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(54) GAMING APPARATUS AND CONTROL METHOD THEREOF

(75) Inventor: **Kazumasa YOSHIZAWA**, Tokyo (JP)

Correspondence Address:
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314 (US)

(73) Assignee: **ARUZE CORP.**, Koto-ku (JP)

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(57) **ABSTRACT**

A gaming apparatus of the present invention comprises: a roulette; a roulette; a result determination device for determining a result of a game with the roulette; an expected-number-of-games input device that allows an input of an expected number of games of the identical result determined continuously by the result determination device; a counting device for counting a continuous number of games of the identical result determined continuously by the result determination device; and a first prize-offering device for offering a prize, when the continuous number of games counted by the counting device is identical to the expected number of games inputted through the expected-number-of-games input device.

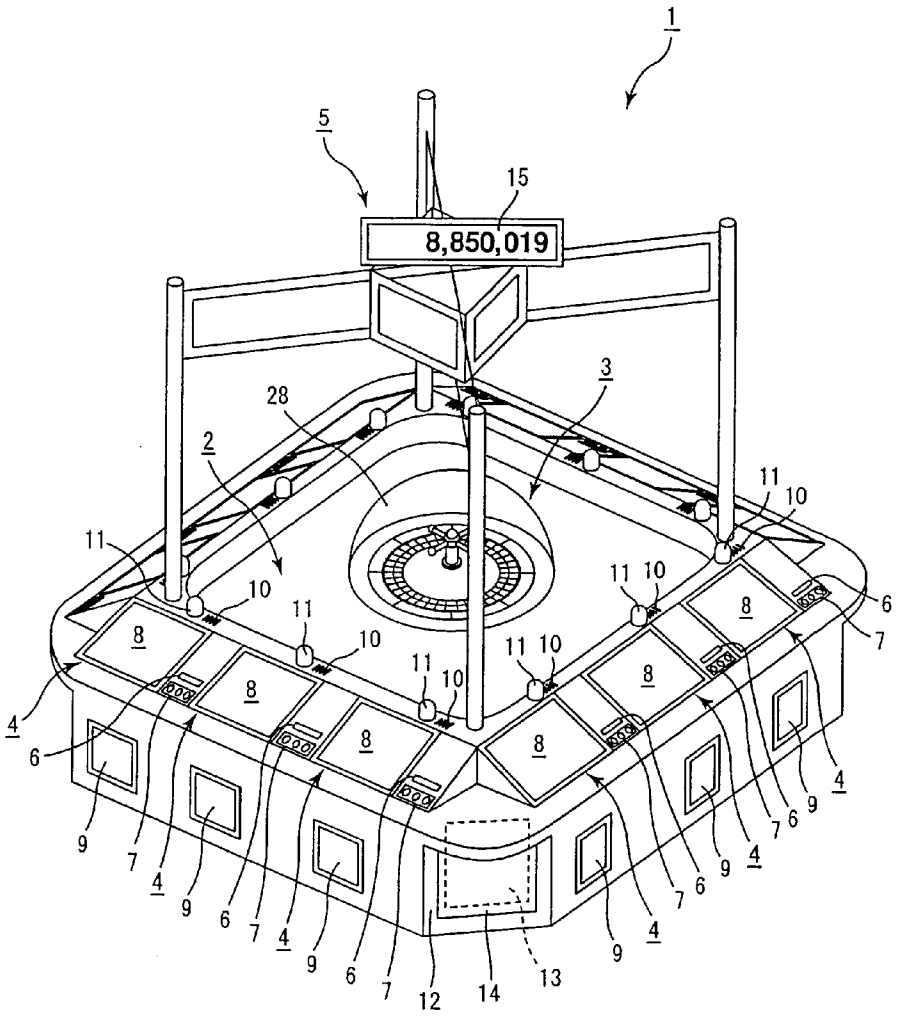


Fig. 1

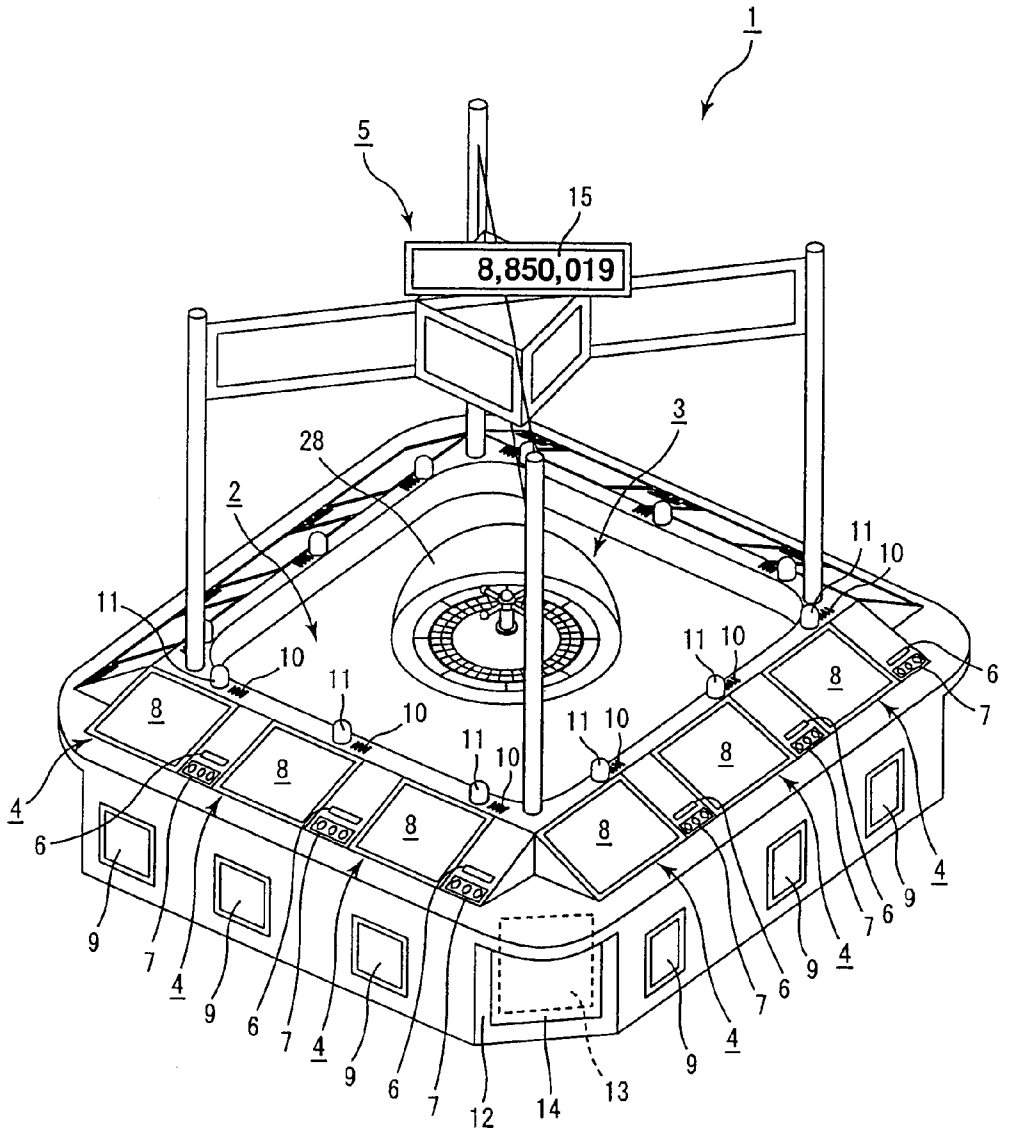


Fig. 2

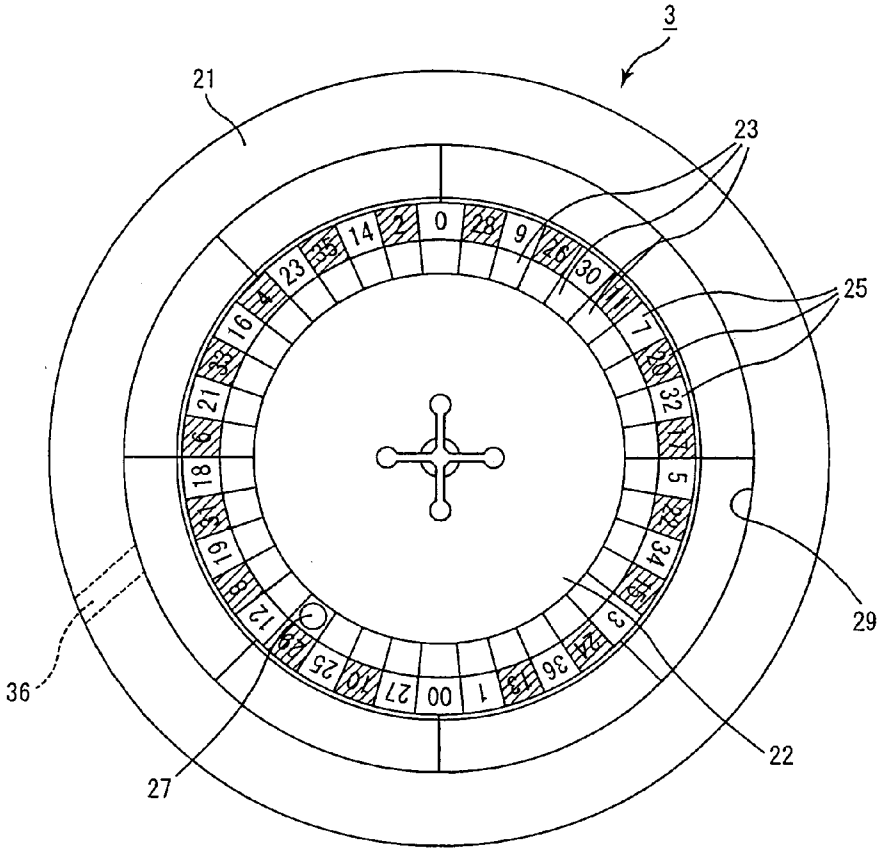

3
21
23
25
29
22
27
36
0
28
9
26
30
11
7
20
32
5
34
24
3
36
13
1
00
27
10
25
29
12
18
22
9
31
14
23
4
16
33
21
6

Fig. 3

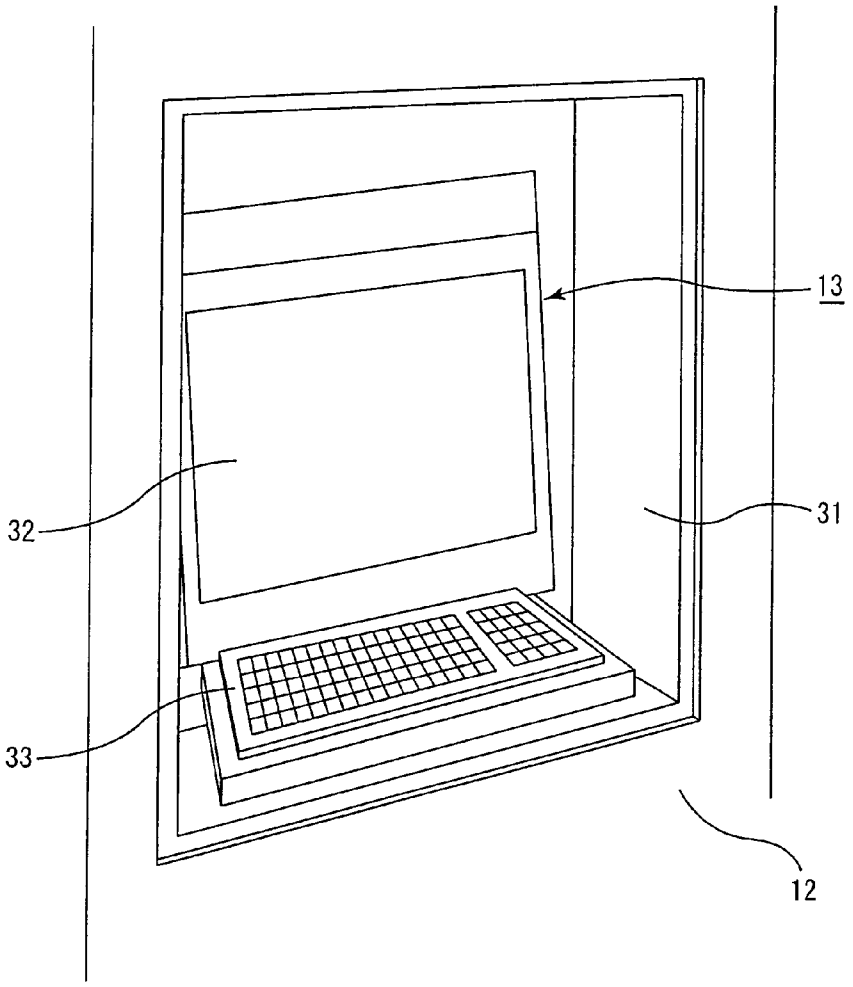


Fig. 4

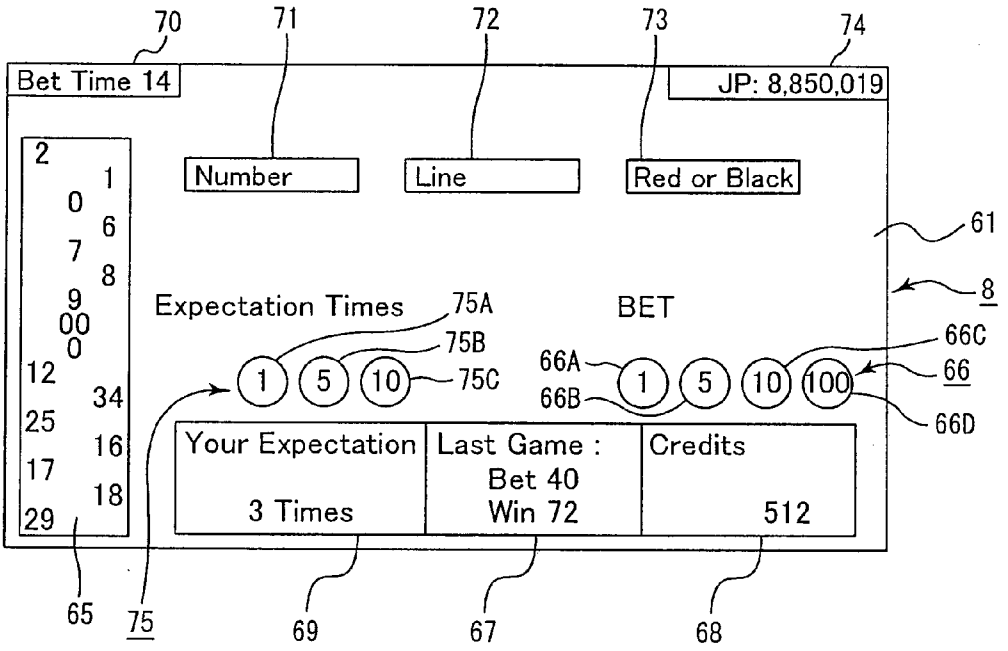
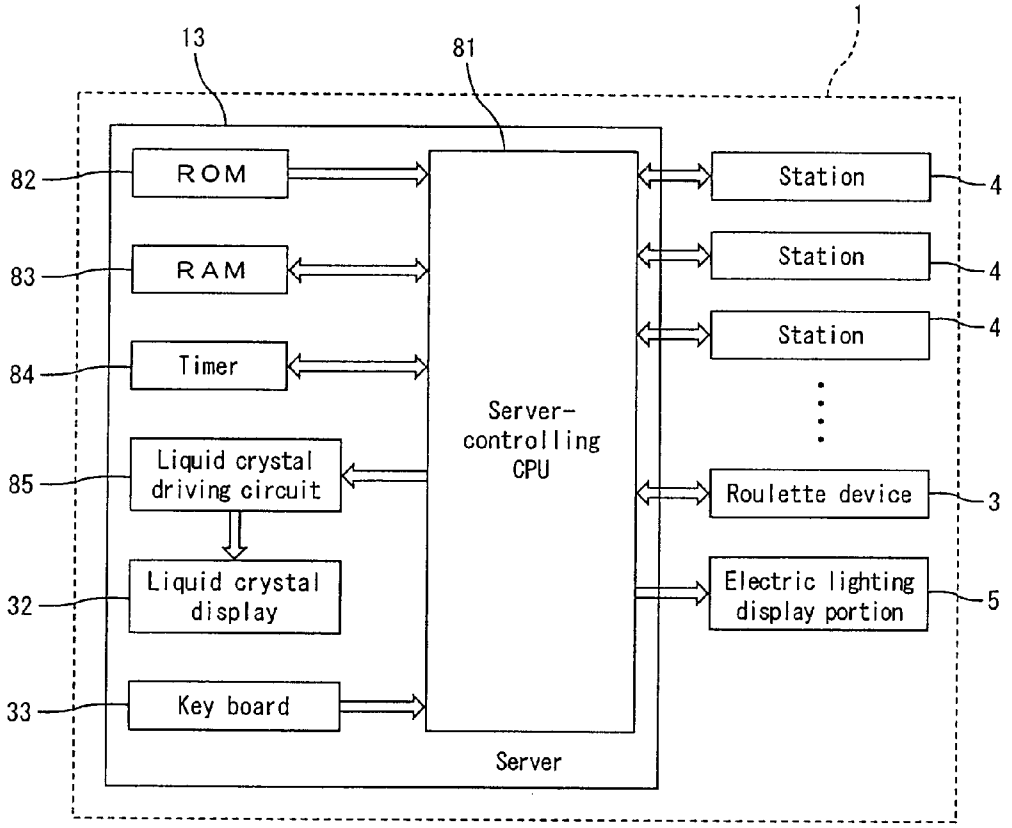

70
71
72
73
74
Bet Time 14
JP: 8,850,019
Number
Line
Red or Black
61
8
Expectation Times
75A
75B
75C
BET
66A
66B
66C
66
66D
1
5
10
100
Your Expectation
3 Times
Last Game :
Bet 40
Win 72
Credits
512
65
75
69
67
68

Fig. 5


1
13
81
82
ROM
83
RAM
84
Timer
85
Liquid crystal driving circuit
32
Liquid crystal display
33
Key board
Server-controlling CPU
Server
Station
4
Station
4
Station
4
Roulette device
3
Electric lighting display portion
5

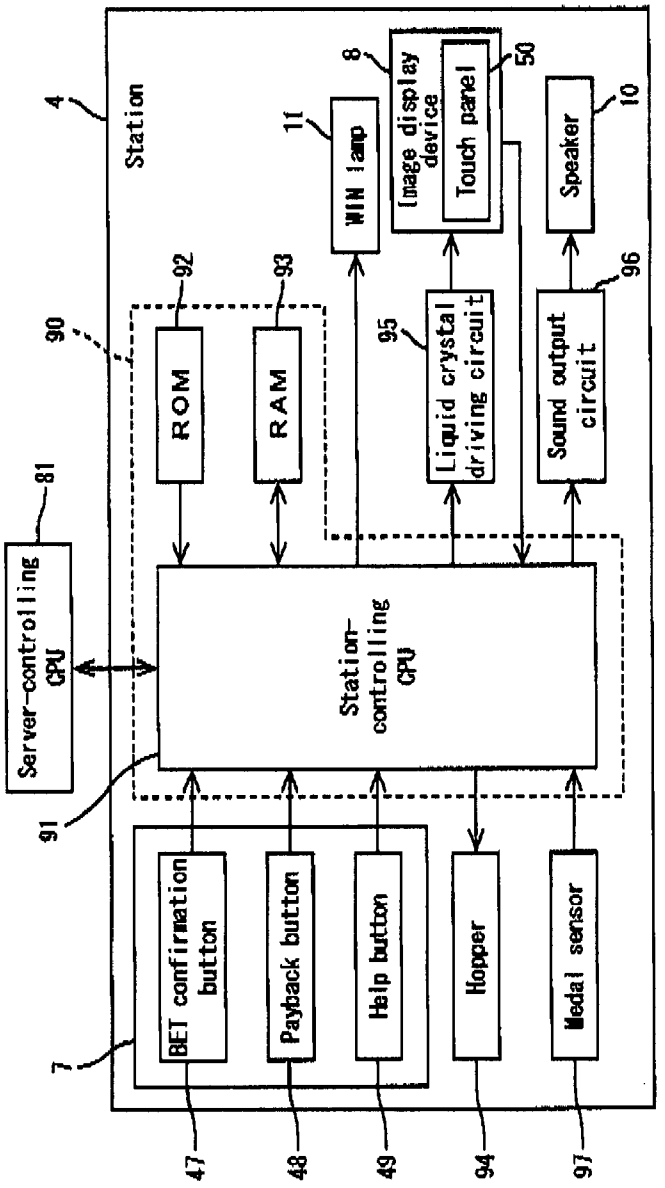

4
Station
11
WIN lamp
8
Image display device
Touch panel
50
Speaker
10
92
93
90
ROM
RAM
95
Liquid crystal driving circuit
Sound output circuit
96
81
Server-controlling CPU
Station-controlling CPU
91
7
BET confirmation button
Payback button
Help button
Hopper
Medal sensor
47
48
49
94
97

Fig. 6

Fig. 7

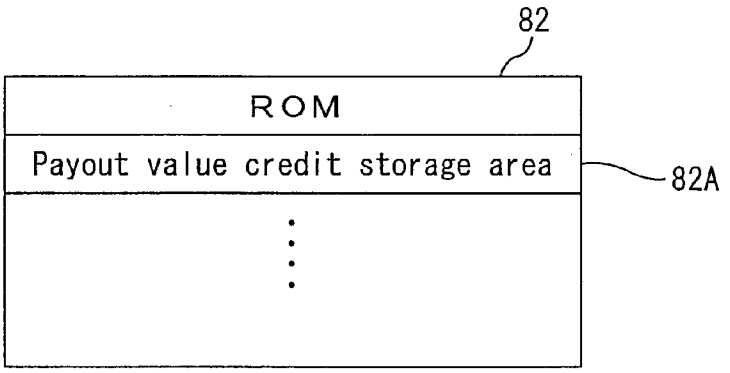

82
ROM
Payout value credit storage area
82A

Fig. 8

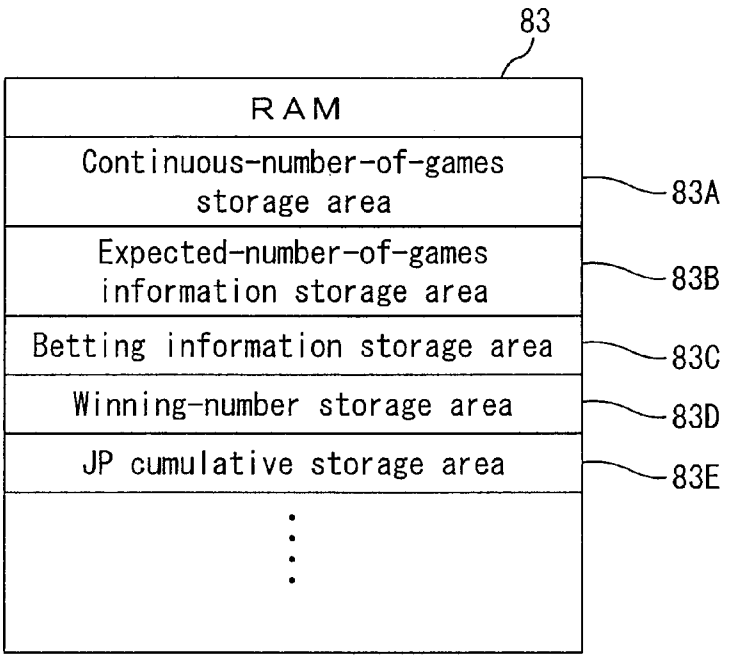

83
RAM
Continuous-number-of-games storage area
83A
Expected-number-of-games information storage area
83B
Betting information storage area
83C
Winning-number storage area
83D
JP cumulative storage area
83E

Fig. 9

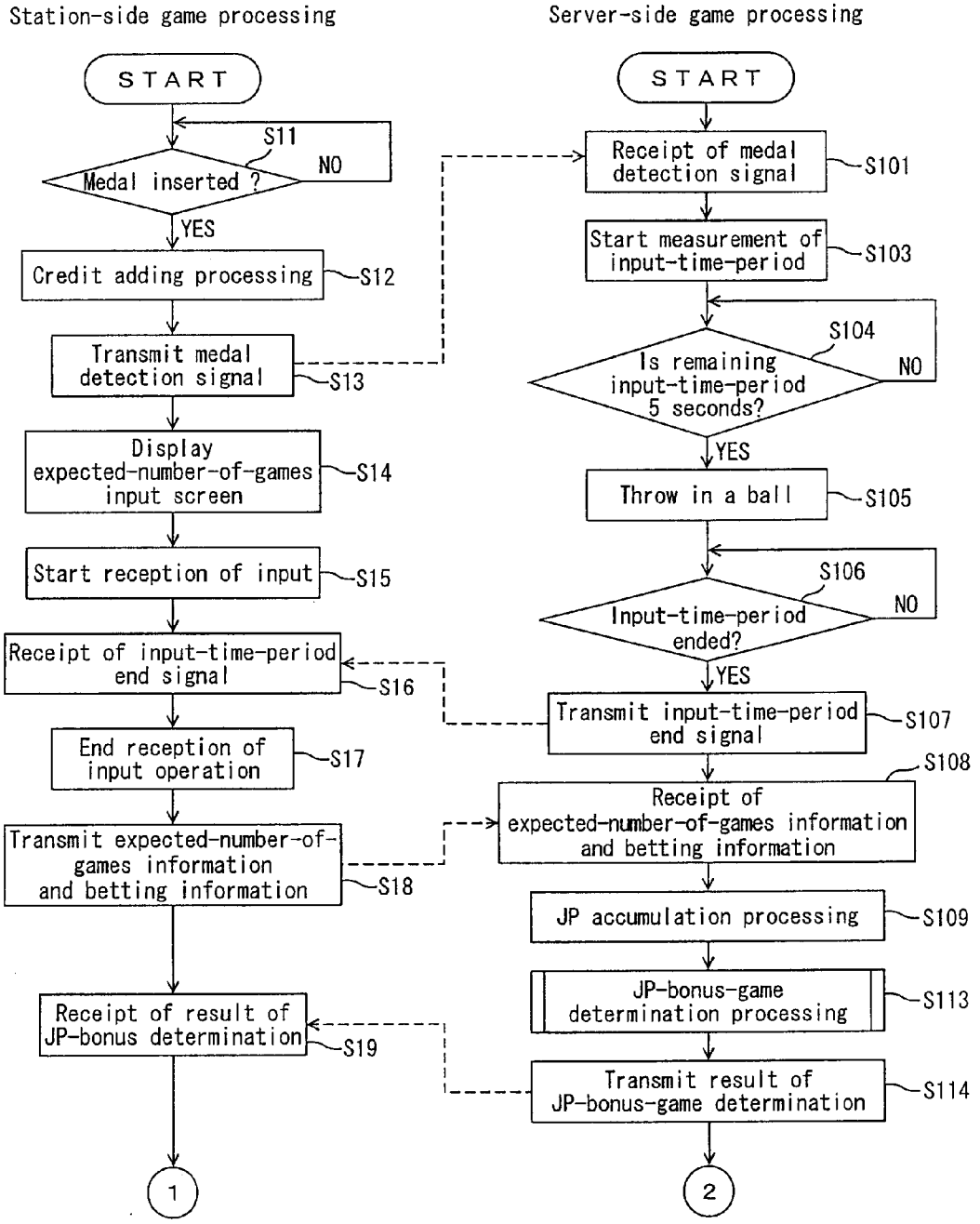

Station-side game processing
Server-side game processing
START
S11
Medal inserted ?
NO
YES
Credit adding processing
S12
Transmit medal detection signal
S13
Display expected-number-of-games input screen
S14
Start reception of input
S15
Receipt of input-time-period end signal
S16
End reception of input operation
S17
Transmit expected-number-of-games information and betting information
S18
Receipt of result of JP-bonus determination
S19
1
START
Receipt of medal detection signal
S101
Start measurement of input-time-period
S103
S104
Is remaining input-time-period 5 seconds?
NO
YES
Throw in a ball
S105
S106
Input-time-period ended?
NO
YES
Transmit input-time-period end signal
S107
S108
Receipt of expected-number-of-games information and betting information
JP accumulation processing
S109
JP-bonus-game determination processing
S113
Transmit result of JP-bonus-game determination
S114
2

Fig. 10

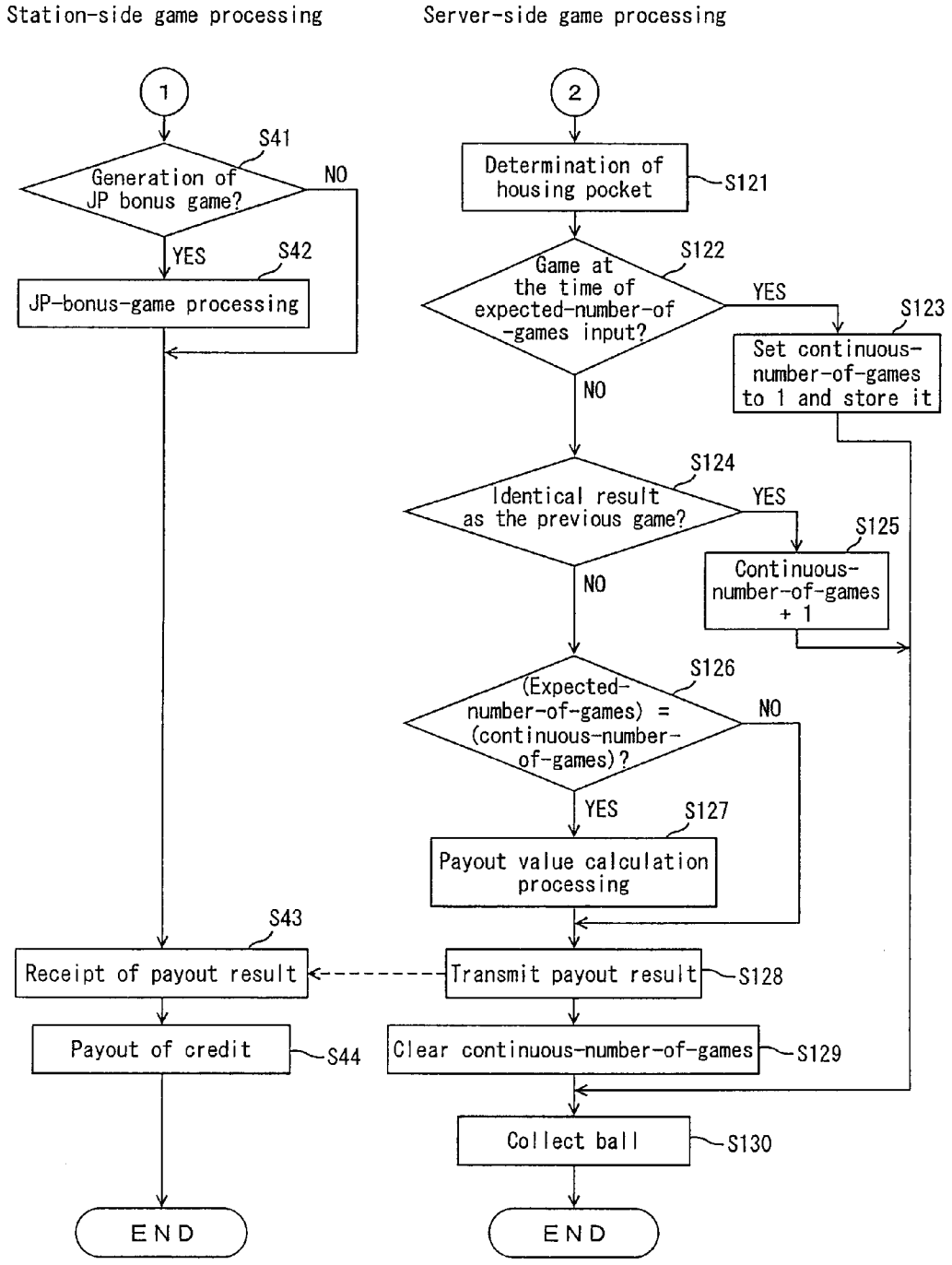

Station-side game processing
Server-side game processing
1
2
S41
Generation of JP bonus game?
NO
YES
S42
JP-bonus-game processing
Determination of housing pocket
S121
S122
Game at the time of expected-number-of-games input?
YES
S123
Set continuous-number-of-games to 1 and store it
NO
S124
Identical result as the previous game?
YES
S125
Continuous-number-of-games + 1
NO
S126
(Expected-number-of-games) = (continuous-number-of-games)?
NO
YES
S127
Payout value calculation processing
S43
Receipt of payout result
Transmit payout result
S128
Payout of credit
S44
Clear continuous-number-of-games
S129
Collect ball
S130
END
END

Fig. 11

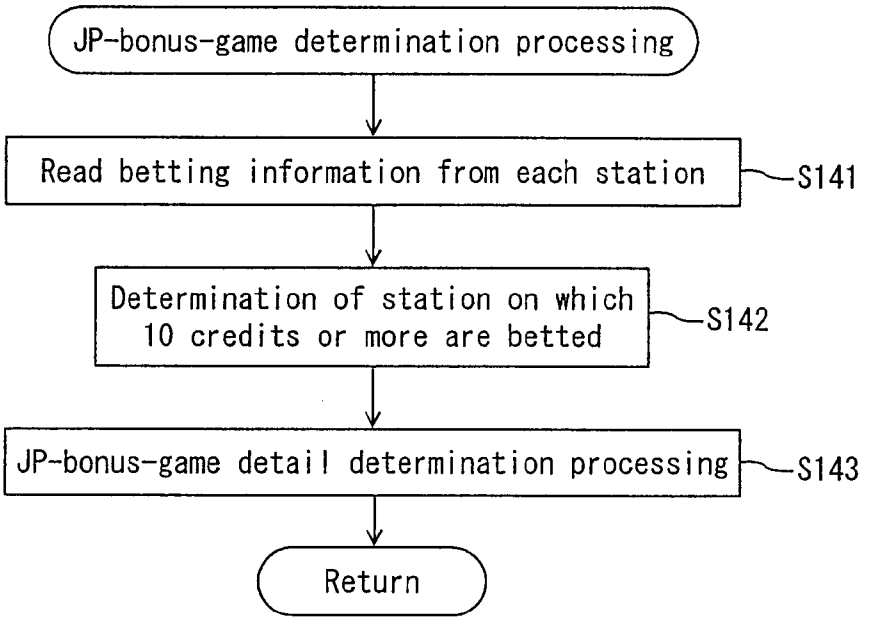

JP-bonus-game determination processing
Read betting information from each station
S141
Determination of station on which 10 credits or more are betted
S142
JP-bonus-game detail determination processing
S143
Return

Fig. 12

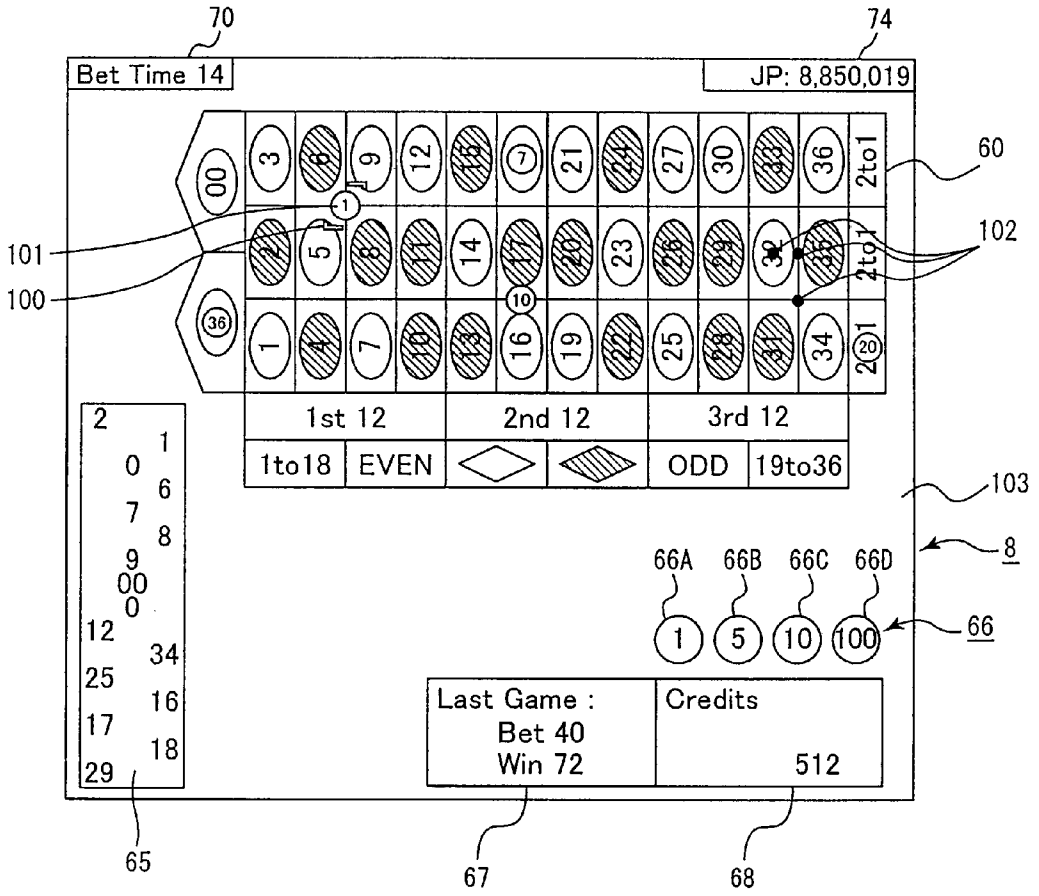

70
74
Bet Time 14
JP: 8,850,019
60
101
100
102
2to1
1st 12
2nd 12
3rd 12
1to18
EVEN
ODD
19to36
103
8
66A
66B
66C
66D
66
Last Game :
Bet 40
Win 72
Credits
512
65
67
68

Fig. 13

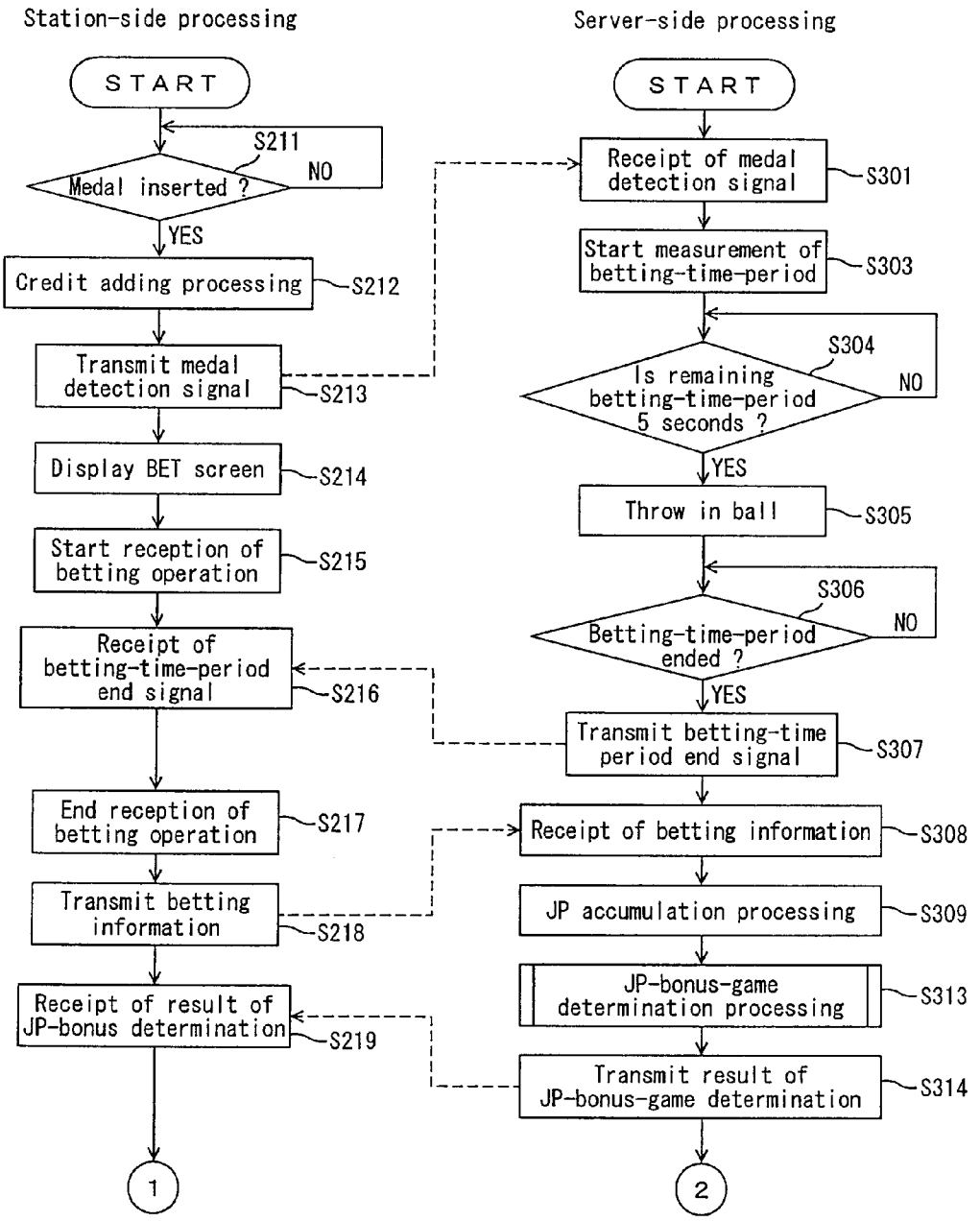
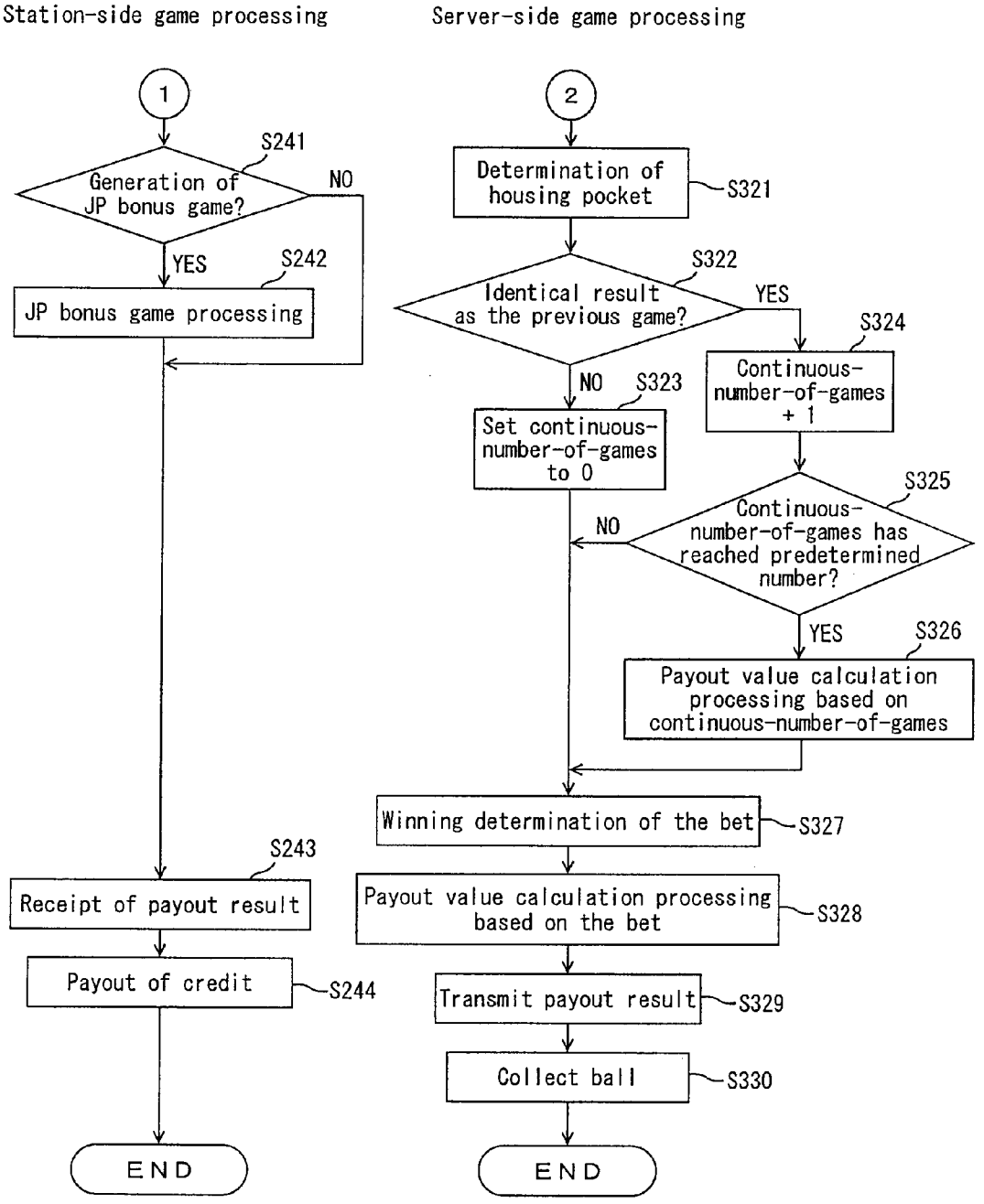

Station-side processing
Server-side processing
START
START
S211
Medal inserted ?
NO
YES
Credit adding processing
S212
Transmit medal detection signal
S213
Display BET screen
S214
Start reception of betting operation
S215
Receipt of betting-time-period end signal
S216
End reception of betting operation
S217
Transmit betting information
S218
Receipt of result of JP-bonus determination
S219
1
Receipt of medal detection signal
S301
Start measurement of betting-time-period
S303
S304
Is remaining betting-time-period 5 seconds ?
NO
YES
Throw in ball
S305
S306
Betting-time-period ended ?
NO
YES
Transmit betting-time period end signal
S307
Receipt of betting information
S308
JP accumulation processing
S309
JP-bonus-game determination processing
S313
Transmit result of JP-bonus-game determination
S314
2

Fig. 14


Station-side game processing
Server-side game processing
1
S241
Generation of JP bonus game?
NO
YES
S242
JP bonus game processing
S243
Receipt of payout result
Payout of credit
S244
END
2
Determination of housing pocket
S321
S322
Identical result as the previous game?
YES
S324
Continuous-number-of-games + 1
NO
S323
Set continuous-number-of-games to 0
S325
Continuous-number-of-games has reached predetermined number?
NO
YES
S326
Payout value calculation processing based on continuous-number-of-games
Winning determination of the bet
S327
Payout value calculation processing based on the bet
S328
Transmit payout result
S329
Collect ball
S330
END

GAMING APPARATUS AND CONTROL METHOD THEREOF

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims benefit of priority based on Japanese Patent Application No. 2006-284210 filed on Oct. 18, 2006. The contents of this application are incorporated herein by reference in their entirety.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to a gaming apparatus such as a roulette gaming machine and a bingo gaming machine, and a control method thereof.

[0004] 2. Discussion of the Background

[0005] Conventionally, in some of the gaming apparatuses, by using a roulette having pockets to which identification numbers (such as "00", "0", and "1" to "36") are assigned, a prize is offered when a ball released on the roulette enters a pocket expected by a player.

[0006] Among such gaming apparatuses, there exists a gaming apparatus in which a plurality of roulettes are provided, and a player bets on display results of the plurality of roulettes (for example, see U.S. Pat. No. 6,921,072).

[0007] In addition, among such gaming apparatuses, there exists a gaming apparatus in which, a progressive jackpot is offered when a single player wins number bets for at least three times continuously (for example, see U.S. Pat. No. 5,743,798).

[0008] The contents of U.S. Pat. No. 6,921,072 and U.S. Pat. No. 5,743,798 are incorporated herein by reference in their entirety.

[0009] An object of the present invention is to provide a gaming apparatus and a control method thereof capable of offering entertainment not found in the aforementioned conventional arts.

SUMMARY OF THE INVENTION

[0010] In order to achieve the above-described object, the present invention provides a gaming apparatus having the following structure (1).

[0011] (1) A gaming apparatus comprising: a roulette; a result determination device for determining a result of a game with the roulette; an expected-number-of-games input device that allows an input of an expected number of games of the identical result determined continuously by the result determination device; a counting device for counting a continuous number of games of the identical result determined continuously by the result determination device; and a first prize-offering device for offering a prize, when the continuous number of games counted by the counting device is identical to the expected number of games inputted through the expected-number-of-games input device.

[0012] According to the invention of the structure (1), in a game with a roulette, when the number of games that have resulted in an identical result continuously [e.g. the number of games in which a ball has entered into an identical number pocket, the number of games in which the ball has entered into a number pocket of an identical color (such as red or black), or the number of games in which the ball has entered into a number pocket according to an identical line on a betting board] is identical to the expected number of games inputted through the expected-number-of-games input device, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing such an easily understandable and new game in which a player expects not the number, color, or line, but the number of games of the continuous identical results, it is possible to execute the game excellent in entertainment.

[0013] Further, the present invention provides a gaming apparatus having the following structure (2).

[0014] (2) A gaming apparatus comprising: a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned; a pocket specifying device for specifying one number pocket out of the plurality of number pockets; a winning-number determination device for determining an identification number assigned to the number pocket that the pocket specifying device has specified, as a winning number; an expected-number-of-games input device that allows an input of an expected number of games of the identical identification number determined continuously as the winning number by the winning-number determination device; a counting device for counting a continuous number of games of the identical identification number determined continuously as the winning number by the winning-number determination device; and a first prize-offering device for offering a prize, when the continuous number of games counted by the counting device is identical to the expected number of games inputted through the expected-number-of-games input device.

[0015] According to the invention of the structure (2), when the continuous number of games of the identical identification number determined continuously as the winning number is identical to the expected number of games inputted through the expected-number-of-games input device, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing an easily understandable and new game in which a player expects not the identification number but the continuous number of games of the identical identification number, it is possible to execute the game excellent in entertainment not found in the conventional art.

[0016] Further, the present invention provides a gaming apparatus having the following structure (3).

[0017] (3) A gaming apparatus comprising: a roulette; a result determination device for determining a result of a game with the roulette; a counting device for counting a continuous number of games of the identical result determined continuously by the result determination device; and a second prize-offering device for offering a prize, when the continuous number of games counted by the counting device has reached a predetermined number of games.

[0018] According to the invention of the structure (3), when the identical results are determined continuously for a predetermined number of times in the games with the

roulette, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing an easily understandable and new game of not expecting the identification number but offering a prize when the identical results are obtained continuously for a predetermined number of times, it is possible to play a game excellent in entertainment not found in the conventional art.

[0019] Further, the present invention provides a gaming apparatus having the following structure (4).

[0020] (4) A gaming apparatus comprising: a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned; a pocket specifying device for specifying one number pocket out of the plurality of number pockets; a winning-number determination device for determining an identification number assigned to the number pocket that the pocket specifying device has specified, as a winning number; a counting device for counting a continuous number of games of the identical identification number determined continuously as the winning number by the winning-number determination device; and a second prize-offering device for offering a prize, when the continuous number of games counted by the counting device has reached a predetermined number of games.

[0021] According to the invention of the structure (4), when the identical identification number is determined continuously as the winning number for a predetermined number of times in the game with the roulette, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing an easily understandable and new game of not expecting the identification number but offering a prize when the identical identification number is obtained continuously for a predetermined number of times, it is possible to play a game excellent in entertainment not found in the conventional art.

[0022] Further, the present invention provides a control method of a gaming apparatus having the following structure (5).

[0023] (5) A control method of a gaming apparatus which comprises a roulette and an expected-number-of-games input device that allows an input of an expected number of games of an identical result determined continuously with the roulette, comprising the steps of: determining a result of a game with the roulette; counting a continuous number of games of the identical result determined continuously; and offering a prize, when the counted continuous number of games is identical to an expected number of games inputted through the expected-number-of-games input device.

[0024] According to the invention of the structure (5), in a game with a roulette, when the number of games that have resulted in an identical result continuously [e.g. the number of games in which a ball has entered into an identical number pocket, the number of games in which the ball has entered into a number pocket of an identical color (such as red or black), or the number of games in which the ball has entered into a number pocket according to an identical line on a betting board] is identical to the expected number of games inputted through the expected-number-of-games input device, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing such an easily understandable and new game in which a player expects not the number, color, or line, but the continuous number of games of the identical result, it is possible to execute the game excellent in entertainment.

[0025] Further, the present invention provides a control method of a gaming apparatus, having the following structure (6).

[0026] (6) A control method of a gaming apparatus which comprises a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned, and an expected-number-of-games input device that allows an input of an expected number of games of an identical identification number determined continuously as the winning number with the roulette, comprising the steps of: specifying one number pocket out of the plurality of number pockets; determining an identification number assigned to the specified number pocket, as the winning number; counting a continuous number of games of the identical identification number determined continuously as the winning number; and offering a prize, when the counted continuous number of games is identical to the expected number of games inputted through the expected-number-of-games input device.

[0027] According to the invention of the structure (6), when the continuous number of games of the identical identification number determined continuously as the winning number is identical to the expected number of games inputted through the expected number of games input device, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing an easily understandable and new game in which a player expects not the identification number but the continuous number of games of the identical identification number, it is possible to execute the game excellent in entertainment not found in the conventional art.

[0028] Further, the present invention provides a control method of a gaming apparatus, having the following structure (7).

[0029] (7) A control method of a gaming apparatus which comprises a roulette, comprising the steps of: determining a result of a game with the roulette; counting a continuous number of games of the identical result determined continuously; and offering a prize, when the counted continuous number of games has reached a predetermined number of games.

[0030] According to the invention of the structure (7), when the identical results are determined continuously for a predetermined number of times in the game with the roulette, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing an easily understandable and new game of not expecting the identification number but offering a prize when the identical results are obtained continuously for a predetermined number of times, it is possible to play a game excellent in entertainment not found in the conventional art.

[0031] Further, the present invention provides a control method of a gaming apparatus having the following structure (8).

[0032] (8) A control method of a gaming apparatus which comprises a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned, comprising the steps of: specifying one number pocket out of the plurality of number pockets; determining an identification number assigned to the specified number pocket, as a winning number; counting a continuous number of games of the identical identification number determined continuously as the winning number; and offering a prize, when the counted continuous number of games has reached a predetermined number of games.

[0033] According to the invention of the structure (8), when the identical identification number is determined continuously as the winning number for a predetermined number of times in the games with the roulette, a prize (e.g. a payout of a certain amount of coins or a bonus game in which a player can acquire a large amount of coins) is offered. Thus, by providing an easily understandable and new game of not expecting the identification number but offering a prize when the identical identification number is obtained continuously for a predetermined number of times, it is possible to play a game excellent in entertainment not found in the conventional art.

[0034] According to the present invention, it is possible to provide a gaming apparatus and a control method thereof with entertainment not found in the conventional art.

BRIEF DESCRIPTIONS OF THE DRAWINGS

[0035] FIG. **1** is an external perspective view showing the general structure of a roulette gaming machine according to a first embodiment.

[0036] FIG. **2** is a plan view of a roulette device according to the first embodiment.

[0037] FIG. **3** is a perspective view of a server according to the first embodiment.

[0038] FIG. **4** is a view showing an image displayed to an image display device included in a station of a roulette gaming machine according to the first embodiment.

[0039] FIG. **5** is a block diagram showing an internal structure of a roulette gaming machine according to the first embodiment.

[0040] FIG. **6** is a block diagram showing an internal structure of a station according to the first embodiment.

[0041] FIG. **7** is a schematic view showing a storage area of a ROM in a roulette gaming machine according to the first embodiment.

[0042] FIG. **8** is a schematic view showing a storage area of a RAM in the roulette gaming machine according to the first embodiment.

[0043] FIG. **9** is a flowchart showing a game processing in a roulette gaming machine according to the first embodiment.

[0044] FIG. **10** is another flowchart showing a game processing in the roulette gaming machine according to the first embodiment.

[0045] FIG. **11** is a flowchart showing a subroutine of JP bonus game determination processing executed by a server-controlling CPU in a roulette gaming machine according to the first embodiment.

[0046] FIG. **12** is a view showing an image displayed to an image display device included in a station of a roulette gaming machine according to a second embodiment.

[0047] FIG. **13** is a flowchart showing game processing in a roulette gaming machine according to the second embodiment.

[0048] FIG. **14** is another flowchart showing game processing in a roulette gaming machine according to the second embodiment.

DESCRIPTION OF THE EMBODIMENTS

[0049] Detailed description will be given to the first embodiment and the second embodiment to which a gaming apparatus according to the present invention is applied as a roulette gaming machine, with reference to the drawings.

First Embodiment

[0050] First, a general structure of the roulette gaming machine **1** according to the first embodiment will be described based on FIG. **1**. FIG. **1** is an external perspective view showing the general structure of a roulette gaming machine according to the first embodiment.

[0051] In the roulette gaming machine **1**, a player expects the number of games of the identical results continuously displayed on the roulette device **3**, and bets game media such as a medal on the expected-number-of-games. Then, when the identical result is continuously displayed in expected number of games, a predetermined number of medals are paid out. Display of the identical result in the present invention means, for example, the display of the contents of the identical results under fixed rules, as seen in such cases that a ball enters the identical number pocket, the ball enters the number pocket of the identical color (such as red or black), or the ball enters the number pocket according to the identical line on a betting board.

[0052] As shown in FIG. **1**, the roulette gaming machine **1** is basically comprised of a cabinet **2** forming a main body, a roulette device **3** provided at a substantially center portion of the upper surface of the cabinet **2**, a plurality of (12 stations in the first embodiment) stations **4** installed around the roulette device **3** to surround the roulette device **3**, and an electric lighting display portion **5** provided above the cabinet **2**. The roulette gaming machine **1** corresponds to the gaming apparatus of the present invention. Also, the roulette device **3** corresponds to the roulette of the present invention. In the first embodiment, a case is described where a plurality of stations **4** are provided in the roulette gaming machine **1**. However, the gaming apparatus according to the present invention may be a stand-alone type.

[0053] Here, each station **4** has at least a medal insertion slot **6** for inserting currency value of coins or game media such as chips and medals used for a game, a control portion **7** consisting of a plurality of control buttons and the like which enable a player to input predetermined commands, and an image display device **8** which displays images relating to the games. Thus, the stations **4** receive a betting operation by the player. The player can proceed with games being deployed by operating a touch panel provided at the front face of the image display device **8**, the control portion **7** and the like, while looking at the images displayed to the image display device **8**.

[0054] In addition, a medal payout exit **9** is provided for each station **4** at the side faces of the cabinet **2** in which stations **4** are installed. Further, on the upper right side with respect to the image display device **8** of each station **4**, there is provided a speaker **10** for generating music, effect sounds and the like.

[0055] Further, at the upper portion of the image display device **8** of each of the stations **4**, a WIN lamp **11** is respectively provided. The WIN lamp **11** is lighted when the expected-number-of-games inputted by the player is identical to the number of games of the identical results displayed continuously in the roulette device **3**. Also, the WIN lamp **11** is lighted when the player at the station **4** acquires a jackpot (hereinafter, also referred to as "JP") during a JP bonus game for acquiring the JP.

[0056] It should be noted that these WIN lamps **11** are provided at the positions viewable from all the installed stations **4** (12 stations in the first embodiment), thus making it possible for other players playing with the same roulette gaming machine **1** to recognize the WIN lamps **11** being lighted anytime.

[0057] In addition, a medal sensor (not shown) is provided inside the medal insertion slot **6**, to distinguish the game media such as a medal inserted from the medal insertion slot **6**, and to count inserted medals. Further, a hopper (not shown) is provided inside the medal payout exit **9**, to payout a predetermined number of medals from the medal payout exit **9**.

[0058] Further, a server **13** is disposed inside of a corner portion **12** located at the corner of the cabinet **2**. The server **13** is usually housed within the corner portion **12** to prevent it from being operated by a player. However, a corner door **14** provided at the corner portion **12** can be opened using a key switch in order to enable operations of the server **13**. By operating the server **13**, a maintenance person can configure each setting of the roulette gaming machine **1**.

[0059] In the electric lighting display portion **5**, there is provided a JP-value display portion **15** for displaying a value of the JP. In the roulette gaming machine **1** according to the first embodiment, 0.5% of the credits is cumulatively stored out of the credits betted at all the 12 stations **4**. The accumulated credits of JP are paid out to the station **4** at which the player is determined to have won in a later-described JP bonus game. It should be noted that the JP-value display portion **15** is provided at a top portion of the electric lighting display portion **5**, so that a display content thereof can be recognized by all the players playing games at the stations **4**.

[0060] Next, a structure of the roulette device **3** according to the first embodiment is described by using FIG. **2**. FIG. **2** is a plan view of the roulette device according to the first embodiment.

[0061] As shown in FIG. **2**, the roulette device **3** is basically comprised of a frame member **21** secured to the cabinet **2**, and a wheel **22** which is rotatably housed and supported inside of the frame member **21**. Further, on an upper surface of the wheel **22**, there are formed a large number of concave-shaped number pockets **23** (a total of 38 number pockets according to the first embodiment). Further, on the upper surface of the wheel **22** in the outer direction of each of the number pockets **23**, there are formed number display plates **25** displaying each number of "0", "00", and "1" to "36" as a graphic character, in association with each number pocket **23**.

[0062] In addition, a ball throwing slot **36** is formed inside of the frame member **21**. A ball throwing device not shown is connected to the ball throwing slot **36**, so that a ball **27** can be thrown onto the wheel **22** from the ball throwing slot **36** in association with a drive of the ball throwing device. Further, the upper part of a roulette wheel is entirely covered with a hemispheric transparent acrylic cover member **28**. The ball **27** corresponds to the pocket specifying device for specifying one number pocket out of a plurality of number pockets.

[0063] Moreover, a winning determination device (not shown) is disposed below the wheel **22**. The winning determination device is a device for determining which number pocket **23** the ball **27** is housed in. Further, a ball collecting device not shown is disposed below the wheel **22**. This ball collecting device is a device for collecting the ball **27** on the wheel **22** after the game is ended. It should be noted that the aforementioned ball throwing device, the winning determination device, and the ball collecting device are already publicly-known, and therefore a detailed description thereof is omitted here.

[0064] Here, the frame member **21** is gently inclined to an inward direction, and a guide wall **29** is formed in a middle portion of the frame member **21**. The guide wall **29** is for guiding a thrown ball **27** to roll it against a centrifugal force. As the rotation speed of the ball **27** decreases and the centrifugal force decreases, the ball **27** rolls down the inclined surface of the frame member **21** inwardly, and reaches the rotating wheel **22**. Then, the ball **27** having rolled down to the wheel **22** further passes through the number display plates **25** located outside the rotating wheel **22**, and is housed in any one of the number pockets **23**. The number described on the number display plates **25**, which corresponds to the number pocket **23** having the ball **27** housed therein, is determined to become a winning number by the winning determination device.

[0065] Next, the server **13** provided in the roulette gaming machine **1** according to the first embodiment will be described by using FIG. **3**. FIG. **3** is a perspective view showing a server according to the first embodiment.

[0066] FIG. **3** is a view showing a state in which the corner door **14** of the corner portion **12** is opened, and a state in which the server **13** is disposed in a space **31** formed on the wall surface of the cabinet **2**.

[0067] The server **13** is connected to each station **4**, and initiatively controls each station **4** to proceed with games by transmitting command signals to each station **4**.

[0068] As shown in FIG. **3**, a liquid crystal display **32** and a keyboard **33** are connected to the server **13**, and a menu for configuring each type of settings is displayed to the liquid crystal display **32**. In addition, a plurality of keys are arranged on the keyboard **33**, and each type of settings in the roulette gaming machine **1** can be configured when a maintenance person operates the keys, in a state in which the menu is displayed to the liquid crystal display **32**.

[0069] Next, structures of the control portion **7** and the image display device **8** according to the first embodiment

will be described. As shown in FIG. **1**, the control portion **7** is provided at a side portion of the image display device **8**, and each of the buttons to be operated by the player is arranged therein. Specifically, a BET confirmation button **47**, a CASHOUT button **48**, and a HELP button **49** are arranged from the left side when viewed from a position facing to the station **4**.

[**0070**] The BET confirmation button **47** is a button to be pressed for confirming an input after the later-described expected-number-of-games input and betting operation.

[**0071**] When the input of the expected-number-of-games and the input of the bet are confirmed and the identical result is continuously displayed in the roulette device **3**, the player wins the game. When the player wins the game, the credits corresponding to the number of betted chips are added to the credits possessed by the player at present. It should be noted that the betting operation will be described in detail later.

[**0072**] The CASHOUT button **48** is a button pressed when the game is ended. When the CASHOUT button **48** is pressed, the medals corresponding to the credits possessed by the player at present (usually, one medal for one credit), which are obtained in games and the like, are paid out from the medal payout exit **9**.

[**0073**] The HELP button **49** is a button pressed when an operation method and the like of the game is unclear. Immediately after the HELP button **49** is pressed, a help screen showing each type of operation information is displayed to the image display device **8**.

[**0074**] The image display device **8** is a so-called touch panel type liquid crystal display with a touch panel **50** installed on the front face thereof. By pressing an icon displayed to a liquid crystal screen with a finger or the like, selection of the icon is enabled.

[**0075**] FIG. **4** is a view showing an exemplary image displayed to the image display device during a game.

[**0076**] As shown in FIG. **4**, an expected-number-of-games input screen **61** is displayed to the image display device **8** during a game being played on the roulette gaming machine **1**. By conducting each type of operations on the expected-number-of-games input screen **61**, the player can bet a chip by using the credits in his or her stock.

[**0077**] First, the expected-number-of-games input screen **61** used in a normal game will be described based on FIG. **4**. In the middle of the expected-number-of-games input screen **61**, a Number image **71**, a Line image **72**, and a Red or Black image **73** are displayed for selecting a target to expect the continuous number of games.

[**0078**] When the Number image **71** is selected through the touch panel, the number (identification number) is determined as the target to expect the continuous number of games. In this case, when any one of the numbers assigned to the number pockets is continuously displayed in the later-described expected number of games, a predetermined number of medals is paid out.

[**0079**] When the Line image **72** is selected through the touch panel, a line is determined as the target to expect the continuous number of games. In this case, when any one of the lines of the lines of 1 to 12, the lines of 13 to 24, or the lines of 25 to 36 is continuously displayed in the later-described expected number of games, a predetermined number of medals is paid out.

[**0080**] When the Red or Black image **73** is selected through the touch panel, color (red or black) is determined as the target to expect the continuous number of games. In this case, when either color of black or red is continuously displayed in the later-described expected number of games, a predetermined number of medals is paid out. Colors of the Number image **71**, the Line image **72**, and the Red or Black image **73** are changed when they are selected. Thus, the player can see that any one of the images is selected.

[**0081**] A result history display portion **65** is displayed on the left side of the expected-number-of-games input screen **61**. On a lower side of the expected-number-of-games input screen **61**, an expected-number-of-games display portion **69**, a CASHOUT result display portion **67**, a number-of-credits display portion **68** are displayed in this order starting from the left.

[**0082**] In addition, on the upper side of the expected-number-of-games display portion **69**, the CASHOUT result display portion **67**, and the number-of-credits display portion **68**, unit-expected-number-of-games input buttons **75** (**75**A, **75**B, **75**C) and unit-BET buttons **66** (**66**A, **66**B, **66**C, **66**D) are displayed.

[**0083**] A result of the winning number obtained in the previous games (here, one game refers to a series of operations in which the player places a bet on the game at his or her station **4**, the ball **27** drops into any one of the number pockets **23**, and the credits are paid out based on the winning number) is displayed as a list to the result history display portion **65**. At this time, when one game is ended, a new winning number is added and displayed from the top, thus making it possible to confirm a history of the winning number of 16 games at maximum.

[**0084**] To the expected-number-of-games display portion **69**, the continuous number of games that the player has expected in this game is displayed. FIG. **4** shows that three times is inputted as the expected number of games.

[**0085**] To the CASHOUT result display portion **67**, the number of betted chips placed by the player in the previous game and the number of cashed out credits are displayed. Here, the number obtained by subtracting the number of bets from the number of cashed out credits is the number of credits newly obtained by the player in the previous game.

[**0086**] Further, to the number-of-credits display portion **68**, the number of credits possessed by the player at present is displayed. This number of credits is decreased according to the number of bets when the player bets the chip (one credit per one bet). In addition, when the betted chip is won and the credits are cashed out, the number of credits is increased by the number of cashed out credits. It should be noted that the game is ended when the number of credits possessed by the player becomes 0.

[**0087**] The unit-expected-number-of-games input buttons **75** (**75**A, **75**B, **75**C) are buttons for inputting the expected number of games (Expectation Times in FIG. **4**) of the identical result displayed continuously. When the unit-expected-number-of-games input button **75**A is pressed, the expected number of games is increased by a unit of one time.

When the unit-expected-number-of-games input button **75**B is pressed, the expected number of games is increased by a unit of five times. When the unit expected-number-of-games input button **75**C is pressed, the expected number of games is increased by a unit of ten times.

[**0088**] The unit-BET buttons **66** (**66**A, **66**B, **66**C, **66**D) are for betting the chips on the expected target selected by the player. The unit-BET buttons **66** are comprised of four types of buttons: a 1-BET button **66**A; a 5-BET button **66**B; a 10-BET button **66**C; and a 100-BET button **66**D. When the 1-BET button **66**A is pressed, one chip is bet at a time. When the 5-BET button **66**B is pressed, five chips are bet at a time. Also, when the 10-BET button **66**C is pressed, ten chips are bet at a time. When the 100-BET button **66**D is pressed, 100 chips are bet at a time. Accordingly, even when the player bets many chips, the operation can be simplified.

[**0089**] A BET-time display portion **70** is provided at an upper portion of the expected-number-of-games input screen **61**. The BET-time display portion **70** displays a remaining time during which the player can input the expected number of games and place a bet; "20" is displayed at the start of reception of the betting operation and the number is decreased by one per one second, and the reception of the betting operation is ended when the number becomes "0". In addition, when a remaining input time period of the player at each station **4** has reached five seconds, the ball throwing device is driven to throw in the ball **27** onto the roulette wheel.

[**0090**] On the right side of the BET-time display portion **70**, a JP display portion **74** is provided for displaying the number of credits of JP accumulated thus far. Here, 0.5% of the credits betted at all the 12 stations **4** are cumulatively added to the credits of JP, and common numerical value is displayed to the JP display portions **74** of all the stations **4**. Then, when the player wins in a JP bonus game generated at a predetermined timing, the number of credits of JP is paid out, and the initial numerical value (e.g. 50,000 credits) is displayed to the JP display portion **74**. It should be noted that the number of credits accumulated thus far is also displayed to a JP-value display portion **15** (see FIG. **1**) of the electric lighting display portion **5**, other than the JP display portion **74**.

[**0091**] Next, a structure of a control system of the roulette gaming machine **1** according to the first embodiment will be described based on FIG. **5**. FIG. **5** is a block diagram showing an internal structure of the roulette gaming machine according to the first embodiment.

[**0092**] As shown in FIG. **5**, the roulette gaming machine **1** is comprised of the server **13** and a plurality of (12 stations in the present embodiment) stations **4** connected to the server **13**, and the roulette device **3** and the electric lighting display portion **5** are further connected to the server **13**. It should be noted that the internal structure of the station **4** will be described in detail later.

[**0093**] In addition, the server **13** is basically comprised of: a server-controlling CPU **81**, a ROM **82** and a RAM **83** which are arithmetic devices and control devices for controlling an entire body of the server **13**; a timer **84** connected to the server-controlling CPU **81**; the liquid crystal display **32** connected through a liquid crystal driving circuit **85**; and the keyboard **33** (see FIG. **3**).

[**0094**] The server-controlling CPU **81** initiatively controls each station **4** to proceed with games, by conducting various types of processing based on an input signal and the like supplied from each station **4**, and data and programs stored in the ROM **82** and the RAM **83**, and by transmitting the command signal to the station **4** based on the processing results. Further, the server-controlling CPU **81** conducts throwing in of the ball **27** and rotation of the wheel **22** by driving a driving motor included in the roulette device **3**, and conducts determination of the winning number obtained by the dropped ball, by controlling the winning determination device for specifying a drop position of the ball. Then, when the display result based on the obtained winning number in a plurality of games is identical, the server-controlling CPU **81** conducts winning determination of the betted chip and calculates the number of credits to be paid out at each station **4**.

[**0095**] The ROM **82** is comprised of, for example, a semiconductor memory or the like, and stores a program for realizing basic functions of the roulette gaming machine **1**, a report of a maintenance time and setting of a report condition for reporting, a program for executing a management, a payout value ratio to the roulette game (the number of payouts of credits to winning per one chip), and a program for initiatively controlling each station **4** and the like.

[**0096**] Meanwhile, the RAM **83** temporarily stores the expected number of games or betting information supplied from each station **4**, the winning number of the roulette device **3** determined by a sensor, a value of JP accumulated until the present time, and the data on a processing result executed by the server-controlling CPU **81**, and so forth.

[**0097**] Further, the server-controlling CPU **81** is connected with the timer **84** for conducting time measurement. Time information of the timer **84** is transmitted to the server-controlling CPU **81**, and the server-controlling CPU **81** conducts rotation operation of the wheel **22** and throwing in of the ball **27** as will be described later based on the time information of the timer **84**.

[**0098**] In addition, the electric lighting display portion **5** (see FIG. **1**) is connected to the server-controlling CPU **81**. The server-controlling CPU **81** controls light emission from LEDs and the like for performing illumination effects, and displays a predetermined characters and the like to the electric lighting display portion **5**. Further, the server-controlling CPU **81** especially causes the JP-value display portion **15** of the electric lighting display portion **5** to display the value of JP accumulated until the present time.

[**0099**] FIG. **7** is a schematic view showing a storage area of the ROM in the roulette gaming machine according to the present embodiment.

[**0100**] As shown in FIG. **7**, the ROM **82** is provided with a payout value credit storage area **82**A which stores the payout value ratios. It should be noted that the payout value ratios stored in the payout value credit storage area **82**A are previously stored based on the continuous number of games and a betting method (number, color or line).

[**0101**] Specifically, when the betting method is the number, "(continuous number of games)×38" is set as the payout value ratio. Namely, for example, when the continuous number of games is twice and the betting method is the number, 76 times is set as payout value ratio, and when the

continuous number of games is three times and the betting method is the number, 114 times is set as the payout value ratio.

[0102] In addition, when the betting method is the color, "(continuous number of games)×2" is set as the payout value ratio.

[0103] Further, when the betting method is the line, "(continuous number of games)×3" is set as the payout value ratio.

[0104] FIG. **8** is a schematic view showing the storage area of the RAM in the roulette gaming machine according to the present embodiment.

[0105] As shown in FIG. **8**, the RAM **83** includes: a continuous-number-of-games storage area **83**A which stores the continuous number of games showing the number of times that the identical result has been displayed continuously in the roulette gaming machine **1**; an expected-number-of-games information storage area **83**B which stores the expected number of games inputted by the player; a betting information storage area **83**C which stores the betting information of the player currently playing the game; a winning-number storage area **83**D which stores the winning number of the roulette device **3** determined by the winning determination device; and a JP cumulative storage area **83**E which stores the number of credits to which 0.5% of the betted credits is cumulatively added. It should be noted that the betting information is specifically the information regarding the bet placed by using the station **4**, such as the number of betted chips (the number of bets) and the betting method, or the like.

[0106] Next, the structure of the control system of the station **4** connected to the server **13** according to the first embodiment will be described based on FIG. **6**. FIG. **6** is a block diagram showing the internal structure of the station according to the first embodiment. It should be noted that 12 stations **4** provided in the roulette gaming machine **1** have basically the identical structures. One of the stations **4** will be described hereinafter.

[0107] As shown in FIG. **6**, the station **4** is comprised of a station control portion **90** and several peripheral devices and equipment. The station control portion **90** includes a station-controlling CPU **91**, a ROM **92**, and a RAM **93**. The ROM **92** is comprised of, for example, the semiconductor memory or the like, and stores the programs for realizing basic functions of the station **4**, other programs of various types necessary for controlling the station **4**, a data table and the like. Also, the RAM **93** is a memory temporarily storing various types of data calculated by the station-controlling CPU **91**, the number of credits possessed (accumulated in the station **4**) by the player, and condition of betting of chips by the player, or the like.

[0108] Also, the BET confirmation button **47**, the CASH-OUT button **48**, and the HELP button **49** provided in the control portion **7** (see FIG. **1**) are respectively connected to the station-controlling CPU **91**. The station-controlling CPU **91**, based on operation signals issued by pressing each of the buttons and the like, controls the station **4** so as to execute various types of operations corresponding to the operation signals. Specifically, the station-controlling CPU **91** conducts various types of operations based on the input signals supplied from the control portion **7** on receiving the input of operations by the player, and the data and programs stored in the ROM **92** and the RAM **93**. Then, the station-controlling CPU **91** transmits the results to the aforementioned server-controlling CPU **81**.

[0109] Meanwhile, the station-controlling CPU **91** receives an command signal from the server-controlling CPU **81**, and controls the peripheral equipment constituting the station **4**, to proceed with the roulette game in the station **4**. In addition, depending on the contents of processing, the station-controlling CPU **91** executes various types of processing based on the input signal supplied from the control portion **7** on receiving inputs of operations by the player, and the data and programs stored in the ROM **92** and the RAM **93**. Then, based on the results, the peripheral equipment constituting the station **4** is controlled to proceed with the game in the station **4**.

[0110] In addition, a hopper **94** is connected to the station-controlling CPU **91**. The hopper **94** pays out a predetermined number of medals from the medal payout exit **9** (see FIG. **1**), according to the command signal from the station-controlling CPU **91**.

[0111] Further, the image display device **8** is connected to the station-controlling CPU **91** through the liquid crystal driving circuit **95**. The liquid crystal driving circuit **95** is comprised of a program ROM, an image ROM, an image-controlling CPU, a work RAM, a VDP (Video Display Processor), a video RAM and the like. In the program ROM, an image-controlling program regarding display to the image display device **8** and various types of selection tables are stored. Further, in the image ROM, for example, dot data for forming an image displayed to the image display device **8** is stored. The image-controlling CPU determines, based on a parameter set by the station-controlling CPU **91**, the image displayed to the image display device **8** out of the dot data previously stored in the image ROM, according to the image-controlling program previously stored in the program ROM. The work RAM is formed as a temporal storage means for use in executing the aforementioned image-controlling program with the image-controlling CPU. In addition, the VDP forms the image according to the display content determined by the image-controlling CPU, and outputs it to the image display device **8**. It should be noted that the video RAM is formed as the temporal storage means for forming the image by VDP.

[0112] Moreover, as described above, the touch panel **50** is installed on the front face of the image display device **8**, and the operation information of the touch panel **50** is transmitted to the station-controlling CPU **91**. In the touch panel **50**, the betting operation of the chips by the player is performed in the expected-number-of-games input screen **61**. Specifically, when the operation of the unit-BET buttons **66** are performed by operating the touch panel **50**, the information thereof is transmitted to the station-controlling CPU **91**. The touch panel **50** corresponds to the expected-number-of-games input device according to the present invention. Then, based on the information, the present betting information of the player (the number of bets and the betting method designated in the expected-number-of-games input screen **61**) is stored in the RAM **83** as needed. Further, the betting information is transmitted to the server-controlling CPU **81**, and is stored in the betting information storage area of the RAM **83**.

[0113] Further, a sound output circuit **96** and a speaker **10** are connected to the station-controlling CPU **91**. The speaker **10** generates various types of effect sounds when various types of effects are conducted based on the output signal from the sound output circuit **96**.

[0114] Furthermore, a medal sensor **97** is connected to the station-controlling CPU **91**. The medal sensor **97** detects a medal inserted from the medal insertion slot **6** (FIG. **1**), calculates the number of inserted medals, and transmits its result to the station-controlling CPU **91**. Then, based on a transmitted signal, the station-controlling CPU **91** increases the number of credits possessed by the player, which is stored in the RAM **93**.

[0115] A WIN lamp **11** is connected to the station-controlling CPU **91**. The station-controlling CPU **91** lights the WIN lamp **11** of the station where the player has acquired the JP in the JP bonus game.

[0116] Subsequently, description is given to a server-side game processing program executed by the sever-controlling CPU **81** in the roulette gaming machine **1** according to the first embodiment, and a station-side game processing program executed by the station-controlling CPU **91** on the station **4** side, based on FIG. **9** and FIG. **10**. FIG. **9** and FIG. **10** are flowcharts showing the game processing of the roulette gaming machine according to the present embodiment. It should be noted that each program shown in the flowcharts in FIG. **9** and FIG. **10** is stored in the ROM **82** and the RAM **83** included in the server **13** or in the ROM **92** and the RAM **93** included in the station **4**, and is executed by the server-controlling CPU **81** or the station-controlling CPU **91**.

[0117] First, description is given to the station-side game processing based on FIG. **9** and FIG. **10**. First, in step S**11**, the station-controlling CPU **91** determines whether or not a medal or a coin has been inserted by the player, based on a detection signal of the medal sensor **97**. When the medal or coin has not been inserted (step S**11**: NO), the station-controlling CPU **91** waits until the medal or coin is inserted. Meanwhile, when the medal or coin has been inserted (step S**11**: YES), the processing shifts to step S**12**.

[0118] In step S**12**, the station-controlling CPU **91** records credit data of a value corresponding to the number of medals inserted. Subsequently, in step S**13**, the station-controlling CPU **91** transmits, to the server **13**, a medal detection signal showing that the medal or coin is inserted.

[0119] Next, in step S**14**, the station-controlling CPU **91** displays the expected-number-of-games input screen **61** shown in FIG. **4** to the image display device **8** in the station **4**. In step S**15**, the station-controlling CPU **91** starts measuring an input time period in which the expected number of games and the bet can be inputted. Then, during the input time period in which the bet can be received, the player participating in the game inputs the expected number of games he or she expects, by operating the touch panel **50**, and further, the player can bet chips on the expected number of games (see FIG. **4**). It should be noted that a specific input method using the expected-number-of-games input screen **61** has already been described, and therefore the description thereof is omitted here.

[0120] Moreover, the player can participate in the game, in which the input time period has been already started, in the middle of the game, and up to 12 persons can play with the roulette gaming machine **1** according to the first embodiment. Further, when the game is played in succession to the previous game, the reception of the betting operation is started immediately after the previous game is ended.

[0121] Next, in step S**16**, when receiving an input-time-period end signal showing the end of the input time period from the server-controlling CPU **81**, the station-controlling CPU **91** displays the image showing the end of the input time period to the image display device **8** of the station **4**, and ends the reception of the input operation through the touch panel **50** (step S**17**). Thereafter, the expected-number-of-games information showing the expected number of games and the betting information, which have been inputted at the station **4**, are transmitted to the server **13** (step S**18**).

[0122] Next, in step S**19**, the station-controlling CPU **91** receives from the server **13** the result of later-described JP bonus game determination processing (step S**113**) executed by the server-controlling CPU **81**. Here, the result of the JP bonus game includes the result of determination whether or not to generate a predetermined JP bonus game in each station **4**, and further the result of determination which station **4** out of the 12 stations **4** should win a JP (or whether all the stations should not win a JP).

[0123] Next, in step S**41**, based on the result of JP bonus game determination processing received in step S**19**, the station-controlling CPU **91** determines whether or not to generate the JP bonus game. When determining not to generate the bonus game in this station **4** (step S**41**: NO), the station-controlling CPU **91** shifts the processing to step S**43**.

[0124] Meanwhile, when determining to generate the JP bonus game in the station **4** (step S**41**: YES), the station-controlling CPU **91** executes a predetermined selective type bonus game for obtaining the JP, and displays the game result (whether or not the player has won the JP) to the image display device **8**, based on the result received in step S**19** (step S**42**). Thereafter, the processing shifts to step S**43**.

[0125] In step S**43**, the station-controlling CPU **91** receives a payout result of the credits transmitted from the server-controlling CPU **81**. It should be noted that the payout result of the credits includes the payout result of a normal roulette game played by using the expected-number-of-games input screen **61** and the payout result of the JP in the JP bonus game.

[0126] Thereafter, in step S**44**, based on the payout result received in step S**43**, the station-controlling CPU **91** conducts a payout of credits. Specifically, the credits corresponding to the payout value of the roulette game, which is a normal game, and the credits corresponding to the value of JP when the player wins the JP, are recorded in the RAM **93**. Then, when the CASHOUT button **48** is pressed, the medals corresponding to the credits stored in the RAM **93** at present (usually, one medal per one credit) is paid out from the medal payout exit **9**.

[0127] Thereafter, when the game is continuously played in any one of the stations **4**, the processing is returned to step S**14**, and by starting the input time period again, the next game is started. Meanwhile, when the game is ended in all the stations **4**, the roulette game processing is ended.

[0128] Next, a game processing program on the server side will be described based on FIG. **9** and FIG. **10**.

[0129] First, in step S**101**, the server-controlling CPU **81** receives a medal detection signal transmitted from the station-controlling CPU **91** in step S**13**, and determines whether or not the player has inserted a medal or a coin. In the roulette gaming machine **1** according to the first embodiment, when the medal or coin is inserted in any one of the stations **4**, a medal detection signal is sent to the server-controlling CPU **81** from the station-controlling CPU **91** of the station **4** into which the medal or coin is inserted.

[0130] When the medal detection signal is received, in step S**103**, the server-controlling CPU **81** starts measurement of the input time period during which the player can input the expected number of games. It should be noted that, when this game is played in succession to the previous game, the measurement of the input time period is started immediately after the previous game is ended. During this input time period, the player participating in the game inputs the expected number of games he or she expects by operating the touch panel **50**, and the player can bet chips on the expected number of games.

[0131] Next, in step S**104**, the server-controlling CPU **81** determines whether or not the remaining input time period has reached five seconds. The remaining input time period is also displayed to the image display device **8** by the BET-time display portion **70** (see FIG. **4**). Then, when it is determined that the remaining input time period has not reached five seconds (step S**104**: NO), the server-controlling CPU **81** continuously waits until the remaining input time period reaches five seconds. Meanwhile, when it is determined that the remaining input time period is five seconds (step S**104**: YES), the server-controlling CPU **81** executes the processing using the roulette device **3**, in accordance with a game execution program as follows.

[0132] First, the server-controlling CPU **81** throws in the ball **27** onto the roulette board by driving a ball throwing device (step S**105**), and drives the driving motor to rotate the wheel **22** at a predetermined rotation speed in an opposite direction to a ball throwing direction. The thrown ball **27** rolls on the roulette board along the guide wall **29**, and thereafter, when the rotation speed decreases and the centrifugal force decreases, the ball rolls down on the inclined surface of the frame member **21** toward the inside, and reaches the rotating wheel **22** (see FIG. **2**). Then, the ball **27** having rolled down to the wheel **22** passes over the number display plates **25** located outside the rotating wheel **22**, and is housed in any one of the number pockets **23**, and the number (in FIG. **2**, any one of "0", "00", and "1" to "36") described on the number display plates **25**, which corresponds to the number pocket **23** having the ball **27** housed therein, is the winning number.

[0133] Next, in step S**106**, the server-controlling CPU **81** determines whether or not the input time period is ended. When determining that the input time period is not ended (step S**106**: NO), the server-controlling CPU **81** waits until the input time period is ended. Meanwhile, when determining that the input time period is ended (step S**106**: YES), the server-controlling CPU **81** transmits the input-time-period end signal indicating the end of the input-time-period to the station-controlling CPU **91** (step S**107**).

[0134] Next, in step S**108**, the server-controlling CPU **81** receives the expected-number-of-games information corresponding to the input of the expected number of games by the player at each station **4**, and stores the expected number of games in the expected-number-of-games information storage area **83**B in the RAM **83**. In addition, in step S**108**, the server-controlling CPU **81** receives the betting information corresponding to the betting operation conducted by the player at each station **4**, and stores the betting information in the betting information storage are **83**C in the RAM **83**.

[0135] Next, in step S**109**, the server-controlling CPU **81** cumulatively adds the credits corresponding to 0.5% of the total credits received from each station **4** in step S**108**, to the value of JP recorded in the JP cumulative storage area **83**E of the RAM **83**. In addition, based on the JP value, the displays of the JP-value display portion **15** and the JP display portion **74** are updated.

[0136] Next, in step S**113**, the server-controlling CPU **81** obtains a random number from a random number sampling circuit or the like, and determines whether or not the JP bonus game should be generated in each station **4**, and also determines which station **4** should win the JP (or whether all the stations **4** should not win the JP).

[0137] Next, in step S**114**, the server-controlling CPU **81** transmits a determination result of the JP bonus game to each station **4**.

[0138] Next, in step S**121**, after the ball **27** is housed in any one of the number pockets **23**, the server-controlling CPU **81** drives the winning determination device and determines which number is associated with the number pocket **23** having the ball **27** housed therein. When executing the processing, the server-controlling CPU **81** functions as a result determination device for determining the result of the game.

[0139] Also, when executing the processing, the server-controlling CPU **81** functions as a winning number determination device for determining the identification number, which is assigned to the number pocket, as the winning number.

[0140] Next, in step S**122**, the server-controlling CPU **81** determines whether or not this game is the game at the time of inputting the expected number of games. When determining that this game is the game at the time of inputting the expected number of games, the server-controlling CPU **81** sets the continuous number of games to 1, and stores it in the continuous-number-of-games storage area **83**A of the RAM **83**. Thereafter, the processing shifts to step S**130**.

[0141] In step S**122**, when determining that this game is not the game at the time of inputting the expected number of games, the server-controlling CPU **81** determines whether or not the result of the game is identical to the result of the previous game (step S**124**). When determining that the result of the game is identical to the result of the previous game, the server-controlling CPU **81** adds 1 to the continuous number of games stored in the continuous-number-of-games storage area **83**A of the RAM **83** and stores the resultant value therein (step S**125**), and shifts the processing to step S**130**. When executing the processing of step S**125**, the server-controlling CPU **81** functions as a counting device for counting the continuous number of games of the identical results determined continuously.

[0142] When determining in step S**124** that the result of the game is not identical to the result of the previous game,

the server-controlling CPU **81** determines whether or not the expected number of games, which has been inputted by the player and stored in the expected-number-of-games information storage area **83**B of the RAM **83**, is identical to the continuous number of games stored in the continuous-number-of-games storage area **83**A of the RAM **83** (step S**126**).

[**0143**] When determining that the expected number of games and the continuous number of games are identical to each other, the server-controlling CPU **81** conducts payout value calculation processing (step S**127**). In the processing, the server-controlling CPU **81** calculates a sum of the payout values of the credits to be paid out to each station **4**, based on the payout value ratios stored in the payout value credit storage area **82**A of the ROM **82**. When executing the processing of step S**127**, the server-controlling CPU **81** functions as a first prize-offering device for offering the prize when the continuous number of games is identical to the expected number of games inputted through the touch panel **50**.

[**0144**] Next, in step S**128**, the server-controlling CPU **81** executes transmission processing of the payout result based on the payout value calculation processing of step S**127**. Specifically, the server-controlling CPU **81** issues to the station-controlling CPU **91** the credit data corresponding to the payout value, and further issues the credit data corresponding to the JP-value accumulated at present when the player has won the JP.

[**0145**] Next, in step S**129**, the server-controlling CPU **81** clears the continuous number of games stored in the continuous-number-of-games storage area **83**A of the RAM **83**, and shifts the processing to step S**130**.

[**0146**] In step S**130**, the server-controlling CPU **81** drives a ball collecting device provided below the wheel **22**, to collect the ball **27** on the wheel **22**. The collected ball **27** is thrown onto the wheel **22** of the roulette device **3** again in the next game thereafter. After this processing, the present subroutine is ended.

[**0147**] Next, sub-processing of the JP bonus game determination processing of step S**113** will be described.

[**0148**] FIG. **11** is a flowchart showing the sub-processing of the JP bonus game determination processing executed by the server-controlling CPU **81** of the roulette gaming machine **1** according to the present embodiment.

[**0149**] First, in step S**141**, the server-controlling CPU **81** reads the betting information received in step S**108** again.

[**0150**] Next, in step S**142**, the server-controlling CPU **81** determines whether or not chips of 10 credits or more are betted at each station **4**, based on the read betting information, and specifies the station **4** at which the chips of 10 credits or more are betted, out of all the 12 stations **4**.

[**0151**] Next, in step S**143**, the server-controlling CPU **81** executes the JP-bonus-game detail determination processing. In the processing, the server-controlling CPU **81** determines whether or not the JP bonus game should be generated in each station **4** by using the random number sampled in the sampling circuit or the like, and determines which station **4** should win the JP out of the 12 stations **4** (or whether all the stations **4** should not win the JP) when it is determined that the JP bonus game should be generated. After the processing of step S**143**, the present subroutine is ended.

[**0152**] As described above, in the roulette gaming machine **1** and the control method of the roulette gaming machine **1** according to the first embodiment, a certain number of medals is paid out when the number of times of the identical result determined continuously is identical to the expected number of games inputted through the touch panels **50** (expected-number-of-games input device) in the game with the roulette device **3**. Thus, by providing the easily understandable and new game in which the number, color or line is not expected but the number of times of the continuous identical result is expected, the game excellent in entertainment not found in the conventional art can be played.

[**0153**] In the roulette gaming machine **1** according to the first embodiment, the player expects the number of times of the identical result displayed continuously in the roulette device **3**, and bets game media such as a medal on the expected number of games. Then, description has been given to a case where a predetermined number of medals is paid out when the identical result is displayed continuously in the expected number of games. However, the present invention is not limited to this case, and the expected number of games may not be inputted and a prize may be offered when the identical result is displayed continuously for a predetermined number of times. Therefore, description will be given hereinafter to the roulette gaming machine in which the prize is offered when the identical result is displayed continuously for a predetermined number of times.

Second Embodiment

[**0154**] Description will be given to the roulette gaming machine according to a second embodiment, based on FIG. **12** to FIG. **14**.

[**0155**] In the roulette gaming machine according to the second embodiment, the expected number of games is not inputted, and the roulette gaming machine of the second embodiment has approximately the identical external appearance and circuit structure as those of the roulette gaming machine **1**, except that medals are offered when the identical result is displayed continuously for a predetermined number of times in the roulette device. Therefore, the description is not given for the point except for the invention of the image displayed to the image display device of the station and the flowchart. Also, the description is given with the identical signs and numerals assigned to the constituent elements corresponding to those of the roulette gaming machine **1**.

[**0156**] In the roulette gaming machine according to the second embodiment, the player expects the number or the like to be determined in the roulette device, and bets the game media such as a medal on the expected number or the like. Then, when the betted number or the like is won, a predetermined number of medals can be paid out to the player. Further, when the identical result is displayed continuously for a predetermined number of times in the roulette device, a predetermined number of medals are paid out.

[**0157**] FIG. **12** is another view showing an exemplary image display screen displayed to the image display device

8. As shown in FIG. 12, a BET screen 103 having a table type betting board 60 is displayed to the image display device 8 during the game with the roulette gaming machine 1. By performing various types of operations on the BET screen 103, the player can bet chips by using the credits in stock.

[0158] 38 types of numbers of "0", "00", and "1" to "36" are arranged and displayed in a grid shape within the table type betting board 60 displayed to the BET screen 103. In addition, a special BET area for betting the chips by designating "odd number", "even number", "the type of the color on the number display plates (red or black)", or "a predetermined numerical range (such as "1" to "12")" is similarly arranged in a grid shape.

[0159] In addition, to the table type betting board 60, there is displayed a cursor 100 indicating a BET area 102 that the player is selecting at present. Further, there are displayed the number of chips betted until the present time and a chip mark 101 indicating the BET area 102, and the number displayed on the chip mark 101 indicates the number of bets of the chip. For example, as shown in FIG. 12, the chip mark 101 of "7" placed on a grid of "18" indicates that seven chips are betted on the number "18". It should be noted that such a method for betting on only one number is the betting method called a "straight bet".

[0160] In addition, the chip mark 101 of "1" placed at an intersection of the grids of "5", "6", "8", "9" indicates that one chip is betted covering four numbers of "5", "6", "8", "9". It should be noted that such a method covering four numbers for betting on the four numbers is the betting method called a "corner bet".

[0161] Other betting method includes a "split bet" which covers two numbers using the line between two numbers so as to bet on the two numbers; a "street bet" which covers three numbers using an end of lateral single row of numbers (in FIG. 12, a vertical single row) so as to bet on three numbers (such as "13", "14", "15"); a "five bet" which covers five numbers using the line between the numbers of "00" and "3" so as to bet on five numbers "0", "00", "1", "2", and "3"; a "line bet" which covers six numbers using the space between the numbers in two lateral rows of numbers (in FIG. 12, two vertical rows) so as to bet on six numbers (such as "13", "14", "15", "16", "17", and "18"); and a "column bet" which covers 12 numbers using the grid "2 to 1" so as to bet on 12 numbers; and a "dozen bet" which covers 12 numbers using any of the grids "1st-12", "2nd-12" and "3rd-12" so as to bet on 12 numbers, respectively. Further, there is a method which covers 18 numbers so as to bet on 18 numbers, by specifying the 18 numbers from any of the color of the number display plates ("red" or "black"), odd numbers or even numbers, and the numbers equal to or less than 18 or numbers equal to or greater than 18, using six grids provided at a lowermost stage of the table-type betting board 60. Here, in such plurality of betting methods, the payout value of the credits per one chip (payout value ratio) for the winning bet-chip is respectively different.

[0162] When placing a bet using the BET screen 103 having the above-described configuration, the player first designates, on the screen, the BET area 102 (on the grid of the number and the mark or on the line forming the grid) in which the bet is to be placed, by directly pressing the BET area 102 with a finger. As a result, the cursor 100 moves to the designated BET area 102.

[0163] Thereafter, by pressing each unit button (the 1-BET button 66A, the 5-BET button 66B, the 10-BET button 66C, and the 100-BET button 66D) of the unit-BET buttons 66, the chips corresponding to the number of units are betted on the BET area 102. For example, by pressing the 10-BET button 66C four times, the 5-BET button 66B once, and 1-BET button 66A three times, a total of 48 chips can be betted.

[0164] It should be noted that the other configuration of the screen has been already described by using FIG. 4, and therefore the description thereof is omitted here.

[0165] Subsequently, the server-side game processing program executed by the server-controlling CPU 81 in the roulette gaming machine 1 according to the second embodiment, and the station-side game processing program executed by the station-controlling CPU 91 on the station 4 side will be described based on FIG. 13 and FIG. 14. It should be noted that each program shown by the flowchart in FIG. 13 and FIG. 14 is stored in the ROM 82 and the RAM 83 provided in the server 13, or in the ROM 92 and the RAM 93 provided in the station 4, and is executed by the server-controlling CPU 81 or the station-controlling CPU 91.

[0166] First, the station-side game processing program will be described based on FIG. 13 and FIG. 14.

[0167] The processing of steps S211 to S213 is identical to the processing of steps S11 to S13 (see FIG. 9), and therefore the description thereof is omitted here.

[0168] In step S214, the station-controlling CPU 91 displays the BET screen 103 shown in FIG. 12, to the image display device 8 of the station 4.

[0169] Next, in step S215, the station-controlling CPU 91 starts measuring the betting time period during which the input of the bet is possible. Then, during the betting time period in which the reception of the bet is possible, the player participating in the game operates the touch panel 50, and can bet his or her chips on the BET area 102 related to the number he or she expects (see FIG. 12).

[0170] Next, in step S216, when receiving the betting time period end signal showing the end of the betting time period from the server-controlling CPU 81, the station-controlling CPU 91 displays the image showing the end of the betting time period to the image display device 8 of the station 4, and ends the reception of the betting operation through the touch panel 50 (step S217). Thereafter, the station-controlling CPU 91 transmits the betting information inputted at the station 4, to the server 13 (step S218).

[0171] Thereafter, the station-controlling CPU 91 conducts the processing of steps S219 to S244. The processing conducted here is identical to the processing of steps S19 to S44 (see FIG. 9 and FIG. 10), and therefore the description thereof is omitted here.

[0172] Next, the server-side game processing program will be described based on FIG. 13 and FIG. 14.

[0173] The processing of step S301 is identical to the processing of step S101 (see FIG. 9), and therefore the description thereof is omitted here.

[0174] In step S303, the server-controlling CPU 81 starts measuring the betting time period, which is a reception

period that the player can bet, from the time point where the player having participated in the game first has inserted the medal or coin.

[0175] Next, in step S304, the server-controlling CPU 81 determines whether or not the remaining betting time period has reached 5 seconds. When determining that the remaining betting time period has not reached 5 seconds (step S304: NO), the server-controlling CPU 81 waits until the remaining betting time period reaches 5 seconds. When determining that the remaining betting time period has reached 5 seconds (step S304: YES), the server-controlling CPU 81 executes the processing with the roulette device 3, in accordance with a game execution program as follows.

[0176] The processing of step S305 is identical to the processing of step S105 (see FIG. 9), and therefore the description thereof is omitted here.

[0177] Next, in step S306, the server-controlling CPU 81 determines whether or not the betting time period is ended. When determining that the betting time period is not ended (step S306: NO), the server-controlling CPU 81 waits until the betting time period is ended. Meanwhile, when determining that the betting time period is ended (step S306: YES), the server-controlling CPU 81 transmits the betting time period end signal showing the end of the betting time period, to the station-controlling CPU 91 (step S307).

[0178] Next, in step S308, the server-controlling CPU 81 receives the betting information according to the betting operation conducted by the player in each station 4, and stores it in the betting information storage area 83C of the RAM 83.

[0179] The processing of step S309, step S313, step S314 is identical to the processing of step S109, step S113, and step S114 (see FIG. 9), respectively, and therefore the description thereof is omitted here.

[0180] Next, in S321, the server-controlling CPU 81 drives the winning determination device after the ball 27 is housed in any one of the number pockets 23, and determines which number is associated with the number pocket 23 having the ball 27 housed therein.

[0181] Next, in step S322, the server-controlling CPU 81 determines whether or not the result of the game is identical to the result of the previous game. When determining that the result of the game is identical to the result of the previous game, the server-controlling CPU 81 increments the continuous number of games stored in the continuous-number-of-games storage area 83A of the RAM 83 by 1, stores the resultant value therein (step S324), and shifts the processing to step S325.

[0182] In step S325, the server-controlling CPU 81 determines whether or not the continuous number of games has reached a predetermined number of games (ten times in the present embodiment). When determining that the continuous number of games has reached the predetermined number of games, the server-controlling CPU 81 conducts payout value calculation processing based on the continuous number of games (step S326). In this processing, the server-controlling CPU 81 calculates the payout value based on the continuous number of games, according to a calculation formula of "(an average of the number of bets in the past ten games)×10".

[0183] In step S322, when determining that the result of the game is not identical to the result of the previous game, the server-controlling CPU 81 sets the continuous number of games stored in the continuous-number-of-games storage area 83A of the RAM 83 to 0, and stores it therein (step S323).

[0184] After the processing of step S322, when determining that the continuous number of games has not reached the predetermined number of games, or after the processing of step S326, the server-controlling CPU 81 conducts winning determination of the bet (step S327).

[0185] Next, the server-controlling CPU 81 executes the payout value calculation processing based on the bet (step S328). In this processing, the server-controlling CPU 81 recognizes the winning chip betted on the winning number at each of the stations 4, and calculates the sum of the payout value of the credits to be paid out to each of the stations 4, by using the payout value ratios [the number of credits to be paid out per one chip (one bet)] for each BET area 102 stored in the payout value storage area 82A of the ROM 82. When executing the processing of step S328, the server-controlling CPU 81 functions as a second prize-offering device for offering the prize when the continuous number of games has reached a predetermined number of games.

[0186] Next, in step S329, the server-controlling CPU 81 executes transmission processing of the payout result based on the payout value calculation processing of step S326 and step S328. Specifically, the server-controlling CPU 81 issues the credit data corresponding to the payout value to the station-controlling CPU 91, and also issues the credit data corresponding to the JP value accumulated at present when the player has won the JP. Furthermore, when the continuous number of games has become the predetermined number of games, the server-controlling CPU 81 issues the credit data based on the number of bets and the continuous number of games. Thereafter, the processing shifts to step S330.

[0187] In step S330, the server-controlling CPU 81 drives the ball collecting device provided below the wheel 22, to collect the ball 27 on the wheel 22. The collected ball 27 is to be thrown onto the wheel 22 of the roulette device 3 again in the next game thereafter. After this processing, the present subroutine is ended.

[0188] As described above, in the roulette gaming machine 1 and the control method of the roulette gaming machine 1 according to the second embodiment, a certain number of medals is paid out when the identical results have been determined continuously for a predetermined number of games. Thus, by providing the easily understandable and new game in which medals are paid out when a predetermined number of identical results have been determined continuously, the game excellent in entertainment not found in the conventional art can be played.

[0189] Although the present invention has been described with reference to embodiments thereof, these embodiments merely illustrate concrete examples, not restrict the present invention. The concrete structures of respective device and the like can be designed and changed as required. Furthermore, there have been merely described most preferable effects of the present invention, as the effects of the present invention, in the embodiments of the present invention. The effects of the present invention are not limited to those described in the embodiments of the present invention.

[0190] Further, in the aforementioned detailed description, characteristic portions have been mainly described, for ease of understanding the present invention. The present invention is not limited to the embodiments described in the aforementioned detailed description, but can be also applied to other embodiments over a wider range of applications. Further, the terms and phrases used in the present specification have been used for clearly describing the present invention, not for limiting the interpretation of the present invention. Further, those skilled in the art will easily conceive other structures, systems, methods and the like which are included in the concept of the present invention, from the concept of the present invention described in the present specification. Accordingly, the description of the claims is intended to include equivalent structures that fall within the technical scope of the invention. Further, the abstract aims at enabling engineers and the like who belong to the present technical field but are not familiar with the patent office and public institutions, the patent, law terms and technical terms to immediately understand the technical content and the essence of the present application through brief studies. Accordingly, the abstract is not intended to restrict the scope of the invention which should be evaluated from the description of the claims. It is desirable that literatures and the like which have been already disclosed are sufficiently studied and understood, in order to sufficiently understand the objects of the present invention and the specific effects of the present invention.

[0191] In the aforementioned detailed description, there have been described processes to be executed by computers. The aforementioned description and expressions have been described for the sake of enabling those skilled in the art to understand the present invention most effectively. In the present specification, each step for deriving a single result should be understood to be self-consistent processing. Further, each step includes transmission, reception, recording and the like of electric or magnetic signals. Although, in the processing at each step, such signals have been expressed as bits, values, symbols, characters, terms, numerical characters and the like, it should be noticed that they have been merely used for convenience of description. Further, although the processing at each step was described using expressions common to human behaviors in some cases, the processes described in the present specification are to be executed by various types of devices, in principle. Further, other structures required for conducting each step will be apparent from the aforementioned description.

What is claimed as new and desired to be secured by Letters Patent of the United States is:

1. A gaming apparatus comprising:

a roulette;

a result determination device for determining a result of a game with said roulette;

an expected-number-of-games input device that allows an input of an expected number of games of the identical result determined continuously by said result determination device;

a counting device for counting a continuous number of games of the identical result determined continuously by said result determination device; and

a first prize-offering device for offering a prize, when the continuous number of games counted by said counting device is identical to the expected number of games inputted through said expected-number-of-games input device.

2. A gaming apparatus comprising:

a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned;

a pocket specifying device for specifying one number pocket out of said plurality of number pockets;

a winning-number determination device for determining an identification number assigned to the number pocket that said pocket specifying device has specified, as a winning number;

an expected-number-of-games input device that allows an input of an expected number of games of the identical identification number determined continuously as the winning number by said winning-number determination device;

a counting device for counting a continuous number of games of the identical identification number determined continuously as the winning number by said winning-number determination device; and

a first prize-offering device for offering a prize, when the continuous number of games counted by said counting device is identical to the expected number of games inputted through said expected-number-of-games input device.

3. A gaming apparatus comprising:

a roulette;

a result determination device for determining a result of a game with said roulette;

a counting device for counting a continuous number of games of the identical result determined continuously by said result determination device; and

a second prize-offering device for offering a prize, when the continuous number of games counted by said counting device has reached a predetermined number of games.

4. A gaming apparatus comprising:

a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned;

a pocket specifying device for specifying one number pocket out of said plurality of number pockets;

a winning-number determination device for determining an identification number assigned to the number pocket that said pocket specifying device has specified, as a winning number;

a counting device for counting a continuous number of games of the identical identification number determined continuously as the winning number by said winning-number determination device; and

a second prize-offering device for offering a prize, when the continuous number of games counted by said counting device has reached a predetermined number of games.

5. A control method of a gaming apparatus which comprises a roulette and an expected-number-of-games input device that allows an input of an expected number of games of an identical result determined continuously with said roulette, comprising the steps of:

determining a result of a game with the roulette;

counting a continuous number of games of the identical result determined continuously; and

offering a prize, when the counted continuous number of games is identical to an expected number of games inputted through said expected-number-of-games input device.

6. A control method of a gaming apparatus which comprises a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned, and an expected-number-of-games input device that allows an input of an expected number of games of an identical identification number determined continuously as the winning number with said roulette, comprising the steps of:

specifying one number pocket out of said plurality of number pockets;

determining an identification number assigned to the specified number pocket, as the winning number;

counting a continuous number of games of the identical identification number determined continuously as the winning number; and

offering a prize, when the counted continuous number of games is identical to the expected number of games inputted through said expected-number-of-games input device.

7. A control method of a gaming apparatus which comprises a roulette, comprising the steps of:

determining a result of a game with the roulette;

counting a continuous number of games of the identical result determined continuously; and

offering a prize, when the counted continuous number of games has reached a predetermined number of games.

8. A control method of a gaming apparatus which comprises a roulette having a wheel arranged with a plurality of number pockets to which identification numbers are assigned, comprising the steps of:

specifying one number pocket out of said plurality of number pockets;

determining an identification number assigned to the specified number pocket, as a winning number;

counting a continuous number of games of the identical identification number determined continuously as the winning number; and

offering a prize, when the counted continuous number of games has reached a predetermined number of games.

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