dealt card determination process (S1402), displays a card image on the main display 104 and/or the liquid crystal display 201. By means of the dealt card display process, it is possible for all the players to know the card details of the up card only. In the Baccarat game, although it is possible for the player to know the details of the up card dealt to the "Banker" and the two cards dealt to the "player", it is not possible for the player to know the details of the "Hole Card" dealt to the "Banker", as the front surface thereof is not displayed. If it were possible to know the details of the "Hole Card", it would be possible to know the outcome of the game. For this reason, the "Hole Card" becomes the subject of the card compilation process, to be described hereafter, and the "peeking" using the printed card.

[0100] When the dealt card display process (S1403) is finished, the gaming machine 100, more specifically the main controller 301, performs the card compilation process (S1404). The card compilation process is a process which causes the card printer 304 corresponding to the player terminal 101 which is to perform the "peeking" to perform the card printing on the card to be the subject of the "peeking".

[0101] Fig. 15 shows an example of the card compilation process. When the card compilation process is started, the gaming machine 100, more specifically the main controller 301 or the card printing destination determination process 1203, in accordance with a previously fixed criterion or condition, performs a process determining which card printer 304 should perform the card printing (S1501). For example, in the event that the criterion determining the compilation subject applied in the game is fixed as the card printer 304 corresponding to the player terminal 101 on which the highest value of bet has been placed, the gaming machine 100, more specifically the main controller 301 or the card printing destination determination process 1203, referring to the bet status information 1207, determines the card printer 304.

[0102] Next, the gaming machine 100, more specifically the main controller 301 or the card printing instruction process 1204, referring to the dealt card information 1206 generated by the game execution process 1202, performs a process specifying a card to be printed (S1502). The card to be printed being the card which is to be the subject of the "peeking", giving the Baccarat game as an example, it is the "Hole Card" dealt to the "Banker".

[0103] Next, the gaming machine 100, more specifically the main controller 301 or the card printing instruction process 1204, transmits the card printing instruction to the card printer 304 determined in step S1501 so that it prints the card determined in step S1502 (S1503).

[0104] For example, in a case in which the player terminal 101 on which the highest value of bet is placed in the previously given example is, of the five player terminals 101, a number three player terminal 101, and the "Hole Card" is an ace (A) of clubs, the gaming machine 100, more specifically the main controller 301 or the card printing instruction process 1204, transmits the card printing instruction to the card printer 304 corresponding to the number three player terminal 101 instructing it to print the ace of clubs card. The card printer 304 which receives the card printing instruction prints an image of the ace of clubs on the front surface of the blank card 701A, and discharges it onto the upper surface of the number three player terminal 101. As the player can freely handle the printed card 701B ejected from the card printer 304, it is possible, while lifting the edge of the printed card 701B, to enjoy the "peeking" until satisfied.

[0105] The player terminal 101 requests a game continuation permission input from the player who has finished the "peeking". For example, the player terminal 101 displays a message such as "If you would like to finish the peeking and continue with the game, please press the cancel button" on the liquid crystal display 201. In the event that the player performs a predetermined operation in accordance with the message from the player terminal 101, the player terminal 101 determines that the game continuation permission input has been performed, and transmits a game continuation permission notification to the main controller 301. The game continuation permission notification is a message for informing the main controller 301 that, as the player given the printed card 701B has finished the "peeking" action, it is acceptable to continue with the game.

[0106] Next, the gaming machine 100, more specifically the main controller 301 or the management process 1201, determines whether or not the game continuation permission notification has been received from the player terminal 101 corresponding to the card printer 304 to which the card printing instruction has been transmitted (S1504).

[0107] In the event that such a message has not been received (S1504, No), the gaming machine 100, more

specifically the main controller 301 or the management process 1201, waits until the message is received. Meanwhile, in the event that such a message has been received (S1504, Yes), the gaming machine 100, more specifically the main controller 301 or the management process 1201, finishes the card compilation process, and returns the control to the main process.

[0108] Returning to Fig. 14, the description of the main process will be restarted.

[0109] When the card compilation process (S1404) finishes, the gaming machine 100, more specifically the main controller 301 or the game execution process 1201, performs a payout process (S1405). The payout process, based on the details of the card determined in the dealt card determination process, rules of the game, the value of the bet and the like, determines a result of the game and an amount to be paid out to each player terminal 101 and, in the event that there is a payout amount, transmits an instruction to the relevant player terminal 101 to execute the payout process.

[0110] When the payout process (S1405) finishes, the single round of the game (unit game) is finished. The gaming machine 100, more specifically the main controller 301, returns again to step 51401, and operates in such a way that a new round of the game can be started. Hereafter, by repeatedly executing from step S1401 to step S1405, the gaming machine 100 continuously provides the game to the player.

7. Other

[0111] The card compilation process does not necessarily need to be performed in one round of the game. For example, the gaming machine according to the present invention may be configured to perform the card compilation process for the player terminal in which the highest value of bet is input, only in a situation where the highest value of bet exceeds a predetermined value (for example, a thousand credits).

[0112] The gaming machine according to the present invention may be configured to transmit, in the card compilation process, a card compilation instruction to all the card printers 304 under a certain condition. For example, the gaming machine may be configured to be provided with a counter that counts a number of rounds of the games being performed, in the main controller 301. And, in the event that the round of games counted by the counter reaches a predetermined number of times (for example, ten thousand times), regardless of the criterion being employed at the time for determining the card printing destination, the card compilation instruction is transmitted to all the card printers 304 as a privilege of a ten thousand time commemoration.

[0113] Although, in the embodiment described heretofore, the configuration is such that the card printer 304 is connected directly to the main controller 301, the invention is also established with a configuration in which, connecting the card printer 304 to the microcomputer 1305 or the communication interface 1313 of each player terminal 101, the main controller 301 transmits the card printing instruction to the player terminal 101, and the microcomputer 1305 of each player terminal 101 controls the card printer 304 in accordance with the printing instruction.

[0114] In the embodiment, the card to be printed out by the printer is selected by the processor (main controller 301) in accordance with a progress of the game. However, the gaming machine 100 may be configured that the processor allows the player to select the card to be printed by the printer.

[0115] As described with reference to the embodiment, the gaming machine provides a game using a suite of cards.

[0116] The term "card" used herein includes all kinds of items having a back surface and a front surface, such as a playing card, a flower card (Hanafuda; Japanese playing cards) or a trading card.

[0117] The gaming machine is provided with a printer that prints an image of a card, which is displayed on the display, on a blank card to be provided as a printed card to the player.

[0118] According to the gaming machine thus configured, the player is enabled to play the card game with the card actually in hand, and especially enables the player to perform an action called "peeking".

[0119] The gaming machine may be provided with a plurality of player terminals that are provided for each of a plurality of players. According to this configuration, the gaming machine can provide the game to a plurality of players to be simultaneously participate in the game.

[0120] In the gaming machine, the processor may be configured to determines that a plurality of the printers provided in each of the player terminals are to be controlled to perform printing the image of the selected card, in a single round of the game.

[0121] According to the gaming machine thus configured, the action of "peeking", which is performed by only one player in an actual game, can be enjoyed by a plurality of players.

[0122] In the gaming machine, the processor may be configured to determine the printer to be controlled to output the printed card when a predetermined condition is satisfied in the game.

[0123] In the gaming machine, the processor may be configured to determine that the printer, which is provided in one of the player terminals having the operation unit through which a highest bet is made in a current round of the game, is to be controlled to output the printed card.

[0124] According to the gaming machine thus configured, it is possible to cause a player who makes the bet of a highest value to savor a feeling of superiority and an excitement, and to further increase an interest in the game.

[0125] In the gaming machine, the processor may be configured to determine that at least one of the printers, which is provided in the player terminals having the op-

eration unit through which an operation for receiving a printed card is input in a current round of the game, is to be controlled to output the printed card.

[0126] According to the gaming machine thus configured, it is possible to avoid a situation in which only the player who places the high value bet performs the peeking, and for all the players to obtain an opportunity to enjoy the "peeking".

[0127] In the gamine machine, the processor may be configured to determine that the printer, which is provided in one of the player terminals having the operation unit through which a fastest bet is made in a current round of the game, is to be controlled to output the printed card.

[0128] According to the gaming machine thus configured, it is possible to reduce a time required for each rounds of the game, meaning that it is possible to improve an operating rate of the gaming machine, and to increase a profit of the administrator of the game arcade in which the gaming machine is installed.

[FIG. 3]
PLAYER

100	GAMING MACHINE
101	PLAYER TERMINAL
104	MAIN DISPLAY
105	SPEAKER
106, 107	LAMP, LED
207	ACRYLIC PANEL
209	THREE-DIMENSIONAL MODEL CHIPS
301	MAIN CONTROLLER
302	ELEVATION MECHANISM
303	ILLUMINATION UNIT
304	CARD PRINTER

[FIG. 7]

304	CARD PRINTER
705	ROLLER
706	ROLLER
707	ROLLER DRIVE MOTOR
708	IMAGE FORMATION UNIT
709	CONTROL CIRCUIT FROM MAIN CONTROLLER

[FIG. 11]

100	GAMING MACHINE
101	PLAYER TERMINAL
101	PLAYER TERMINAL
104	MAIN DISPLAY
105	SPEAKER
106, 107	LAMP, LED
207	ACRYLIC PANEL
207	ACRYLIC PANEL
209	THREE-DIMENSIONAL MODEL CHIPS
209	THREE-DIMENSIONAL MODEL CHIPS
301	MAIN CONIROLLER
302	ELEVATION MECHANISM
302	ELEVATION MECHANISM
303	LIGHT SOURCE
303	LIGHT SOURCE
304	CARD PRINTER
304	CARD PRINTER
1101	CPU
1102	RAM
1103	ROM
1104	BUS
1105	MICROCOMPUTER
1106	I/O IMTERFRCE
1107	IMAGE PROCESSING CIRCUIT
1108	SOUND CIRCUIT
1109	LAMP DRIVE CIRCUIT
1110	COMMUNICATION INTERFACE

[FIG. 12]

1101	CPU
1102	RAM
1103	ROM
1105	MICROCOMPUTER
1107	IMAGE PROCESSING CIRCUIT
1108	SOUND CIRCUIT
1109	LAMP DRIVE CIRCUIT
1110	COMMUNICATION INTERFACE PLAYER TERMINAL CARD PRINTER
1201	MANAGEMENT PROCESS
1202	GAME EXECUTION PROCESS
1203	CARD PRINTING DESTINATION DETERMINATION PROCESS
1204	CARD PRINTING INSTRUCTION PROCESS
1206	DEALT CARD INFORMATION
1207	BET STATUS INFORMATION
1208	CARD PRINTING INFORMATION

[FIG. 13]

101	PLAYER TERMINAL
201	LIQUID CRYSTAL DISPLAY
202	TOUCH PANEL
207	ACRYLIC PANEL
209	THREE-DIMENSIONAL MODEL CHIPS
301	MAIN CONTROLLER
302	ELEVATION MECHANISM POWER TRANSMISSION
303	LIGHT SOURCE LIGHT EMISSION.
304	CARD PRINTER
1301	CPU
1302	RAM
1303	ROM
1304	BUS
1305	MICROCOMPUTER

1306 I/O INTERFACE
1307 LIQUID CRYSTAL PANEL DRIVE CIRCUIT
1308 TOUCH SENSITIVE PANEL DRIVE CIRCUIT
1309 HOPPER DRIVE CIRCUIT
1310 PAYOUT COMPLETION SIGNAL CIRCUIT
1311 STEPPING MOTOR CONTROL CIRCUIT
1312 LED DRIVE CONTROL CIRCUIT
1313 COMMUNICATION INTERFACE
1314 HOPPER
1315 COIN DETECTION UNIT START

[FIG. 14]

S1401 BET RECEPTION PROCESS
S1402 DEALT CARD DETERMINATION PROCESS
S1403 DEALT CARD DISPLAY PROCESS
S1404 CARD COMPILATION PROCESS
S1405 PAYOUT PROCESS CARD COMPILATION PROCESS

(FIG. 15)

S1501 DETERMINE CARD PRINTER TO OUTPUT PRINTED CARD
S1502 DETERMINE IMAGE OF CARD TO BE PRINTED
S1503 TRANSMIT CARD PRINTING INSTRUCTION TO DETERMINED CARD PRINTER
S1504 GAME CONTINUATION PERMISSION IS RECEIVED?

NO
YES
RETURN

Claims

1. A gaming machine comprising:

a display;
an operation unit;
a processor that is operable with the display to:

provide a game using a suit of cards to a player by displaying the cards on the display and by allowing the player to input operations through the operation unit; and
select a card from among the cards in accordance with a progress of the game; and
a printer that prints an image of the selected card on a blank card to be provided as a printed card to the player.

2. The gaming machine according to claim 1, wherein the processor provides the game by displaying at least one of the cards dealt to the player in a faced-down state, and
wherein the processor selects at least one of the faced-down cards to be printed by the printer.

3. The gaming machine according to claim 1, wherein the processor allows the player to select the card to be printed by the printer.

4. The gaming machine according to claim 1, further comprising a plurality of player terminals that are provided for each of a plurality of players that simultaneously participate in the game, each of the player terminals being provided with the operation unit and the printer,
wherein the processor controls each of the printers that are provided in the player terminals.

5. The gaming machine according to claim 4, wherein the processor determines which of the printers is to be controlled to perform printing the image of the selected card.

6. The gaming machine according to claim 5, wherein the processor determines that a plurality of the printers are to be controlled to perform printing the image of the selected card, in a single round of the game.

7. The gaming machine according to claim 6, wherein the processor selects the card to be printed by the printer for each of the printers that are determined to be controlled.

8. The gaming machine according to claim 5, wherein the processor determines the printer to be controlled when a predetermined condition is satisfied in the game.

9. The gaming machine according to claim 5, wherein the processor determines that the printer, which is provided in one of the player terminals having the operation unit through which a highest bet is made in a current round of the game, is to be controlled.

10. The gaming machine according to claim 5, wherein the processor determines that at least one of the printers, which is provided in the player terminals having the operation unit through which an operation for receiving a printed card is input in a current round of the game, is to be controlled.

11. The gaming machine according to claim 5, wherein the processor determines that the printer, which is provided in one of the player terminals having the operation unit through which a fastest bet is made in a current round of the game, is to be controlled.

12. The gaming machine according to claim 4, wherein the display includes:

a main display that is disposed to be visible from the players that participate in the game; and
a plurality of terminal displays, each of which is provided in each of the player terminals.

13. The gaming machine according to claim 12, wherein the processor provides the game by displaying main information on the main display, and by displaying at least one of the cards dealt to each of the players in a faced-down state on each of the terminal displays, and
wherein the processor selects at least one of the faced-down cards to be printed by at least one of the printers.

14. The gaming machine according to claim 13, wherein each of the printers outputs the printed card on each of the terminal displays.

15. A gaming machine comprising:

a display;
an operation unit;
a processor that is operable with the display to:

provide a game using a suit of cards to a player by displaying the cards on the display and by allowing the player to input operations through the operation unit; and
select a card from among the cards in accordance with a progress of the game; and
a printer that prints an image of the selected card on a blank card to be provided as a printed card to the player,
wherein the processor provides the game by displaying at least one of the cards dealt to the player in a faced-down state, and
wherein the processor selects at least one of the faced-down cards to be printed by the printer.

16. The gaming machine according to claim 15, further comprising a plurality of player terminals that are provided for each of a plurality of players that simultaneously participate in the game, each of the player terminals being provided with the operation unit and the printer,
wherein the processor controls each of the printers that are provided in the player terminals.

17. The gaming machine according to claim 16, wherein the processor determines which of the printers is to be controlled to perform printing the image of the selected card.

18. The gaming machine according to claim 17, wherein the processor determines that a plurality of the printers are to be controlled to perform printing the image of the selected card, in a single round of the game.

19. The gaming machine according to claim 18, wherein the processor selects the card to be printed by the printer for each of the printers that are determined to be controlled.

20. The gaming machine according to claim 17, wherein the processor determines that the printer, which is provided in one of the player terminals having the operation unit through which a highest bet is made in a current round of the game, is to be controlled.

21. The gaming machine according to claim 17, wherein the processor determines that at least one of the printers, which is provided in the player terminals having the operation unit through which an operation for receiving a printed card is input in a current round of the game, is to be controlled.

22. The gaming machine according to claim 17, wherein the processor determines that the printer, which is provided in one of the player terminals having the operation unit through which a fastest bet is made in a current round of the game, is to be controlled.

23. The gaming machine according to claim 16, wherein the display includes:

a main display that is disposed to be visible from the players that participate in the game; and
a plurality of terminal displays, each of which is provided in each of the player terminals.

24. The gaming machine according to claim 23, wherein the processor provides the game by displaying main information on the main display, and by displaying at least one of the cards dealt to each of the players in a faced-down state on each of the terminal displays, and
wherein the processor selects at least one of the faced-down cards to be printed by at least one of the printers.

25. The gaming machine according to claim 24, wherein each of the printers outputs the printed card on each of the terminal displays.

26. A gaming machine comprising:

a plurality of player terminals that are provided for each of a plurality of players that simultaneously participate in a game using a suit of cards;
a display including:

a main display that is disposed to be visible from the players that participate in the game; and

a plurality of terminal displays, each of which being provided in each of the player terminals;

a plurality of operation units, each of which being provided in each of the player terminals;

a processor that is operable with the display to:

provide the game by displaying main information on the main display while displaying at least one of the cards dealt to each of the players in a faced-down state on each of the terminal displays, and by allowing the players to input operations through the operation units; and

select at least one of the faced-down cards in accordance with a progress of the game; and

a plurality of printers, each of which being provided in each of the player terminals and prints an image of the selected card on a blank card to be provided as a printed card to each of the players.

27. The gaming machine according to claim 26, wherein the processor determines which of the printers is to be controlled to perform printing the image of the selected card.

28. The gaming machine according to claim 27, wherein the processor determines that a plurality of the printers are to be controlled to perform printing the image of the selected card, in a single round of the game.

29. The gaming machine according to claim 28, wherein the processor selects the card to be printed by the printer for each of the printers that are determined to be controlled.

30. The gaming machine according to claim 27, wherein the processor determines that the printer, which is provided in one of the player terminals having the operation unit through which a highest bet is made in a current round of the game, is to be controlled.

31. The gaming machine according to claim 27, wherein the processor determines that at least one of the printers, which is provided in the player terminals having the operation unit through which an operation for receiving a printed card is input in a current round of the game, is to be controlled.

32. The gaming machine according to claim 27, wherein the processor determines that the printer, which is provided in one of the player terminals having the operation unit through which a fastest bet is made in a current round of the game, is to be controlled.

33. The gaming machine according to claim 26, wherein each of the printers outputs the printed card on each of the terminal displays.

FIG. 1

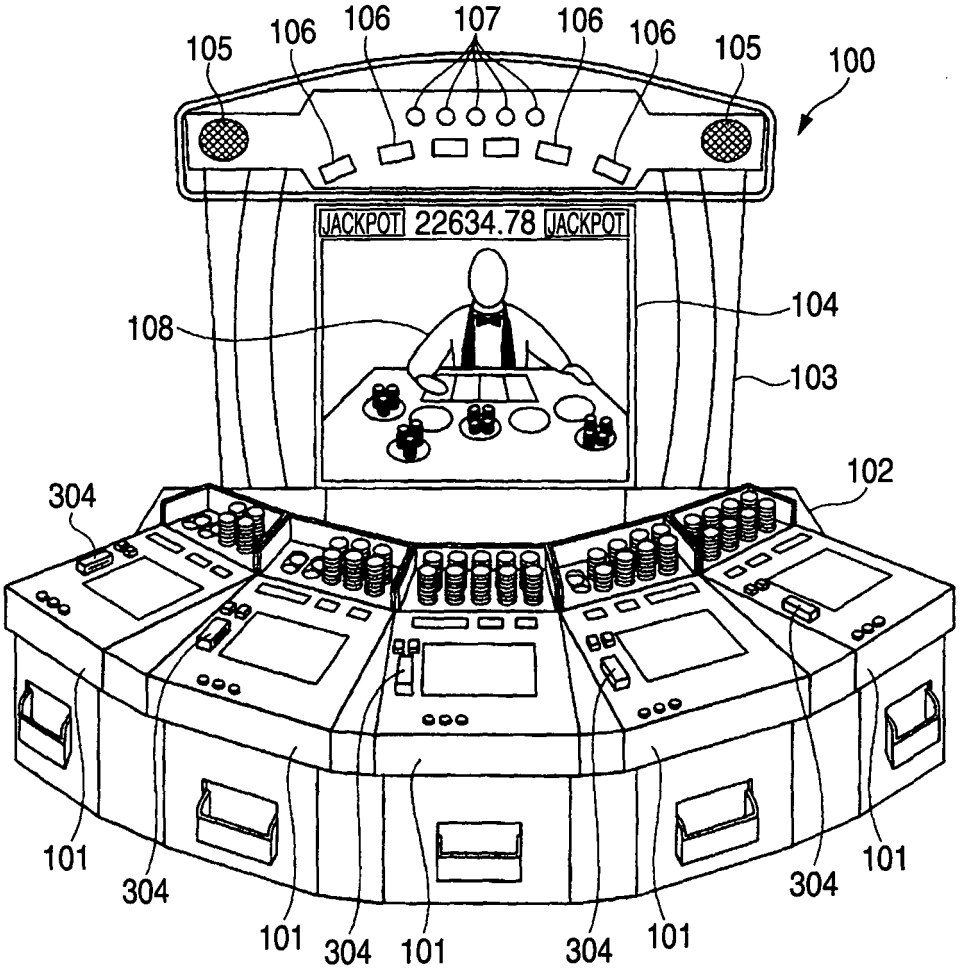

105
106
106
107
106
106
105
100
JACKPOT 22634.78 JACKPOT
108
104
103
102
304
101
304
101
304
101
304
101
304
101

FIG. 2

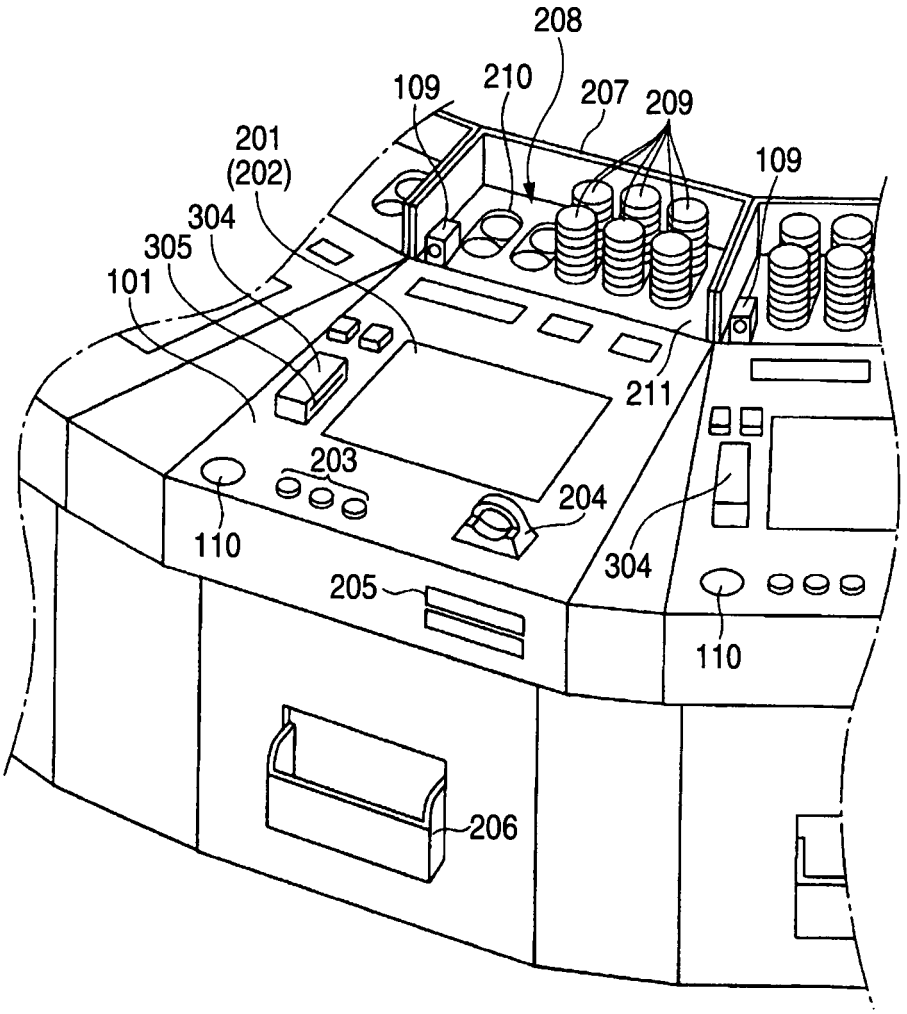

208
109
210
207
209
201
(202)
109
304
305
101
211
203
204
110
304
205
110
206

FIG. 3

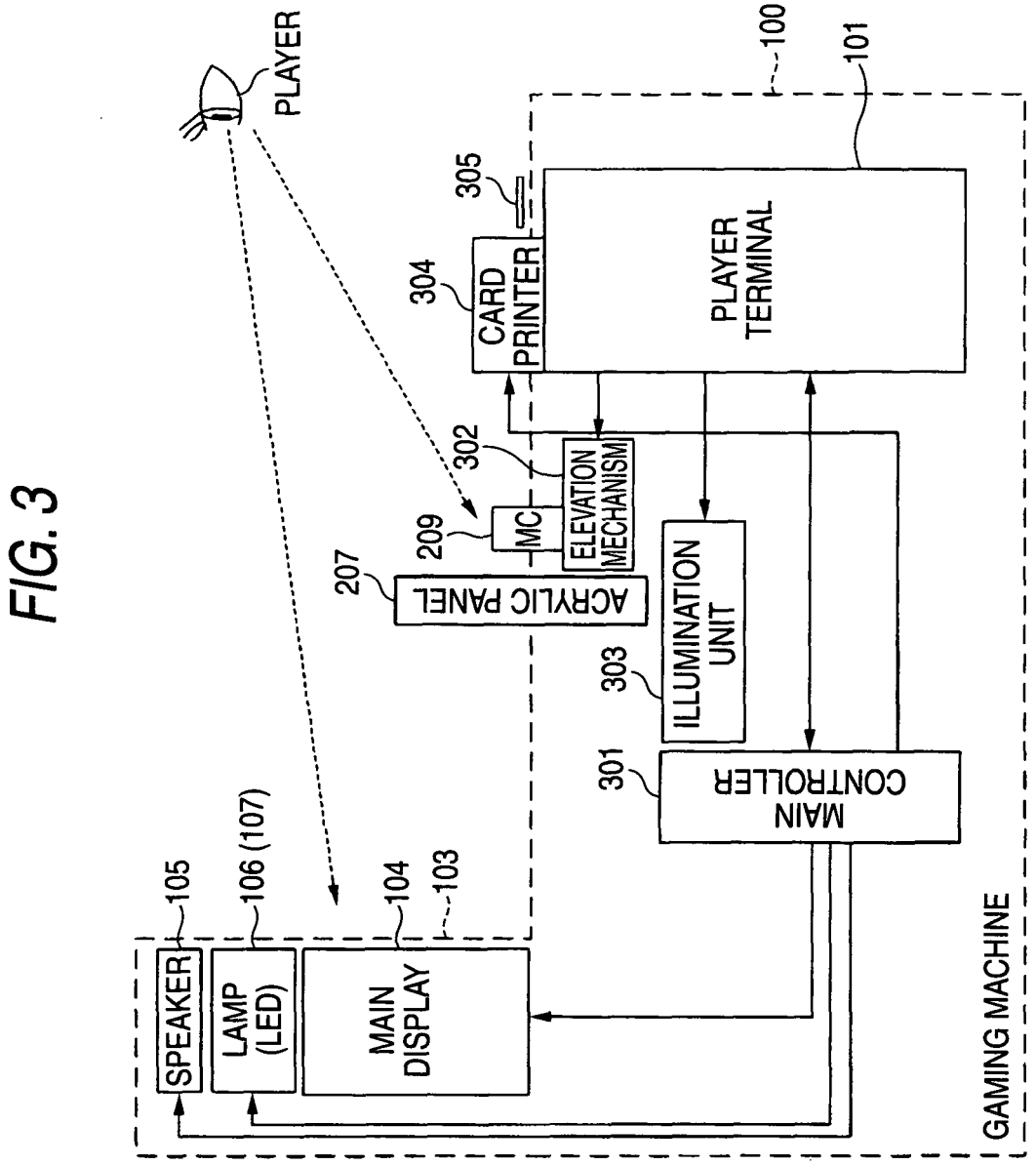

PLAYER
100
101
305
304
CARD PRINTER
PLAYER TERMINAL
302
ELEVATION MECHANISM
209
MC
207
ACRYLIC PANEL
ILLUMINATION UNIT
303
301
MAIN CONTROLLER
105
106 (107)
104
103
SPEAKER
LAMP (LED)
MAIN DISPLAY
GAMING MACHINE

FIG. 4

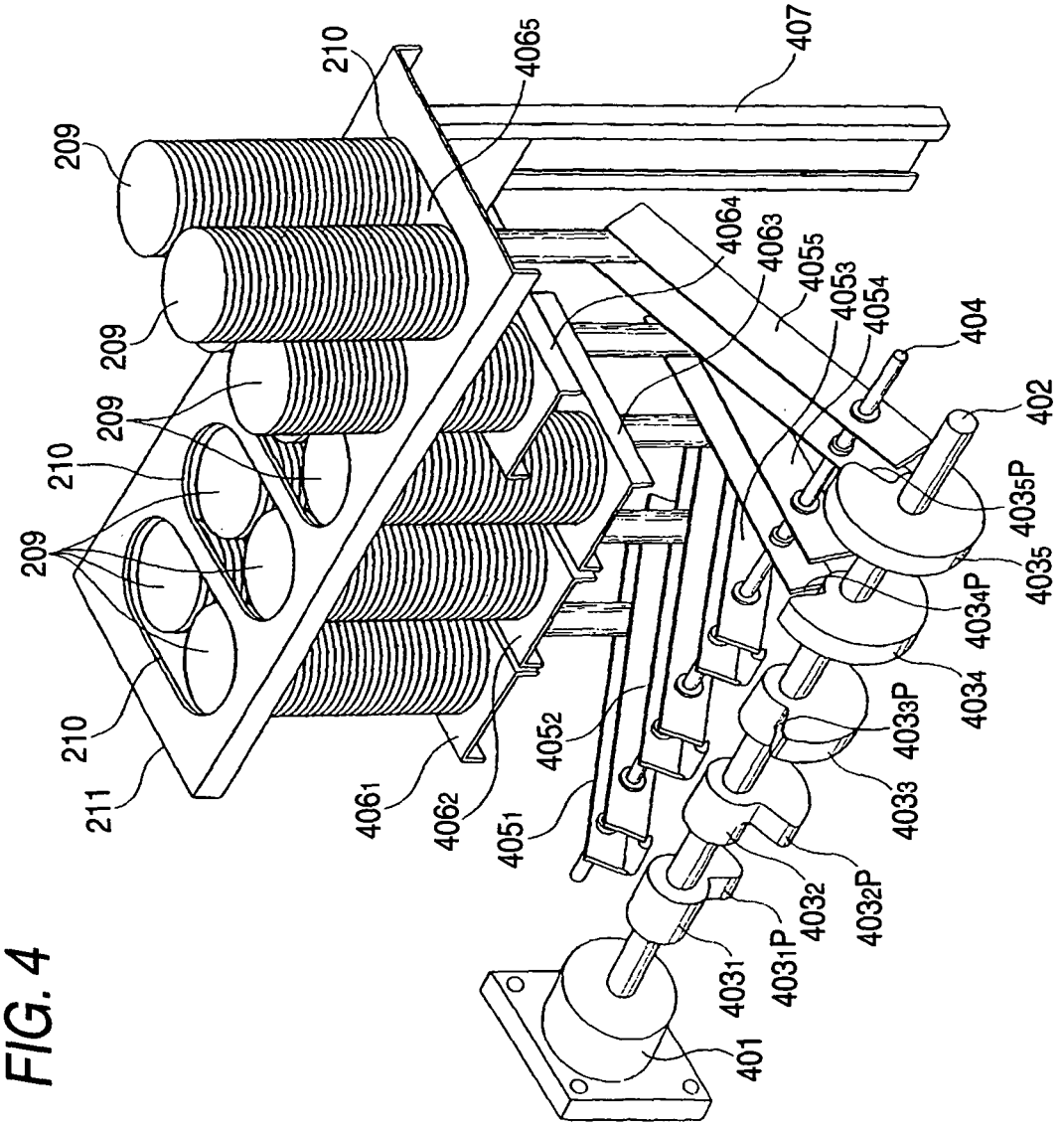

209
210
211
406$_5$
407
406$_4$
406$_3$
405$_5$
405$_3$
405$_4$
404
402
403$_5$P
403$_5$
403$_4$P
403$_4$
403$_3$P
403$_3$
403$_2$P
403$_2$
403$_1$P
403$_1$
401
405$_2$
405$_1$
406$_2$
406$_1$

FIG. 5

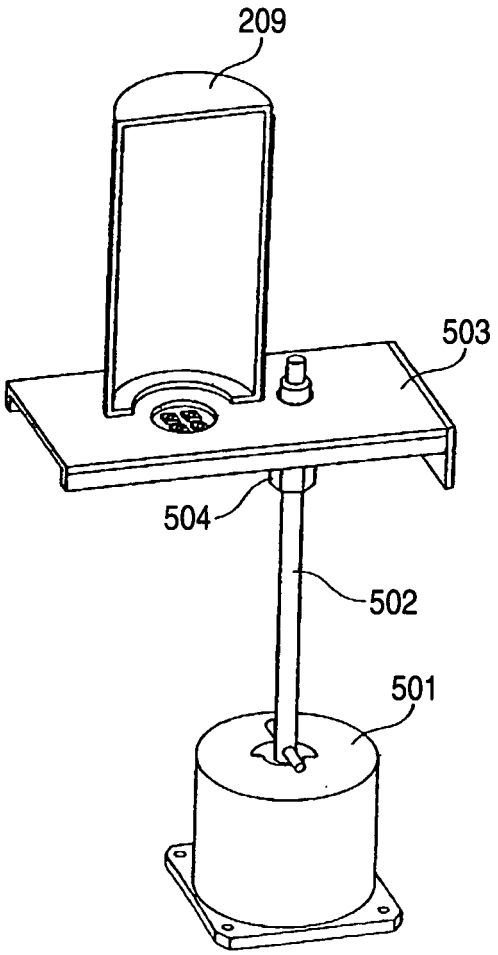


FIG. 6

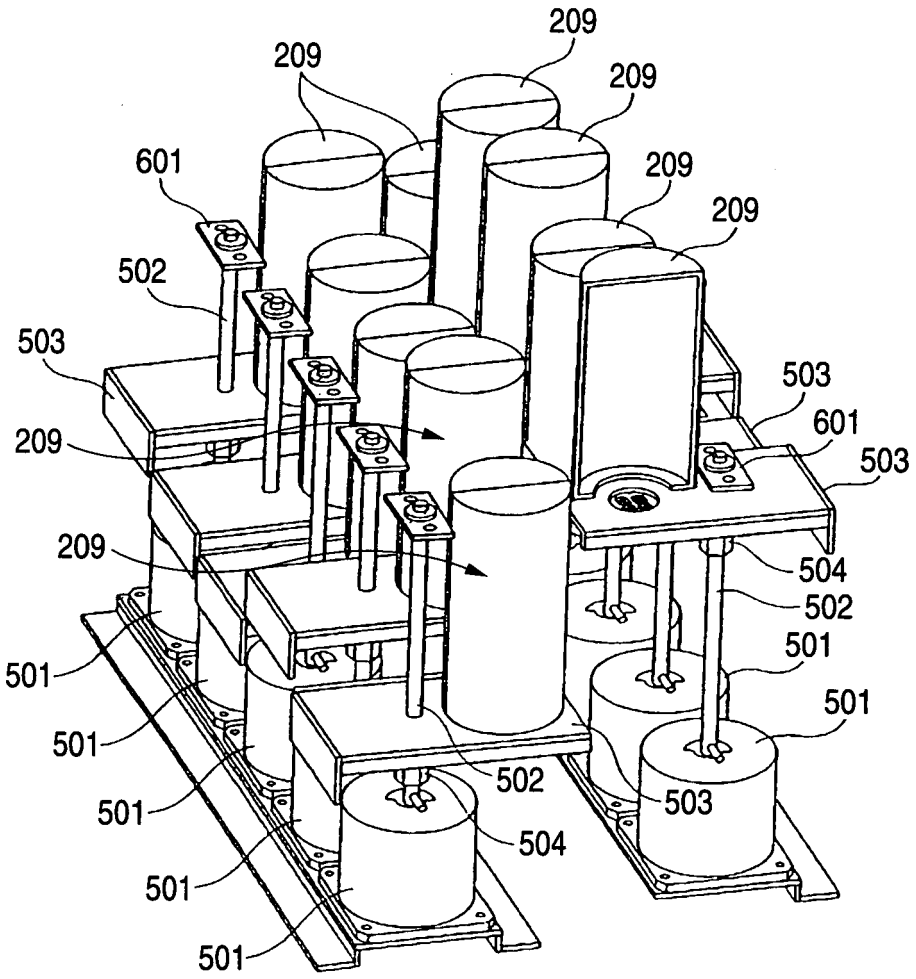

209
209
209
209
209
209
601
601
502
503
503
503
209
209
504
502
501
501
501
501
501
502
503
504
501

FIG. 7

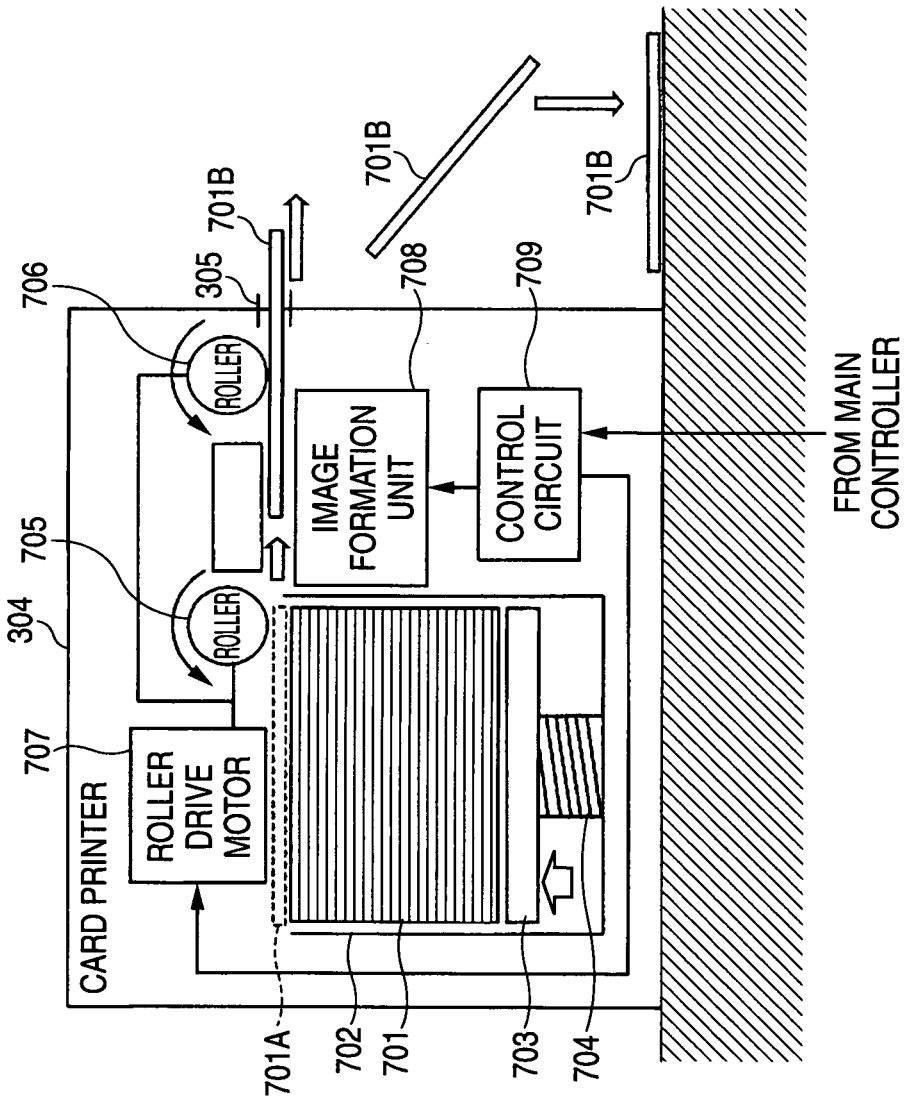

CARD PRINTER
ROLLER DRIVE MOTOR
IMAGE FORMATION UNIT
CONTROL CIRCUIT
FROM MAIN CONTROLLER
ROLLER
ROLLER
701B
701B
701B
305
706
705
304
707
708
709
701A
702
701
703
704

FIG. 8A

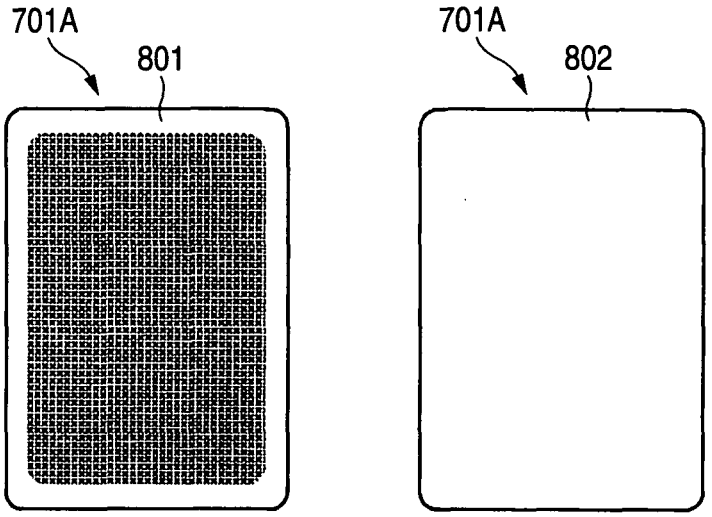


FIG. 8B

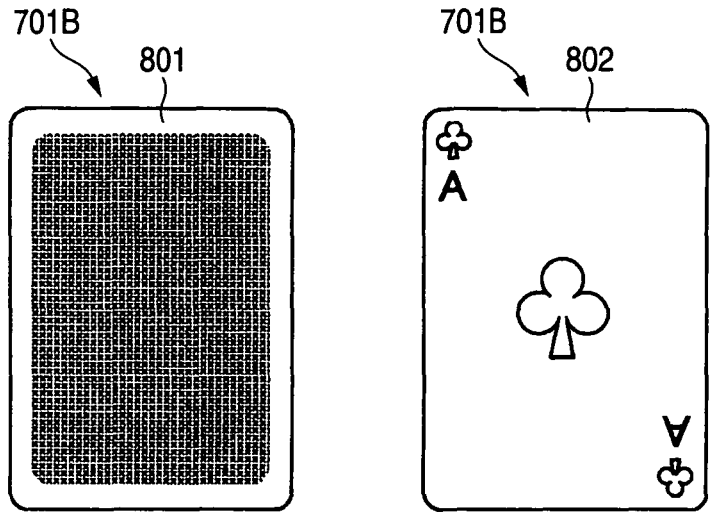


FIG. 9

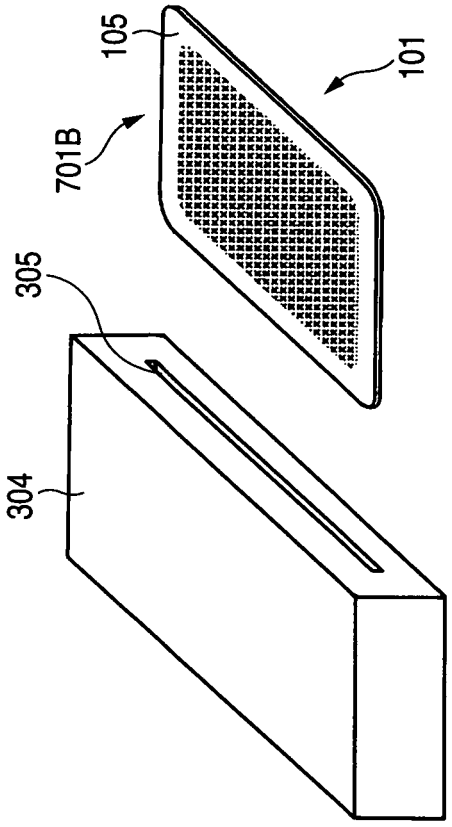


FIG. 10

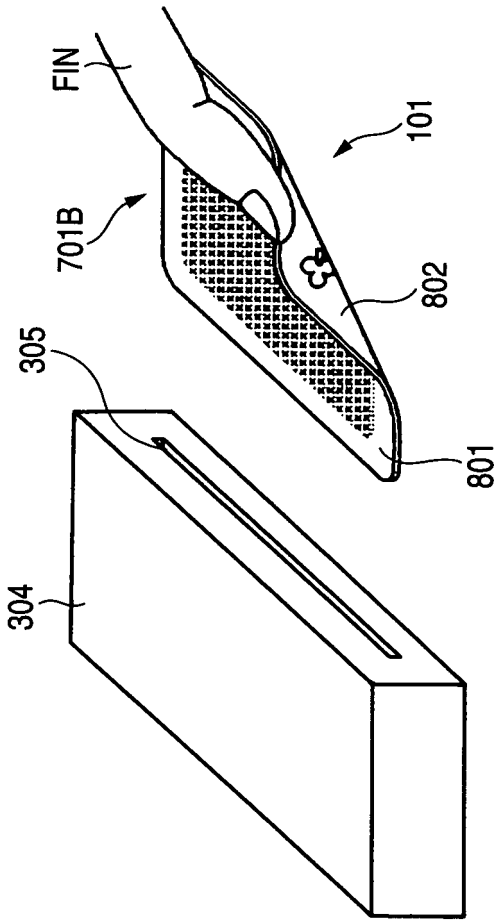


FIG. 11

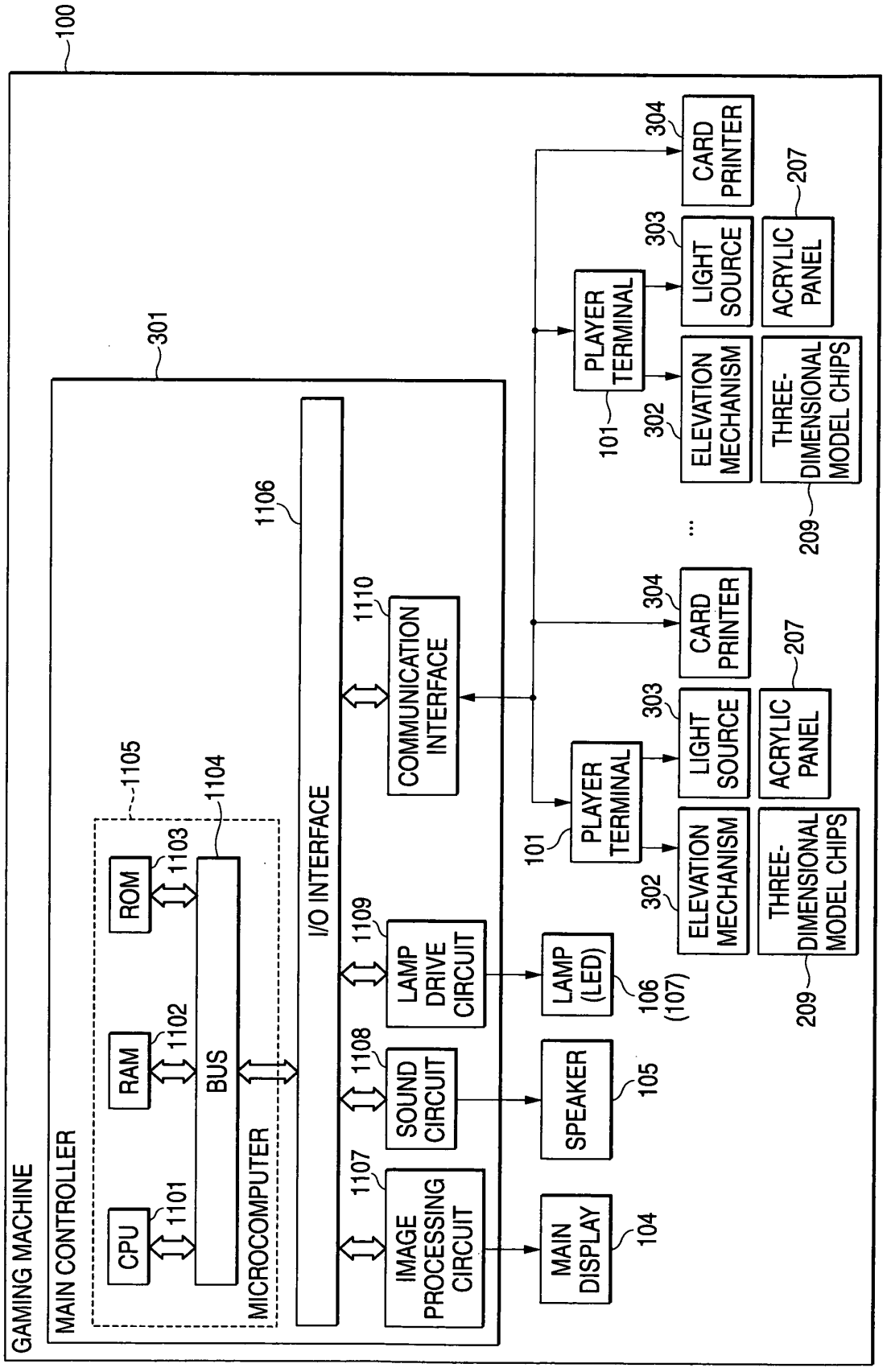

100
GAMING MACHINE
MAIN CONTROLLER
301
MICROCOMPUTER
1105
CPU
1101
RAM
1102
ROM
1103
BUS
1104
I/O INTERFACE
1106
IMAGE PROCESSING CIRCUIT
1107
SOUND CIRCUIT
1108
LAMP DRIVE CIRCUIT
1109
COMMUNICATION INTERFACE
1110
MAIN DISPLAY
104
SPEAKER
105
LAMP (LED)
106 (107)
PLAYER TERMINAL
101
ELEVATION MECHANISM
302
LIGHT SOURCE
303
CARD PRINTER
304
ACRYLIC PANEL
207
THREE-DIMENSIONAL MODEL CHIPS
209

FIG. 12

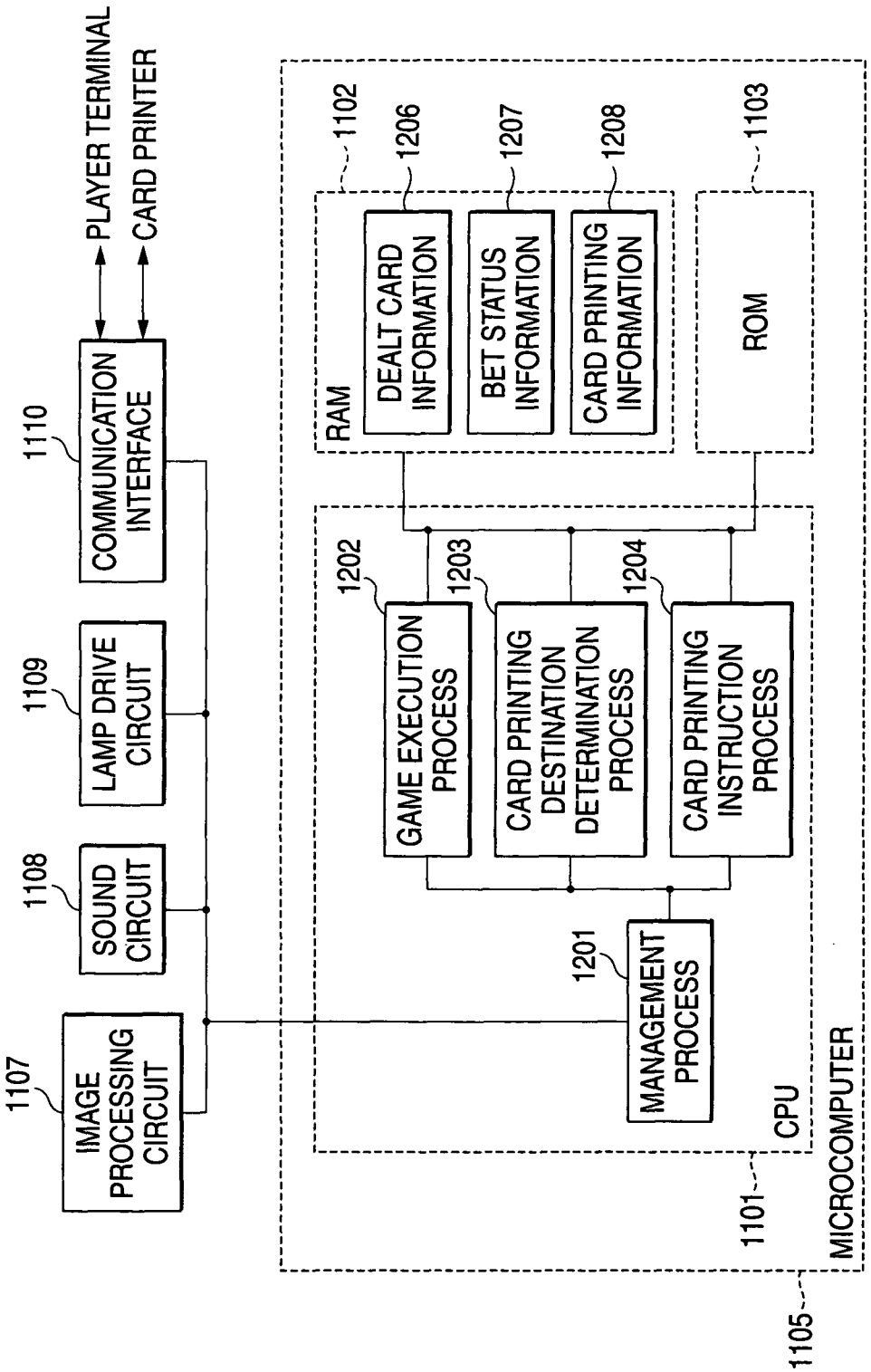

PLAYER TERMINAL
CARD PRINTER
COMMUNICATION INTERFACE
1110
LAMP DRIVE CIRCUIT
1109
SOUND CIRCUIT
1108
IMAGE PROCESSING CIRCUIT
1107
1102
1206
1207
1208
1103
RAM
DEALT CARD INFORMATION
BET STATUS INFORMATION
CARD PRINTING INFORMATION
ROM
1202
1203
1204
GAME EXECUTION PROCESS
CARD PRINTING DESTINATION DETERMINATION PROCESS
CARD PRINTING INSTRUCTION PROCESS
1201
MANAGEMENT PROCESS
CPU
1101
MICROCOMPUTER
1105

FIG. 13

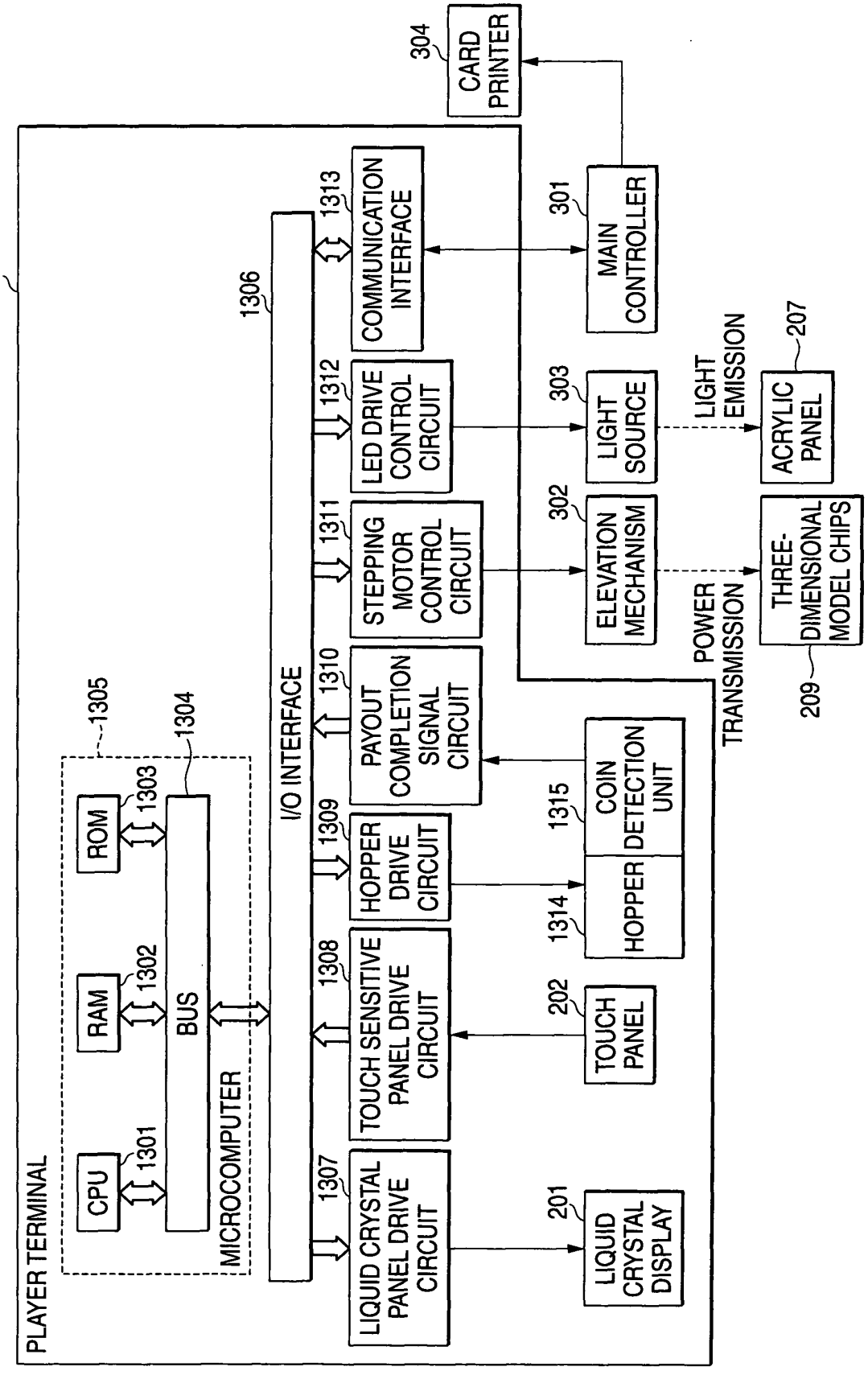

101
PLAYER TERMINAL
CPU
1301
RAM
1302
ROM
1303
BUS
1304
MICROCOMPUTER
1305
I/O INTERFACE
1306
LIQUID CRYSTAL PANEL DRIVE CIRCUIT
1307
TOUCH SENSITIVE PANEL DRIVE CIRCUIT
1308
HOPPER DRIVE CIRCUIT
1309
PAYOUT COMPLETION SIGNAL CIRCUIT
1310
STEPPING MOTOR CONTROL CIRCUIT
1311
LED DRIVE CONTROL CIRCUIT
1312
COMMUNICATION INTERFACE
1313
HOPPER
1314
COIN DETECTION UNIT
1315
LIQUID CRYSTAL DISPLAY
201
TOUCH PANEL
202
CARD PRINTER
304
MAIN CONTROLLER
301
LIGHT SOURCE
303
ELEVATION MECHANISM
302
POWER TRANSMISSION
LIGHT EMISSION
ACRYLIC PANEL
207
THREE-DIMENSIONAL MODEL CHIPS
209

FIG. 14

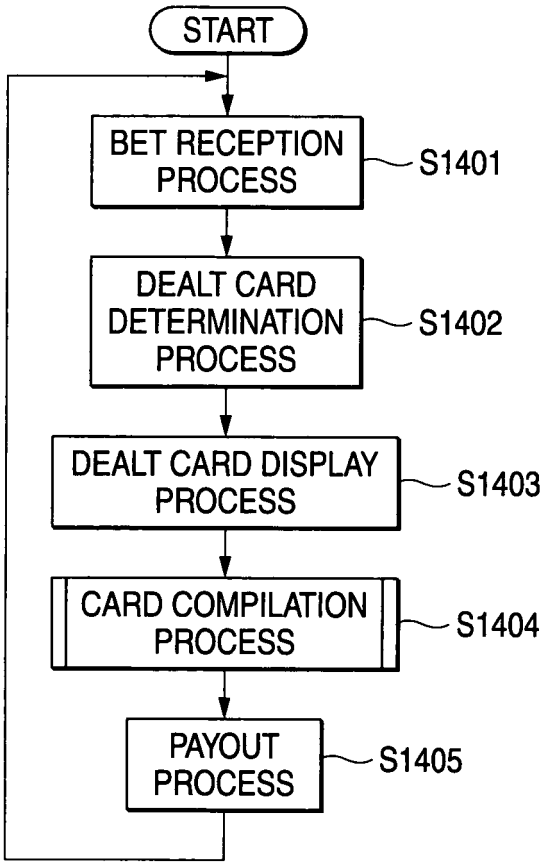
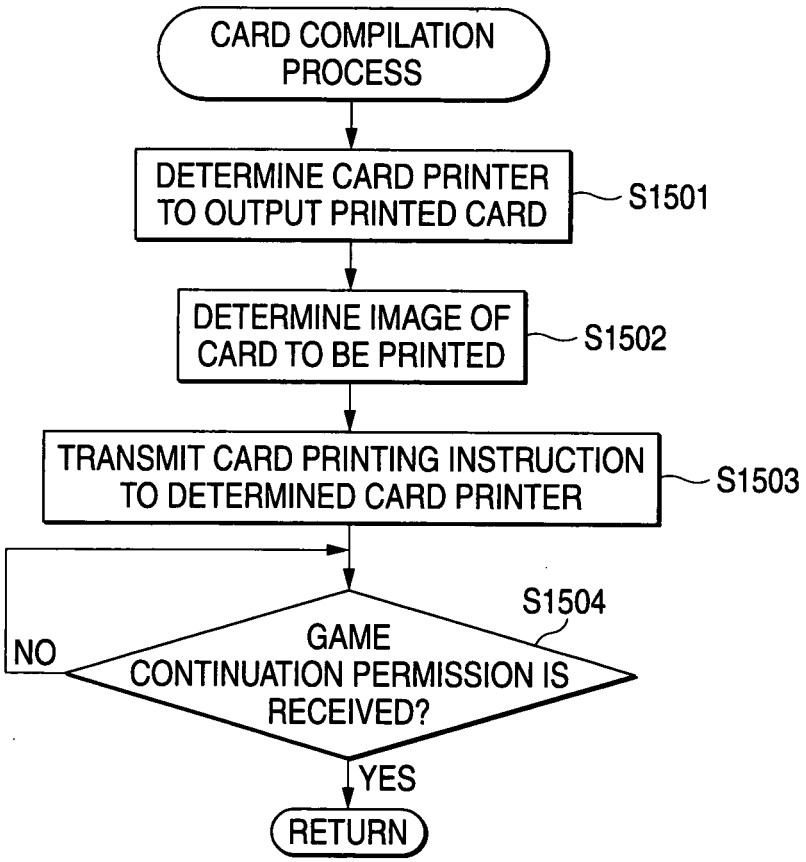

START
BET RECEPTION PROCESS
S1401
DEALT CARD DETERMINATION PROCESS
S1402
DEALT CARD DISPLAY PROCESS
S1403
CARD COMPILATION PROCESS
S1404
PAYOUT PROCESS
S1405

FIG. 15


CARD COMPILATION PROCESS
DETERMINE CARD PRINTER TO OUTPUT PRINTED CARD
S1501
DETERMINE IMAGE OF CARD TO BE PRINTED
S1502
TRANSMIT CARD PRINTING INSTRUCTION TO DETERMINED CARD PRINTER
S1503
S1504
GAME CONTINUATION PERMISSION IS RECEIVED?
NO
YES
RETURN

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2005168664 A **[0004]**
- JP 2005058572 A **[0005]**