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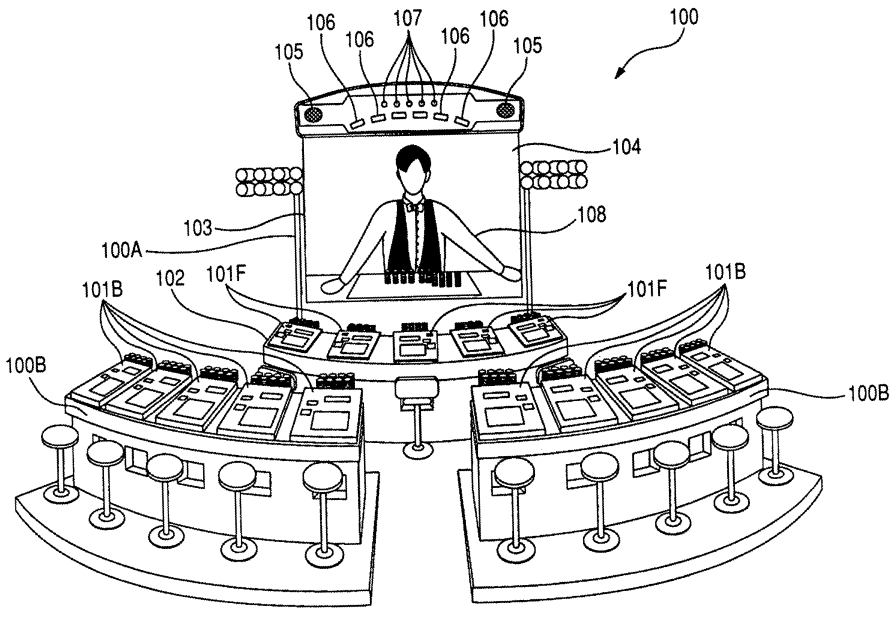
(54) **Gaming machine**

(57) A gaming machine includes: a first game unit that performs a first game process for providing a first game to a first group of players; and a second game unit that performs a second game process for providing a second game to a second group of players. The first game unit performs the first game process including transmitting first game status information to the second game unit, the first game status information representing status of the first game. The second game unit performs the second game process including: receiving the first game status information from the first game unit; allowing the second group of players to bet on the status of the first game; and paying out an award to the second group of players based on the bet amount in accordance with a result of the first game.

FIG. 1



EP 1 764 753 A2

Description

TECHNICAL FIELD

[0001] The present invention relates to a gaming machine in which a player bets a game value to play a game and achieves a game value having an amount determined based on the bet game value when the player wins the game.

BACKGROUND

[0002] A gaming machine with which a game played in a casino can be more simply played has been popular in the market. As an example of the gaming machine is implemented a gaming machine in which a card game such as Black Jack or the like is played.

[0003] As an example of the gaming machine described above has been proposed a gaming machine that is equipped with: a shared display device for displaying an image of a dealer who deals cards for a plurality of players; and a plurality of individual display devices for displaying images for providing the card game to be performed by each of the players. The individual display devices are also called "satellites", or"player terminals". When cards are dealt, the dealer image is displayed in the direction to the setup positions of the individual display devices to which the cards are dealt, that is, so that each of the players as operators of the individual display devices and the dealer image face each other. Example of such gaming machine is described in detail in JP-A-2004-008706 (on paragraph [0039] [0042], and on Fig. 1). The document JP-A-2004-008706 has a corresponding US patent application that is published as US 2004/0063482 A1.

[0004] Furthermore, in card games such as Twenty One (Twenty One), a gaming method in which each player can play Twenty One (Twenty One) as a main game with the player's own cards and also play an extra game for betting other players' own cards. Example of such gaming method is described in U.S. Patent No. 5,390,934.

[0005] In the above described gaming machine, each player uses an individual display device, and thus the maximum number of players who can play simultaneously is limited to the number of the individual display devices. Under the state that all the individual display devices are played by players, other players who want to play the game must wait until some of the players participating in the game finish the game, and thus they may feel tired until the game is finished. Accordingly, there is a risk that these other players lose their incentives the game and walk away without playing the game.

[0006] It may be considered to increase the number of individual display devices as a method of solving this problem. However, the game machine for supplying a game such as a card game or the like has such game characteristics that the number and type of cards being used in the game are finite and the time required for one game is increased as the number of players increases, so that players lose feelings of speed, and thus the number of players participating in the game at the same time is limited. Therefore, the method of solving the problem by increasing the number of individual display devices unnecessarily may damp the fascination of the game.

SUMMARY

[0007] One of objects of the present invention is to provide a gaming machine in which a first player, who waits for a second player participating in a main game finishes the main game, can enjoy a subsidiary game while the first player spends the waiting time.

According to one aspect of the invention, there is provided a gaming machine including: a first game unit that performs a first game process for providing a first game to a first group of players, the first game process including: allowing the first group of players to bet; and paying out an award to the first group of players based on the bet amount in accordance with a result of the first game; and a second game unit that performs a second game process for providing a second game to a second group of players, the second game being different from the first game, wherein the first game unit performs the first game process further including transmitting first game status information to the second game unit, the first game status information representing status of the first game, and wherein the second game unit performs the second game process including: receiving the first game status information from the first game unit; allowing the second group of players to bet on the status of the first game; and paying out an award to the second group of players based on the bet amount in accordance with a result of the first game.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] In the accompanying drawings:

Fig. 1 is a perspective view showing an overview of a gaming machine;
Fig. 2 is a perspective view showing a player terminal;
Fig. 3 is a block diagram showing a control system of the gaming machine;
Fig. 4 is a perspective view showing an example of an elevating mechanism;
Fig. 5 is a perspective view showing another example of the elevating mechanism;
Fig. 6 is a perspective view showing another example of the elevating mechanism;
Fig. 7 is a functional block diagram showing a configuration example of a main controller;
Fig. 8 is a functional block diagram showing a configuration example of a main player terminal;
Fig. 9 is a functional block diagram showing a con-

figuration example of a subsidiary player terminal;
Fig. 10 is a sequence diagram showing an operation example of the gaming machine;
Fig. 11 is a diagram showing an example of the screen displayed on a liquid crystal display of the main player terminal;
Fig. 12 is a diagram showing an example of the screen displayed on the liquid crystal display of the subsidiary player terminal;
Fig. 13 is a diagram showing an example of the screen displayed on the liquid crystal display of the subsidiary player terminal which is shifted from the screen shown in Fig. 12;
Fig. 14 is a diagram showing an example of the screen displayed on the liquid crystal display of the subsidiary player terminal which is shifted from the screen shown in Fig. 13;
Fig. 15 is a sequence diagram showing an example of the operation of the gaming machine which is subsequent to the sequence diagram shown in Fig. 10;
Fig. 16 is a diagram showing an example of the screen displayed on the liquid crystal display of the main player terminal;
Fig. 17 is a diagram showing an example of the screen displayed on the liquid crystal display of the subsidiary player terminal;
Fig. 18 is a diagram showing an example of the screen displayed on a front display;
Fig. 19 is a diagram showing an example of the screen displayed on the liquid crystal display of the main player terminal which is shifted from the screen shown in Fig. 16;
Fig. 20 is a diagram showing an example of the screen displayed on the liquid crystal display of the subsidiary player terminal which is shifted from the screen shown in Fig. 17;
Fig. 21 is a sequence diagram showing an example of the operation of the gaming machine which is subsequent to the sequence diagram shown in Fig. 15;
Fig. 22 is a diagram showing an example of the screen displayed on the front display;
Fig. 23 is a sequence diagram showing an example of the operation of the gaming machine which is subsequent to the sequence diagram of Fig. 15;
Fig. 24 is a diagram showing an example of the screen displayed on the front display;
Fig. 25 is a diagram showing an example of the screen displayed on the liquid crystal display of the main player terminal; and
Fig. 26 is a diagram showing an example of the screen displayed on the liquid crystal display of the subsidiary player terminal.

DETAILED DESCRIPTION

[0009] An embodiment of the present invention will be now described with reference to the drawings.

1. Overview of Gaming Machine

Fig. 1 is a diagram showing the overview of a gaming machine according to an embodiment. The following description will be made on the assumption that a program for playing Black Jack which is one of card games as a game to be executed is installed in a gaming machine 100 according to the embodiment, however, the gaming machine of the present invention is not limited to one for playing Black Jack.

[0010] As shown in Fig. 1, the gaming machine 100 has a main game unit 100A, and two subsidiary game units 100B connected to the main game unit 100A to be communicable with the main game unit 100A.

[0011] The main game unit 100A includes a terminal portion 102 having five main player terminals 101F called "satellites" which are disposed in a substantially fan-shaped arrangement, and a panel portion 103 which is disposed at the rear side of the terminal portion 102 when viewed from operators (players) of the terminal portion 102. Five subsidiary player terminals 101B are installed in each of the subsidiary game units 100B. The players as the operators of the main player terminals 101F are called as main players, and the players as the operators of the subsidiary player terminals 101B are called as subsidiary players. In the embodiment, the main players play a main game (for example, all games played on so-called casino or games such as card games such as Black Jack, baccarat, poker, etc., table games such as roulette, etc.) provided by the main game unit 100A, and the subsidiary players play a subsidiary game as a game to which the subsidiary players bet game values to a game result of the main game played by the main players.
In the description herein, the amount of game values bet by a player is also referred to as "bet amount".

[0012] The panel portion 103 includes a front display 104 as a display device such as a liquid crystal display device or the like, speakers 105, lamps 106 and LEDs 107. The front display 104 notifies to each of the players, general information relating to all the games in which the main players and/or the subsidiary players participate.

[0013] The front display 104 is designed to display information such as a start notification of the betting-allowable time, an end notification of the betting, and a win-loss notification of a game, by using animation of a dealer 108 or other images.

[0014] The speakers 105, the lamps 106 and LEDs 107 provide effects relating to the game, for example, the effect based on an output of BGM or a sound effect or the effect based on execution of turn-on/turn-out in conformity with the image display of the front display 104 or independently of the image display of the front display 104.

[0015] Fig. 2 is an partially enlarged view of the terminal portion 102. The terminal portion 102 and the main player terminals 101F installed in the terminal portion 102 will be described with reference to Fig. 2.

[0016] Each of the main player terminals 101F has, on the top surface thereof, a liquid crystal display 201 for supplying a player with information relating to a game.

The liquid crystal display 201 is covered by a transparent touch panel 202, and a button group 203 including plural buttons used in the game by the player such as PAYOUT button, BET button, etc. is disposed at the front side of the liquid crystal display 201 for the player correlatively with an input interface screen displayed on the liquid crystal display 201. Furthermore, a coin insertion portion in which the player insertions a game value medium such as a coin, a medal, a chip or the like (hereinafter merely referred to as "coin") is provided at the right side of the button group 203. A bank bill insertion portion 205 in which the player inserts a bank bill is provided at the lower side of the coin insertion portion 204. A coin sensor (not shown) is disposed at the coin insertion portion 204, and when a coin is inserted into the coin insertion portion 204, a coin detection signal is output through the coin sensor. Furthermore, a bank bill sensor (not shown) is disposed at the bank bill insertion portion 205, and when a bank bill is inserted into the bank bill insertion portion 205, a bank bill detection signal is output through the bank bill sensor.

[0017] A coin payout opening 206 is provided at the lower portion of the front surface of the main player terminal 101F. When the player presses PAYOUT button as one button of the button group 203, coins whose number corresponds to all or a part of a player possession credit value stored in the main player terminal 101F are paid out from the coin payout opening 206, and the player achieves these coins.

[0018] An U-shaped transparent acryl panel 207 is provided at the front side (at the side facing the panel portion 103) of the liquid crystal display 201, a solid model chip presenting portion 208 is provided in an area surrounded by the transparent acryl panel 207. The solid model chip presenting portion 208 includes solid model chips 209, a presenting portion plate 211 having an opening through which solid model chips 209 are projected from the inside of the player terminal 101 to the outside or projected solid model chips 209 are accommodated in the player terminal 101, and an elevating mechanism (described later) for moving the solid model chips 209 upwardly and downwardly.

[0019] The solid model chips 209 is a model of a mountain of chips, and formed of resin or the like by molding. One solid model chip presenting portion 208 may have plural different units of solid model chips 209. For example, there may be prepared a solid model chip imitating a mountain of chips each of which corresponds to one credit, a solid model chip imitating a mountain of chips each of which corresponds to 10 credits, a solid model chip imitating a mountain of chips each of which corresponds to 100 credits, for example.

[0020] These solid model chips 209 are moved upwardly or downwardly by the elevating mechanism in accordance with the number of chips credited in the gaming machine 100 by the main player operating the main player terminal 101F provided with the solid model chip presenting portion 208, that is, in accordance with the player's possession credit value. For example, when a player's possession credit value is equal to "251", the solid model chip imitating a mountain of chips each of which corresponds to one credit is upwardly or downwardly moved so as to project from the presenting portion plate 211 by only the height corresponding to the thickness of one chip, the solid model chip imitating a mountain of chips each of which corresponds to ten credits is upwardly or downwardly moved so as to project from the presenting portion plate 211 by only the height corresponding to the thickness of five chips, and the solid model chip imitating a mountain of chips each of which corresponds to one hundred credits is upwardly or downwardly moved so as to project from the presenting portion plate 211 by only the height corresponding to the thickness of two chips.

[0021] All the players can rapidly and intuitively grasp their possession credit values by watching the height of the solid model chips 209 projected from the presenting portion plates 211, and have realistic sensations as if the actual chips are being increased/reduced in front of the player's eyes.

[0022] Next, the subsidiary game unit 100B will be described. The subsidiary player terminal 101B installed in the subsidiary game unit 100B is the same as the main player terminal 101F described above, and thus the detailed description of the subsidiary player terminal 101B is omitted.

[0023] Fig. 3 is a block diagram showing an example of the internal configuration of the gaming machine 100. A main controller 301 is equipped in the main game unit 100A. The main controller 301 is configured by an information processing device for executing a game program, peripheral devices, etc. The main controller 301 is connected to the main player terminals 101F and the subsidiary player terminals 101B so that the main controller 301 can perform two-way communication with each of the main player terminals 101F and the subsidiary player terminals 101B. The main controller 301 receives a notification of a bet coin number, a betting target, etc. from each of the main player terminals 101F and the subsidiary player terminals 101B, starts execution of the game when a predetermined condition is satisfied, determines the win/loss of the main game and the subsidiary game, and then notifies the game result to each of the player terminals 101.

[0024] Each main player terminal 101F increases/reduces the player's possession credit value according to the notification from the main controller 301. For example, when the main layer wins the main game, each main player terminal 101F adds the possession credit value with the credit value corresponding to a gained number of coins and re-stores the possession credit value according to the notification from the main controller 301. On the other hand, when the main player loses the main game, each main player terminal 101F subtracts the credit value corresponding to the bet number of coins from the possession credit value and re-stores the pos-

session credit value according to the notification from the main controller 301.

[0025] Each subsidiary player terminal 101B operates in the same manner as the main player terminal portion 101F with respect to the subsidiary game. That is, each subsidiary player terminal 101B increases/reduces the main player's possession credit value according to the notification from the main controller 301. For example, when the subsidiary player wins the subsidiary game, the subsidiary player terminal 101F of the subsidiary player concerned adds the possession credit value with the credit value corresponding to a gained number of coins and re-stores the possession credit value according to the notification from the main controller 301. On the other hand, when the main player loses the main game, each main player terminal 101F subtracts the credit value corresponding to the bet number of coins from the possession credit value and re-stores the possession credit value according to the notification from the main controller 301.

[0026] The main controller 301 controls the output of the image signal to be displayed on the front display 104, the driving of the lamps 106 and LEDs 107 and the driving of the speakers 105.

[0027] The main player terminal 101F has a terminal controller 304F configured by the information processing device and the peripheral devices, an elevating mechanism 302 connected to the terminal controller 304F and a light source 303.

The elevating mechanism 302 is means for moving the solid model chips 209 upwardly or downwardly. In the embodiment, a stepping motor is used as driving force for elevation, however, a normal motor combined with a position control mechanism may be used.

[0028] The specific configuration of the elevating mechanism 302 will be described with reference to Fig. 4. The elevating mechanism 302 shown in Fig. 4 has a rotational driving shaft 402 secured to the stepping motor 401, abutting members 403_1 to 403_5 that are fixed to the rotational driving shaft 402 and rotates in connection with the rotation of the rotational driving shaft 402, arm portions 405_1 to 405_5 that are rotatably secured to a support shaft 404 at the positions where one ends thereof abut against the abutting faces 4031P to 4035P of the abutting members 403_1 to 403_5, and table portions 406_1 to 406_5 secured to the other ends of the arm portions 405_1 to 405_5. The solid model chips 209 are fixedly mounted on the upper surfaces of the table portions 406_1 to 406_5. The table portions 406_1 to 406_5 are guided by a sliding rail 407, and regulated so that the solid model chips 209 accurately pass through the openings 210.

[0029] The example of Fig. 4 is designed so that five kinds of solid model chips 209 are elevated, and thus the abutting members 403_1 to 403_5, the abutting faces 403_1P to 403_5P, the arm portions 405_1 to 405_5 and the table portions 406_1 to 406_5 are prepared every five elements, and subscripts are affixed to discriminate these elements from one another. However, when it is unnecessary to discriminate these elements, no subscript is affixed, and these elements will be described merely as the abutting member 403, the abutting face 403P, the arm portion 405 and the table portion 406.

[0030] Next, the operation of the elevating mechanism 302 shown in Fig. 4 will be described.

[0031] When the stepping motor 401 driven by the player terminal 101 rotates the rotational driving shaft 402, the abutting members 403 are rotated. When this rotation progresses, the abutting face 403 abuts against one end of the arm portion 405. In the embodiment, the abutting face 4035P abuts against one end of the arm portion 405_5 most early, and then the abutting face 403_4P, the abutting face 403_3P, the abutting face 403_2P and the abutting face 403_1P successively abut against the one ends of the corresponding arm portions 405_4 to 405_1 in this order.

[0032] When the abutting face 403P abuts against the one end of the arm portion 405 and then the abutting member 403 is further rotated, the abutting face 403P presses the one end of the arm portion 405 downwardly. The arm portion 405 whose one end is pressed down is rotated around the support shaft 404, and the other end thereof is pressed upwardly. As a result, the table portion 406 fixed to the other end is also pressed upwardly, and the solid model chip 209 mounted on the table portion 406 is also upwardly moved. As a result a part or all of the solid model chip 209 can be passed through the opening 210, and projected and exposed from the presenting portion plate 211 in accordance with the rotational amount of the rotational driving shaft 402 by the stepping motor 401.

[0033] Furthermore, by rotating the stepping motor 401 reversely, a part or whole of the solid model chip 209 which is temporarily projected and exposed from the presenting portion plate 211 can be accommodated to the lower side of the presenting portion plate 211.

[0034] In the configuration shown in Fig. 4, the shapes of the abutting members 403_1 to 403_5 are determined so as to vary the timings at which the abutting faces 403_1P to 403_5P abut against the one ends of the corresponding arm portions 405_1 to 405_5 respectively. Therefore, the solid model chip 209 at the right end starts to move upwardly at the earliest time, and then the solid mode chips 209, from the solid model chip 209 at the right side to the solid model chip 209 at the left side, successively start to move upwardly. If the solid model chips are set to be discriminable from one another with colors or patterns by utilizing this property like the value per chip is set to the lowest value for the solid model chip 209 at the rightmost end (for example, one credit per chip, the value per chip is set to a higher value (for example, 5 credits, 10 credits, 100 credits, 1000 credits per chip) as the position of the solid model chip 209 is gradually shifted to the left side, possession credit values in such a broad range as the range from 1 to 100000 credits can be expressed by projection amounts of the solid model chips 209.

[0035] Next, another configuration of the elevating

mechanism 302 is shown in Figs. 5 and 6. Fig. 5 is a perspective view showing the basic unit of another configuration of the elevating mechanism 302. Plural basic units as described above are assembled into one elevating mechanism 302.

[0036] In the basic unit of the elevating mechanism 302, a table portion 503 is secured to a rotational driving shaft 502 rotated by a stepping motor 501.

[0037] As in the case of the above-described example, the solid model chip 209 is mounted on the upper surface of the table portion 503. In Fig. 5, with respect to the solid model chip 209, hollow semi-cylinders at right and left sides are attached to each other to form one solid model chip 209, and a hollow semi-cylinder at one side before attached is shown in Fig. 5. The solid model chip 209 is upwardly or downwardly moved so as to project from the opening 210 of the presenting portion plate 211 (not shown), and this is the same as the example described above.

[0038] A nut 504 is fixed to the bottom portion of the table portion 503. A screw thread and a thread groove are formed on the outer peripheral surface of the rotational driving shaft 502 (not shown), and the nut 504 and the rotational driving shaft 502 screw together.

[0039] The table portion 503 is regulated so as not to rotate in connection with the rotational driving shaft 502. For example, a guide rail is provided to rotate the rotation of the table portion (the movement in the up-and-down direction is not regulated) as in the case of the above example. Alternatively, the rotation of the table portion 503 may be regulated (the movement in the up-and-down direction is not regulated) by making the table portion 503 in slidable contact with the inner wall or the gaming machine 100 or the like.

[0040] The table portion 503 is screw-fed forward or backward by rotating the rotational driving shaft 502. That is, by controlling the rotational driving of the stepping motor 501, the upward and downward movement of the table portion 503, that is, the solid model chip 209 placed on the table portion 503 can be controlled.

[0041] Fig. 6 is a perspective view showing an example in which the elevating mechanism 302 is configured by using plural basic units described above. In the example of the elevating mechanism 302, it is configured by an array of five basic units each of which has one solid model chip 209 mounted thereon, and an array of other five basics units each of which has one solid model chip 209 mounted thereon. The stepping motor 501 is provided every basic unit, and thus the elevation control of the solid model chips 209 can be controlled independently every basic unit.

[0042] Therefore, when the elevating mechanism 302 thus configured is used, the solid model chip 209 is elevated not only for the purpose of displaying the possession credit value, but also for the purpose of achieving another display such as an effect of elevating the solid model chip 209 like waves from right to left or from left to light when a player of the player terminal gains a large win.

[0043] Returning to Fig. 3, the schematic configuration of the gaming machine 100 will be described.

The terminal controller 304 of the main player terminal 101F is connected to the light source portion 303, and controls the light emission operation of the light source portion 303. The light source portion 303 is a circuit having a light source such as plural LEDs or the like, and functions as a light source that can change the color thereof (for example, red, blue, green, white or the like) and the brightness thereof. Light emitted from the light source portion 303 is guided by the acryl panel 207, and emitted to the outside of the gaming machine 100, particularly so as to be visible by the player.

[0044] Next, the subsidiary player terminal 101B will be described.

The subsidiary player terminal 101B includes a terminal controller 304B configured by an information processing device and peripheral devices, an elevating mechanism 302 connected to the terminal controller 304 and a light source portion 303. The solid model chip 209 is operated by the elevating mechanism 302, and the light emission control of the acryl panel 207 is performed by the light source portion 303. The elevating mechanism 302, the light source portion 303, the acryl panel 207 and the solid model chip 209 are designed as in the case of the main player terminal portion 101F, and the detailed description thereof is omitted.

[0045] 2. Configuration of Main Controller

Next, the configuration of the main controller 301 will be described with reference to Fig. 7. Fig. 7 is a block diagram showing the gaming machine 100 mainly containing the main controller 101.

[0046] The main controller 301 is configured by a computer 705 which basically includes CPU 701, RAM 702, ROM 703 and a bus 704 for performing data transmission among the above elements, and ROM 703 and RAM 702 are connected to CPU 701 through the bus 704. In ROM 703 are stored various kinds of programs, data tables, etc. which are required to execute the processing for the control of the gaming machine 100. Furthermore, RAM 702 is a memory for temporarily storing various kinds of data calculated in CPU 701.

[0047] The microcomputer, more specifically CPU 701 is connected to an image processing circuit 707 through an I/O interface 706, and the image processing circuit 707 is connected to the front display 104 to control the driving of the front display.

[0048] The image processing circuit 707 is configured by a program ROM, an image ROM, an image control CPU, a work RAM, VDP (video display processor), a video RAM, etc. In the program ROM are stored various kinds of an image control program and various kinds of selection tables associated with the display on the front display 104. In the image ROM are stored image-forming dot data such as dot data required to form an image on the front display 104, etc. Furthermore, on the basis of parameters set in CPU 701, the image control CPU de-

termines an image to be displayed on the front display 104 from dot data pre-stored in the program ROM according to the image control program pre-stored in the program ROM. Furthermore, the work RAM is designed as temporarily storing means when the image control program is executed by the image control CPU. Furthermore, VDP generates image data corresponding to a display content determined by the image control CPU, and outputs the image data to the front display 104. The video RAM is designed as temporarily storing means when an image is formed by VDP.

[0049] Furthermore, the microcomputer 705, more specifically CP 701 is connected to the speakers 105 through an audio circuit 708, and the speakers 105 generate various kinds of sound effects, BGM, etc. when various kinds of effects are carried out on the basis of the output signal from the audio circuit.

[0050] Furthermore, the lamps 106 and LEDs 107 are connected through a lamp drive circuit to the microcomputer 705, more specifically CPU 701. When many lamps 106 and LEDs 107 are disposed on the front surface of the gaming machine 100 to provide various kinds of effects, the turn-on control thereof is performed on the basis of the driving signal from CPU 701 by the lamp drive circuit.

[0051] Furthermore, the microcomputer 705, more specifically CPU 701 is connected to each of the main player terminals 101F and the subsidiary player terminals 101B through the communication interface 10, and the two-way communication can be performed between CPU 701 and each main player terminal 101F while the two-way communication can be performed between CPU 701 and each subsidiary player terminal 101B. The microcomputer 705, more specifically CPU 701 receives/transmits commands, requests, etc. from/to each main player terminal 101, and the main controller 301 and the main player terminal 101F carry out the progress control of the main game in cooperation with each other. Likewise, the microcomputer 705, more specifically CPU 701 receives/transmits commands, requests, etc. from/to each subsidiary player terminal 101B by the communication interface 710, and the main controller 301 and the subsidiary player terminal 101B carry out the progress control of the subsidiary game in cooperation with each other.

[0052] 3. Configuration of main player terminal

Next, the configuration of the main player terminal 101F will be described with reference to Fig. 8.

Fig. 8 is a functional block diagram showing an example of a control system of the main player terminal 101F.

The central core of the main player terminal 101F is the terminal controller 304F, and the terminal controller 304F is configured by a microcomputer 805 as the central core, which basically includes CPU 801, RAM 802, ROM 803 and a bus 804 for performing data transmission among these elements. ROM 803 and RAM 802 are connected to CPU 801 through the bus 804. In ROM 803 are stored various kinds of programs, data tables, etc. which are required to execute the processing for the control of the main player terminal 101F, for example, the control of the operation of the elevating mechanism 302, the control of turn-on/turn-off of the light source portion, etc. RAM 802 is memory for temporarily storing various kinds of data calculated in CPU 801.

[0053] The microcomputer 805, more specifically CPU 801, is connected to a liquid crystal panel drive circuit 807 through an I/O interface 806, and the liquid crystal panel drive circuit 807 is connected to the liquid crystal display 201 to control the driving of the liquid crystal display 201.

[0054] The microcomputer 805, more specifically CPU 801, is connected to a touch panel drive circuit 808 through the I/O interface 806, and the touch panel drive circuit 808 outputs coordinate data of the touch position on the touch panel 202.

[0055] The microcomputer 805, more specifically CPU 801, is connected to a hopper 814 through a hopper drive circuit 809. When a driving signal is output from CPU 801 to the hopper drive circuit 809, the hopper 814 pays out a predetermined number of coins from the coin payout opening 206. A coin detector 815 is connected to CPU 801 through a payout completion signal circuit 810. The coin detector 815 is disposed in the coin payout opening 206, and when it is detected that a predetermined number of coins are paid out from the coin payout opening 206, a coin payout detection signal is output from the coin detector 815 to the payout completion signal circuit 810, and the payout completion signal circuit 810 outputs a payout completion signal to CPU 801.

[0056] The microcomputer 805, more specifically CPU 801, is connected to a stepping motor control circuit 811 for rotating the stepping motor 401 (or 501) to drive the elevating mechanism 302. When a motor driving signal is output from CPU 801 to the stepping motor control circuit 811, the stepping motor 401 (or 501) is driven to rotate by the stepping motor control circuit 811, whereby the elevating mechanism 302 operates to move the solid model chip 209 upwardly or downwardly.

[0057] The microcomputer 805, more specifically CPU 801, is connected to an LED driving control circuit 812 for driving the light source portion 303. In the embodiment, the light source portion 303 is configured by plural LEDs, and the LED driving control circuit 812 supplies driving power to driving-targeted LEDs out of all the LEDs in accordance with an LED driving command from CPU 801. Accordingly, the turn-on/turn-out of LEDs can be controlled in a desired style under the control of CPU 801.

[0058] In the embodiment, the light source portion is configured by five red LEDs, five blue LEDs and five white LEDs, and the LED driving control circuit 812 is a circuit for selectively supplying power so that the five red LEDs, the five blue LEDs and the five white LEDs can be independently and separately turned on/turned off.

[0059] The microcomputer 805, more specifically CPU 801, is connected to the main controller 301 through the communication interface 813, and CPU 801 and the main controller 301 can perform two-way communication ther-

ebetween. CPU 801 performs transmission/reception, etc. of commands, requests, data, etc. with the main controller 3, and the main controller 301 and the main player terminal 101F controls the progress of the main game in cooperation with each other.

[0060] 4. Configuration of subsidiary player terminal

Fig. 9 is a functional block diagram showing an example of the control system for the subsidiary player terminal 101B. As shown in Fig. 9, the configuration of the control system of the subsidiary player terminal 101B is the same as the main player terminal portion 101F. Therefore, the same constituent elements are represented by the same reference numerals, and the detailed description thereof is omitted.

[0061] 5. Operation of gaming machine

Next, an operation of the gaming machine 100 according to the embodiment will be described with reference to Figs. 10 to 26. Fig. 10 is a sequence diagram showing the operation of the gaming machine 100, Fig. 15 is a sequence diagram sequential to Fig. 11, Fig. 21 is a sequence diagram sequential to Fig. 15, and Fig. 23 is a sequence diagram sequential to Fig. 15 when a different choice from Fig. 21 is made. The operation of the gaming machine 100 will be described hereunder with reference to these sequence diagrams.

[0062] In Figs. 10, 15, 21 and 23, only one main player terminal and only one subsidiary player terminal are illustrated as representatives for the main player terminals 101F and the subsidiary player terminals 101B, and the other main player terminals 101F and the subsidiary player terminals 101B are omitted from the illustration.

[0063] First, when the start condition of the game is satisfied, the main controller 301 executes dealing card preparation processing corresponding to a work of shuffling a mount of cards and preparing for card dealing by a dealer (step S1001). Specifically, when there are N cards to be used in one game, any one of the numbers from first to N-th (called as a dealing order) is randomly allocated to each card. The main controller 301 determines the cards to be dealt to the dealer and main players according to this dealing order.

[0064] When the dealing card preparation processing (step S1001) is finished, the main controller 301 transmits a main game starting instruction to each main player terminal 101F (more specifically, the terminal controller 304F, hereinafter merely referred to as "main player terminal 101F") (step S1002).

[0065] The main player terminal portion 101F receiving the main game start instruction executes main game input acceptance processing (step S1003). The main game input acceptance processing is the processing of prompting an input operation for selection and settlement (containing an indication of a bet amount) by a main player, and achieving an input content as data.

In this example, the main game input acceptance processing prompts the main player to input the bet amount. Fig. 11 shows a display example displayed on the liquid crystal display 201 of the main player terminal portion 101F as a user input interface screen when the main game input acceptance processing is executed. The input interface screen will be described hereunder with reference to Fig. 11.

[0066] As shown in Fig. 11, a player card display area 1101 is provided at the front side of the liquid crystal display 201 (at the panel portion 103 side). However, at this time point, the processing corresponding to the card dealing to the main player is not carried out, and thus no card image is displayed.

[0067] A chip display area 1102 is provided at the lower side of the player card display area 1101. An image 1118 of chips corresponding to the number of coins bet by the main player is displayed on the chip display area 1102 to provided an effect to enhance the realistic sensations. When the player touches the chip display area 1102, the bet amount is determined by the touch panel 202, and the bet amount thus determined is transmitted to the main controller 301. That is, the chip display area 1102 also functions as a bet determining button.

[0068] Plural bet buttons 1103 are displayed at the lower right side of the chip display area 1102. The main player can input a desired bet amount by properly touching the bet button 1103. In the example shown in Fig. 12, the values "1", "10" and "100" are set to the respective bet buttons 1103, and coins whose number corresponds to a value set by one touch are added to the bet value.

[0069] Repeat bet button 1104 and UNDO bet button 1105 are displayed at the upper side of the bet button 1103. By touching the Repeat bet button 1104, the main player can bet the same number of coins as the previous game in which he/she participated just before. By touching the UNDO bet button 1105, the main player can cancel the number of coins bet.

[0070] An operating button group used when the main player bargains with the dealer 108 is displayed at the lower left side of the chip display area 1102. Specifically, as the operating buttons are displayed STAND button 1106, HIT button 1107, SURRENDER button 1108, INSURANCE button 1109, SPLIT button 1110 and Double Down button 1111.

[0071] The STAND button 1106 is an operating button to be touched when the player tries the player's luck by using the currently-dealt cards without any request for card dealing. The HIT button 1107 is an operating button to be touched by the main player when dealing one more card is requested in addition to the dealt cards. The HIT button 1107 is continuously usable until the total number of dealt cards is equal to 21 or more.

[0072] The SURRENDER button 1108 is an operating button to be touched when the main player gives up a bout in the present game.

When the SURRENDER button 1108 is selected, a half of the bet amount at that time point is tolled by the dealer, and the remaining half of the bet amount is returned to the main player. The INSURANCE button 1109 is an operating button to be touched when the main player effects insurance with a half of the bet amount at that time point

against Black Jack of the dealer cards 801. The SURRENDER button 1108 is usable when the face-up card (the card at the obverse side is any card except for "A (Ace)", and the INSURANCE button 1109 is usable when the face-up card is "A (Ace) ".

[0073] The SPLIT button 1110 is an operating button to be touched when two cards dealt during the game have the same numeral and thus the cards are shared to two hands. When the SPLIT button 1110 is selected, the player can try his/her luck at each hand. When a card having the same numeral is dealt again after the cards are shared to two hands, the cards concerned can be shared to two hands again. In one game, SPLIT can be selected till three times at maximum. The Double Down button 1111 is an operating button to be touched when the bet amount is doubled during the game. After the Double Down button 1111 is selected, the player draws only one card and then cannot draw any more card.

[0074] HELP button 1112 is displayed and a message area 1113 is provided at the lower side of the HIT button 1106 and the STAND button 1107. The HELP button 1112 is a button to be touched when an explanation of the game (in this case, Black Jack) is requested. A message supporting the progress of the game is displayed in accordance with the present gaming state. A message explaining the game when the HELP button 1112 is selected is also displayed in the message area 1113.

[0075] An area in which a credit value gained by the main player is displayed (gained credit value display area 1114) and an area (possession credit value display area) 1115 in which a credit value possessed by the main player is displayed are provided at the lowest area of the liquid crystal display 201. An area (bet value lower limit value display area) 1116 in which the lower limit value of the bet amount is displayed and an area (bet amount upper limit value display area) 1117 in which the upper limit value of the bet amount is displayed are provided. By displaying the lower limit value and the upper limit value of the bet amount, the main player is promoted to determine the bet amount within the range indicated by these values.

[0076] When the main player operates the bet button 1103 during the display of the input interface screen, the chip image 1118 is displayed in the chip display area 1102 in accordance with the value corresponding to the operation, so that the player can confirm the bet number of coins.

[0077] Returning to Fig. 10, the description on the operation of the gaming machine 100 is continued.

The main player inputs the bet amount into the main player terminal 101F while checking the input interface screen. After the input of the main player is finished, the main player terminal 101F generates main game input content as the information corresponding to the input content of the main player, and transmits this main game input content information to the main controller 301 (step S1004). In this case, the main game input content information contains main player terminal identification information indicating which main player terminal 101F transmits the information concerned, and information indicating the bet amount. The main game input content information is individually transmitted from each main player terminal 101F to the main controller 301.

[0078] The main controller 301 receiving the main game input content information generates main game status information based on the received main game input content information, and executes main game status information storing processing as the processing of storing the above information (step S1005). Through this storing processing, the main controller 301 records what action each player takes (in this example, what bet amount each player inputs).

[0079] Subsequently, the main controller 301 transmits the main game status information to each subsidiary player terminal 101B (step S1006). The main game status information is the information relating to the main game, and contains information required when the subsidiary player plays the game. The main controller 301 generates main game status information by using the main game input content information received from each main player terminal 101F. The main game status information contains the following contents, for example.

[0080]

(1) Cards dealt to each main player terminal 101F
(2) The bet amount in each main player terminal 101F
(3) Winning percentage in each main player terminal 101F
(4) Record of winning percentage in each main player terminal 101F
(5) Cards dealt to dealer

Each subsidiary player terminal 101B receiving the main game status information executes the main gaming state display processing (step S1007). The main gaming state display processing is the processing of displaying a main gaming state display screen to inform a gaming state, etc. in each main player terminal 101F to the subsidiary player. Fig. 12 shows an example of the screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B. This screen is a screen for notifying the gaming state of each main player terminal 101F to the subsidiary player to the subsidiary player, and also functions as an input interface screen for accepting the input of the subsidiary player on the subsidiary game.

[0081] On this screen are displayed a dealer card image display area 1201 as an image display of cards dealt to the dealer, a main player card image display area 1202 as an image display of cards dealt to the main player corresponding to each main player terminal 101F, a bet amount display area 1203 for displaying a bet amount as a game value bet by the main player in the main player terminal 101F, a winning percentage display area 1204 of the main player of the main player terminal 101F, and a winning record display area 1205 for displaying win or

loss of five games immediately before the present game.

[0082] By checking these displays, each subsidiary player predicts which main player wins the main game (gain the award), and bets a desired bet amount to the win of the main player concerned. This is the content of the subsidiary game played by the subsidiary players. When a subsidiary player touches any select button area 1206, the corresponding main player is selected as a betting target of the subsidiary game.

[0083] A select button area 1206 for selecting a main player as a betting target of a subsidiary game by the subsidiary player is provided at the lower side of the winning record display 1205. When the selected main player wins the main game, the subsidiary player concerned wins the subsidiary game. Therefore, the subsidiary player concerned receives an award as a benefit of the winning of the subsidiary game.

[0084] At the lower side of the select button area 1206 is provided a rate display area 1207 as an area for displaying a rate (subsidiary game rate) by which the bet amount of the subsidiary player is multiplied to determine the award to the subsidiary player concerned when the subsidiary player wins the subsidiary game. As described later, the subsidiary game rate may be changed in the progress of the game.

[0085] Plural bet buttons 1210, and UNDO bet button 1211 and Repeat bet button 1212 located at the right side of the bet buttons 1210 are provided at the lower right side of the screen as in the case of the input interface screen of the main player terminal 101F as shown in Fig. 11. HELP button 1208 is displayed and a message area 1209 is provided at the lower left side of the screen. A bet amount display area 1213 for displaying a bet amount bet by the subsidiary player, an area (gained credit value display area 1214) for displaying a credit value gained by the subsidiary player and an area (possession credit value display area) 1215 for displaying a credit value possessed by the subsidiary player are provided at the lowest area. Furthermore, an area (bet value lower limit value display area) 1216 for displaying the lower limit value of the bet amount in the subsidiary game and an area (bet amount upper limit value display area) 1217 for displaying the upper limit value of the bet amount in the subsidiary game are provided at the lower side of the above areas. By representing the lower limit and upper limit values of the bet amount, the subsidiary player is promoted to determine the bet amount within the range indicated by these values.

[0086] After the main gaming state display processing (step S1007) as the display processing of the input interface screen, the subsidiary player terminal 101B executes bet acceptance display processing in accordance with reception of the main game status information (step S1008). Fig. 13 shows an example of a screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B when the bet acceptance start display is executed. The screen shown in Fig. 13 is basically identical to the screen in the main gaming state display processing shown in Fig. 11, however, it is different in that a bet acceptance start message 1301 is added. The bet acceptance start message 1301 informs the subsidiary player of allowance of an input to the subsidiary game.

[0087] Returning to Fig. 10, the operation of the gaming machine 100 will be described.

After the bet acceptance start display processing (step S1008), the subsidiary player terminal 101B executes subsidiary player input acceptance processing (step S1009). The subsidiary player input acceptance processing is the processing of prompting an input of selection and determination of a betting target of the subsidiary player associated with the subsidiary game (containing an indication of the bet amount), and achieving the input content as data.

[0088] The subsidiary player inputs the selection of the main player and the bet amount to the subsidiary player terminal 101B by using the bet button 1210, the UNDO bet button 1211 and the Repeat bet button 1212, the select button area 1206, etc. while checking the input interface screen.

[0089] Fig. 14 is an example of the screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B when the subsidiary player inputs a bet value during execution of subsidiary player input acceptance processing (step S1009).

[0090] This screen is basically identical to the screen shown in Fig. 13, and a chip image 1401 corresponding to a bet value input by the subsidiary player is displayed in a select button area 1206. When the subsidiary player touches the select button area 1206 under this state, transmission of subsidiary game input information described later is executed.

[0091] Returning to Fig. 10, the description on the operation of the gaming machine 100 is continued.

The subsidiary player terminal 101B generates subsidiary game input information as the information corresponding to the input content of the subsidiary player, and transmits the subsidiary game input information to the main controller 301 (step S1010). The subsidiary game input information is transmitted from each subsidiary player terminal 101B to the main controller 301.

[0092] The main controller 301 receiving the subsidiary game input information generates subsidiary game status information on the basis of the received subsidiary game input information, and executes the subsidiary game status information storing processing as the processing of storing the above information (step S1011). Through this processing, the main controller 301 records what action each subsidiary player takes.

[0093] Next, the description of the operation of the gaming machine 100 subsequent to the step S1011 is continued. When a condition of finishing the acceptance of the bet from the main player is satisfied, the main controller 301 executes the bet acceptance end processing (step S1012). The condition of finishing the acceptance of the bet may be lapse of a predetermined time (for ex-

ample, one minute) from the transmission of the main game start instruction or the like, for example.

[0094] The bet acceptance finishing processing (step S1012) is the processing of judging whether the above finishing condition is satisfied and generates a bet acceptance finishing instruction when the condition is satisfied. The main controller 301 transmits the generated bet acceptance finishing instruction to each main player terminal 101F after it executes the bet acceptance finishing processing (step S1012) (step S1013).

[0095] The main player terminal 101F receiving the bet acceptance finishing instruction executes bet acceptance end display processing (step S1015). The bet acceptance end display processing is the processing in which information for informing the main player that the bet acceptance is finished is displayed on the liquid crystal display 201 of the main player terminal 101F as the input interface screen for the main player. Fig. 16 shows an example of the screen displayed on the liquid crystal display 201 of the main player terminal 101F after the bet acceptance end display processing is executed. This screen basically has the same content as the screen shown in Fig. 11, and is different in that a bet acceptance finishing message 1601 is added at the upper left side of the screen. On the basis of the bet acceptance finishing message 1601, the main player as the operator of the main player terminal 101F knows that the bet acceptance has been finished.

[0096] Returning to Fig. 15, the description on the operation of the gaming machine is continued.

The main controller 301 also transmits the main game status information containing the bet acceptance finishing message to each subsidiary player terminal 101B with the bet acceptance finishing instruction to each main player terminal 101F as a trigger (step S1014).

[0097] The subsidiary player terminal 101B receiving the main game status information executes the bet acceptance end display processing (step S1016). The bet acceptance end display processing is the processing in which the information for informing the subsidiary player that the bet acceptance for the subsidiary game is finished is displayed on the liquid crystal display 201 of the subsidiary player terminal 101B as the input interface screen for the subsidiary player, etc. Fig. 17 shows an example of the screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B after the bet acceptance end display processing is executed. This screen basically has the same content as the screen shown in Fig. 14, and it is modified in that a bet acceptance finishing message 1701 is displayed in place of the bet acceptance start message 1301. On the basis of the bet acceptance end message 1701, the subsidiary player as the operator of the subsidiary player terminal 101B knows that the bet acceptance has been finished.

[0098] Returning to Fig. 15, the description on the operation of the gaming machine 100 is continued.

The main controller 301 executes dealt card determining/displaying processing as the processing of determining cards to be dealt to the dealer and each main player and displaying the determined cards on the front display 104 (step S1017). The determination of the dealt cards is carried out on the basis of the dealing order settled in the previous dealt card preparation processing (step S1001 in Fig. 10). For example, the first card of the dealing order is set to the first card of the dealer (first card), the second card of the dealing order is set to the first card of a first main player, and the third card of the dealing order is set to the first card of a second main player. Likewise, every two cards are determined for each of the dealer and the main players according to the dealing order.

[0099] Fig. 18 shows an example of the screen displayed on the front display 104 through the execution of the dealt card determining/displaying processing (step S1017). The front display 104 is provided with a dealer image 108, a dealer card display area 1801 for displaying an image of cards dealt to the dealer, and main player card display areas 1802, 1803, 1804, 1805 and 1806 as areas for displaying images of cards dealt to main players. The images of the obverse surfaces of the cards determined according to the above-described dealing order, except for the second card of the dealer, are displayed on the dealer card display area 1801 and the main player card display areas 1802, 1803, 1804, 1805 and 1806, and which cards are dealt to the dealer and each main player is informed to the main players, the subsidiary players and galleries.

[0100] Returning to Fig. 15, the description on the operation of the gaming machine 100 is continued according to the sequence diagram.

When the cards to be dealt are determined through the dealt cards determining/displaying processing (step S1017), the main controller 301 transmits the information on the first and second cards as the processing of informing each main player terminal 101F of the cards determined as dealt cards of the main player terminal 101F concerned (step S1018). For example, in the case of the example of Fig. 18, the main controller 301 transmits information for specifying "7 of diamond" as a first card and "8 of heart" as a second card, as first and second card information, to the main player terminal 101F corresponding to the first main player (displayed as "Player1" at the leftmost end of the screen) . Likewise, the main controller 301 transmits information for specifying "A (Ace) of spade" as a first card and "Q(Queen) of heart" as a second card, as first and second card information, to the main player terminal 101F corresponding to the second main player (displayed as "Player2" at the second position from the leftmost end of the screen). Likewise, the first and second card information corresponding to the dealt cards are transmitted to the main player terminals 101F corresponding to the third to fifth main players.

[0101] Returning to Fig. 15, the description on the operation of the gaming machine 100 is continued according to the sequence diagram.

Each main player terminal 101F receiving the above-described first and second card information executes the

main player first and second card display processing (step S1019). This is the processing of displaying the card image corresponding to the received first and second card information in the player card display area 1101 of the liquid crystal display 201 of the main player terminal 101F.

[0102] Fig. 19 shows an example of the screen of the liquid crystal display 201 of the main player terminal 101F after the main player first and second card display processing is executed. In this example, the screen display content is basically identical to the screen provided at the bet acceptance end time shown in Fig. 1 except that the card image is displayed in the player card display area 1101. The main player can know the progress state of the game from this screen shown in Fig. 19 in addition to the screen displayed on the front display 104.

[0103] Returning to Fig. 15, the description on the operation of the gaming machine 100 is continued according to the sequence diagram.

Subsequently to the dealt card determination/displaying processing (step S1017), the main controller 301 executes main game status information renewal processing (step S1020). The bet amount of each main player has been already stored in the previous main game status information storing processing (step S1005 in Fig. 10). This gaming state information renewal processing is the processing of storing the first and second cards of each main player in addition to the bet amount and also storing the first and second cards of the dealer.

[0104] Subsequently, the main controller 301 executes rate changing processing as the processing of increasing/reducing the rate for determining the award of the subsidiary player (called as subsidiary game rate) in accordance with the cards of the main player bet by the subsidiary player (step S1021A). The rate changing processing is the processing of changing the subsidiary game rate in accordance with the progress state of the main game to enhance the fascination of the subsidiary game. As a specific example of the rate changing processing may be considered a method of calculating the winning probability of a main player from the first card (face-up card) of the dealer the first card and the second card of the main player concerned and increasing the subsidiary game rate on the basis of the winning probability. A predetermined default value may be used or a value calculated in accordance with the data of the bet amount, winning rate, winning percentage record of the main player may be used as the subsidiary game rate before the rate changing processing.

[0105] Subsequently to the rate changing processing (step S1021A), the main controller 301 executes subsidiary game status information renewal processing (step S1021B). In the previous subsidiary game status information storing processing (step S1011 in Fig. 10), the main player as a betting target of each player, the bet amount and the initial value rate have been already stored. This subsidiary game status information renewal processing is the processing of renewing and storing the subsidiary game rate changed in the rate changing processing.

[0106] Furthermore, the main controller 301 transmits to each subsidiary player terminal 101B main game status information containing information for specifying cards dealt to the dealer and each main player and information containing the changed subsidiary game rate (step S1022).

[0107] The subsidiary player terminal 101B receiving the main game status information transmitted in step S1022 executes the main gaming state display renewal processing (step S1023). This main gaming state display renewal processing is the processing of renewing the screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B on the basis of the main game status information received in step S1022, that is, the processing of displaying each dealt card on the liquid crystal display 201 in this example.

[0108] Fig. 20 shows an example of the screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B after the main gaming state display renewal processing (step S1023) is executed. This example of the screen is basically identical to the screen shown in Fig. 17 (at the time of the bet acceptance finishing processing), and is different in that card images dealt to the dealer card image display area 1201 and the main player card image display area 1202 are displayed on the main game status information, and the subsidiary game rate changed in the rate changing processing is displayed in the rate display area 1207. The subsidiary player as the operator of the subsidiary player terminal 101B can check the progress state of the game from the card images displayed in the dealer card image display area 1201 and the main player card image display area 1202 and the rate display area 1207.

[0109] Returning to Fig. 15, the description on the operation of the gaming machine 100 is continued according to the sequence diagram.

The main player terminal 101F receiving the first and second card information executes HIT/STAND input acceptance processing as the processing of making the main player input which one of HIT (request for added cards) or STAND (declaration of no added card), SURRENDER, INSURANCE, SPLIT, DOUBLEDOWN at the next stage of the main game should be executed (step S1024). That is, the main player terminal 101F waits until the main player executes an input operation by STAND button 1106, HIT button 1107, SURRENDER button 1108, INSURANCE button 1109, SPLIT button 1110 and Double Down button 1111 as operating buttons, and when any one of the buttons is operated, the main player terminal 101F executes the processing corresponding to the button concerned.

[0110] Fig. 21 is a sequence diagram showing the operation of the gaming machine 100 when the STAND button 1106 is operated during the HIT/STAND input acceptance processing (step S1024). An example of the operation of the gaming machine 100 will be hereunder

described according to the sequence diagram of Fig. 21.

[0111] When STAND input is executed by operating the STAND button 1106 (step S1025), the main player terminal 101F transmits STAND information to the main controller 301 in order to notify that the main player concerned declares STAND (step S1026). When STAND is declared, all the action of the main player of the main player terminal 101F during the game is finished.

[0112] When the player's action is finished with respect to all the main player terminals 101, the main controller 301 executes the main game win determining processing for determining which main player wins the main game and how much the award is (step S1027). This determination is carried out on the basis of the main game status information renewed in the previous step S1020.

[0113] The main controller 301 executing the main game win determining processing (step S1027) executes main game result display processing in order to inform the result to the main players, the subsidiary players and galleries (step S1028). The main game result display processing is the processing of displaying the win-loss of the main game on the front display 104. Fig. 22 shows an example of the screen displayed on the front display 104 through the main game result display processing. This screen has the same basic screen configuration as the screen shown in Fig. 18, however, it is different in that the card image of the second card is changed from the face-down (down card) image to the face-up (up card) image in the dealer card display area 1801 to clarify the total scores of the dealer and also a win-loss message 2201 indicating the total scores of the dealer and the win or loss of each main player is displayed on the player card display area 1801.

[0114] Subsequently, the main controller 301 transmits the main game result information to each main player terminal 101F (step S1029). This main game result information contains information indicating whether the main player playing with the main player terminal 101F concerned wins or loses the game, and also information on the award thereof if the main player wins.

[0115] Each main player terminal 101F receiving the main game result information executes payout processing on the basis of the main game result information (step S1030). That is, when the main player playing with the main player terminal 101F concerned wins the main game and the information on the award thereof is contained in the received main game result information, each main player terminal 101F adds the value corresponding to the award amount to the credit value or drives the hopper 814 to eject coins whose number corresponds to the sward amount, thereby paying out the award with respect to the main gain.

[0116] Subsequently, the main controller 301 executes subsidiary game win-loss determining processing of determining which subsidiary player wins the subsidiary game and how much the award thereof is (step S1031). This determination is carried out on the basis of the subsidiary game status information renewed in the previous step S1021B and the determination content in the main game win-loss determining processing (step S1027).

[0117] Subsequently, the main controller 301 transmits the subsidiary game result information to each subsidiary player terminal 101B (step S1032). This subsidiary game result information is the information based on the determination content of the subsidiary game win-loss determining processing, and it contains information as to whether the subsidiary player playing with the subsidiary player terminal 101B concerned wins the subsidiary game or not and information containing the award amount thereof when the subsidiary player concerned wins the subsidiary game.

[0118] Each subsidiary player terminal 101B receiving the subsidiary game result information executes payout processing on the basis of the subsidiary game result information (step S1033). That is, when the subsidiary player playing with the subsidiary player terminal 101B concerned wins the subsidiary game and also the information on the award amount thereof is contained the received subsidiary game result information, each subsidiary player terminal 101B adds the value corresponding to the award amount to the credit value or drives the hopper 814 to eject coins whose number corresponds to the award amount, thereby paying out the award of the subsidiary game.

[0119] Next, an example of the operation of the gaming machine 100 when the HIT button 1107 is operated in the HIT/STAND input acceptance processing described above (Fig. 15; step S1024) will be described with reference to Fig. 23. Fig. 23 is a sequence diagram showing the operation of the gaming machine 100 when the HIT button 1107 is operated.

[0120] When HIT input based on the operation of the HIT button 1106 is executed (step S1034), the main player terminal 101F transmits HIT information to the main controller 301 in order to notify that the main player concerned declares HIT (step S1035).

[0121] When the HIT information is received, the main controller 301 executes dealt card determining/displaying processing of determining cares to be dealt to the main player declaring HIT, and displaying the determined cards on the front display 104 (step S1036). The determination of the dealt cards is carried out on the basis of the dealing order determined in the previous dealt card preparation processing (Fig. 10, step S1001). For example, when the first to twelfth cards of the dealing order have been already dealt, the thirteenth card of the dealing order is determined as a third card to the main player declaring HIT.

[0122] Fig. 24 shows an example of the screen displayed on the front display 104 through the execution of the dealt card determining/displaying processing (step S1036). The image displayed on the front display 104 at this time is substantially the same as the screen when the above dealt card determining/displaying processing (Fig. 15, step S1017) is executed, and the image 2201 of the card corresponding to the third card is added and

displayed in the main player card display area 1802 corresponding to the main player declaring HIT (in this example, it is assumed that the first main player declares HIT).

[0123] Returning to Fig. 23, the description of the operation of the gaming machine 1100 is continued according to the sequence diagram.

When the cards to be dealt are determined by the dealt card determining/displaying processing (step S1035), the main controller 301 executes transmission of third card information which is the processing of informing the main player terminal 101F transmitting HIT information of a card determined as a third card of the main player terminal 101F concerned (step S1037). For example, in the case of the example shown in Fig. 24, the main controller 301 transmits information for specifying "6 of diamond" as the third card, as third card information, to the main player terminal 101F corresponding to the first player (displayed as "Player1" at the leftmost side of the screen).

[0124] The main player terminal 101F receiving the third card information executes main player third card display processing (step S1038). This is the processing of displaying the card image corresponding to the received third card information in a player card display area 1101 of the liquid crystal display 201 of the main player terminal 101F. Fig. 25 shows an example of the screen of the liquid crystal display 201 of the main player terminal 101F after the main player third card display processing is executed. In this example, the screen display content is basically identical to the screen displayed after the main player first and second card display processing (Fig. 15, step S1019) shown in Fig. 19 is executed except that the third card image 2501 is additionally displayed in the play card display area 1101. The main player concerned can be known the progress state of the game on the basis of the screen shown in Fig. 25 in addition to the screen displayed on the front display 104.

[0125] Returning to Fig. 23, the description of the operation of the gaming machine 100 is continued according to the sequence diagram.

Subsequently to the dealt card determining/displaying processing (step S1036) described above, the main controller 301 executed main game status information renewal processing (step S1039). The bet amount and the first and second cards for each main player have been already stored in the main game status information renewal processing (Fig. 15, step S1020) described above. This main game status information renewal processing is the processing of storing the third card dealt to the main player declaring HIT.

[0126] Subsequently, the main controller 301 executes rate changing processing of increasing or reducing the subsidiary game rate in accordance with occurrence of the third card (step S1040). In this case, the rate changing processing is executed on only the subsidiary player selecting the main player declaring HIT as a betting target.

[0127] Subsequently to the rate changing processing (step S1040), the main controller 301 executes subsidiary game status information renewal processing (step S1041). The main player as a betting target, the bet amount and the initial value rate (however, the changed rate when it is changed in step S1021A) for each subsidiary player have been already stored in the subsidiary game status information renewal processing (Fig. 15, step S1021B) described above. This subsidiary game status information renewal processing is the processing of renewing and storing the subsidiary game rate changed in the rate changing processing in step S1040 while the subsidiary game rate concerned is reflected to the subsidiary game status information.

[0128] The main controller 301 transmits to each subsidiary player terminal 101B the main game status information containing information for specifying the third card dealt to the main player and information containing the changed subsidiary game rate (step S1041).

[0129] The subsidiary player terminal 101B receiving the main game status information transmitted in step S1042 executes main gaming state display renewal processing (step S1043) . This main gaming state display renewal processing is the processing of renewing the screen displayed on the liquid crystal display 201 of the subsidiary player terminal 101B on the basis of the received main game status information, that is, in this example, it is the processing of additionally displaying the third card dealt to the main player declaring HIT on the liquid crystal display 201.

[0130] Fig. 26 shows an example of the screen displayed on the liquid crystal display 201 of each subsidiary player terminal 101B after the main gaming state display renewal processing (step S1043) is executed. This screen basically has the same content as the screen shown in Fig. 20 (see the main gaming state display renewal processing; Fig. 15, step S1023), however, it is different in that the card image 2601 of the third card is additionally displayed in the main player card image display area 1202 corresponding to the first main player and the numerical value shown in the rate display area 1207 is changed. The subsidiary player as the operator of the subsidiary player terminal 101B can check the progress state of the game on the basis of the card image displayed in the main player card image display area 1202 and the changed displayed in the rate display area 1207.

[0131] After the step S1043, the processing of the gaming machine 100 returns to the HIT/STAND input acceptance processing (Fig. 15, step S1024) again, and the same processing as described above is repeated until the notification of the end of the action (declaration of STAND, declaration of SURRENDER) is transmitted from all the main player terminals 101F to the main controller 301.

[0132] According to the gaming machine thus operated, there can be provided a gaming machine in which a player who waits until a player participating in a game finishes the game can enjoy a subsidiary game while he/she spends a waiting time.

[0133] 6. Others

The above-described embodiment may be modified as follows.

(1) In the above embodiment, the main controller 301 is provided to the main game unit 100A separately from the main player terminals 101F, however, the present invention is not limited to the above configuration. For example, the main controller 301 is not provided to the main game unit 100A, however, a program operating as the main controller 301 is installed in the terminal controller 304F of some main player terminal 101B so that the terminal controller 304F functions as a host for the other main player terminals 102F and the subsidiary player terminals 101B. That is, the present invention can be established even if any one of the main player terminals 101F is configured as a main player terminal 101F that also serves as the main controller 301.

[0134] (2) In the above embodiment, the main controller 301 executes the subsidiary game win-loss judging processing (see step S1031, Fig. 21). However, the present invention could be established even if the main controller 301 does not execute the subsidiary game win-loss judging processing (step S1031), but transmits main game result information to the subsidiary player terminal 101B, and each subsidiary player terminal 101B individually executes the subsidiary game win-loss determining processing on the basis of the main game result information and executes the payout processing (step S1033) on the basis of the result of the subsidiary game win-loss determining processing.

[0135] (3) In the above embodiment, the award to the subsidiary player is settled in accordance with the bet amount and the award rate of the subsidiary player separately from and independently of the result of the main game of the main player as a betting target. However, the present invention could be established even if the award amount to the subsidiary player is settled on the basis of the game result of the main player selected as a betting target (the bet amount bet by the main player, the award rate applied to the main player).

According to the above modifications, it is sufficient for a subsidiary player to merely input a choice of a main layer as a betting target when the subsidiary game input acceptance processing (Fig. 10, S1009) is executed, and it is unnecessary to input a bet amount. Furthermore, the subsidiary game input information transmitted from the subsidiary player terminal 101B to the main controller 301 contains only the information indicating the main player selected by the subsidiary player, and the bet amount is not contained in the subsidiary game input information.

[0136] Furthermore, the main game status information transmitted from the main controller 301 to the subsidiary player terminal 101B contains the bet amount of the main player (bet information) and the award rate applied to the main player. In the subsequent main gaming state display renewal processing (Fig. 15, S1023), these information is displayed on the liquid crystal display 201 of the subsidiary player terminal 101B. The bet amount of the main player and the award rate applied to the main player are stored as a part of the subsidiary game status information by the main controller 301 in the subsidiary game status information renewal processing (Fig. 15, S1021B) or the like.

The bet information included in the main game status information in this modification, represents game values that each of the main players (first group of players) bet in the main game (first game).

[0137] Thereafter, in the subsidiary game win-loss determining processing (Fig. 21, S1031), the main controller 301 determines the award amount for the subsidiary player on the basis of the subsidiary game status information, more specifically, the bet amount of the main player selected s a betting target by the subsidiary player concerned and the award rate applied to the main player.

[0138] The processing other than the foregoing description is based on the contents shown in Fig. 10, Fig. 15, Fig. 21 and Fig. 23 in the embodiment described above.

[0139] When the bet amount of the main player is changed according to the progress state of the main game, the bet amount of the subsidiary player selecting the main player concerned is changed in connection wit the change of the bet amount of the main player by the main controller 301 and/or the subsidiary player terminal 101B. As a modification of this modification, the main controller 301 may control to allow a subsidiary player to participate in the subsidiary game only when the subsidiary player concerned bets the credit having the same amount as the bet amount of a main player (for example, 10 credits).

Furthermore, in the above modification, the main controller 301 determines the award rate applied to the main player as a betting target in the subsidiary game to the award rate (subsidiary game rate) to a subsidiary player selecting the main player. When the award rate applied to the main player is changed according to the progress state of the main game, the award rate (subsidiary game rate) of the subsidiary player selecting the main player concerned is also changed in connection with the above change by the main controller 301 and/or the subsidiary player terminal 101B.

[0140] According to this modification, the award of the subsidiary player is determined in accordance with the game progress of the main player, so that the interest of the subsidiary player is attracted to the main game and thus the player's willingness of participating in the game can be enhanced.

In the embodiment described above, the main game unit 100A serves as a first game unit that performs a first game process for providing a first game (main game) to a first group of players (main players). The first game process includes: allowing the first group of players to

bet a game value; and paying out an award to the first group of players based on the bet game value in accordance with a result of the first game.

Each of the two subsidiary game units 100B serves as a second game unit that performs a second game process for providing a second game (subsidiary game) to a second group of players (subsidiary players), the second game being different from the first game.

The first game unit performs the first game process including transmitting first game status information (main game status information) to the second game unit, the first game status information representing status of the first game.

The second game unit performs the second game process including: receiving the first game status information from the first game unit; allowing the second group of players to bet the game value on the status of the first game; and paying out an award to the second group of players based on the bet game value in accordance with a result of the first game.

The first game status information may include award determining parameter information (information representing the bet amount bet by the main player, and/or the award rate applied to the main player) for determining the award to be paid out to the first group of players. The second game unit may be configured to perform the game process further including determining the award to be paid out to the second group of players in accordance with the award determining parameter information.

As described with reference to the embodiment, the second game unit may be configured to perform allowing the second group of players to bet the game value on at least any one of game players from among the first group of players, as a betting target (the status of the first game).

As described as a modification of the embodiment, the first game status information may include bet information representing game values that each of the first group of players bet in the first game, and the second game unit may be configured to perform the second game process further including accepting, as the game value bet in the second game, a game value having the same amount as the game value bet by the game player of the first group of players.

As described with reference to the embodiment, the first game unit may be configured to include a plurality of first terminals (main player terminals 101F) each provided for each player of the first group of players (main players), and the second game unit may be configured to include a plurality of second terminals (subsidiary player terminals 101B) each provided for each player of the second group of players (subsidiary players).

The gaming machine may be configured by further including: a main display (front display 104) that is provided to be visible by both of the first group of players and the second group of players; and a main controller (main controller 301) that is connected to each of the first terminals and the second terminals, and performs at least part of the first game process and the second game process, by displaying a progress of at least part of the first game on the main display.

[0141] As described in detail with reference to the embodiment, there is provided a gaming machine that allows the players who cannot participate in the first game because of the restriction of the number of players to participate in the second game to enjoy the progress of the first game and the game result of the first game.

The foregoing description of the embodiment has been presented for purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed, and modifications and variations are possible in light of the above teachings or may be acquired from practice of the invention. The embodiment was chosen and described in order to explain the principles of the invention and its practical application to enable those skilled in the art to utilize the invention in various embodiments and with various modifications as are suited to the particular use contemplated. It is intended that the scope of the invention be defined by the claims appended hereto, and their equivalents.

Claims

1. A gaming machine comprising:

a first game unit that performs a first game process for providing a first game to a first group of players, the first game process including:

allowing the first group of players to bet; and paying out an award to the first group of players based on the bet amount in accordance with a result of the first game; and

a second game unit that performs a second game process for providing a second game to a second group of players, the second game being different from the first game,

wherein the first game unit performs the first game process further including transmitting first game status information to the second game unit, the first game status information representing status of the first game, and

wherein the second game unit performs the second game process including:

receiving the first game status information from the first game unit;

allowing the second group of players to bet on the status of the first game; and

paying out an award to the second group of players based on the bet amount in accordance with a result of the first game.

2. The gaming machine according to claim 1, wherein

the first game status information includes award determining parameter information for determining the award to be paid out to the first group of players, and wherein the second game unit performs the game process further including determining the award to be paid out to the second group of players in accordance with the award determining parameter information.

3. The gaming machine according to claim 1, wherein the second game unit performs allowing the second group of players to bet on at least any one of game players from among the first group of players.

4. The gaming machine according to claim 3, wherein the first game status information includes bet information representing bet amount that each of the first group of players bet in the first game, and
wherein the second game unit performs the second game process further including accepting, as the bet amount in the second game, a bet amount having the same amount as the bet amount bet by the game player of the first group of players.

5. The gaming machine according to claim 1, wherein the first game unit comprises a plurality of first terminals each provided for each player of the first group of players, and
wherein the second game unit comprises a plurality of second terminals each provided for each player of the second group of players.

6. The gaming machine according to claim 5, further comprising:

a main display that is provided to be visible by both of the first group of players and the second group of players; and
a main controller that is connected to each of the first terminals and the second terminals, and performs at least part of the first game process and the second game process, by displaying a progress of at least part of the first game on the main display.

7. The gaming machine according to claim 6, wherein each of the first terminals comprises:

a display;
an operation unit that allows the player to input operations; and
a controller that performs the first game process by displaying a progress of the first game on the display in accordance with the operations input through the operation unit.

8. The gaming machine according to claim 6, wherein each of the second terminals comprises:

a display;
an operation unit that allows the player to input operations; and
a controller that performs the second game process by displaying a progress of the second game on the display in accordance with the operations input through the operation unit.

FIG. 1

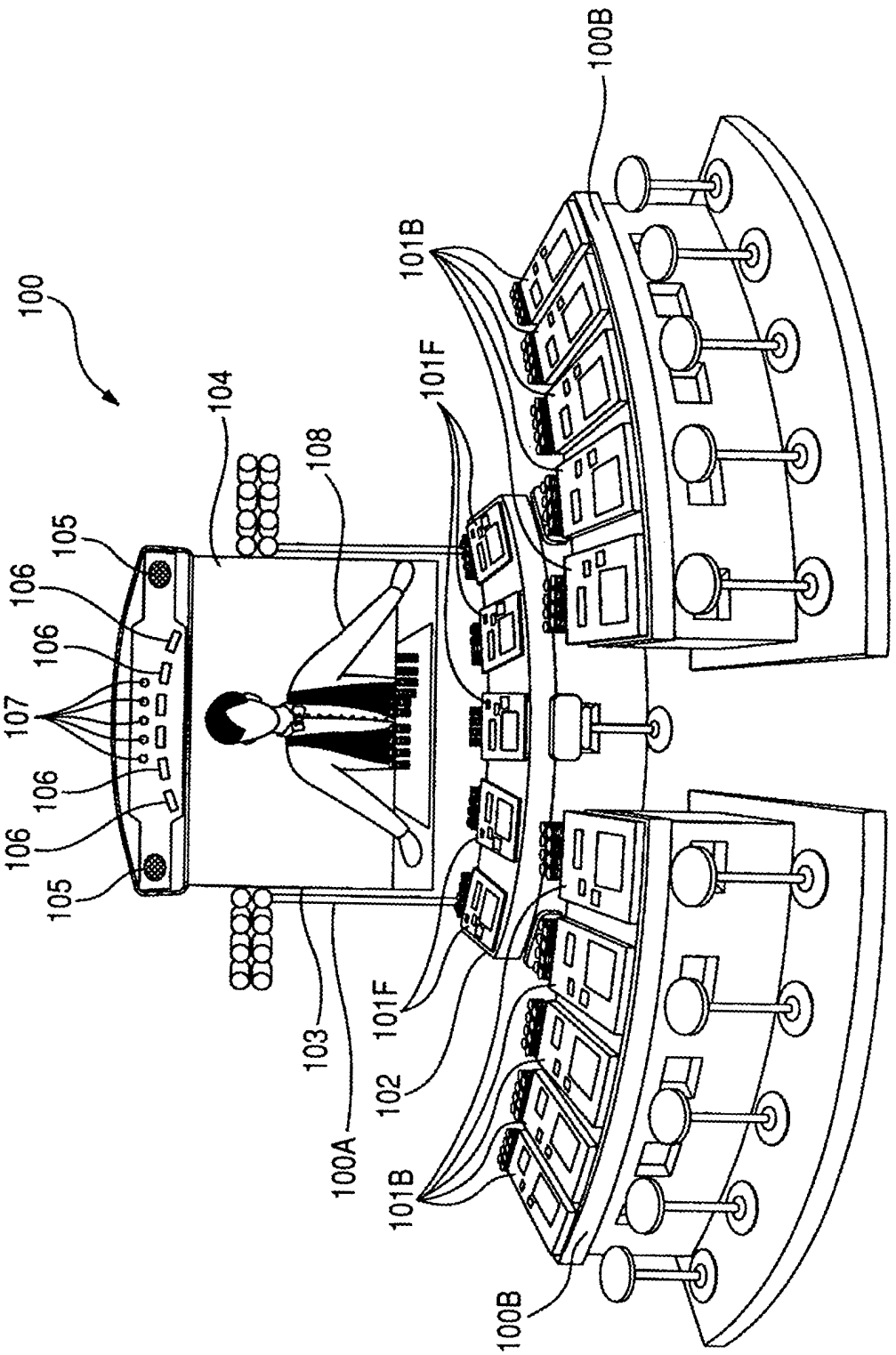

100
100B
101B
101F
104
108
105
106
106
107
106
106
105
103
101F
102
100A
101B
100B

FIG. 2

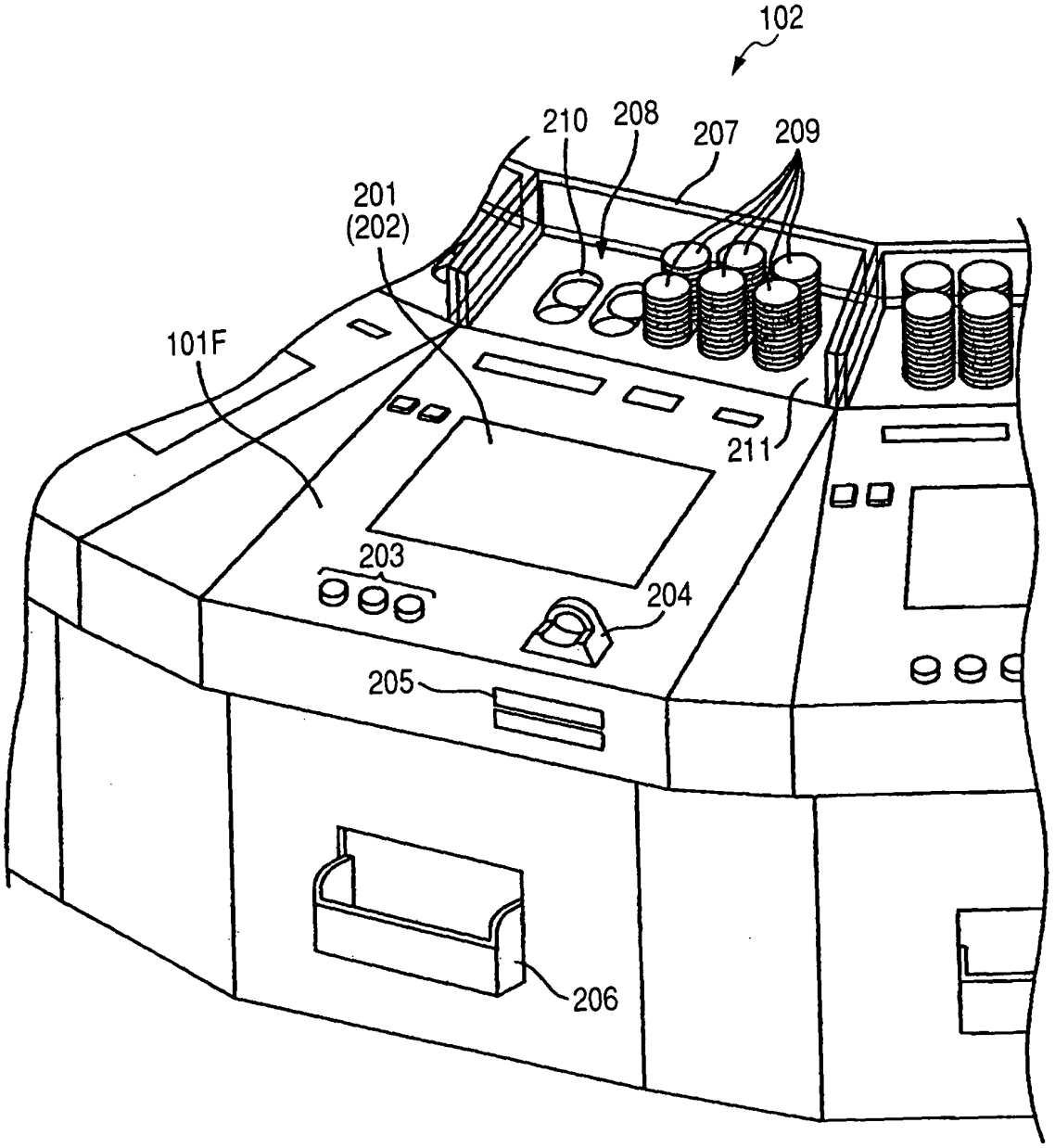
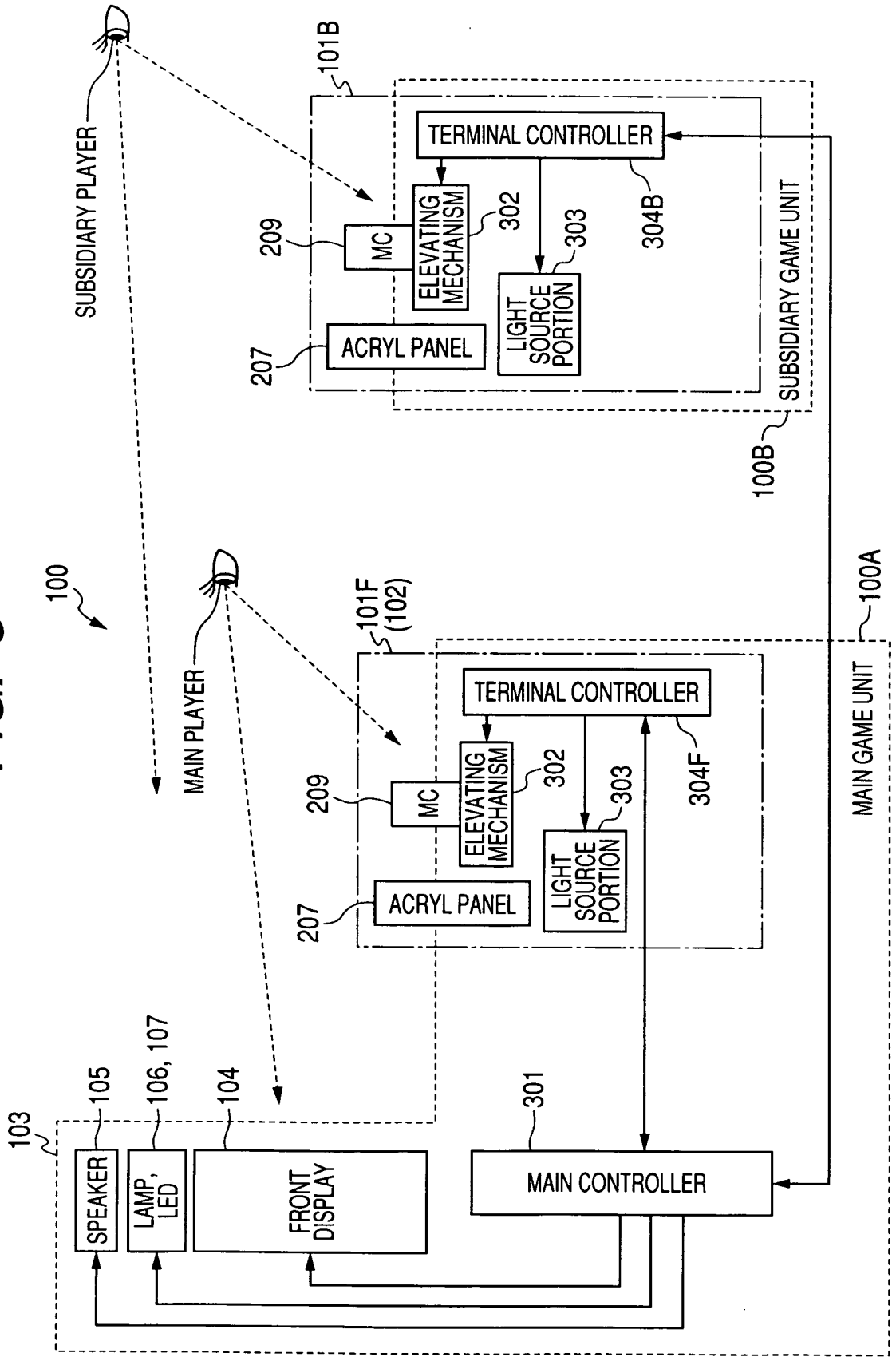


FIG. 3


SUBSIDIARY PLAYER
101B
TERMINAL CONTROLLER
304B
209
MC
ELEVATING MECHANISM
302
303
LIGHT SOURCE PORTION
207
ACRYL PANEL
SUBSIDIARY GAME UNIT
100B
100
MAIN PLAYER
101F (102)
TERMINAL CONTROLLER
304F
209
MC
ELEVATING MECHANISM
302
303
LIGHT SOURCE PORTION
207
ACRYL PANEL
100A
MAIN GAME UNIT
103
105
106, 107
104
301
SPEAKER
LAMP, LED
FRONT DISPLAY
MAIN CONTROLLER

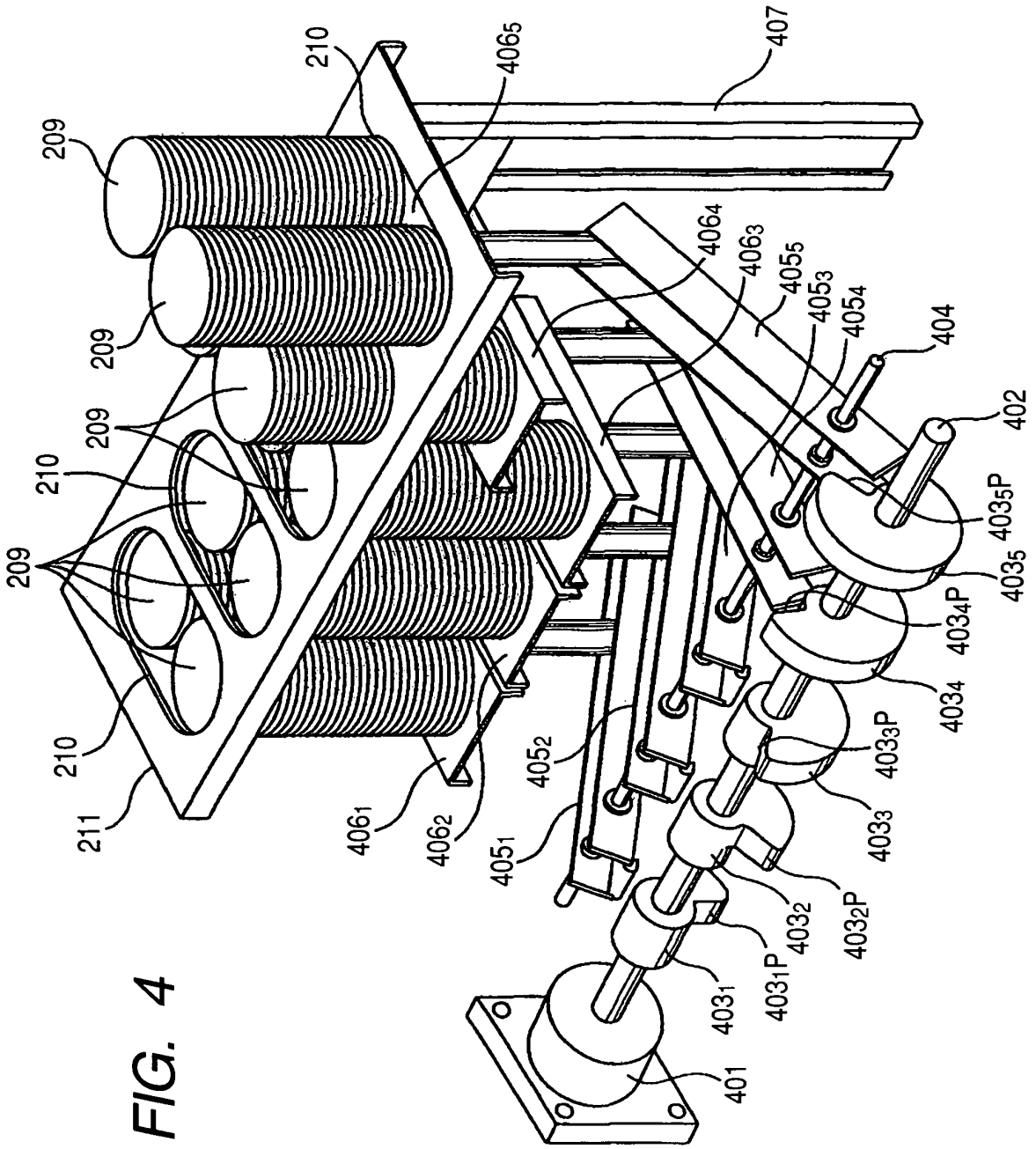

209
209
209
209
210
210
210
211
406₁
406₂
405₁
405₂
406₅
407
406₄
406₃
405₅
405₃
405₄
404
402
403₅P
403₅
403₄P
403₄
403₃P
403₃
403₂P
403₂
403₁P
403₁
401

FIG. 4

FIG. 5

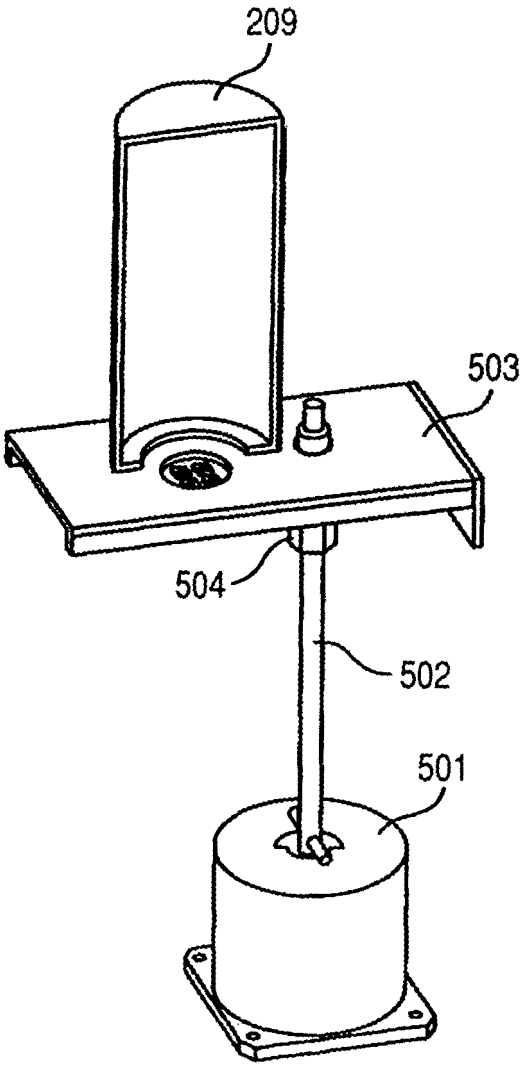


FIG. 6

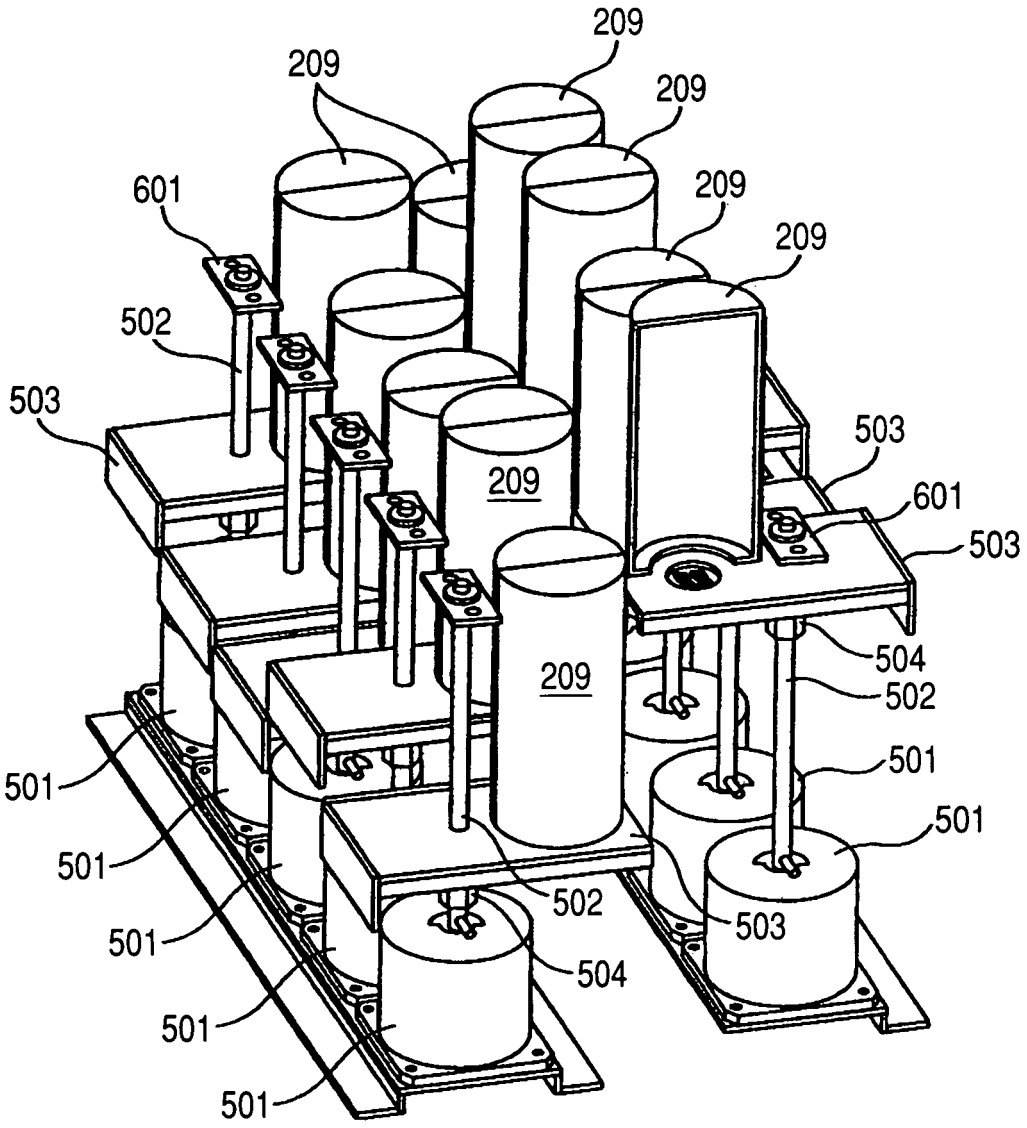

209
209
209
209
209
209
601
502
503
503
601
503
504
502
501
501
501
501
501
501
502
503
504

FIG. 7

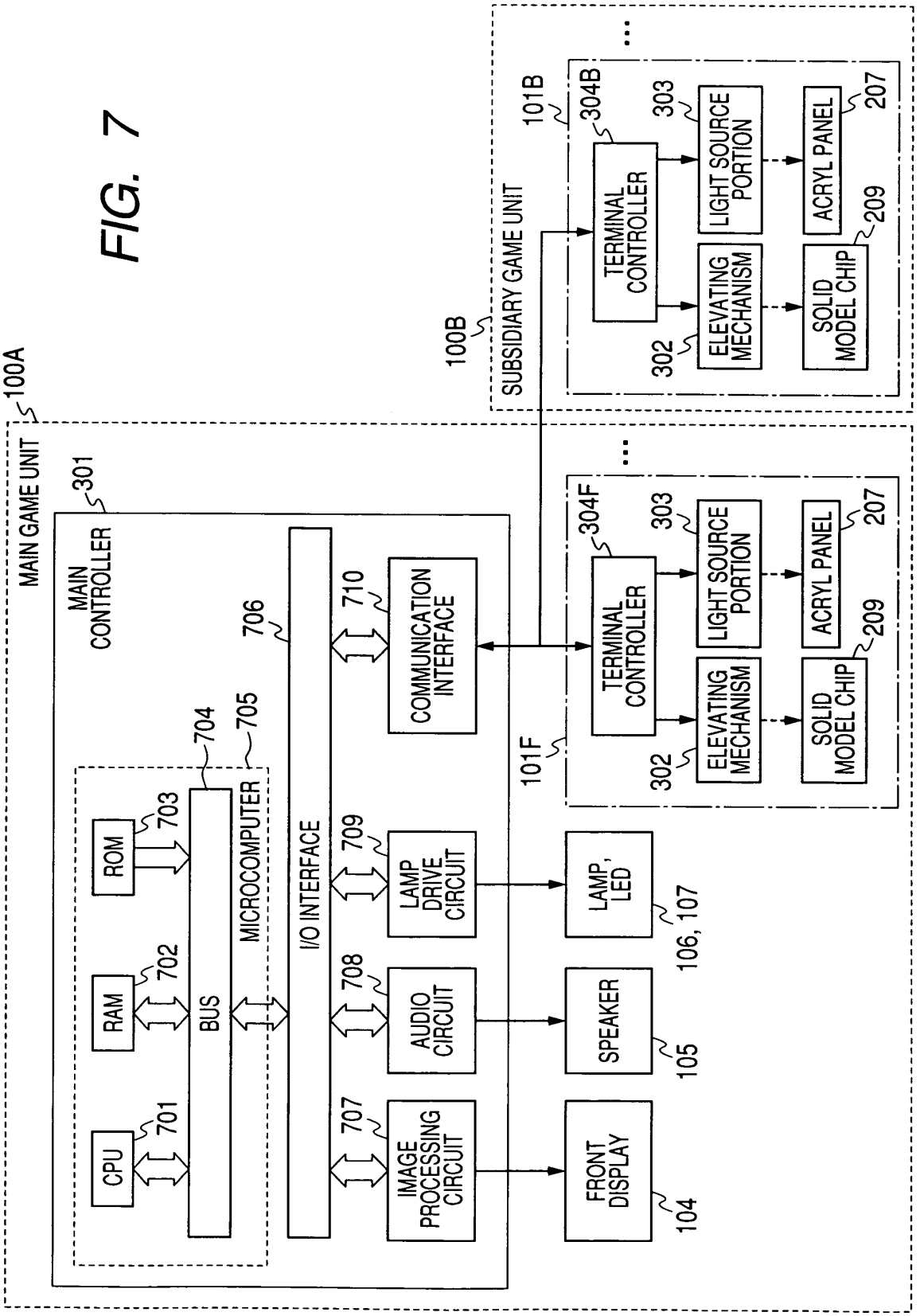

100A
MAIN GAME UNIT
301
MAIN CONTROLLER
CPU
701
RAM
702
ROM
703
BUS
704
MICROCOMPUTER
705
706
I/O INTERFACE
707
IMAGE PROCESSING CIRCUIT
708
AUDIO CIRCUIT
709
LAMP DRIVE CIRCUIT
710
COMMUNICATION INTERFACE
FRONT DISPLAY
104
SPEAKER
105
LAMP, LED
106, 107
100B
SUBSIDIARY GAME UNIT
101B
101F
304B
304F
TERMINAL CONTROLLER
302
ELEVATING MECHANISM
303
LIGHT SOURCE PORTION
207
ACRYL PANEL
209
SOLID MODEL CHIP

FIG. 8

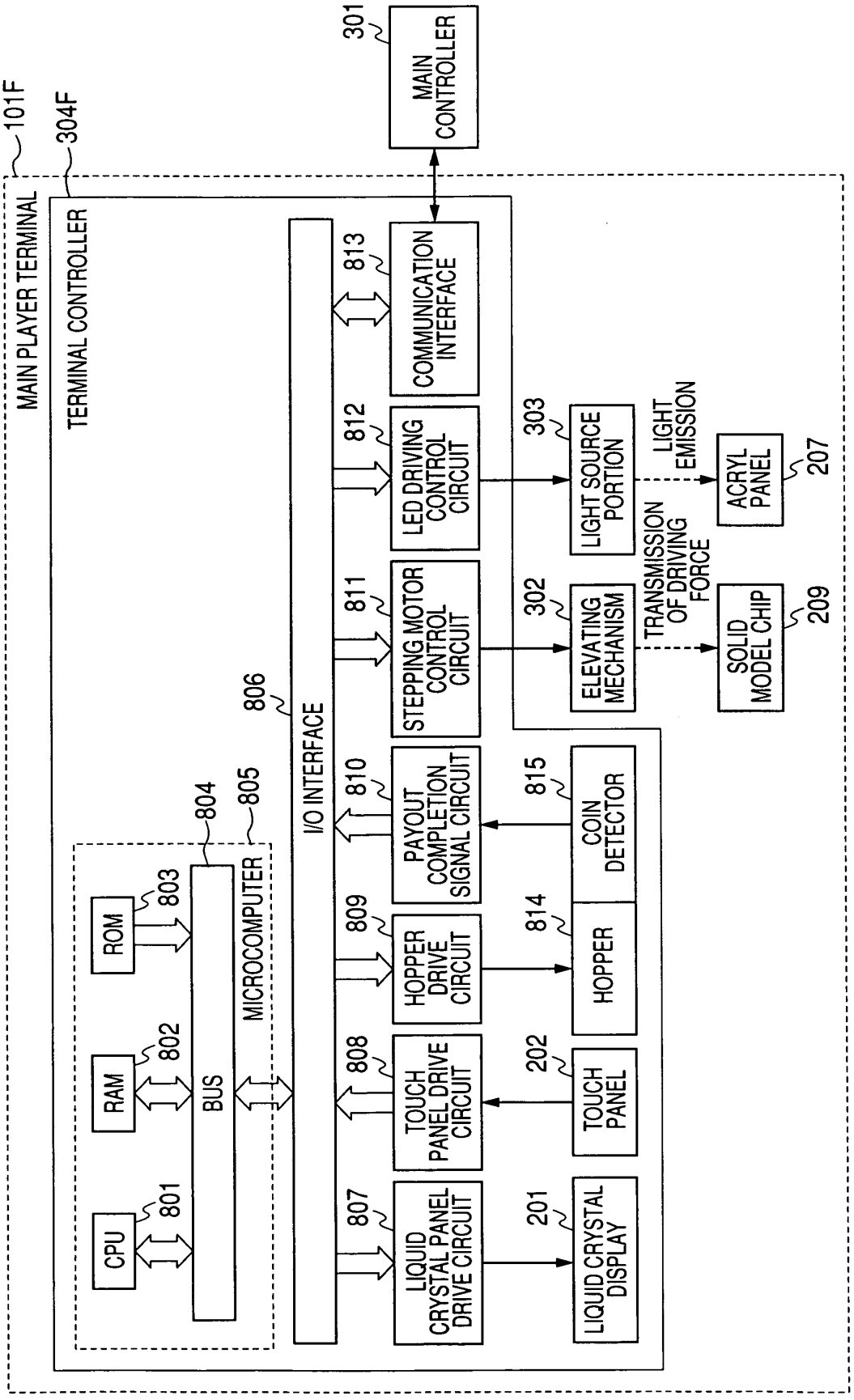

101F
MAIN PLAYER TERMINAL
304F
TERMINAL CONTROLLER
301
MAIN CONTROLLER
813
COMMUNICATION INTERFACE
812
LED DRIVING CONTROL CIRCUIT
303
LIGHT SOURCE PORTION
LIGHT EMISSION
ACRYL PANEL
207
TRANSMISSION OF DRIVING FORCE
811
STEPPING MOTOR CONTROL CIRCUIT
302
ELEVATING MECHANISM
SOLID MODEL CHIP
209
806
I/O INTERFACE
804
805
MICROCOMPUTER
803
ROM
802
RAM
801
CPU
BUS
810
PAYOUT COMPLETION SIGNAL CIRCUIT
815
COIN DETECTOR
809
HOPPER DRIVE CIRCUIT
814
HOPPER
808
TOUCH PANEL DRIVE CIRCUIT
202
TOUCH PANEL
807
LIQUID CRYSTAL PANEL DRIVE CIRCUIT
201
LIQUID CRYSTAL DISPLAY

FIG. 9

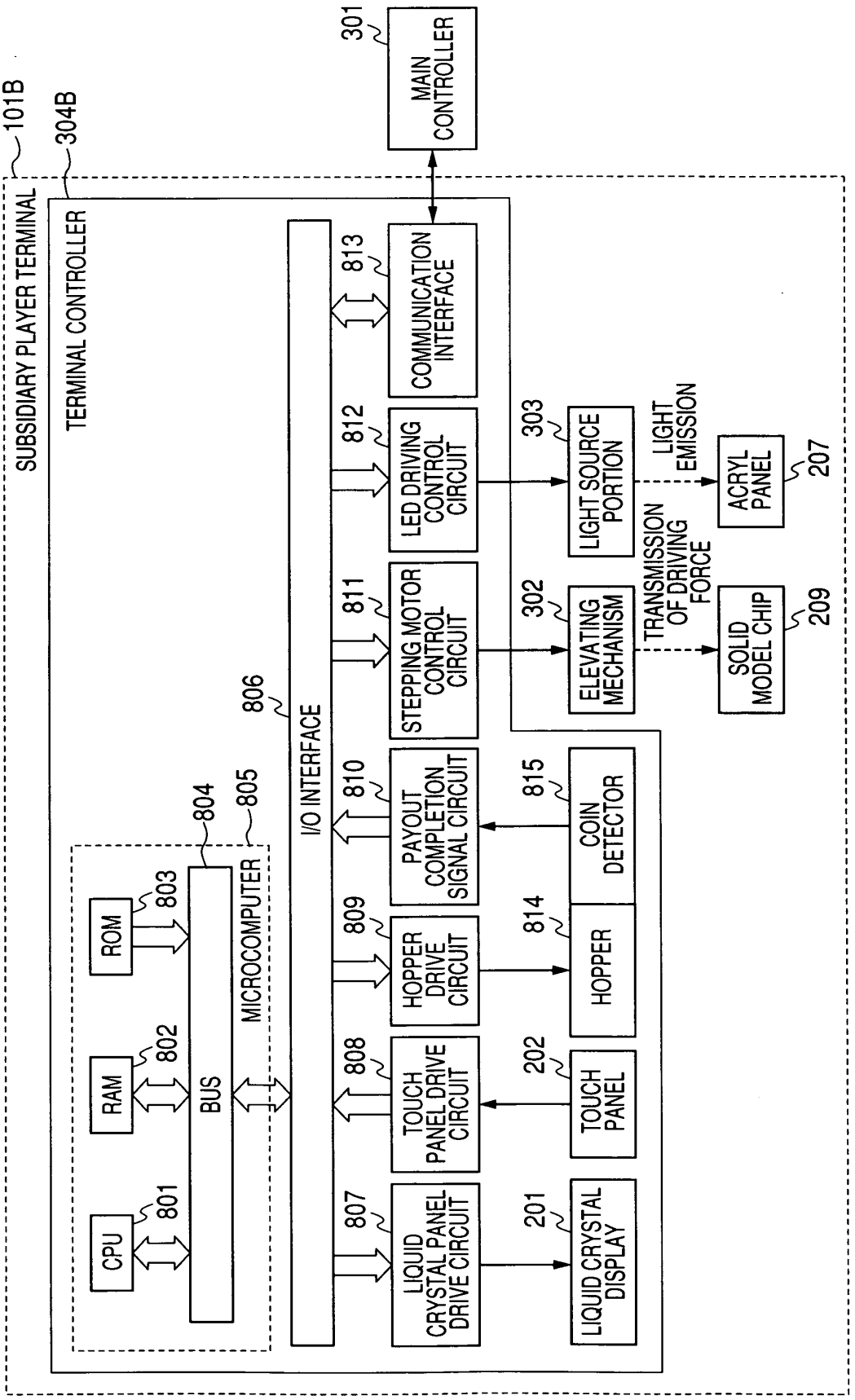

101B
SUBSIDIARY PLAYER TERMINAL
304B
TERMINAL CONTROLLER
301
MAIN CONTROLLER
813
COMMUNICATION INTERFACE
812
LED DRIVING CONTROL CIRCUIT
303
LIGHT SOURCE PORTION
LIGHT EMISSION
ACRYL PANEL
207
811
STEPPING MOTOR CONTROL CIRCUIT
302
ELEVATING MECHANISM
TRANSMISSION OF DRIVING FORCE
SOLID MODEL CHIP
209
806
I/O INTERFACE
804
805
MICROCOMPUTER
ROM
803
RAM
802
BUS
CPU
801
810
PAYOUT COMPLETION SIGNAL CIRCUIT
815
COIN DETECTOR
809
HOPPER DRIVE CIRCUIT
814
HOPPER
808
TOUCH PANEL DRIVE CIRCUIT
202
TOUCH PANEL
807
LIQUID CRYSTAL PANEL DRIVE CIRCUIT
201
LIQUID CRYSTAL DISPLAY

FIG. 10

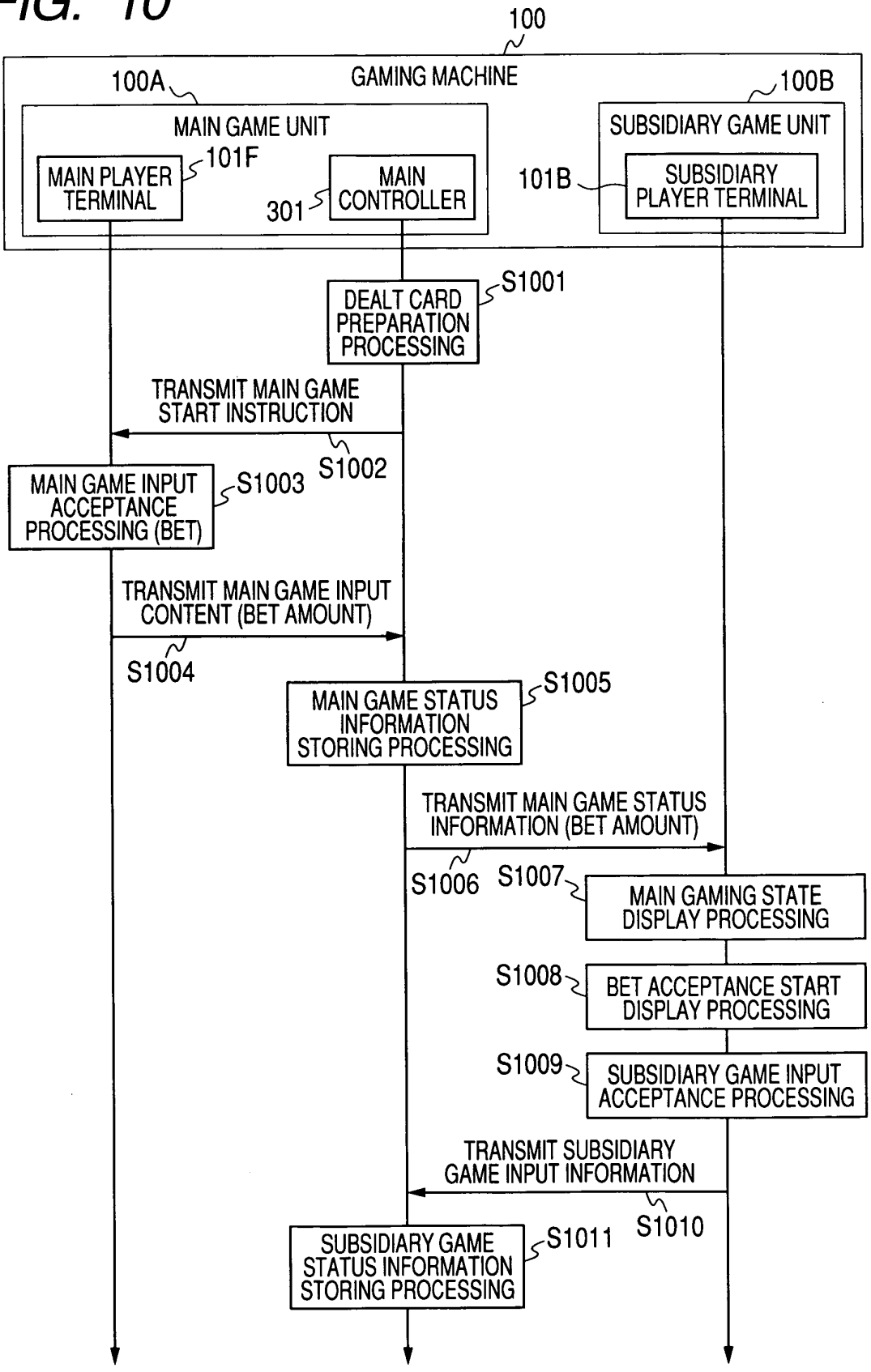

100
GAMING MACHINE
100A
MAIN GAME UNIT
MAIN PLAYER TERMINAL
101F
MAIN CONTROLLER
301
100B
SUBSIDIARY GAME UNIT
101B
SUBSIDIARY PLAYER TERMINAL
DEALT CARD PREPARATION PROCESSING
S1001
TRANSMIT MAIN GAME START INSTRUCTION
S1002
MAIN GAME INPUT ACCEPTANCE PROCESSING (BET)
S1003
TRANSMIT MAIN GAME INPUT CONTENT (BET AMOUNT)
S1004
MAIN GAME STATUS INFORMATION STORING PROCESSING
S1005
TRANSMIT MAIN GAME STATUS INFORMATION (BET AMOUNT)
S1006
S1007
MAIN GAMING STATE DISPLAY PROCESSING
S1008
BET ACCEPTANCE START DISPLAY PROCESSING
S1009
SUBSIDIARY GAME INPUT ACCEPTANCE PROCESSING
TRANSMIT SUBSIDIARY GAME INPUT INFORMATION
S1010
SUBSIDIARY GAME STATUS INFORMATION STORING PROCESSING
S1011

FIG. 11

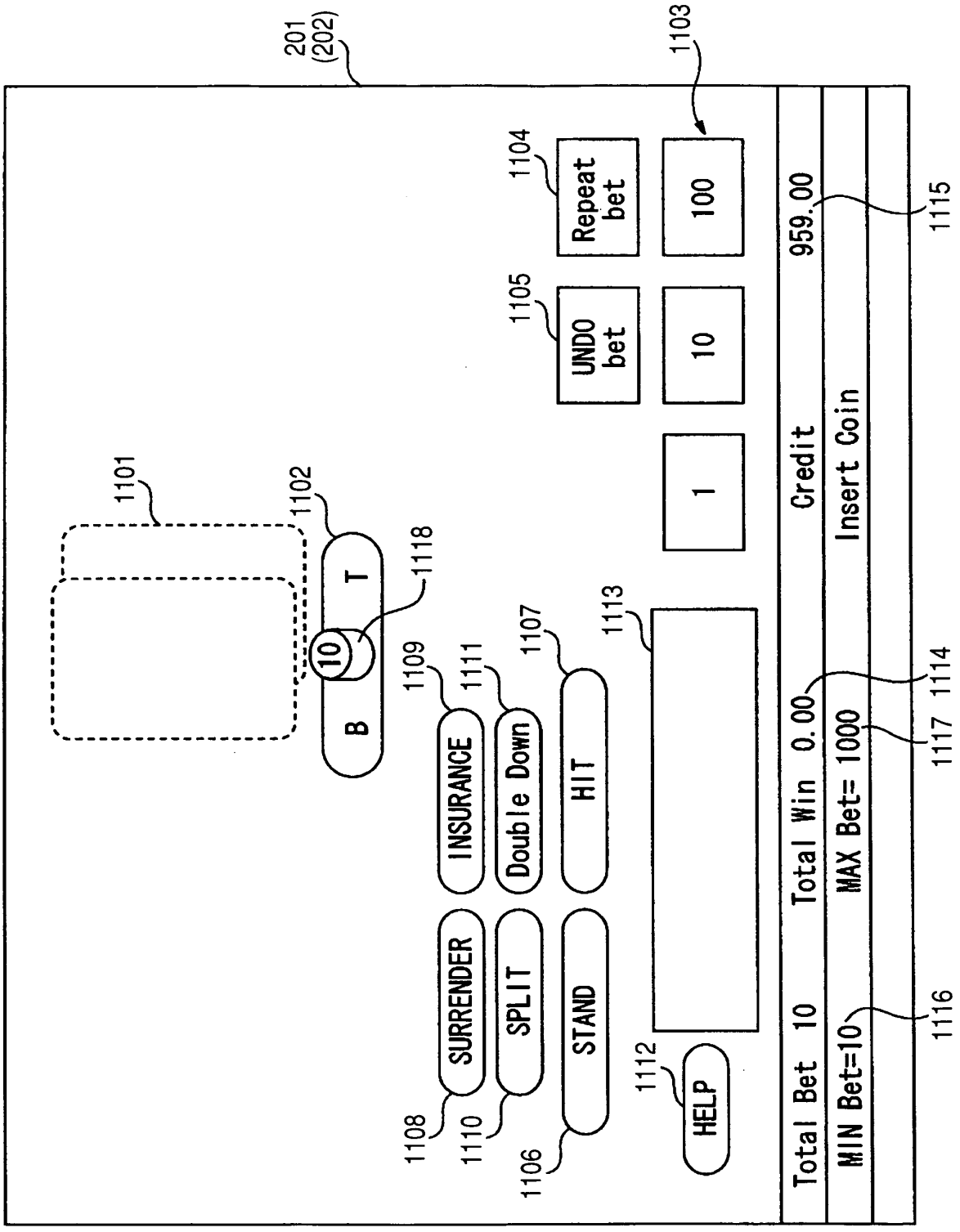

201
(202)
1103
1104
Repeat bet
100
1105
UNDO bet
10
1
1101
1102
T
B
10
1118
1109
INSURANCE
1111
Double Down
1107
HIT
1113
SURRENDER
SPLIT
STAND
1108
1110
1106
1112
HELP
Credit
959.00
1115
Total Win 0.00
1114
1117
MAX Bet= 1000
Insert Coin
Total Bet 10
MIN Bet=10
1116

FIG. 12

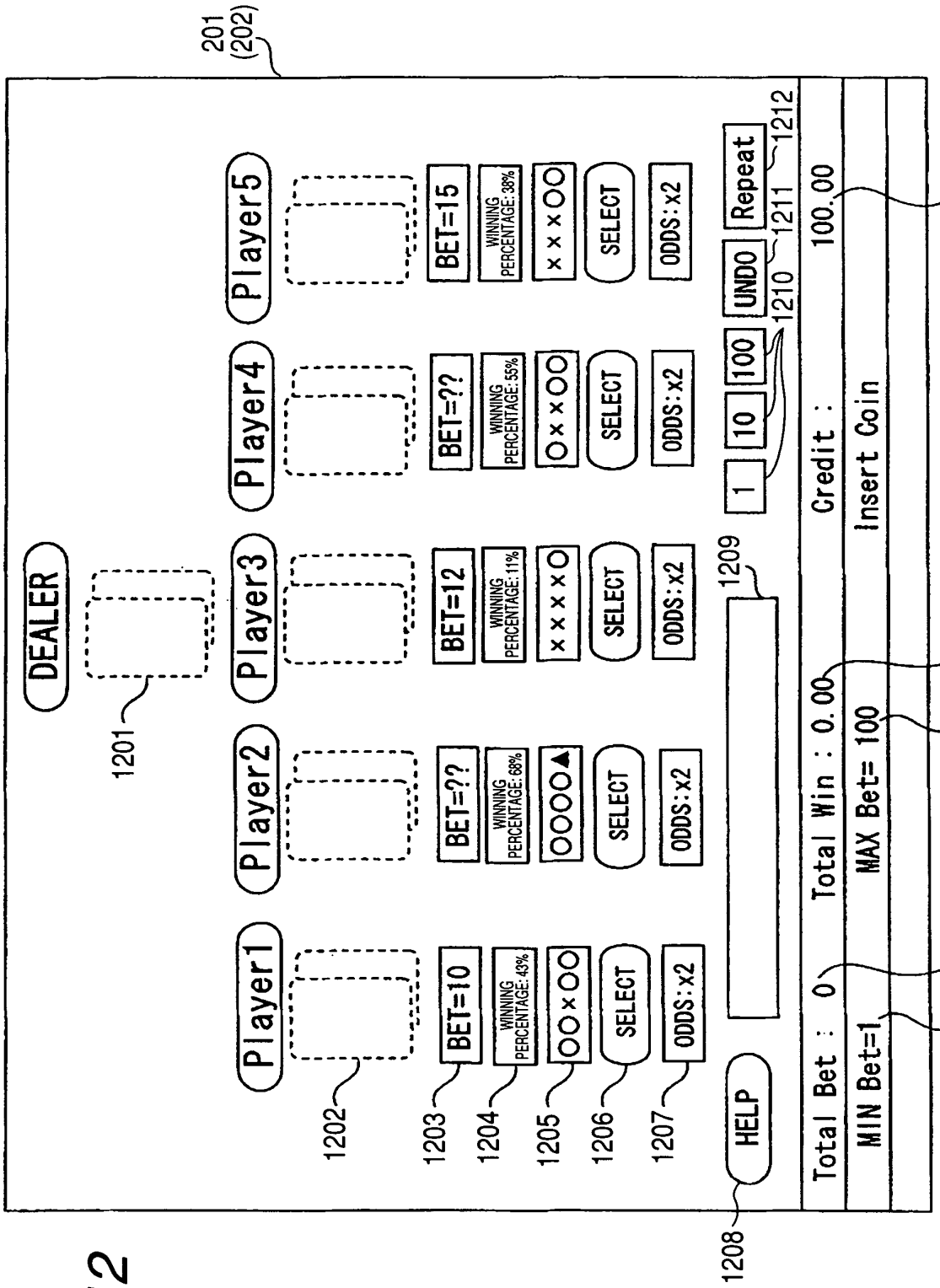

201
(202)
DEALER
1201
Player1
Player2
Player3
Player4
Player5
1202
BET=10
BET=??
BET=12
BET=??
BET=15
1203
WINNING PERCENTAGE: 43%
WINNING PERCENTAGE: 68%
WINNING PERCENTAGE: 11%
WINNING PERCENTAGE: 55%
WINNING PERCENTAGE: 38%
1204
1205
OO×OO
OOOO▲
×××O
O××OO
×××OO
1206
SELECT
1207
ODDS:x2
1209
1
10
100
1210
UNDO
1211
Repeat
1212
1208
HELP
Total Bet : 0
Total Win : 0.00
Credit : 100.00
1215
MIN Bet=1
MAX Bet= 100
Insert Coin
1216
1213
1217
1214

FIG. 13

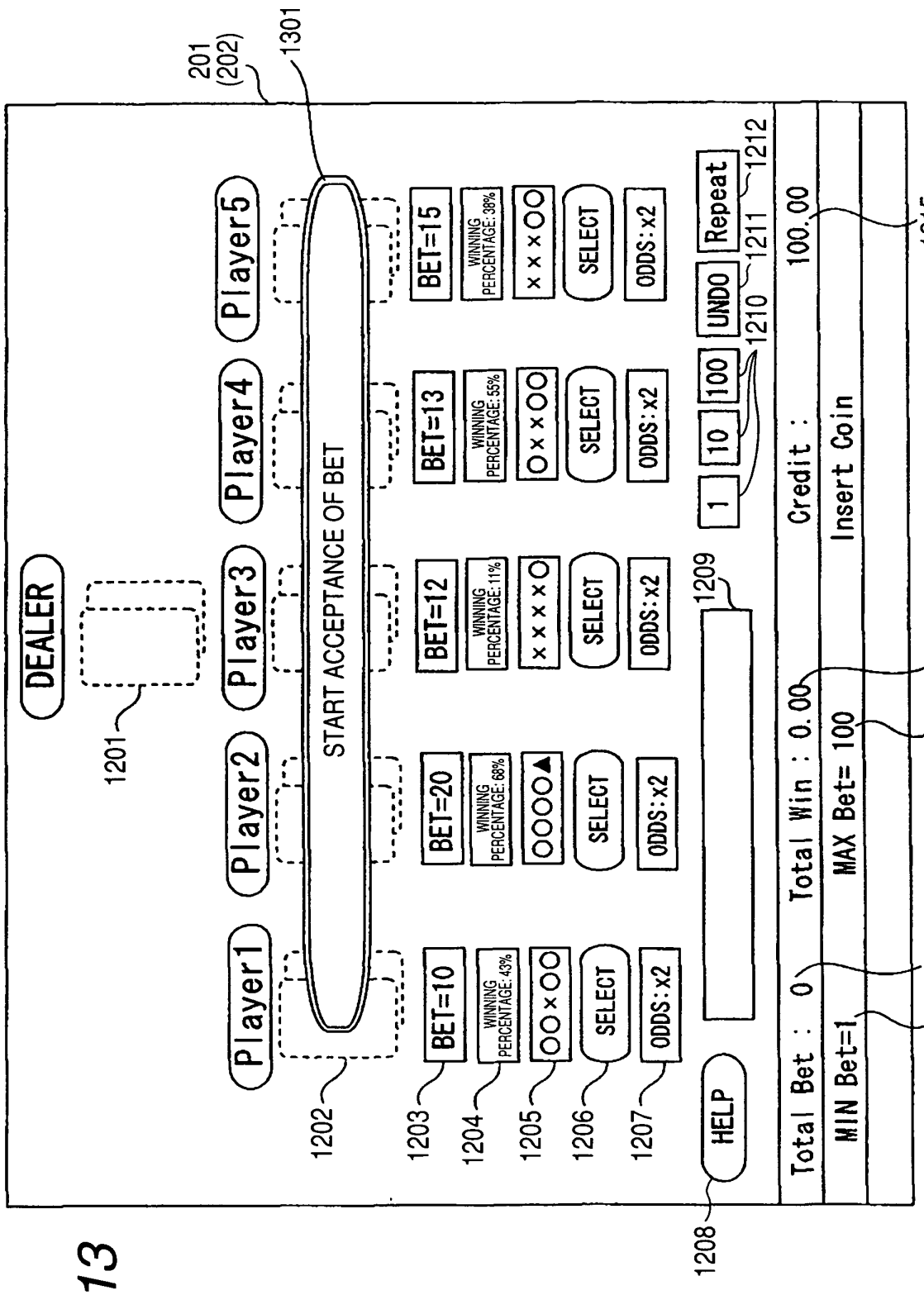

201
(202)
1301
DEALER
1201
Player1
Player2
Player3
Player4
Player5
START ACCEPTANCE OF BET
BET=10
BET=20
BET=12
BET=13
BET=15
WINNING PERCENTAGE: 43%
WINNING PERCENTAGE: 68%
WINNING PERCENTAGE: 11%
WINNING PERCENTAGE: 55%
WINNING PERCENTAGE: 38%
OO×OO
OOOO▲
×××O
O×××OO
×××OO
SELECT
ODDS:x2
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1215
1214
1217
1213
1216
HELP
1
10
100
UNDO
Repeat
Credit : 100.00
Total Win : 0.00
Total Bet : 0
MAX Bet= 100
MIN Bet=1
Insert Coin

FIG. 14

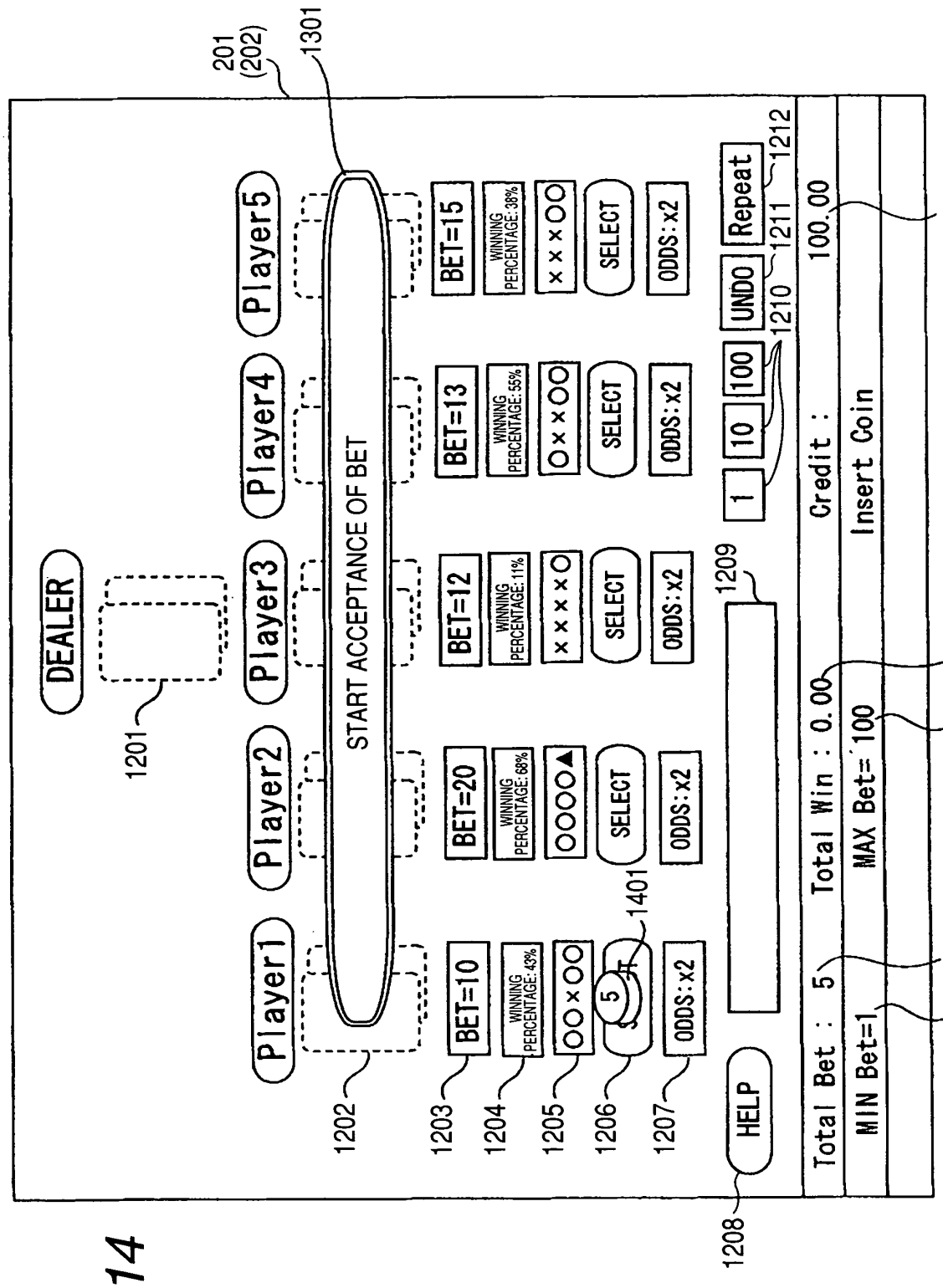

201
(202)
1301
DEALER
1201
Player1
Player2
Player3
Player4
Player5
START ACCEPTANCE OF BET
1202
BET=10
BET=20
BET=12
BET=13
BET=15
WINNING PERCENTAGE: 43%
WINNING PERCENTAGE: 68%
WINNING PERCENTAGE: 11%
WINNING PERCENTAGE: 55%
WINNING PERCENTAGE: 38%
1203
1204
1205
1206
1207
1401
SELECT
ODDS: x2
1209
1
10
100
UNDO
Repeat
1210
1211
1212
HELP
1208
Credit : 100.00
1215
Total Win : 0.00
1214
Total Bet : 5
1213
MAX Bet=100
1217
MIN Bet=1
1216
Insert Coin

FIG. 15

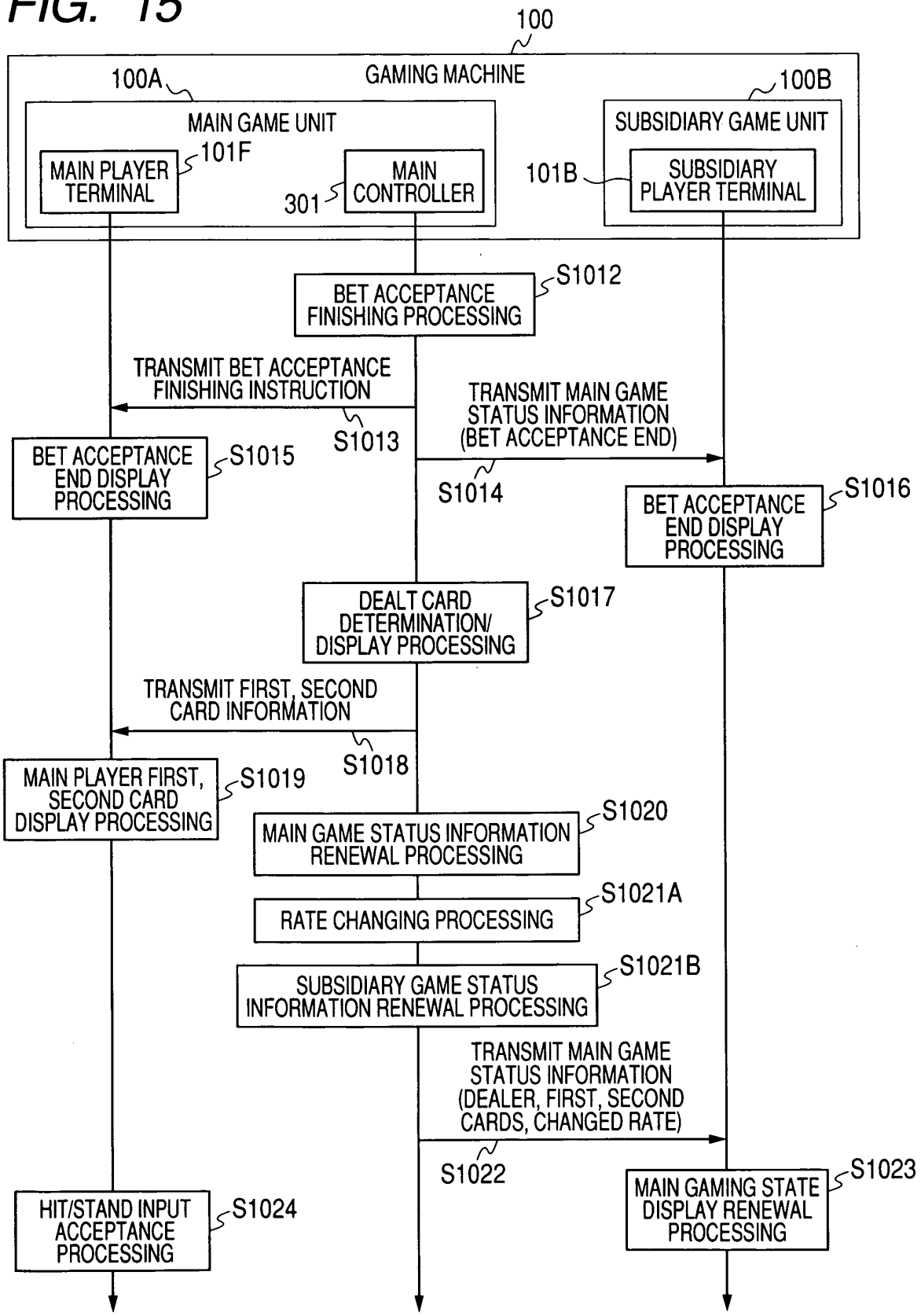

100
GAMING MACHINE
100A
MAIN GAME UNIT
MAIN PLAYER TERMINAL
101F
MAIN CONTROLLER
301
100B
SUBSIDIARY GAME UNIT
101B
SUBSIDIARY PLAYER TERMINAL
BET ACCEPTANCE FINISHING PROCESSING
S1012
TRANSMIT BET ACCEPTANCE FINISHING INSTRUCTION
S1013
TRANSMIT MAIN GAME STATUS INFORMATION (BET ACCEPTANCE END)
S1014
BET ACCEPTANCE END DISPLAY PROCESSING
S1015
BET ACCEPTANCE END DISPLAY PROCESSING
S1016
DEALT CARD DETERMINATION/ DISPLAY PROCESSING
S1017
TRANSMIT FIRST, SECOND CARD INFORMATION
S1018
MAIN PLAYER FIRST, SECOND CARD DISPLAY PROCESSING
S1019
MAIN GAME STATUS INFORMATION RENEWAL PROCESSING
S1020
RATE CHANGING PROCESSING
S1021A
SUBSIDIARY GAME STATUS INFORMATION RENEWAL PROCESSING
S1021B
TRANSMIT MAIN GAME STATUS INFORMATION (DEALER, FIRST, SECOND CARDS, CHANGED RATE)
S1022
MAIN GAMING STATE DISPLAY RENEWAL PROCESSING
S1023
HIT/STAND INPUT ACCEPTANCE PROCESSING
S1024

FIG. 16

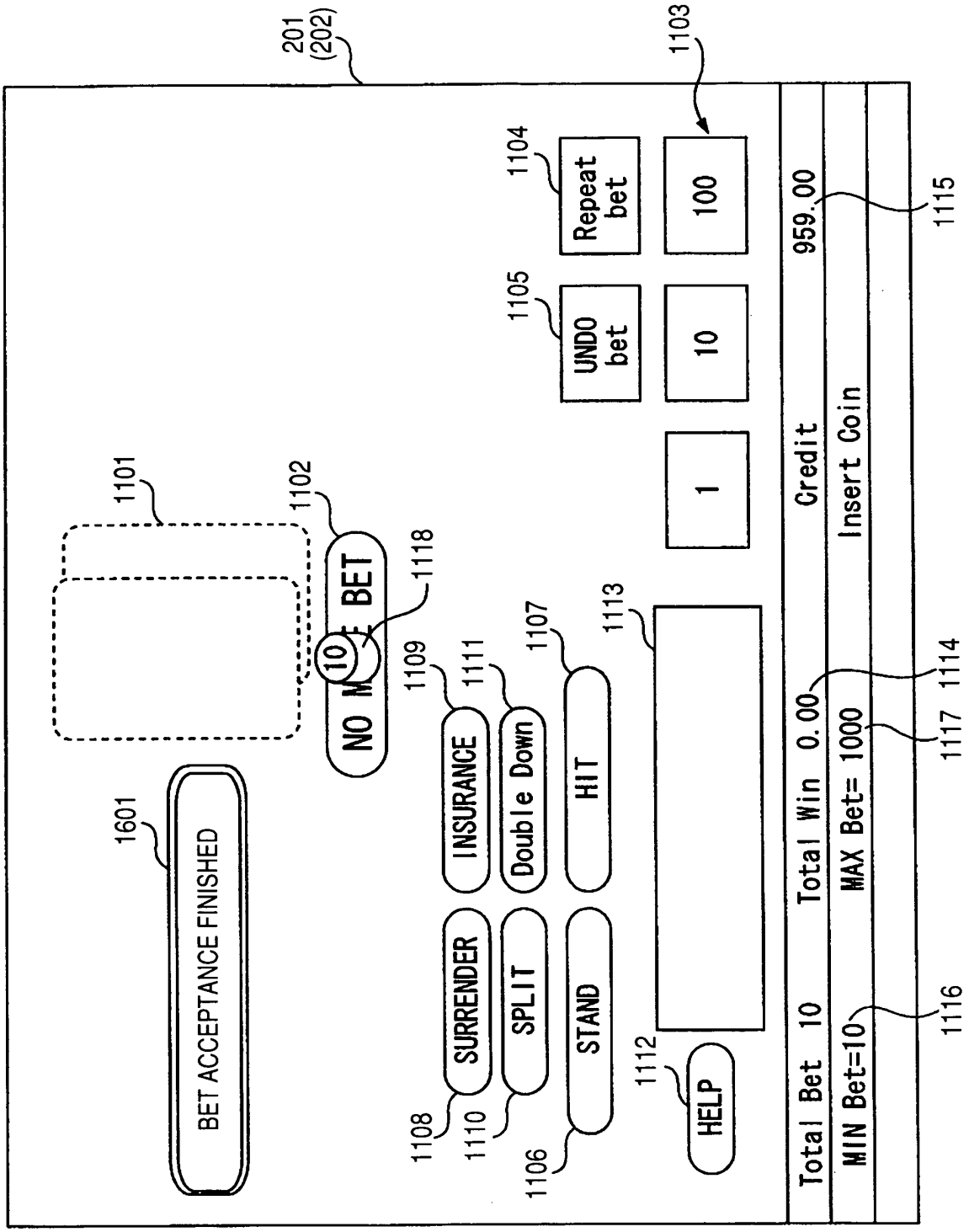

201
(202)
1103
1104
Repeat bet
100
1105
UNDO bet
10
1
1101
1102
1118
BET
10
1109
1111
1107
1113
INSURANCE
Double Down
HIT
1601
BET ACCEPTANCE FINISHED
SURRENDER
SPLIT
STAND
1108
1110
1106
1112
HELP
Credit
959.00
1115
Insert Coin
Total Win 0.00
1114
MAX Bet= 1000
1117
Total Bet 10
MIN Bet=10
1116

FIG. 17

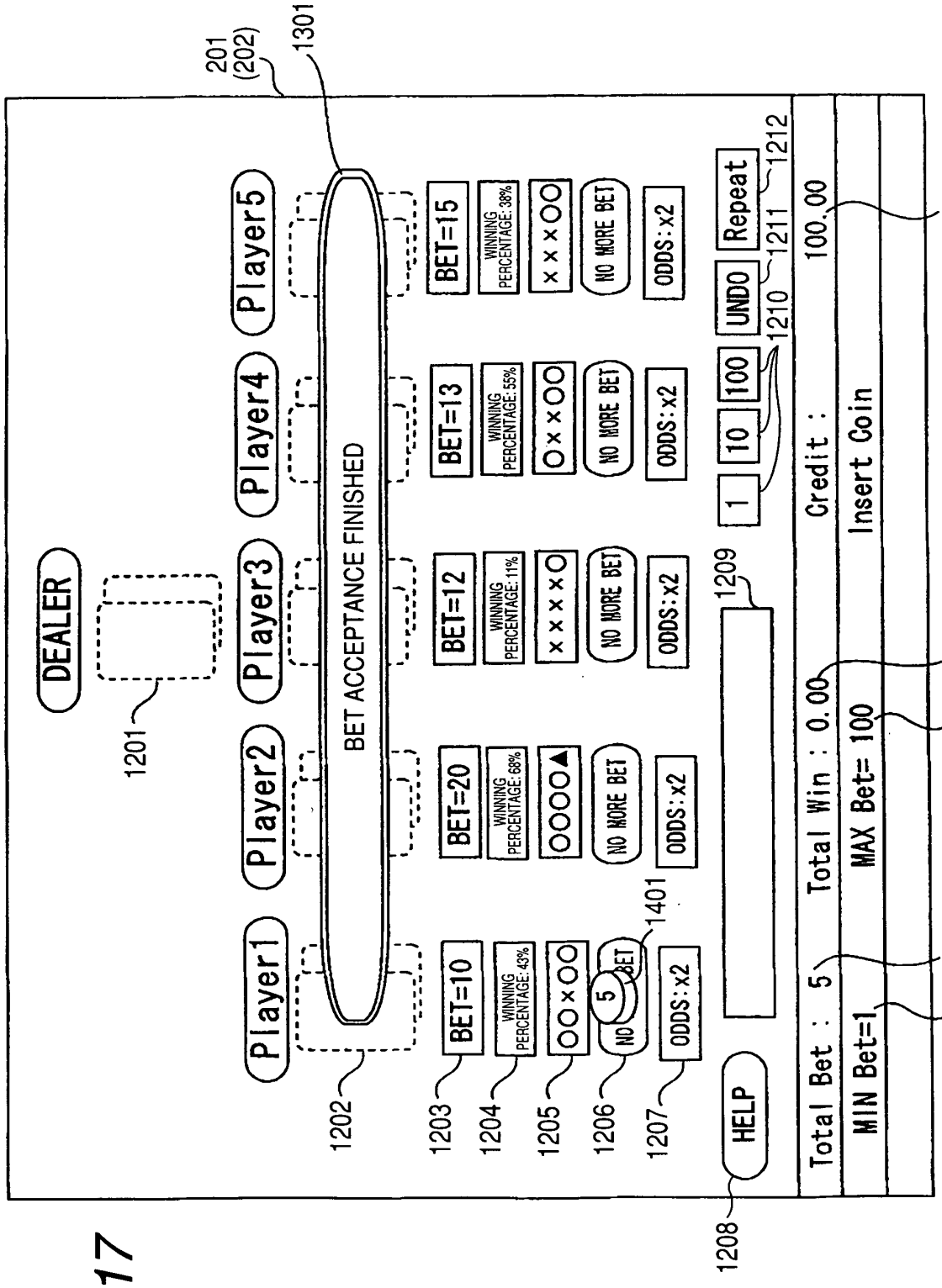
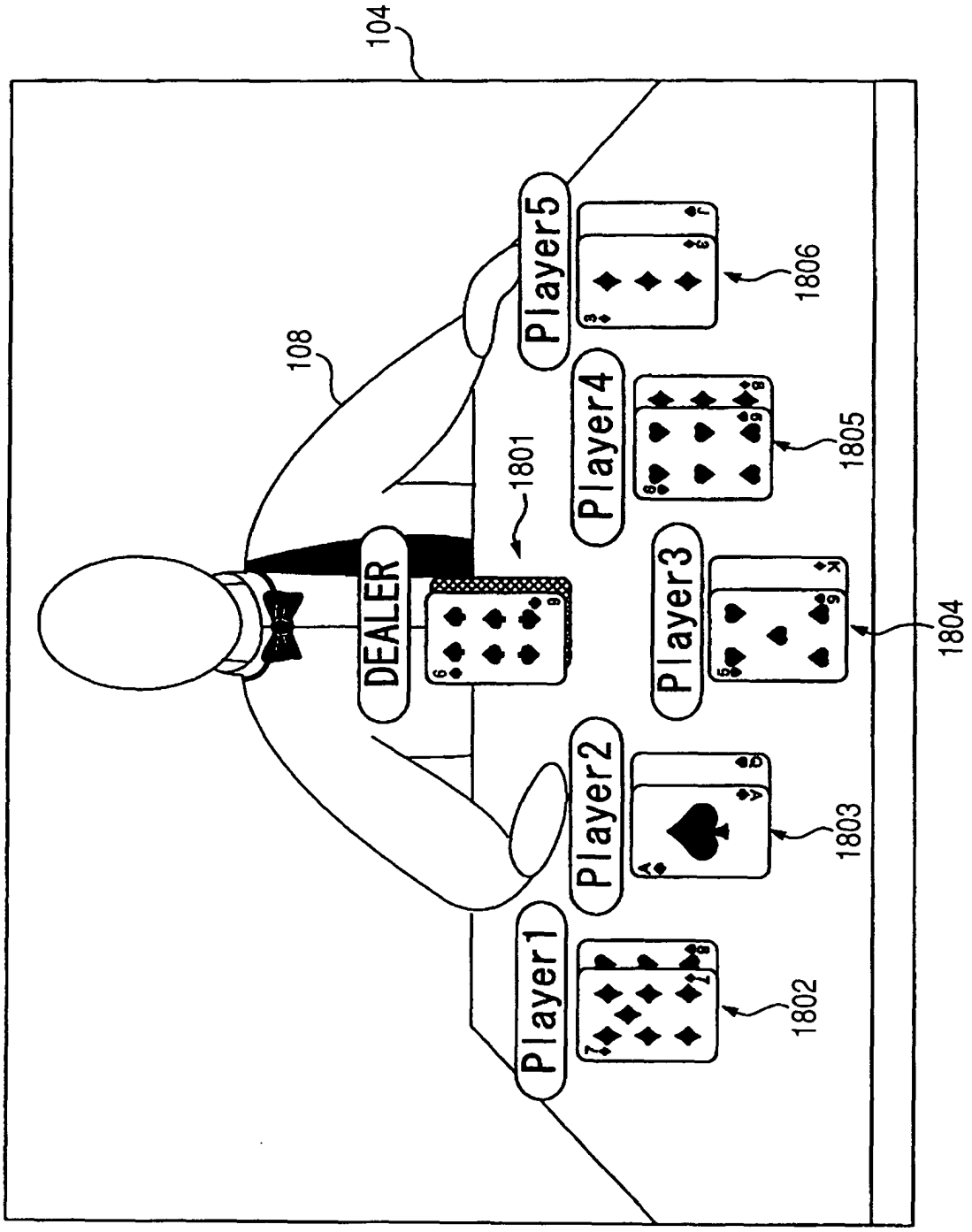

201
(202)
1301
DEALER
1201
Player1
Player2
Player3
Player4
Player5
BET ACCEPTANCE FINISHED
BET=10
BET=20
BET=12
BET=13
BET=15
WINNING PERCENTAGE: 43%
WINNING PERCENTAGE: 68%
WINNING PERCENTAGE: 11%
WINNING PERCENTAGE: 55%
WINNING PERCENTAGE: 38%
NO MORE BET
ODDS: x2
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1401
HELP
1
10
100
UNDO
Repeat
Credit : 100.00
Total Win : 0.00
Total Bet : 5
MAX Bet= 100
MIN Bet=1
Insert Coin

FIG. 18


104
108
1801
DEALER
Player1
Player2
Player3
Player4
Player5
1802
1803
1804
1805
1806

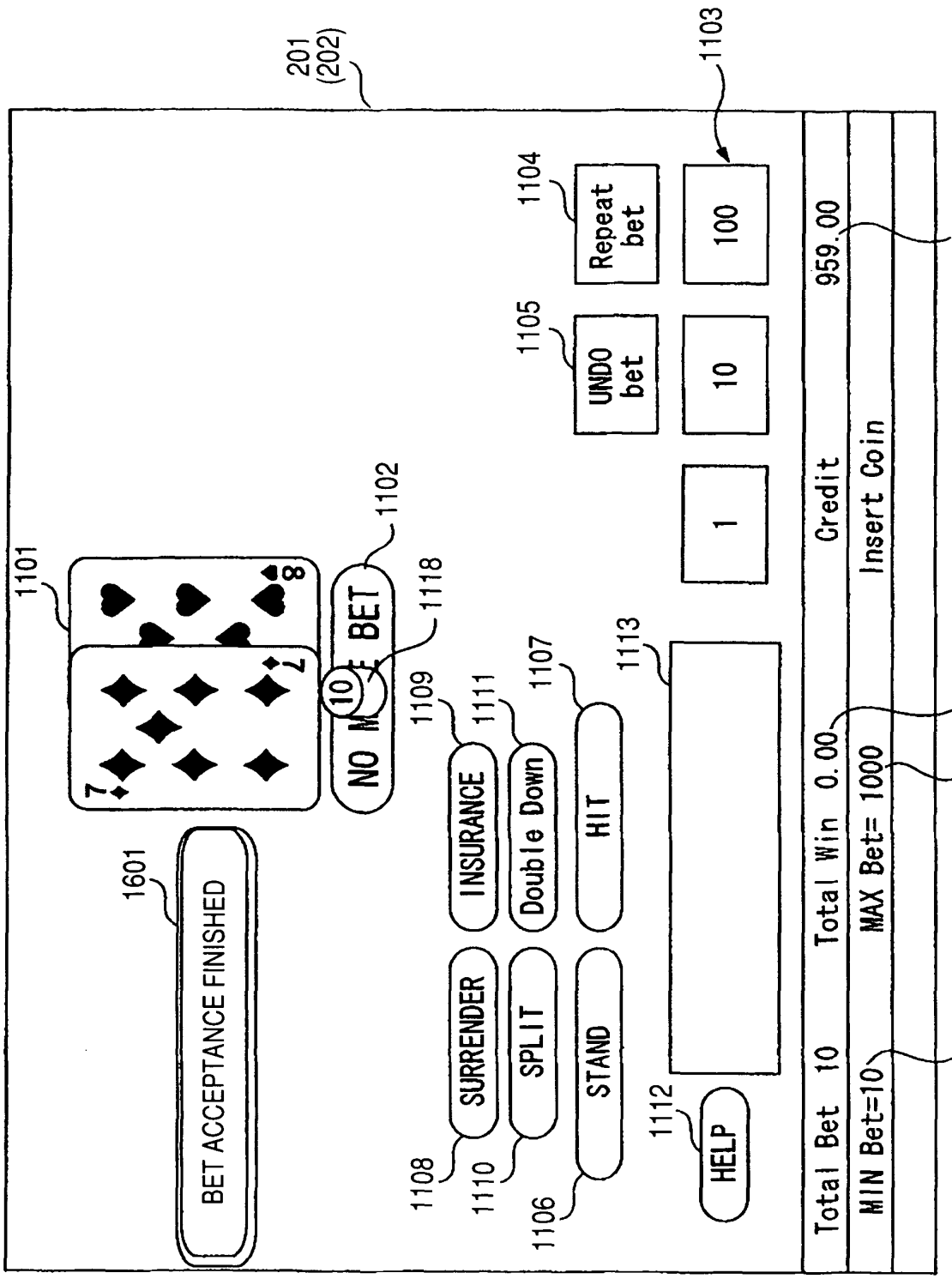

201
(202)
1103
1104
Repeat bet
100
1105
UNDO bet
10
1
Credit
959.00
1115
Insert Coin
1101
1102
BET
1118
NO M
10
1109
INSURANCE
1111
1107
Double Down
1113
HIT
1601
BET ACCEPTANCE FINISHED
1108
SURRENDER
1110
SPLIT
1106
STAND
1112
HELP
Total Win 0.00
1114
MAX Bet= 1000
1117
Total Bet 10
MIN Bet=10
1116

FIG. 19

FIG. 20

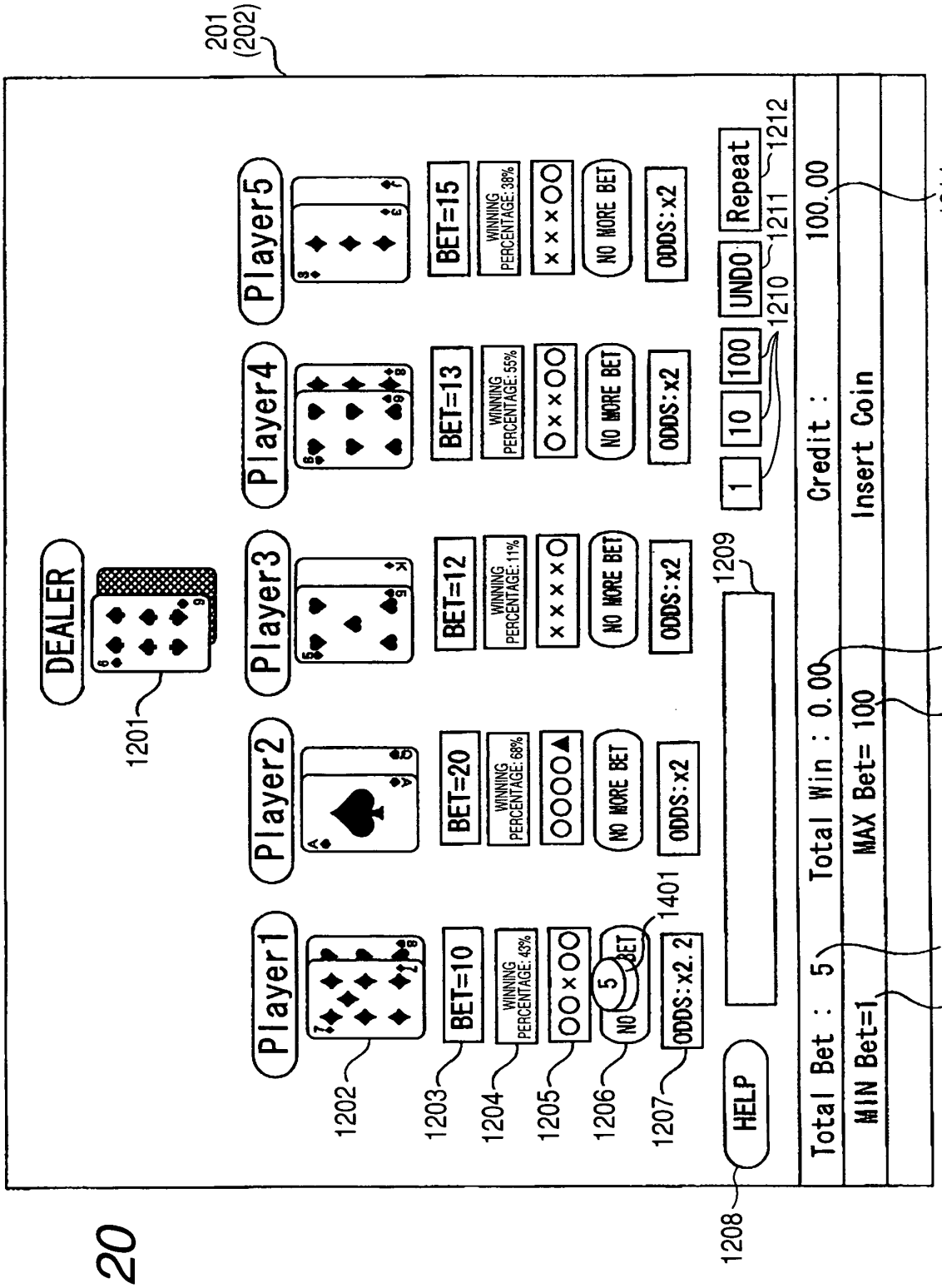

201
(202)
DEALER
1201
Player1
Player2
Player3
Player4
Player5
BET=10
BET=20
BET=12
BET=13
BET=15
WINNING PERCENTAGE: 43%
WINNING PERCENTAGE: 68%
WINNING PERCENTAGE: 11%
WINNING PERCENTAGE: 55%
WINNING PERCENTAGE: 38%
NO MORE BET
ODDS:x2
ODDS:x2.2
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
1314
1401
HELP
UNDO
Repeat
Credit : 100.00
Total Win : 0.00
Total Bet : 5
MAX Bet= 100
MIN Bet=1
Insert Coin

FIG. 21

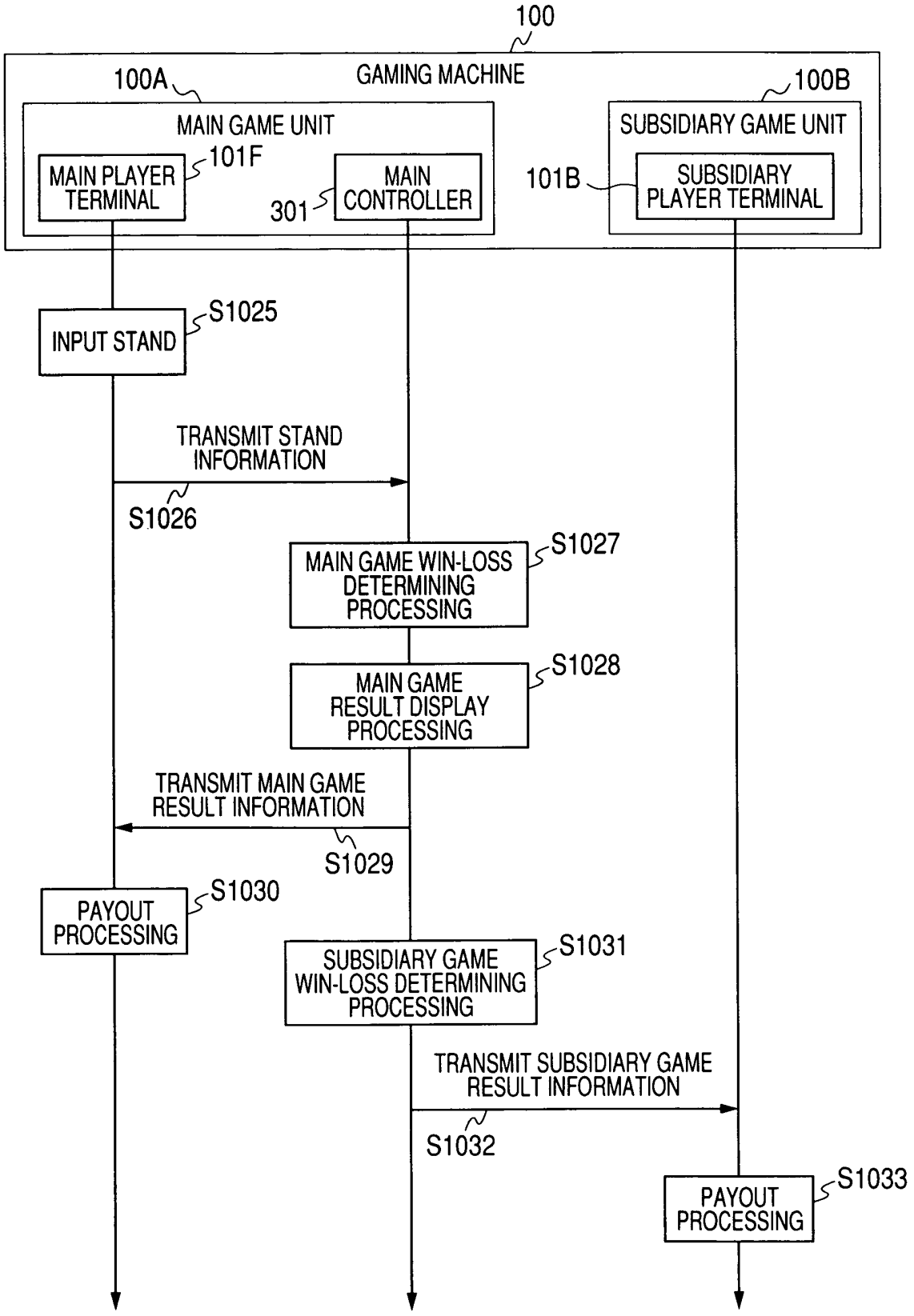

100
GAMING MACHINE
100A
MAIN GAME UNIT
MAIN PLAYER TERMINAL
101F
MAIN CONTROLLER
301
100B
SUBSIDIARY GAME UNIT
101B
SUBSIDIARY PLAYER TERMINAL
INPUT STAND
S1025
TRANSMIT STAND INFORMATION
S1026
MAIN GAME WIN-LOSS DETERMINING PROCESSING
S1027
MAIN GAME RESULT DISPLAY PROCESSING
S1028
TRANSMIT MAIN GAME RESULT INFORMATION
S1029
PAYOUT PROCESSING
S1030
SUBSIDIARY GAME WIN-LOSS DETERMINING PROCESSING
S1031
TRANSMIT SUBSIDIARY GAME RESULT INFORMATION
S1032
PAYOUT PROCESSING
S1033

FIG. 22

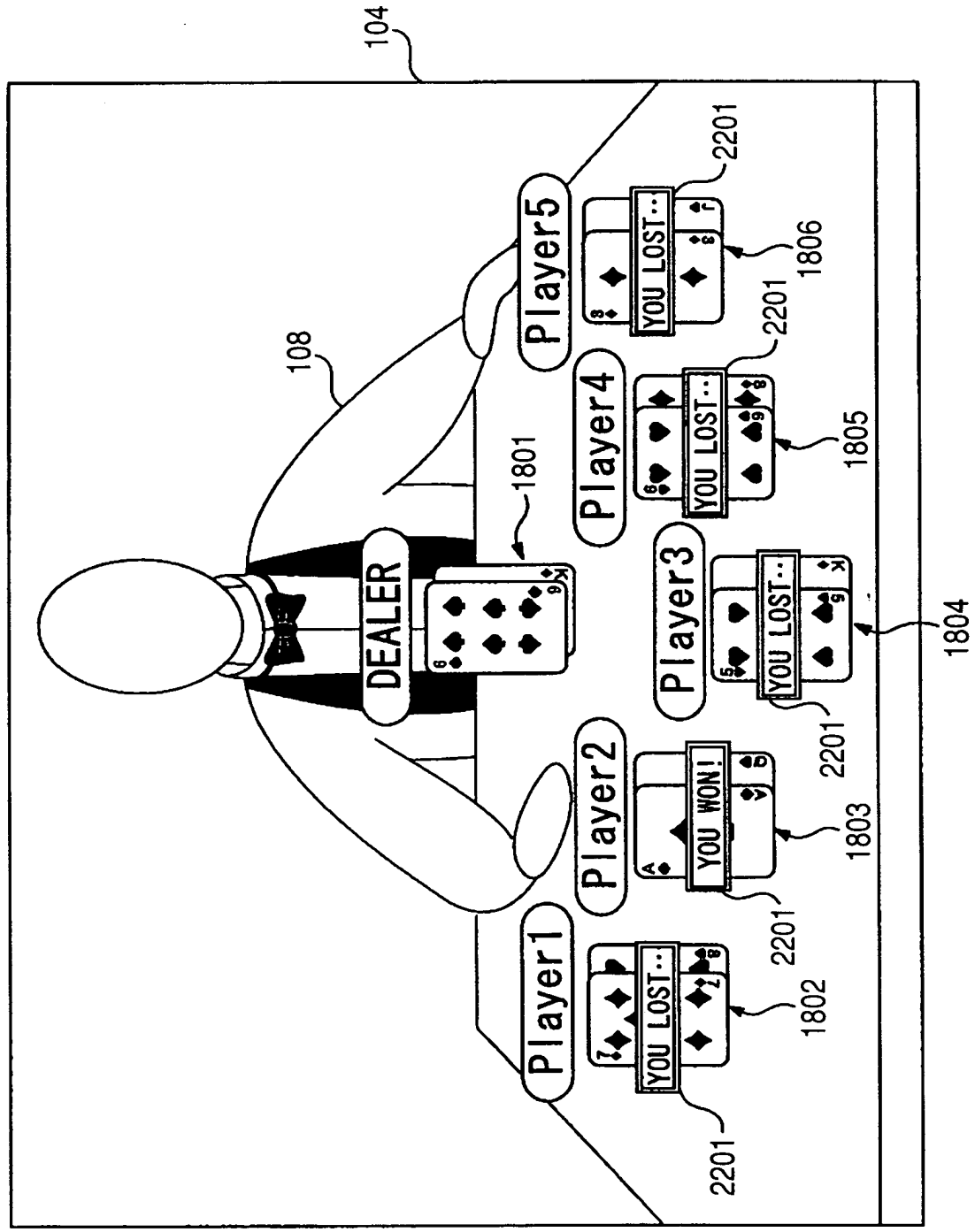

104
108
DEALER
1801
Player1
Player2
Player3
Player4
Player5
YOU LOST..
YOU WON!
2201
1802
1803
1804
1805
1806

FIG. 23

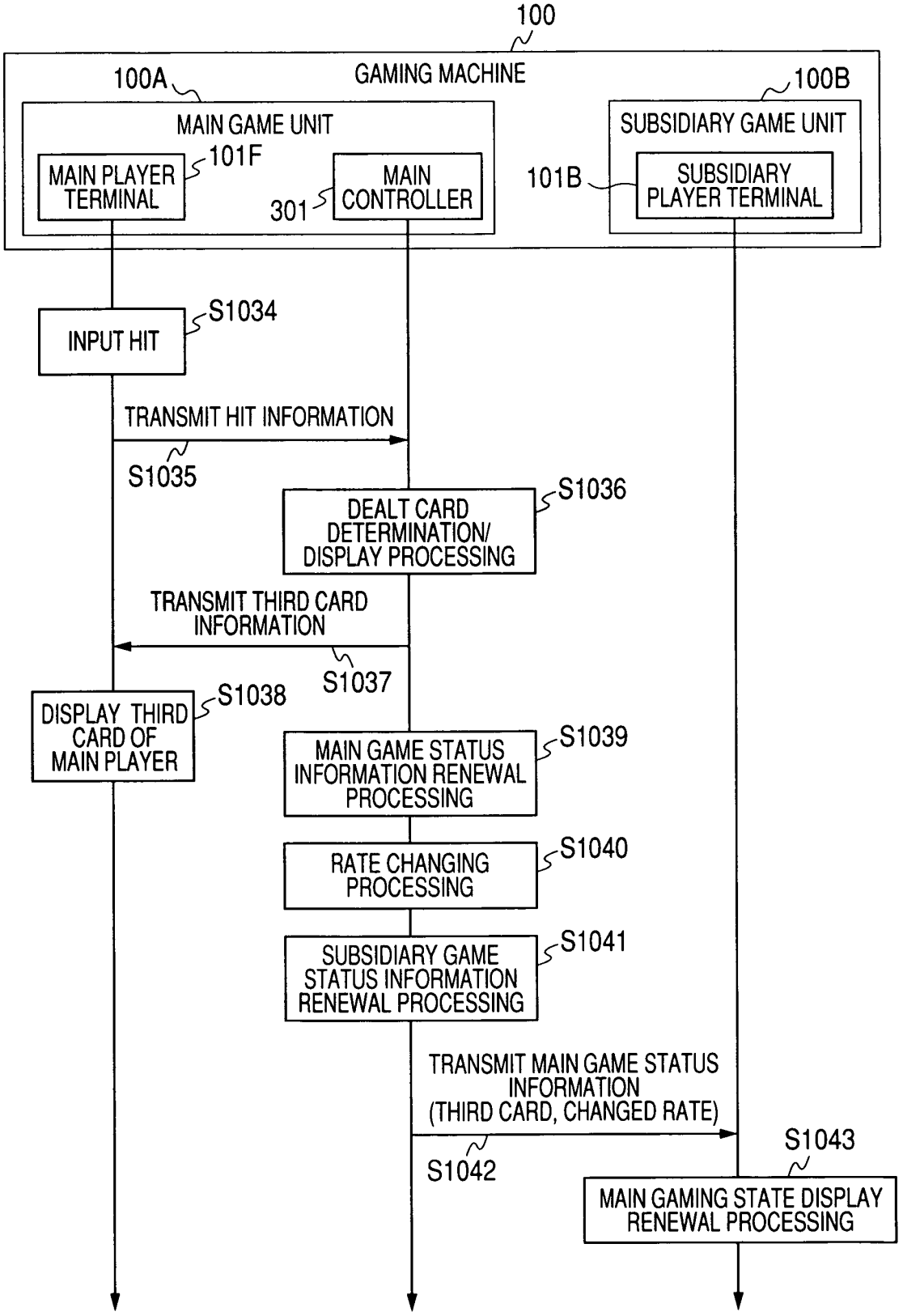
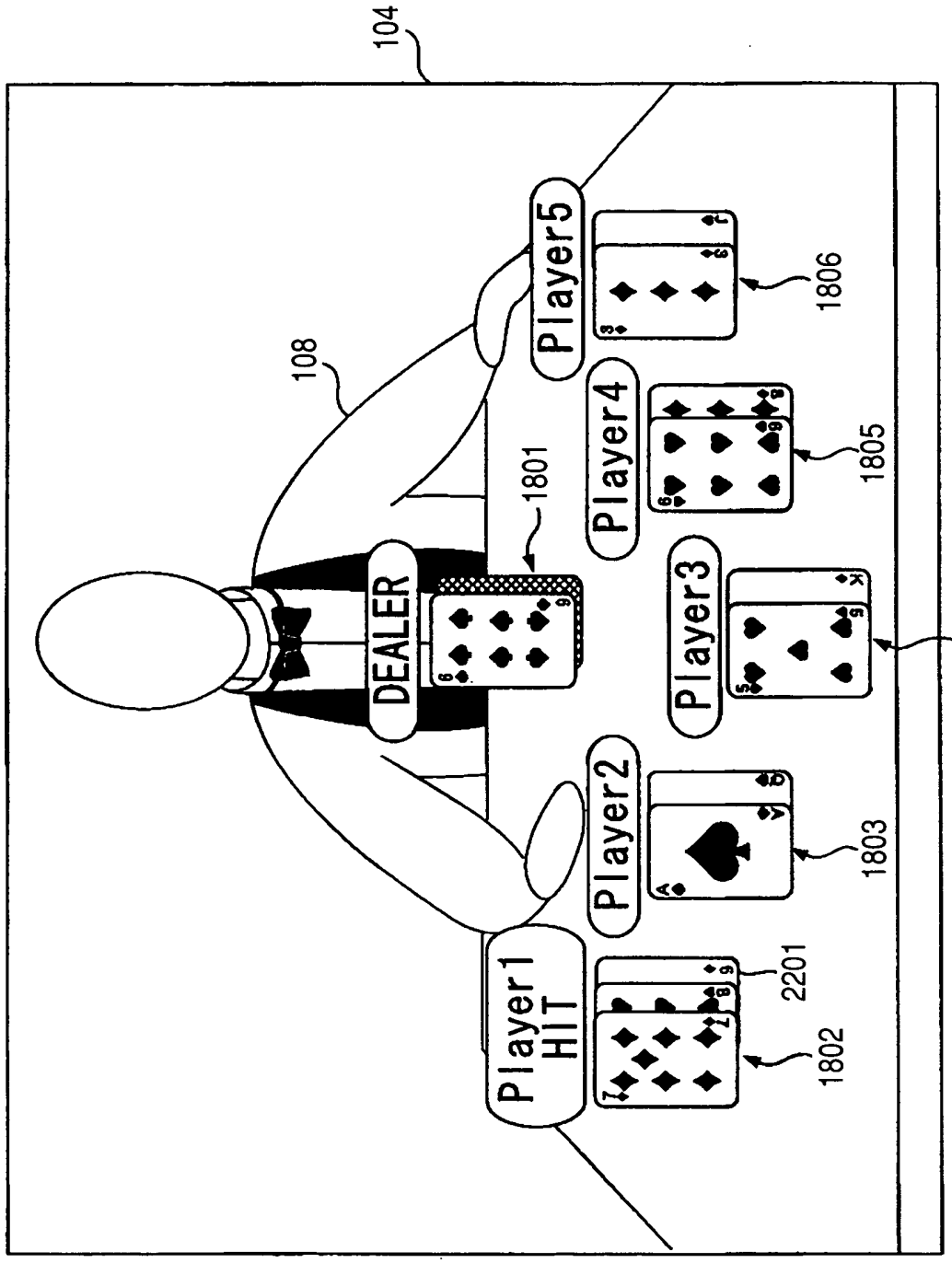

100
GAMING MACHINE
100A
MAIN GAME UNIT
MAIN PLAYER TERMINAL
101F
MAIN CONTROLLER
301
100B
SUBSIDIARY GAME UNIT
101B
SUBSIDIARY PLAYER TERMINAL
INPUT HIT
S1034
TRANSMIT HIT INFORMATION
S1035
DEALT CARD DETERMINATION/ DISPLAY PROCESSING
S1036
TRANSMIT THIRD CARD INFORMATION
S1037
DISPLAY THIRD CARD OF MAIN PLAYER
S1038
MAIN GAME STATUS INFORMATION RENEWAL PROCESSING
S1039
RATE CHANGING PROCESSING
S1040
SUBSIDIARY GAME STATUS INFORMATION RENEWAL PROCESSING
S1041
TRANSMIT MAIN GAME STATUS INFORMATION (THIRD CARD, CHANGED RATE)
S1042
S1043
MAIN GAMING STATE DISPLAY RENEWAL PROCESSING

FIG. 24


104
108
DEALER
1801
Player1
HIT
Player2
Player3
Player4
Player5
1802
2201
1803
1804
1805
1806

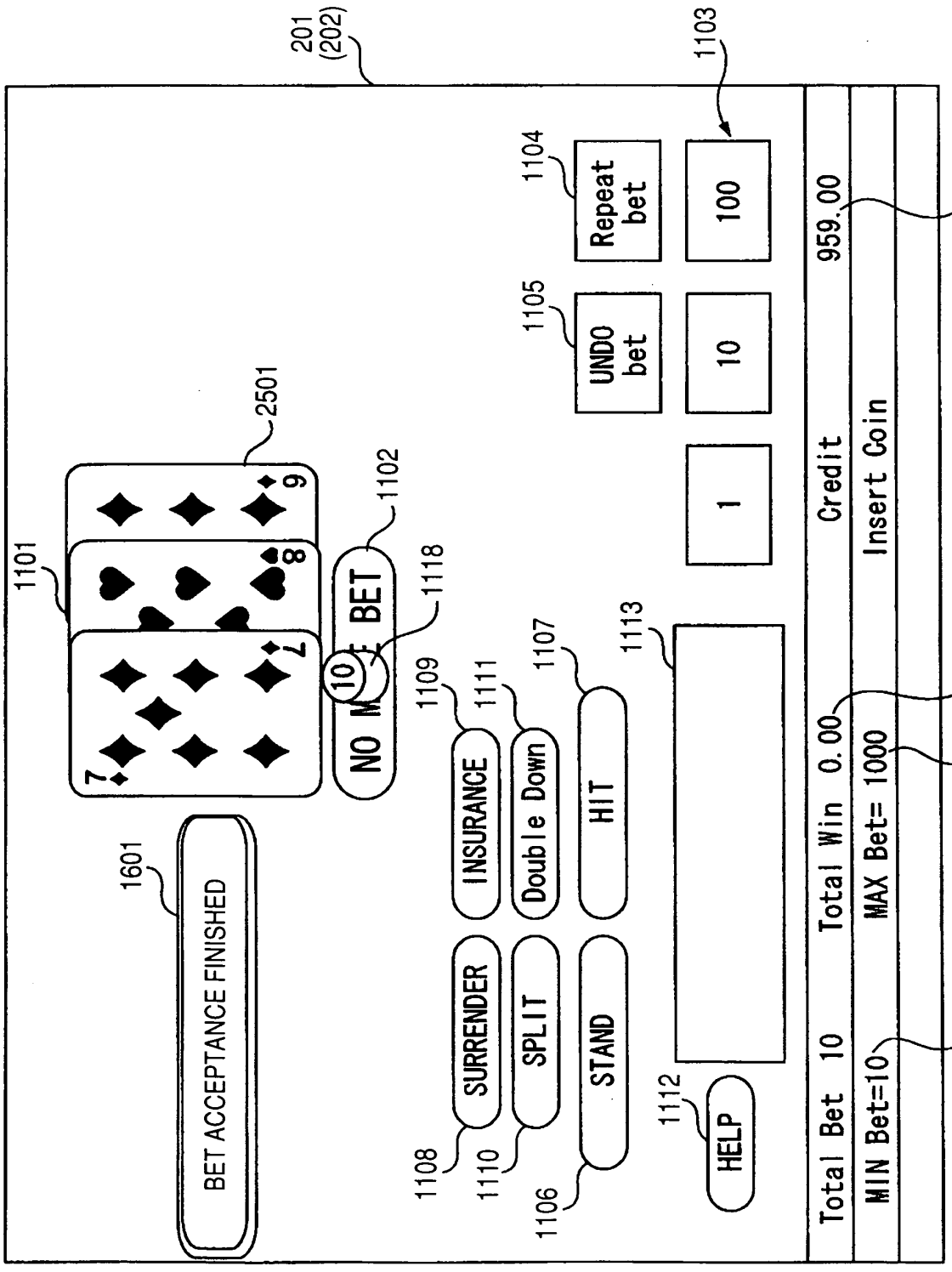
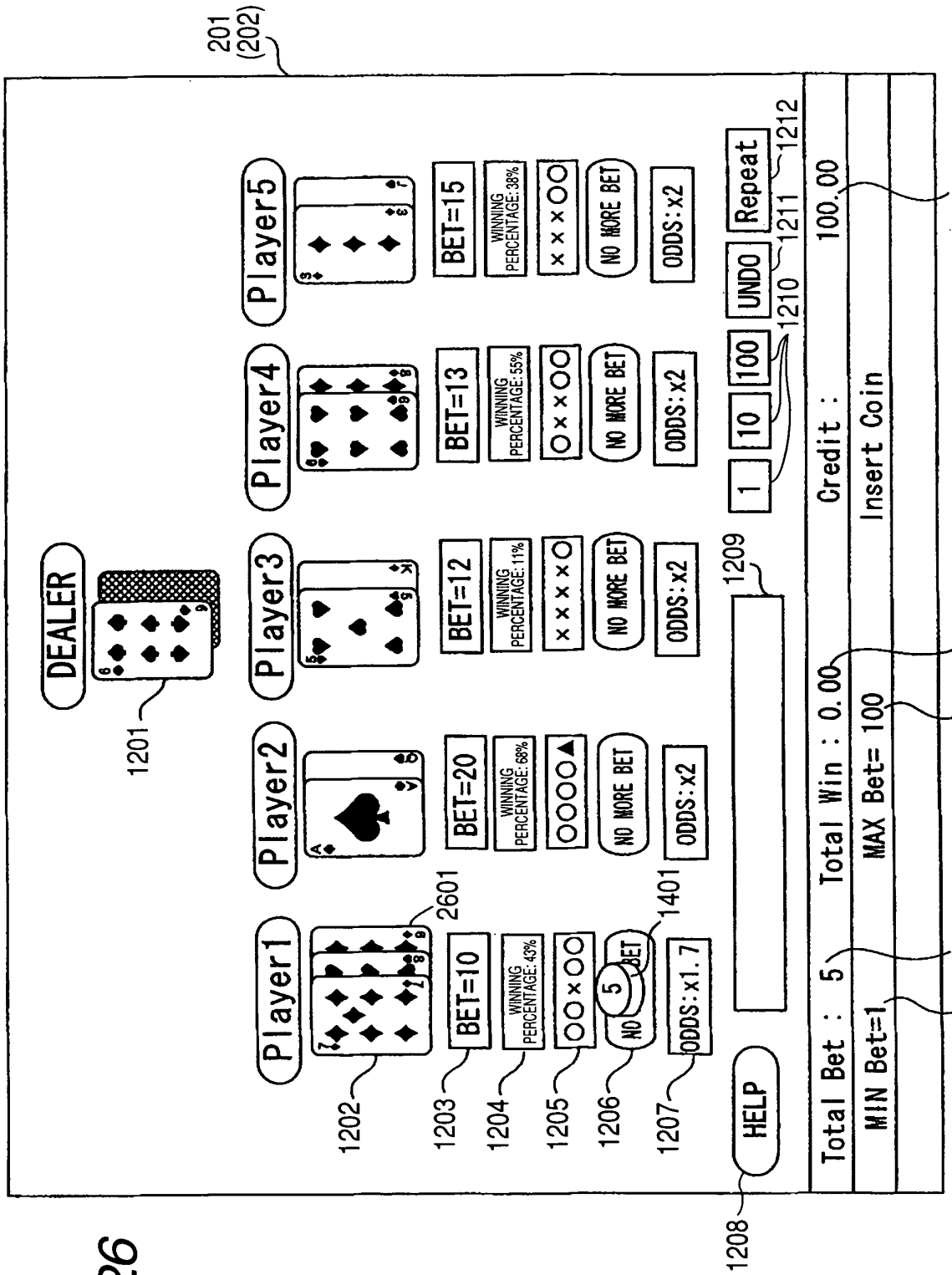

201
(202)
1103
1104
Repeat bet
100
1105
UNDO bet
10
1
959.00
Credit
Insert Coin
1115
2501
1101
1102
BET
1118
1601
BET ACCEPTANCE FINISHED
1109
INSURANCE
1111
1107
Double Down
1113
HIT
1108
SURRENDER
1110
SPLIT
1106
STAND
1112
HELP
Total Win 0.00
1114
MAX Bet= 1000
1117
Total Bet 10
MIN Bet=10
1116

FIG. 25

FIG. 26


201
(202)
DEALER
1201
Player1
Player2
Player3
Player4
Player5
BET=10
BET=20
BET=12
BET=13
BET=15
WINNING PERCENTAGE: 43%
WINNING PERCENTAGE: 68%
WINNING PERCENTAGE: 11%
WINNING PERCENTAGE: 55%
WINNING PERCENTAGE: 38%
NO MORE BET
ODDS:x1.7
ODDS:x2
2601
1401
1202
1203
1204
1205
1206
1207
1208
1209
1210
1211
1212
1213
1214
1215
1216
HELP
1
10
100
UNDO
Repeat
Credit : 100.00
Total Win : 0.00
Total Bet : 5
MAX Bet= 100
MIN Bet=1
Insert Coin

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- JP 2004008706 A **[0003] [0003]**
- US 20040063482 A1 **[0003]**
- US 5390934 A **[0004]**