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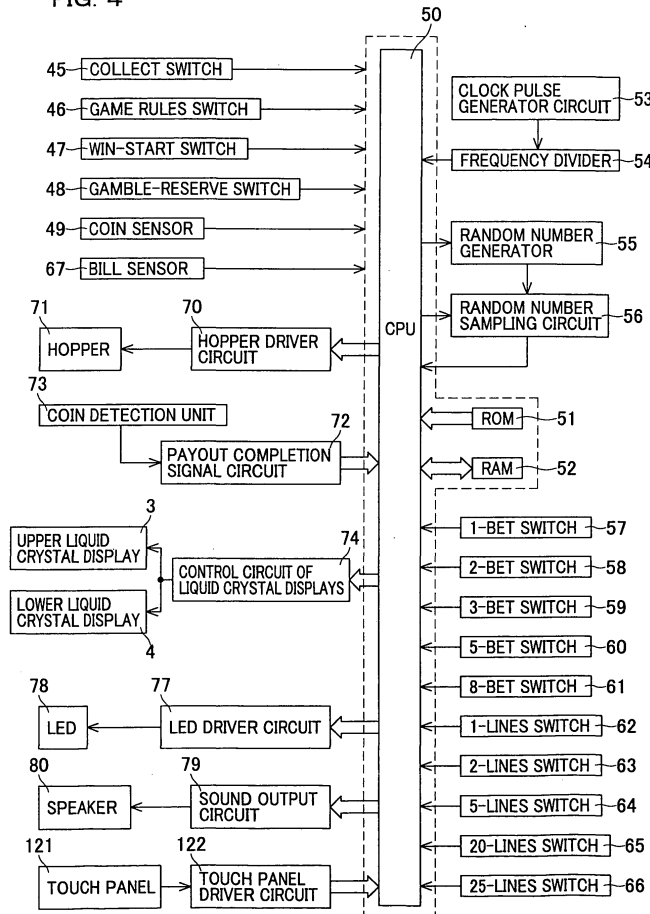
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(54) **Gaming machine**

(57) 25 select buttons included in a select button group correspond to 25 pay lines, respectively. If one or more of the 25 select buttons are touched, one or more

pay lines corresponding to the touched select buttons are selected as (an) activated pay line(s) from the 25 pay lines.

FIG. 4



Description

BACKGROUND OF THE INVENTION

1. Field of the Invention

[0001] The present invention relates to a gaming machine in which an activated pay line can be selected.

2. Description of the Related Art

[0002] A conventional gaming machine such as a slot machine is configured to pay out a number of coins, for example, in accordance with a combination of symbols after multiple reels are rotated for a predetermined period of time and stopped (as disclosed in JP-A-7-313659, for example). Payout of coins is performed only for a combination of symbols on an activated pay line among multiple pay lines.

[0003] However, a pay line selectable as an activated pay line is predetermined, and a desire of a player cannot be reflected in the selection of an activated pay line.

SUMMARY OF THE INVENTION

[0004] It is an object of the present invention to provide a gaming machine in which a player can freely select an activated pay line from pay lines.

[0005] According to an aspect of the invention, there is provided a gaming machine having a display device and game control means for awarding a payout in accordance with a winning combination or combinations of symbols on at least one activated pay line on the display device. The gaming machine is characterized in that the gaming machine comprises a plurality of select buttons corresponding to a plurality of pay lines, respectively; select means for selecting the activated pay line from the pay lines through the select buttons; and activated pay line display means for displaying the activated pay line selected by the select means on the display device.

[0006] According to the aspect, a player can freely select one or more activated pay lines from pay lines through select buttons corresponding to the pay lines, respectively, which can enhance the amusement.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] Other and further objects, features and advantages of the invention will appear more fully from the following description taken in connection with the accompanying drawings in which:

- Fig. 1 is a flowchart of an activated pay line selecting processing program;
- Fig. 2 is a perspective view of a slot machine;
- Fig. 3 is a front view of a control table;
- Fig. 4 is a block diagram schematically showing a

control system for the slot machine;

Fig. 5 is a block diagram schematically showing a control circuit of liquid crystal displays;

Fig. 6 is an explanatory diagram schematically showing columns of symbols, which are variably displayed on the variable display portions in a base game;

Fig. 7 is a diagram showing a "LOBSTER" symbol; Fig. 8 is an explanatory diagram showing winning combinations and payout numbers thereof;

Fig. 9 is an explanatory diagram showing a lottery table of symbols to be stopped;

Fig. 10 is a diagram showing stop areas of five variable display portions;

Fig. 11 is a diagram showing a first pay line;

Fig. 12 is a diagram showing a second pay line;

Fig. 13 is a diagram showing a third pay line;

Fig. 14 is a diagram showing a fourth pay line;

Fig. 15 is a diagram showing a fifth pay line;

Fig. 16 is a diagram showing a sixth pay line;

Fig. 17 is a diagram showing a seventh pay line;

Fig. 18 is a diagram showing an eighth pay line;

Fig. 19 is a diagram showing a ninth pay line;

Fig. 20 is a diagram showing a tenth pay line;

Fig. 21 is a diagram showing an eleventh pay line;

Fig. 22 is a diagram showing a twelfth pay line;

Fig. 23 is a diagram showing a thirteenth pay line;

Fig. 24 is a diagram showing a fourteenth pay line;

Fig. 25 is a diagram showing a fifteenth pay line;

Fig. 26 is a diagram showing a sixteenth pay line;

Fig. 27 is a diagram showing a seventeenth pay line;

Fig. 28 is a diagram showing an eighteenth pay line;

Fig. 29 is a diagram showing a nineteenth pay line;

Fig. 30 is a diagram showing a twentieth pay line;

Fig. 31 is a diagram showing a twenty first pay line;

Fig. 32 is a diagram showing a twenty second pay line;

Fig. 33 is a diagram showing a twenty third pay line;

Fig. 34 is a diagram showing a twenty fourth pay line;

Fig. 35 is a diagram showing a twenty fifth pay line;

Fig. 36 is a flowchart of a main processing program;

Fig. 37 is a flowchart of a starting process;

Fig. 38 is a flowchart of a lottery processing program;

Fig. 39 is a flowchart of a base game processing program;

Fig. 40 is a flowchart of a free game processing program;

Fig. 41 is an explanatory diagram showing a lottery table of symbols to be stopped in another modification;

Fig. 42 is an explanatory diagram schematically showing columns of symbols, which are variably displayed on the variable display portions in a bonus game;

Fig. 43 is an explanatory diagram showing an ex-

ample of a display indicating that the twenty fifth pay line is in a selected state; and

Fig. 44 is a flowchart of an activated pay line selecting processing program in another embodiment.

DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0008] A gaming machine according to the invention will be described in detail based on an embodiment embodying the invention as a slot machine and with reference to drawings. First of all, the construction of the slot machine according to this embodiment will be described with reference to Figs. 2 to 4.

[0009] In Fig. 2, a slot machine 1 has a cabinet 2 forming the whole. An upper liquid crystal display 3 is placed in the upper front part of the cabinet 2, and a lower liquid crystal display 4 is placed on a machine front panel 20 placed at the front center part of the cabinet 2. Either the upper liquid crystal display 3 or the lower liquid crystal display 4 includes a commonly-used liquid crystal display. The upper liquid crystal display 3 displays information on a game such as a game method, the kind of a winning combination and a payout number thereof, and various effects on the game. The lower liquid crystal display 4 includes a touch panel 121 on a screen and displays a credit value and displays five variable display portions 21, 22, 23, 24 and 25 shown in Fig. 2. A Column of various kinds of symbols, which will be described later, is vertically scrolled in each of the variable display portions 21 to 25, so that the symbols are variably displayed, and then stopped so that the symbols are stopped.

[0010] In the slot machine 1, a slot game (including a base game and a bonus game) is performed with video reels implemented by the variable display portions 21 to 25 of the lower liquid crystal display 4. In the slot game, three symbols are stopped in each of the variable display portions 21 to 25. As shown in Fig. 10, the variable display portions 21 to 25 has first stop areas 211, 221, 231, 241 and 251, second stop areas 212, 222, 232, 242 and 252, and third stop areas 213, 223, 233, 243 and 253, respectively. One symbol is stopped in each of the stop areas 211 to 213, 221 to 223, 231 to 233, 241 to 243 and 251 to 253.

[0011] In the slot game, 25 pay lines are provided each spanning five of the stop areas, which consist of one of the stop areas 211 to 213 of the variable display portion 21, one of the stop areas 221 to 223 of the variable display portion 22, one of the stop areas 231 to 233 of the variable display portion 23, one of the stop areas 241 to 243 of the variable display portion 24, and one of the stop areas 251 to 253 of the variable display portion 25. When stopping symbols results in a winning combination of symbols on an activated pay line, a payout is awarded to a player.

[0012] Now, the pay lines will be described more specifically with reference to Figs. 11 to 35. Figs. 11 to 35

are diagrams each showing one pay line shaded.

[0013] As indicated by the shaded parts in Fig. 11, a first pay line L1 spans the second stop areas 212, 222, 232, 242 and 252. As indicated by the shaded parts in Fig. 12, a second pay line L2 spans the first stop areas 211, 221, 231, 241 and 251. As indicated by the shaded parts in Fig. 13, a third pay line L3 spans the third stop areas 213, 223, 233, 243 and 253. As indicated by the shaded parts in Fig. 14, a fourth pay line L4 spans the first stop areas 211, 221, 231 and 241 and the third stop area 253. As indicated by the shaded parts in Fig. 15, a fifth pay line L5 spans the first stop area 251 and the third stop areas 213, 223, 233 and 243. As indicated by the shaded parts in Fig. 16, a sixth pay line L6 spans the first stop areas 211, 221, 231 and 241 and the second stop area 252. As indicated by the shaded parts in Fig. 17, a seventh pay line L7 spans the second stop area 252 and the third stop areas 213, 223, 233 and 243. As indicated by the shaded parts in Fig. 18, an eighth pay line L8 spans the first stop areas 211, 221, 231 and 251 and the second stop area 242. As indicated by the shaded parts in Fig. 19, a ninth pay line L9 spans the second stop area 242 and the third stop areas 213, 223, 233 and 253. As indicated by the shaded parts in Fig. 20, a tenth pay line L10 spans the first stop areas 211, 221 and 231 and the third stop areas 243 and 253. As indicated by the shaded parts in Fig. 21, an eleventh pay line L11 spans the first stop areas 241 and 251 and the third stop areas 213, 223 and 233. As indicated by the shaded parts in Fig. 22, a twelfth pay line L12 spans the first stop areas 211, 221, 231 and 251 and the third stop area 243. As indicated by the shaded parts in Fig. 23, a thirteenth pay line L13 spans the first stop area 241 and the third stop areas 213, 223, 233 and 253. As indicated by the shaded parts in Fig. 24, a fourteenth pay line L14 spans the first stop areas 241 and 251 and the second stop areas 212, 222 and 232. As indicated by the shaded parts in Fig. 25, a fifteenth pay line L15 spans the second stop areas 212, 222 and 232 and the third stop areas 243 and 253. As indicated by the shaded parts in Fig. 26, a sixteenth pay line L16 spans the first stop area 241 and the second stop areas 212, 222, 232 and 252. As indicated by the shaded parts in Fig. 27, a seventeenth pay line L17 spans the second stop areas 212, 222, 232 and 252 and the third stop area 243. As indicated by the shaded parts in Fig. 28, an eighteenth pay line L18 spans the first stop area 251 and the second stop areas 212, 222, 232 and 242. As indicated by the shaded parts in Fig. 29, a nineteenth pay line L19 spans the second stop areas 212, 222, 232 and 242 and the third stop area 253. As indicated by the shaded parts in Fig. 30, a twentieth pay line L20 spans the first stop areas 241 and 251, the second stop areas 212 and 222 and the third stop area 233. As indicated by the shaded parts in Fig. 31, a twenty first pay line L21 spans the first stop area 231, the second stop areas 212 and 222 and the third stop areas 243 and 253. As indicated by the shaded parts in Fig. 32, a twenty second

pay line L22 spans the first stop areas 221 and 241, the second stop area 212 and the third stop areas 233 and 253. As indicated by the shaded parts in Fig. 33, a twenty third pay line L23 spans the first stop areas 231 and 251, the second stop area 212 and the third stop areas 223 and 243. As indicated by the shaded parts in Fig. 34, a twenty fourth pay line L24 spans the first stop areas 211 and 231 and the third stop areas 223, 243 and 253. As indicated by the shaded parts in Fig. 35, a twenty fifth pay line L25 spans the first stop areas 221, 241 and 251 and the third stop areas 213 and 233.

[0014] The "activated pay line" refers to a pay line made activated among 25 pay lines.

[0015] As shown in Figs. 10 to 35, select button groups 141 each including 25 select buttons formed on the touch panel 121 are provided on the left of the variable display portion 21 and on the right of the variable display portion 25, respectively.

[0016] The first pay line L1 is selected by touching a select button having the display, "1", in the select button group 141. In this case, as shown in Fig. 11, the select button having the display, "1", is inverted, and the second stop areas 212, 222, 232, 242 and 252 forming the first pay line L1 are also inverted.

[0017] The second pay line L2 is selected by touching a select button having the display, "2", in the select button group 141. In this case, as shown in Fig. 12, the select button having the display, "2", is inverted, and the first stop areas 211, 221, 231, 241 and 251 forming the second pay line L2 are also inverted.

[0018] The third pay line L3 is selected by touching a select button having the display, "3", in the select button group 141. In this case, as shown in Fig. 13, the select button having the display, "3", is inverted, and the third stop areas 213, 223, 233, 243 and 253 forming the third pay line L3 are also inverted.

[0019] The fourth pay line L4 is selected by touching a select button having the display, "4", in the select button group 141. In this case, as shown in Fig. 14, the select button having the display, "4", is inverted, and the first stop areas 211, 221, 231 and 241 and third stop area 253 forming the fourth pay line L4 are also inverted.

[0020] The fifth pay line L5 is selected by touching a select button having the display, "5", in the select button group 141. In this case, as shown in Fig. 15, the select button having the display, "5", is inverted, and the first stop area 251 and third stop areas 213, 223, 233 and 243 forming the fifth pay line L5 are also inverted.

[0021] The sixth pay line L6 is selected by touching a select button having the display, "6", in the select button group 141. In this case, as shown in Fig. 16, the select button having the display, "6", is inverted, and the first stop areas 211, 221, 231 and 241 and second stop area 252 forming the sixth pay line L6 are also inverted.

[0022] The seventh pay line L7 is selected by touching a select button having the display, "7", in the select button group 141. In this case, as shown in Fig. 17, the select button having the display, "7", is inverted, and the

second stop area 252 and third stop areas 213, 223, 233 and 243 forming the seventh pay line L7 are also inverted.

[0023] The eighth pay line L8 is selected by touching a select button having the display, "8", in the select button group 141. In this case, as shown in Fig. 18, the select button having the display, "8", is inverted, and the first stop areas 211, 221, 231 and 251 and second stop area 242 forming the eighth pay line L8 are also inverted.

[0024] The ninth pay line L9 is selected by touching a select button having the display, "9", in the select button group 141. In this case, as shown in Fig. 19, the select button having the display, "9", is inverted, and the second stop area 242 and third stop areas 213, 223, 233 and 253 forming the ninth pay line L9 are also inverted.

[0025] The tenth pay line L10 is selected by touching a select button having the display, "10", in the select button group 141. In this case, as shown in Fig. 20, the select button having the display, "10", is inverted, and the first stop areas 211, 221 and 231 and third stop areas 243 and 253 forming the tenth pay line L10 are also inverted.

[0026] The eleventh pay line L11 is selected by touching a select button having the display, "11", in the select button group 141. In this case, as shown in Fig. 21, the select button having the display, "11", is inverted, and the first stop areas 241 and 251 and third stop areas 213, 223 and 233 forming the eleventh pay line L11 are also inverted.

[0027] The twelfth pay line L12 is selected by touching a select button having the display, "12", in the select button group 141. In this case, as shown in Fig. 22, the select button having the display, "12", is inverted, and the first stop areas 211, 221, 231 and 251 and third stop area 243 forming the twelfth pay line L12 are also inverted.

[0028] The thirteenth pay line L13 is selected by touching a select button having the display, "13", in the select button group 141. In this case, as shown in Fig. 23, the select button having the display, "13", is inverted, and the first stop area 241 and third stop areas 213, 223, 233 and 253 forming the thirteenth pay line L13 are also inverted.

[0029] The fourteenth pay line L14 is selected by touching a select button having the display, "14", in the select button group 141. In this case, as shown in Fig. 24, the select button having the display, "14", is inverted, and the first stop areas 241 and 251 and second stop areas 212, 222 and 232 forming the fourteenth pay line L14 are also inverted.

[0030] The fifteenth pay line L15 is selected by touching a select button having the display, "15", in the select button group 141. In this case, as shown in Fig. 25, the select button having the display, "15", is inverted, and the second stop areas 212, 222 and 232 and third stop areas 243 and 253 forming the fifteenth pay line L15 are also inverted.

[0031] The sixteenth pay line L16 is selected by touching a select button having the display, "16", in the select button group 141. In this case, as shown in Fig. 26, the select button having the display, "16", is inverted, and the first stop area 241 and second stop areas 212, 222, 232 and 252 forming the sixteenth pay line L16 are also inverted.

[0032] The seventeenth pay line L17 is selected by touching a select button having the display, "17", in the select button group 141. In this case, as shown in Fig. 27, the select button having the display, "17", is inverted, and the second stop areas 212, 222, 232 and 252 and third stop area 243 forming the seventeenth pay line L17 are also inverted.

[0033] The eighteenth pay line L18 is selected by touching a select button having the display, "18", in the select button group 141. In this case, as shown in Fig. 28, the select button having the display, "18", is inverted, and the first stop area 251 and second stop areas 212, 222, 232 and 242 forming the eighteenth pay line L18 are also inverted.

[0034] The nineteenth pay line L19 is selected by touching a select button having the display, "19", in the select button group 141. In this case, as shown in Fig. 29, the select button having the display, "19", is inverted, and the second stop areas 212, 222, 232 and 242 and third stop area 253 forming the nineteenth pay line L19 are also inverted.

[0035] The twentieth pay line L20 is selected by touching a select button having the display, "20", in the select button group 141. In this case, as shown in Fig. 30, the select button having the display, "20", is inverted, and the first stop areas 241 and 251, second stop areas 212 and 222 and third stop area 233 forming the twentieth pay line L20 are also inverted.

[0036] The twenty first pay line L21 is selected by touching a select button having the display, "21", in the select button group 141. In this case, as shown in Fig. 31, the select button having the display, "21", is inverted, and the first stop area 231, second stop areas 212 and 222 and third stop areas 243 and 253 forming the twenty first pay line L21 are also inverted.

[0037] The twenty second pay line L22 is selected by touching a select button having the display, "22", in the select button group 141. In this case, as shown in Fig. 32, the select button having the display, "22", is inverted, and the first stop areas 221 and 241, second stop area 212 and the third stop areas 233 and 253 forming the twenty second pay line L22 are also inverted.

[0038] The twenty third pay line L23 is selected by touching a select button having the display, "23", in the select button group 141. In this case, as shown in Fig. 33, the select button having the display, "23", is inverted, and the first stop areas 231 and 251, second stop area 212 and third stop areas 223 and 243 forming the twenty third pay line L23 are also inverted.

[0039] The twenty fourth pay line L24 is selected by touching a select button having the display, "24", in the

select button group 141. In this case, as shown in Fig. 34, the select button having the display, "24", is inverted, and the first stop areas 211 and 231 and third stop areas 223, 243 and 253 forming the twenty fourth pay line L24 are also inverted.

[0040] The twenty fifth pay line L25 is selected by touching a select button having the display, "25", in the select button group 141. In this case, as shown in Fig. 35, the select button having the display, "25", is inverted, and the first stop areas 221, 241 and 251 and third stop areas 213 and 233 forming the twenty fifth pay line L25 are also inverted.

[0041] Referring back to Fig. 2, a control table 5 projecting to the proximal side is provided at the bottom of the lower liquid crystal display 4. As shown in Fig. 3, COLLECT button 31 and GAME RULES button 32 in order from the leftmost side are placed in the upper part of control table 5. BET 1 PER LINE button 33, BET 2 PER LINE button 34, BET 3 PER LINE button 35, BET 5 PER LINE button 36, BET 8 PER LINE button 37 and WIN START FEATURE button 38 in order from the leftmost side are placed in the middle part of control table 5. RED PLAY 1 LINE button 39, PLAY 2 LINES button 40, PLAY 5 LINES button 41, PLAY 20 LINES button 42, BLACK PLAY 25 LINES button 43 and GAMBLE RESERVE button 44 in order from the leftmost side are placed in the lower part of control table 5. As shown in Fig. 2, a coin insertion slot 9 and a bill insertion slot 10 are provided on the right of the control table 5.

[0042] COLLECT button 31 is a button to be pressed upon exit from a base game. When COLLECT button 31 is pressed, the number of coins equivalent to the credit value acquired in the game are paid out through a coin payout opening 15 and received in a coin tray 16. COLLECT button 31 is associated with COLLECT switch 45 (see Fig. 4). When COLLECT button 31 is pressed, a switch signal is output from COLLECT switch 45 to a CPU 50.

[0043] GAME RULES button 32 is a button to be pressed when how the game should be operated is not clear to a player. When GAME RULES button 32 is pressed, help information is displayed on the upper liquid crystal display 3 and/or lower liquid crystal display 4. GAME RULES button 32 is associated with GAME RULES switch 46 (see Fig. 4). When GAME RULES button 32 is pressed, a switch signal is output from GAME RULES switch 46 to the CPU 50.

[0044] The coin insertion slot 9 has a coin sensor 49 (see Fig. 4). When a coin or coins is or are inserted through the coin insertion slot 9, a coin detection signal is output from the coin sensor 49 to the CPU 50, and a credit value equivalent to the inserted coins is added.

[0045] The bill insertion slot 10 has a bill sensor 67 (see Fig. 4). When a bill or bills is or are inserted through the bill insertion slot 10, a bill detection signal is output from the bill sensor 67 to the CPU 50, and a credit value equivalent to the inserted bills is added.

[0046] BET 1 PER LINE button 33 is a button for bet-

ting 1 for each activated pay line every time pressed once. BET 1 PER LINE button 33 is associated with 1-BET switch 57 (see Fig. 4). When BET 1 PER LINE button 33 is pressed, a switch signal is output from 1-BET switch 57 to the CPU 50.

[0047] BET 2 PER LINE button 34 is a button for starting a game with a BET value of 2 for each activated pay line. BET 2 PER LINE button 34 is associated with 2-BET switch 58 (see Fig. 4). When BET 2 PER LINE button 34 is pressed, a switch signal is output from 2-BET switch 58 to the CPU 50.

[0048] BET 3 PER LINE button 35 is a button for starting a game with a BET value of 3 for each activated pay line. BET 3 PER LINE button 35 is associated with 3-BET switch 59 (see Fig. 4). When BET 3 PER LINE button 35 is pressed, a switch signal is output from 3-BET switch 59 to the CPU 50.

[0049] BET 5 PER LINE button 36 is a button for starting a game with a BET value of 5 for each activated pay line. BET 5 PER LINE button 36 is associated with 5-BET switch 60 (see Fig. 4). When BET 5 PER LINE button 36 is pressed, a switch signal is output from 5-BET switch 60 to the CPU 50.

[0050] BET 8 PER LINE button 37 is a button for starting a game with a BET value of 8 for each activated pay line. BET 8 PER LINE button 37 is associated with 8-BET switch 61 (see Fig. 4). When BET 8 PER LINE button 37 is pressed, a switch signal is output from 8-BET switch 61 to the CPU 50.

[0051] Accordingly, pressing BET 1 PER LINE button 33, BET 2 PER LINE button 34, BET 3 PER LINE button 35, BET 5 PER LINE button 36 and BET 8 PER LINE button 37 provides a BET value of 1, 2, 3, 5 and 8, respectively.

[0052] WIN START FEATURE button 38 is a button for starting a bonus game or adding the payout number acquired in the bonus game to the credit value. WIN START FEATURE button 38 is associated with WIN-START switch 47 (see Fig. 4). When WIN START FEATURE button 38 is pressed, a switch signal is output from WIN-START switch 47 to the CPU 50.

[0053] RED PLAY 1 LINE button 39 is a button for starting a game with the pay line L1 activated and with the number of the activated pay lines "1". RED PLAY 1 LINE button 39 is associated with 1-LINE switch 62 (see Fig. 4). When RED PLAY 1 LINE button 39 is pressed, a switch signal is output from 1-LINE switch 62 to the CPU 50.

[0054] PLAY 2 LINES button 40 is a button for starting a game with the pay lines L1 and L2 activated and with the number of the activated pay lines "2". PLAY 2 LINES button 40 is associated with 2-LINES switch 63 (see Fig. 4).. When PLAY 2 LINES button 40 is pressed, a switch signal is output from 2-LINES switch 63 to the CPU 50.

[0055] PLAY 5 LINES button 41 is a button for starting a game with the pay lines L1 to L5 activated and with the number of the activated pay lines "5". PLAY 5 LINES button 41 is associated with 5-LINES switch 64 (see Fig.

4). When PLAY 5 LINES button 41 is pressed, a switch signal is output from 5-LINES switch 64 to the CPU 50.

[0056] PLAY 20 LINES button 42 is a button for starting a game with the pay lines L1 and L20 activated and with the number of the activated pay lines "20". PLAY 20 LINES button 42 is associated with 20-LINES switch 65 (see Fig. 4). When PLAY 20 LINES button 42 is pressed, a switch signal is output from 20-LINES switch 65 to the CPU 50.

[0057] BLACK PLAY 25 LINES button 43 is a button for starting a game with the pay lines L1 and L25 activated and with the number of the activated pay lines "25". BLACK PLAY 25 LINES button 43 is associated with 25-LINES switch 66 (see Fig. 4). When BLACK PLAY 25 LINES button 43 is pressed, a switch signal is output from 25-LINES switch 66 to the CPU 50.

[0058] Accordingly, pressing RED PLAY 1 LINE button 39, PLAY 2 LINES button 40, PLAY 5 LINES button 41, PLAY 20 LINES button 42 and BLACK PLAY 25 LINES button 43 provides the number of activated pay lines of "1", "2", "5", "20" and "25", respectively.

[0059] Further, RED PLAY 1 LINE button 39, PLAY 2 LINES button 40, PLAY 5 LINES button 41, PLAY 20 LINES button 42, and BLACK PLAY 25 LINES button 43 are buttons for starting a game with the current BET value.

[0060] RED PLAY 1 LINE button 39 and BLACK PLAY 25 LINES button 43 are also used for selecting red or black in a double down game, which is performed with the credit value acquired in a bonus game.

[0061] GAMBLE RESERVE button 44 is a button to be pressed when a player leaves his/her sheet or for shifting to a double down game after a bonus game. GAMBLE RESERVE button 44 is associated with GAMBLE-RESERVE switch 48 (see Fig. 4). When GAMBLE RESERVE button 44 is pressed, a switch signal is output from GAMBLE-RESERVE switch 48 to the CPU 50.

[0062] The cabinet 2 has the coin payout opening 15 and coin tray 16 in the lower part. The coin tray 16 receives a coin or coins paid out through the coin payout opening 15. A coin detection unit 73 (see Fig. 4) including a sensor is placed in the coin payout opening 15. The coin detection unit 73 detects the number of coins to be paid out through the coin payout opening 15.

[0063] Next, with reference to Fig. 6, columns of symbols, which are scrolled in the variable display portions 21 to 25 on the lower liquid crystal display 4 so that symbols included in the columns are variably displayed, in a base game will be described. A column of symbols indicated on a first reel band 101 is scrolled in the variable display portion 21. A column of symbols indicated on a second reel band 102 is scrolled in the variable display portion 22. A column of symbols indicated on a third reel band 103 is scrolled in the variable display portion 23. A column of symbols indicated on a fourth reel band 104 is scrolled in the variable display portion 24. A column of symbols indicated on a fifth reel band 105 is scrolled in the variable display portion 25.

[0064] The columns of symbols indicated on the reel bands 101 to 105 have symbol arrangements, which are different from each other. Each of the columns of symbols has a combination of twelve symbols of "LOBSTER", "SHARK", "FISH", "PUNK", "OCTOPUS", "CRAB", "WORM", "A", "K", "Q", "J" and "SARDINE". "LOBSTER" refers to a lobster symbol as shown in Fig. 7. "SHARK", "FISH", "PUNK", "OCTOPUS", "CRAB", "WORM" and "SARDINE" refer to shark, fish, punk, octopus, crab, worm and sardine symbols, not shown, respectively. "A", "K", "Q" and "J" refer to alphabetical symbols corresponding thereto. "SARDINE" also functions as a scatter symbol for shifting to a bonus game as described later. When three or more "SARDINE" symbols are stopped in the variable display portions 21 to 25 in total, the shift to a bonus game is allowed independent of activated pay lines.

[0065] Three symbols are stopped in each of the variable display portions 21 to 25 after the columns of symbols indicated on the reel bands 101 to 105 are scrolled in the variable display portions 21 to 25 and then stopped.

[0066] Winning combinations are predefined based on multiple kinds of combination of symbols. When a winning combination is made on an activated pay line, a payout number of the winning combination is added to the credit value, the mechanism of which is similar to that of a conventional slot machine and therefore the detailed explanation is omitted herein.

[0067] Next, a construction of a control system of the slot machine 1 will be described with reference to Fig. 4.

[0068] The control system of the slot machine 1 includes the CPU 50 as a core, which is connected to a ROM 51 and a RAM 52. The ROM 51 stores a main processing program, base game processing program, bonus game processing program, lottery table of symbols to be stopped in a base game, lottery table of symbols to be stopped in a bonus game, other programs required for controlling the slot machine 1, data table, or the like. The RAM 52 is a memory for temporarily storing data computed by the CPU 50.

[0069] A clock pulse generator circuit 53 for generating a reference clock pulse, a frequency divider 54, a random number generator 55 for generating a random number, and a random number sampling circuit 56 are connected to the CPU 50. Random numbers sampled by the random number sampling circuit 56 are used in a lottery for a winning combination. COLLECT switch 45 associated with COLLECT button 31, GAME-RULES switch 46 associated with GAME RULES button 32, 1-BET switch 57 associated with BET 1 PER LINE button 33, 2-BET switch 58 associated with BET 2 PER LINE button 34, 3-BET switch 59 associated with BET 3 PER LINE button 35, 5-BET switch 60 associated with BET 5 PER LINE button 36, 8-BET switch 61 associated with BET 8 PER LINE button 37, WIN-START switch 47 associated with WIN START FEATURE button 38, 1-LINE switch 62 associated with RED PLAY 1 LINE but-

ton 39, 2-LINES switch 63 associated with PLAY 2 LINES button 40, 5-LINES switch 64 associated with PLAY 5 LINES button 41, 20-LINES switch 65 associated with PLAY 20 LINES button 42, 25-LINES switch 66 associated with BLACK PLAY 25 LINES button 43 and GAMBLE-RESERVE switch 48 associated with GAMBLE RESERVE button 44 are further connected to the CPU 50. The CPU 50 receives a switch signal output from the above-described switch when the corresponding button is pressed and controls to perform an operation corresponding to the pressed button.

[0070] The coin sensor 49 placed in the coin insertion slot 9 and the bill sensor 67 placed in the bill insertion slot 10 are connected to the CPU 50. The coin sensor 49 detects the number of coins inserted through the coin insertion slot 9, and the CPU 50 computes a credit value equivalent to the inserted coins based on a coin detection signal output from the coin sensor 49. The bill sensor 67 detects the type and the number of bills inserted through the bill insertion slot 10 and the amount of money. The CPU 50 computes a credit value equivalent to the inserted bills based on a bill detection signal output from the bill sensor 67.

[0071] A hopper 71 is connected to the CPU 50 through a hopper driver circuit 70. When a drive signal is output from the CPU 50 to the hopper driver circuit 70, the hopper 71 pays out a predetermined number of coins through the coin payout opening 15.

[0072] The coin detection unit 73 is further connected to the CPU 50 through a payout completion signal circuit 72. When the coin detection unit 73 detects the predetermined number of coins to be paid out through the coin payout opening 15, a coin payout detection signal is output from the coin detection unit 73 to the payout completion signal circuit 72. Based on the coin payout detection signal, the payout completion signal circuit 72 outputs a payout completion signal to the CPU 50.

[0073] The upper liquid crystal display 3 and lower liquid crystal display 4, which are further connected to the CPU 50 through a control circuit 74 of the liquid crystal displays 3 and 4, are controlled by the CPU 50.

[0074] As shown in Fig. 5, the control circuit 74 includes a program ROM 81, an image ROM 82, an image control CPU 83, a work RAM 84, a video display processor (VDP) 85, and a video RAM 86. The program ROM 81 stores an image control program and various select tables relating to the displays on the upper liquid crystal display 3 and lower liquid crystal display 4. The image ROM 82 stores dot data for forming an image such as the columns of symbols indicated on the reel bands 101 to 105 in Fig. 6 displayed on the lower liquid crystal display 4 (or in the variable display portions 21 to 25). The image control CPU 83 determines an image to be displayed on the upper liquid crystal display 3 or lower liquid crystal display 4 from dot data prestored in the image ROM 82 based on a parameter defined by the CPU 50 and in accordance with an image control program prestored in the program ROM 81. The work

RAM 84 functions as a temporary storage device to be used for executing the image control program by the image control CPU 83. The VDP 85 forms an image determined by the image control CPU 83 and outputs the result to the upper liquid crystal display 3 or lower liquid crystal display 4. Thus, the columns of symbols indicated on the reel bands 101 to 105 are scrolled on the lower liquid crystal display 4 (or in the variable display portions 21 to 25). The video RAM 86 functions as a temporary storage device to be used for forming an image by the VDP 85.

[0075] A number of LEDs 78 (one of which is shown in Fig. 4) placed on the front face of the slot machine 1 are further connected to the CPU 50 through an LED driver circuit 77 controlling the lighting of the LED 78 based on a drive signal from the CPU 50 for various effects. A sound output circuit 79 and a speaker 80 are further connected to the CPU 50. The speaker 80 produces various sound effects based on output signals from the sound output circuit 79.

[0076] The touch panel 121 provided on the screen of the lower liquid crystal display 4 is further connected to the CPU 50 through a touch panel driver circuit 122. When one of the 25 select buttons included in the select button group 141 on the touch panel 121 is touched, the touch panel 121 detects the touched select button.

[0077] Next, the determination of symbols to be stopped on the activated pay line L1 in a base game by using a lottery table shown in Fig. 9 will be described.

[0078] Symbols to be stopped on the activated pay line L1 are determined for each of the variable display portions 21 to 25. Code numbers of "00" to "29" are sequentially assigned to symbols included in each of the columns (see Fig. 6) scrolled in the variable display portions 21 to 25, respectively, while the lottery table shown in Fig. 9 is provided. Five random numbers corresponding to the variable display portions 21 to 25, respectively, are sampled by the random number sampling circuit 56.

[0079] Here, with reference to Figs. 6 and 9, the determination of a symbol to be stopped on the activated pay line L1 in the variable display portion 21, i.e., stopped in the second stop area 212 (see Fig. 11), will be described.

[0080] When the random number sampled by the random number sampling circuit 56 is "0", the "J" symbol assigned to Code Number "00" is stopped in the second stop area 212. When the random number is "1", the "Q" symbol assigned to Code Number "01" is stopped in the second stop area 212. When the random number is "2", the "LOBSTER" symbol (see Fig. 7) assigned to Code Number "02" is stopped in the second stop area 212. When the random number is "3", the "J" symbol assigned to Code Number "03" is stopped in the second stop area 212. When the random number is "4", the "Q" symbol assigned to Code Number "04" is stopped in the second stop area 212. When the random number is "5", the "CRAB" symbol assigned to Code Number "05" is stopped in the second stop area 212. When the random

number is "6", the "A" symbol assigned to Code Number "06" is stopped in the second stop area 212. When the random number is "7", the "WORM" symbol assigned to Code Number "07" is stopped in the second stop area 212. When the random number is "8", the "K" symbol assigned to Code Number "08" is stopped in the second stop area 212. When the random number is "9", the "FISH" symbol assigned to Code Number "09" is stopped in the second stop area 212. When the random number is "10", the "PUNK" symbol assigned to Code Number "10" is stopped in the second stop area 212. When the random number is "11", the "Q" symbol assigned to Code Number "11" is stopped in the second stop area 212. When the random number is "12", the "SHARK" symbol assigned to Code Number "12" is stopped in the second stop area 212. When the random number is "13", the "CRAB" symbol assigned to Code Number "13" is stopped in the second stop area 212. When the random number is "14", the "K" symbol assigned to Code Number "14" is stopped in the second stop area 212. When the random number is "15", the "A" symbol assigned to Code Number "15" is stopped in the second stop area 212. When the random number is "16", the "OCTOPUS" symbol assigned to Code Number "16" is stopped in the second stop area 212. When the random number is "17", the "J" symbol assigned to Code Number "17" is stopped in the second stop area 212. When the random number is "18", the "Q" symbol assigned to Code Number "18" is stopped in the second stop area 212. When the random number is "19", the "FISH" symbol assigned to Code Number "19" is stopped in the second stop area 212. When the random number is "20", the "K" symbol assigned to Code Number "20" is stopped in the second stop area 212. When the random number is "21", the "J" symbol assigned to Code Number "21" is stopped in the second stop area 212. When the random number is "22", the "SARDINE" symbol assigned to Code Number "22" is stopped in the second stop area 212. When the random number is "23", the "CRAB" symbol assigned to Code Number "23" is stopped in the second stop area 212. When the random number is "24", the "J" symbol assigned to Code Number "24" is stopped in the second stop area 212. When the random number is "25", the "WORM" symbol assigned to Code Number "25" is stopped in the second stop area 212. When the random number is "26", the "Q" symbol assigned to Code Number "26" is stopped in the second stop area 212. When the random number is "27", the "CRAB" symbol assigned to Code Number "27" is stopped in the second stop area 212. When the random number is "28", the "A" symbol assigned to Code Number "28" is stopped in the second stop area 212. When the random number is "29", the "FISH" symbol assigned to Code Number "29" is stopped in the second stop area 212.

[0081] Symbols to be stopped on the activated pay line L1 in the variable display portions 22 to 25 other than the variable display portion 21 are determined in

the same manner as above.

[0082] Next, winning combinations and payout numbers thereof in a base game will be described with reference to Fig. 8. Fig. 8 is an explanatory diagram showing winning combinations and payout numbers thereof in a base game for a BET value of "1".

[0083] For winning combinations other than that of "SARDINE" symbol, the payout number shown in Fig. 8 is added to the credit value when the BET value is "1", while, when the BET value is "2" or a higher number, the value resulting from the multiplication of the payout number shown in Fig. 8 by the BET value is added to the credit value. When two or more winning combinations of symbols other than "SARDINE" symbol are simultaneously made on more than two activated pay lines, respectively, the total of the payout numbers is added to the credit value. On the other hand, for the winning combination of "SARDINE" symbol only, the value resulting from the multiplication of the payout number by a total BET value, i.e., the product of BET value and number of activated pay lines, is added to the credit value. When one or more winning combinations of symbols other than "SARDINE" symbol are simultaneously made in addition to the winning combination of the "SARDINE" symbol, the payout number(s) for the additional winning combination (s) is/are also added to the credit value.

[0084] More specifically, stopping the "LOBSTER" symbols in a row on an activated pay line in the variable display portions 21 and 22 (in the case of "2K" indicating that two of the symbols appear continuously from the left end) results in a payout number of "10". Stopping the "LOBSTER" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "320". Stopping the "LOBSTER" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "2500". Stopping the "LOBSTER" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "6000".

[0085] Stopping the "SHARK" symbols in a row on an activated pay line in the variable display portions 21 and 22 (in the case of "2K" indicating that two of the symbols appear continuously from the left end) results in a payout number of "3". Stopping the "SHARK" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "25". Stopping the "SHARK" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "150". Stopping the "SHARK" symbols in a row on an activated

pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "1000".

[0086] Stopping the "FISH" symbols in a row on an activated pay line in the variable display portions 21 and 22 (in the case of "2K" indicating that two of the symbols appear continuously from the left end) results in a payout number of "2". Stopping the "FISH" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "15". Stopping the "FISH" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "120". Stopping the "FISH" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "500".

[0087] Stopping the "PUNK" symbols in a row on an activated pay line in the variable display portions 21 and 22 (in the case of "2K" indicating that two of the symbols appear continuously from the left end) results in a payout number of "2". Stopping the "PUNK" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "10". Stopping the "PUNK" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "120". Stopping the "PUNK" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "400".

[0088] Stopping the "OCTOPUS" symbols in a row on an activated pay line in the variable display portions 21 and 22 (in the case of "2K" indicating that two of the symbols appear continuously from the left end) results in a payout number of "2". Stopping the "OCTOPUS" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "8". Stopping the "OCTOPUS" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "50". Stopping the "OCTOPUS" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "300".

[0089] Stopping the "CRAB" symbols in a row on an

activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "7". Stopping the "CRAB" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "50". Stopping the "CRAB" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "200".

[0090] Stopping the "WORM" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "6". Stopping the "WORM" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "40". Stopping the "WORM" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "150".

[0091] Stopping the "A" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "5". Stopping the "A" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "25". Stopping the "A" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "120".

[0092] Stopping the "K" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "5". Stopping the "K" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "25". Stopping the "K" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "120".

[0093] Stopping the "Q" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "5". Stopping the "Q" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the sym-

bols appear continuously from the left end) results in a payout number of "20". Stopping the "Q" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "100".

[0094] Stopping the "J" symbols in a row on an activated pay line in the variable display portions 21 to 23 (in the case of "3K" indicating that three of the symbols appear continuously from the left end) results in a payout number of "5". Stopping the "J" symbols in a row on an activated pay line in the variable display portions 21 to 24 (in the case of "4K" indicating that four of the symbols appear continuously from the left end) results in a payout number of "20". Stopping the "J" symbols in a row on an activated pay line in the variable display portions 21 to 25 (in the case of "5K" indicating that five of the symbols appear continuously from the left end) results in a payout number of "100".

[0095] On the other hand, winning combinations of the "SARDINE" symbol, unlike those of the above symbols, are independent of an activated pay line. More specifically, stopping the "SARDINE" symbol in two, three, four, and five of the variable display portions 21 to 25, not limited to an activated pay line, results in a payout number of "2" (in the case of "2K"), "5" (in the case of "3K"), "10" (in the case of "4K"), and "125" (in the case of "5K"), respectively.

[0096] Further, stopping the "SARDINE" symbol in three or more of the variable display portions 21 to 25, not limited to an activated pay line, results in an award of a payout and the shift to a bonus game.

[0097] The "bonus game" refers to a game to be performed after a base game and may generally be a more advantageous game to a player. Here, in the bonus game, 15 to 25 games are automatically implemented in accordance with a lottery result on the shift to the bonus game without betting any credit, for example.

[0098] In a bonus game, columns of symbols, which are scrolled in the variable display portions 21 to 25 on the lower liquid crystal display 4 so that symbols included in the columns are variably displayed, are shown in Fig. 42. Columns of symbols indicated on first, second, third, fourth, and fifth reel bands 123, 124, 125, 126, and 127 are scrolled in the variable display portions 21 to 25, respectively.

[0099] The columns of symbols indicated on the reel bands 123 to 126 in Fig. 42, which are used in a bonus game, are identical to the columns of symbols indicated on the reel bands 101 to 104 in Fig. 6, which are used in a base game. On the other hand, the column of symbols indicated on the reel band 127 in Fig. 42 is different from the column of symbols indicated on the reel band 105 in Fig. 6, only in the "LOBSTER" symbol assigned to the code number "10".

[0100] The BET value and number of activated pay lines in the bonus game are those upon shift to the bonus game. The winning combinations and payout num-

bers thereof in the bonus game are identical to those of the base game with the exception of the "SHARK" symbol handled as the "LOBSTER" symbol in the bonus game. Furthermore, stopping the "SARDINE" symbol in three or more of the variable display portions 21 to 25, not limited to an activated pay line, results in the shift to the bonus game again. Thus, a player can often get higher credit.

[0101] Next, a main processing program executed in the slot machine 1 will be described with reference to Fig. 36.

[0102] First, a starting process, which will be detailed later with reference to Fig. 37, is performed in step ("S" for short hereinafter) 11. After the starting process is performed in S11, a game is started and the processing moves to S12. In S12, a lottery processing, which will be detailed later with reference to Fig. 38, is performed. Thereafter the processing moves to S13 where a base game processing, which will be detailed later with reference to Fig. 39, is performed. Then, the processing moves to S14 where whether a bonus game has been won or not is determined. More specifically, in the lottery processing in S12, if three or more "SARDINE" symbols are stopped in the variable display portions 21 to 25 in total, not limited to an activated pay line, a bonus game is won (YES in S14). Then, the processing moves to S15 where a bonus game processing, which will be detailed later with reference to Fig. 40, is performed. After the bonus game processing is performed in S15, the main processing program ends. On the other hand, in S12, if three or more "SARDINE" symbols are not stopped in the variable display portions 21 to 25 in total, not limited to an activated pay line, no bonus game is won (NO in S14). Then, the main processing program ends.

[0103] Here, the starting process executed in S11 of the main processing program will be detailed with reference to Fig. 37.

[0104] First, in S21, whether a predetermined period of time, e.g., 15 seconds, has passed or not is determined. If it is determined that the predetermined period of time has not passed (NO in S21), the processing moves to S23 without performing anything. If it is determined that the predetermined period of time has passed (YES in S21), a demo-effect is implemented on the upper liquid crystal display 3 and/or lower liquid crystal display 4 in S22, which is followed by S23.

[0105] In S23, whether any one of the BET 1 PER LINE button 33, BET 2 PER LINE button 34, BET 3 PER LINE button 35, BET 5 PER LINE button 36 and BET 8 PER LINE button 37 has been pressed or not is determined based on a switch signal output from one of the 1-BET switch 57, 2-BET switch 58, 3-BET switch 59, 5-BET switch 60 and 8-BET switch 61. If it is determined that none of the above buttons has been pressed (NO in S23), the processing returns to S21 and repeats the above-described processing. On the other hand, if it is determined that any one of the above buttons has been pressed (YES in S23), the processing moves to S24

even in the middle of the demo-effect. The determination processing in S23 may be based on not only the switch signal but also other input signals.

[0106] In S24, whether any one of the 25 select buttons included in the select button group 141 on the touch panel 121 has been touched or not is determined based on a control signal output from the touch panel driver circuit 122. If it is determined that one of the 25 select buttons has been touched (YES in S24), the processing moves to S26 where an activated pay line selecting processing, which will be described later with reference to Fig. 1, is performed. Then, the processing returns to the main processing program shown in Fig. 36 and moves to the lottery processing in S12. On the other hand, if it is determined that none of the 25 select buttons has been touched (NO in S24), the processing moves to S25.

[0107] In S25, whether any one of the RED PLAY 1 LINE button 39, PLAY 2 LINES button 40, PLAY 5 LINES button 41, PLAY 20 LINES button 42 or BLACK PLAY 25 LINES button 43 has been pressed or not is determined based on a switch signal output from one of the 1-LINE switch 62, 2-LINES switch 63, 5-LINES switch 64, 20-LINES switch 65 and 25-LINES switch 66. If it is determined that none of the above buttons has been pressed (NO in S25), the processing returns to S24 and the above-described processing is repeated. On the other hand, if it is determined that one of the above buttons has been pressed (YES in S25), the processing returns to the main processing program shown in Fig. 36 and moves to the lottery processing in S12 even in the middle of the demo effect.

[0108] Now, the activated pay line selecting processing program executed in S26 of the starting process will be described with reference to Fig. 1.

[0109] First, in S101, whether any one of the 25 select buttons included in the select button group 141 on the touch panel 121 has been touched or not is determined based on a control signal output from the touch panel driver circuit 122. If it is determined that one of the 25 select buttons has been touched (YES in S101), the processing moves to S102 where the time for selection counted by the clock pulse generator circuit 53 or the like is reset and the measurement of time is started.

[0110] In S103, whether the pay line corresponding to the touched select button is in a selected state or not is determined. If it is determined that the pay line corresponding to the touched select button is not in a selected state (NO in S103), the processing moves to S104 where the touched select button is inverted (see Figs. 11 to 35) and further moves to S105 where the pay line corresponding to the touched select button is made in a selected state and inverted for a predetermined period of time (see Figs. 11 to 35). Then, the processing moves to S108. On the other hand, if it is determined that the pay line corresponding to the touched select button in the select button group 141 is in a selected state (YES in S103), the processing moves to S106 where the in-

verse of the touched select button is cancelled and further moves to S107 where the selected state of the pay line corresponding to the touched select button is cancelled. Then, the processing moves to S108.

[0111] In S108, whether it is within the time for selection or not is determined. If it is determined that it is within the time for selection (YES in S108), the processing returns to S101 and the above-described processing is repeated. On the other hand, if it is determined that it is not within the time for selection (NO in S108), the processing moves to S110 where the selected pay line is made activated. Then, the processing returns to the starting process shown in Fig. 37 and further returns the main processing program shown in Fig. 36 and moves to the lottery processing in S12.

[0112] In S101 described above, if it is determined that none of the 25 select buttons has been touched (NO in S101), the processing moves to S109 where whether any one of the pay lines is in a selected state or not is determined. If it is determined that none of the pay lines is in a selected state (NO in S109), the processing returns to S101, and the above-described processing is repeated. On the other hand, if it is determined that any one of the pay lines is in a selected state (YES in S109), the processing moves to S108.

[0113] The CPU 50 functions as "select means" when performing S110 of the activated pay line selecting processing program shown in Fig. 1. The CPU 50 further functions as "activated pay line display means" when performing S105 of the activated pay line selecting processing program. The CPU 50 further functions as "highlighting means" when performing S104 of the activated pay line selecting processing program.

[0114] Next, the lottery processing program executed in S12 of the main processing program will be described with reference to Fig. 38.

[0115] First, in S31, symbols to be stopped on the activated pay line are determined. Here, in a base game, symbols to be stopped on the activated pay line L1 are determined for each of the variable display portions 21 to 25. More specifically, as described above, five random numbers corresponding to the variable display portions 21 to 25, respectively, are sampled by the random number sampling circuit 56, and symbols to be stopped on the activated pay line are determined through code numbers on the lottery table shown in Fig. 9.

[0116] In S32, a winning combination and a payout number thereof are determined based on the symbol determination in S31 and on the table shown in Fig. 8. Then, the processing returns to the main processing program shown in Fig. 36 and moves to the base game processing in S13.

[0117] Here, if a bonus game is won, the number, e. g., one of 10 to 25, of games to be repeatedly performed in the bonus game is determined by lottery. The bonus game here may be referred to as free games in the present invention.

[0118] Next, the base game processing program ex-

ecuted in S13 of the main processing program will be described with reference to Fig. 39.

[0119] First, in S41, the columns of symbols are scrolled in the variable display portions 21 to 25. Then, the scrolling of the columns of symbols is stopped in S42. In S43, credit is paid out. The credit value corresponds to the payout number, which is determined based on the winning combination of symbols stopped in the variable display portions 21 to 25 in S42 and on the table shown in Fig. 8. Then, the processing returns to the main processing program shown in Fig. 36 and moves to S14.

[0120] Next, the bonus game processing program executed in S15 of the main processing program will be described with reference to Fig. 40.

[0121] First, in S51, a lottery processing in the bonus game is performed. In the same manner as the base game, symbols to be stopped on the activated pay line L1 are determined for each of the variable display portions 21 to 25. More specifically, in the same manner as above S31 of the base game lottery processing shown in Fig. 38, five random numbers corresponding to the variable display portions 21 to 25, respectively, are sampled by the random number sampling circuit 56, and symbols to be stopped on the activated pay line are determined through code numbers on the lottery table shown in Fig. 9. After the symbols to be stopped on the activated pay line L1 are determined, a winning combination and a payout number thereof are determined based on the symbol determination above and on the table shown in Fig. 8.

[0122] In S52, the columns of symbols are automatically scrolled in the variable display portions 21 to 25. Then, the scrolling of the columns of symbols is stopped in S53. In S54, credit is paid out. The credit value corresponds to the payout number, which is determined based on the winning combination of symbols stopped in the variable display portions 21 to 25 in S53 and on the table shown in Fig. 8. It should be noted that the "SHARK" symbol is handled as the "LOBSTER" symbol here in the bonus game.

[0123] In S55, whether the number of repeatedly performed games reaches the number determined in the lottery processing shown in Fig. 38 and described above or not is determined. If it is determined that the number of repeatedly performed games has not reached the determined number (NO in S55), the processing returns to S51 and the above-described processing is repeated. On the other hand, if it is determined that the number of repeatedly performed games has reached the determined number (YES in S55), the bonus game processing program is ended.

[0124] In S51 described above, if a bonus game is won, the number of repeatedly performed games is newly determined. The determined number is added to the "number determined in the lottery processing" in the determination in S55. Thus, if a bonus game is won during a bonus game, the shift to the bonus game is per-

formed again. For example, when 17 bonus games are won in the twelfth game of a bonus game of 20 games, the total of 25 (20-12+17) bonus games are performed thereafter.

[0125] Moreover, if credit is paid out in the bonus game, a double down game that bets the credit is performed after the bonus game, the description of which will be omitted herein.

[0126] The CPU 50 functions as "game control means" when executing the main processing program shown in Fig. 36.

[0127] As described above, in the slot machine 1 of this embodiment, the 25 select buttons included in the select button group 141 on the touch panel 121 correspond to the 25 pay lines L1 to L25, respectively. If one or more of the 25 select buttons are touched (YES in S101), one or more pay lines corresponding to the touched select buttons are selected as (an) activated pay line(s) from the 25 pay lines L1 to L25 (S102 to S110). Thus, a player can freely select one or more activated pay lines from pay lines through the select buttons corresponding to the pay lines, respectively, which can enhance the amusement.

[0128] In the slot machine 1 of this embodiment, a pay line is inverted when selected (S105). Thus, which pay lines are in a selected state can be easily visually checked even when multiple pay lines are selectable.

[0129] Further, since the select button corresponding to the pay line selected as an activated pay line is inverted (S104), which pay lines are in a selected state can be more easily visually checked even when multiple pay lines are selectable.

[0130] Although, in the slot machine 1 of this embodiment, the selected pay line and the select button corresponding to the selected pay line are inverted (S104 and S105), the selected pay line and/or the select button may be highlighted in another manner such as color display and blinking display. For example, as shown in Fig. 43, the selected pay line may be displayed like a line graph. Fig. 43 shows the state that the 25th pay line is only selected.

[0131] Although, in the slot machine 1 of this embodiment, the select buttons are formed on the touch panel 121, the select button may be, for example, a lock type press button which emits light with LEDs.

[0132] A spin button may be newly provided to the slot machine 1, and activated pay line selecting processing shown in Fig. 44 as described below may be performed instead of the activated pay line selecting processing in Fig. 1.

[0133] Here, the activated pay line selecting processing program shown in Fig. 44 will be described.

[0134] First, in S121, whether any one of the 25 select buttons included in the select button group 141 on the touch panel 121 has been touched or not is determined. If it is determined that one of the 25 select buttons has been touched (YES in S121), the processing moves to S122 where whether the pay line corresponding to the

touched select button is in a selected state or not is determined. If it is determined that the pay line corresponding to the touched select button is not in a selected state (NO in S122), the processing moves to S123 where the touched select button is inverted (see Figs. 11 to 35) and further moves to S124 where the pay line corresponding to the touched select button is made in a selected state and the pay line is inverted for a predetermined period of time (Figs. 11 to 35). Then, the processing moves to S127.

[0135] On the other hand, if it is determined that the pay line corresponding to the touched select button is in a selected state (YES in S122), the processing moves to S125 where the inverse of the touched select button is cancelled and further moves to S126 where the selected state of the pay line corresponding to the touched select button is cancelled. Then, the processing moves to S127.

[0136] In S127, whether the spin button has been pressed or not is determined. If it is determined that the spin button has not been pressed (NO in S127), the processing returns to S121 and the above-described processing is repeated. On the other hand, if it is determined that the spin button has been pressed (YES in S127), the processing moves to S128 where the selected pay line is made activated. Then, the processing returns to the starting process shown in Fig. 37 and further returns to the main processing program shown in Fig. 36 and moves to the lottery processing in S12.

[0137] In S121 described above, if it is determined that none of the 25 select buttons has been touched (NO in S121), the processing returns to S121 itself where the processing waits until one of the 25 select buttons is touched by a player.

[0138] The lottery table used for determining symbols to be stopped on the activated pay line may be a lottery table shown in Fig. 41, in which a specific range of random numbers sampled by the random number sampling circuit 56 corresponds to one of the code numbers, for example, although the lottery table shown in Fig. 9, in which one of the random numbers sampled by the random number sampling circuit 56 corresponds to one of the code numbers, is applied in this embodiment.

[0139] Although the five variable display portions 21 to 25 are exemplified as variable display portions in this embodiment, the invention is not limited thereto.

[0140] The invention is also applicable to gaming machines excluding a slot machine.

[0141] While this invention has been described in conjunction with the specific embodiments outlined above, it is evident that many alternatives, modifications and variations will be apparent to those skilled in the art. Accordingly, the preferred embodiments of the invention as set forth above are intended to be illustrative, not limiting. Various changes may be made without departing from the spirit and scope of the invention as defined in the following claims.

Claims

1. A gaming machine having a display device and game control means for awarding a payout in accordance with a winning combination or combinations of symbols on at least one activated pay line on the display device,
characterized in that the gaming machine comprises:
a plurality of select buttons corresponding to a plurality of pay lines, respectively;
select means for selecting the activated pay line from the pay lines through the select buttons; and
activated pay line display means for displaying the activated pay line selected by the select means on the display device. 5
2. The gaming machine according to Claim 1,
characterized in that the activated pay line display means highlights the activated pay line on the display device. 10
3. The gaming machine according to Claim 2,
characterized in that the activated pay line display means highlights the activated pay line by at least one of inverse display, color display, and blinking display. 15
4. The gaming machine according to any one of Claims 1 to 3,
characterized in that the gaming machine further comprises highlighting means for highlighting one or more of the select buttons corresponding to the activated pay line selected by the select means on the display device. 20
5. The gaming machine according to Claim 4,
characterized in that the highlighting means highlights the one or more select buttons by at least one of inverse display, color display, and blinking display. 25
6. The gaming machine according to any one of Claims 1 to 5,
characterized in that the display device includes a plurality of variable display portions, in each of which a column of the symbols is scrolled and stopped. 30
7. The gaming machine according to Claim 6,
characterized in that each of the variable display portions has a first stop area, a second stop area and a third stop area, and the symbol is stopped in each of the stop areas. 35
8. The gaming machine according to Claim 7,
characterized in that the pay lines are formed by combinations of the first stop area, second stop area and third stop area of each of the variable display portions. 40
9. The gaming machine according to any one of Claims 1 to 8,
characterized in that the display device includes a touch panel on which the select buttons are formed. 45
10. The gaming machine according to any one of Claims 1 to 9, wherein the gaming machine is a slot machine. 50

FIG. 1

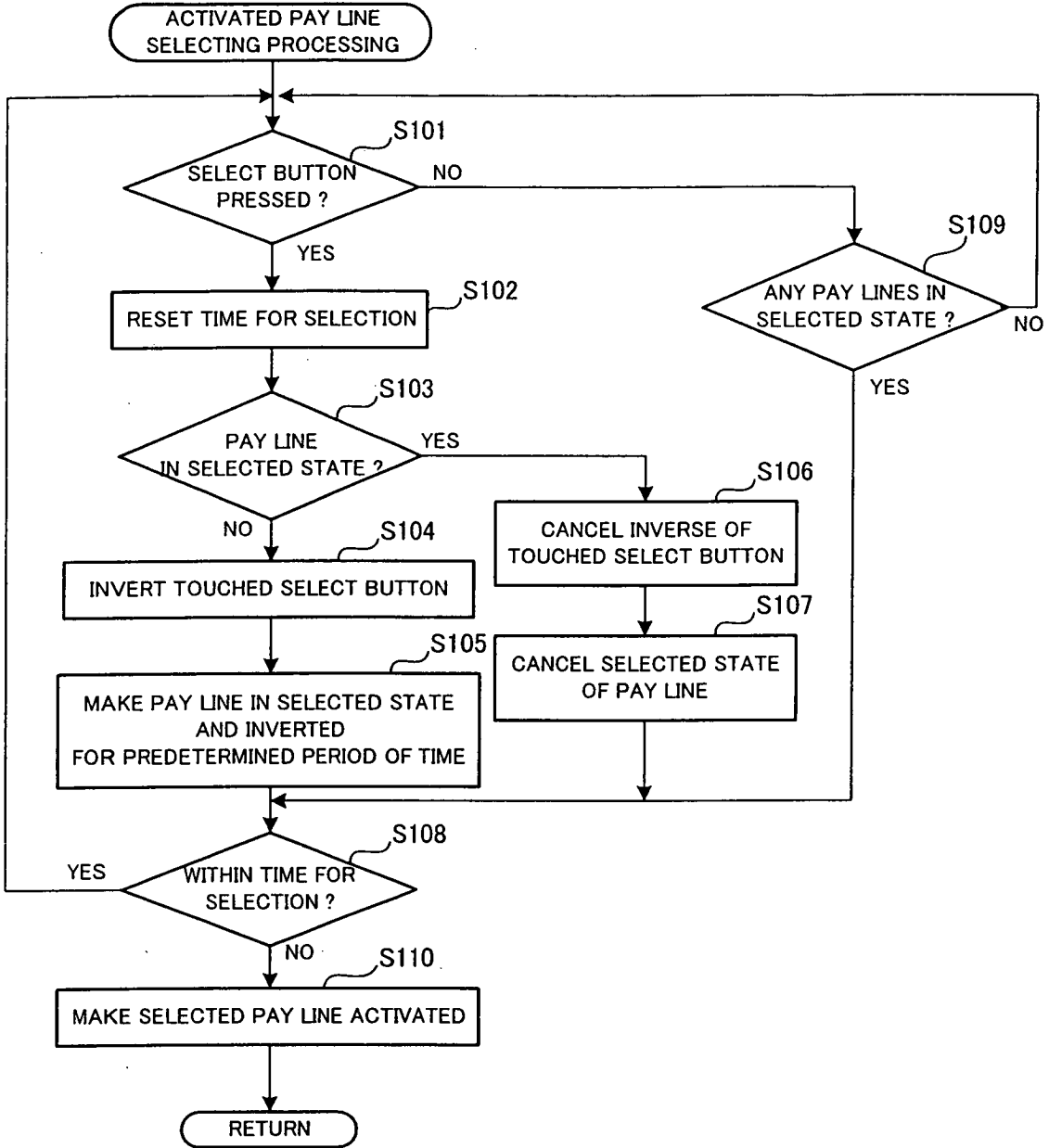


FIG. 2

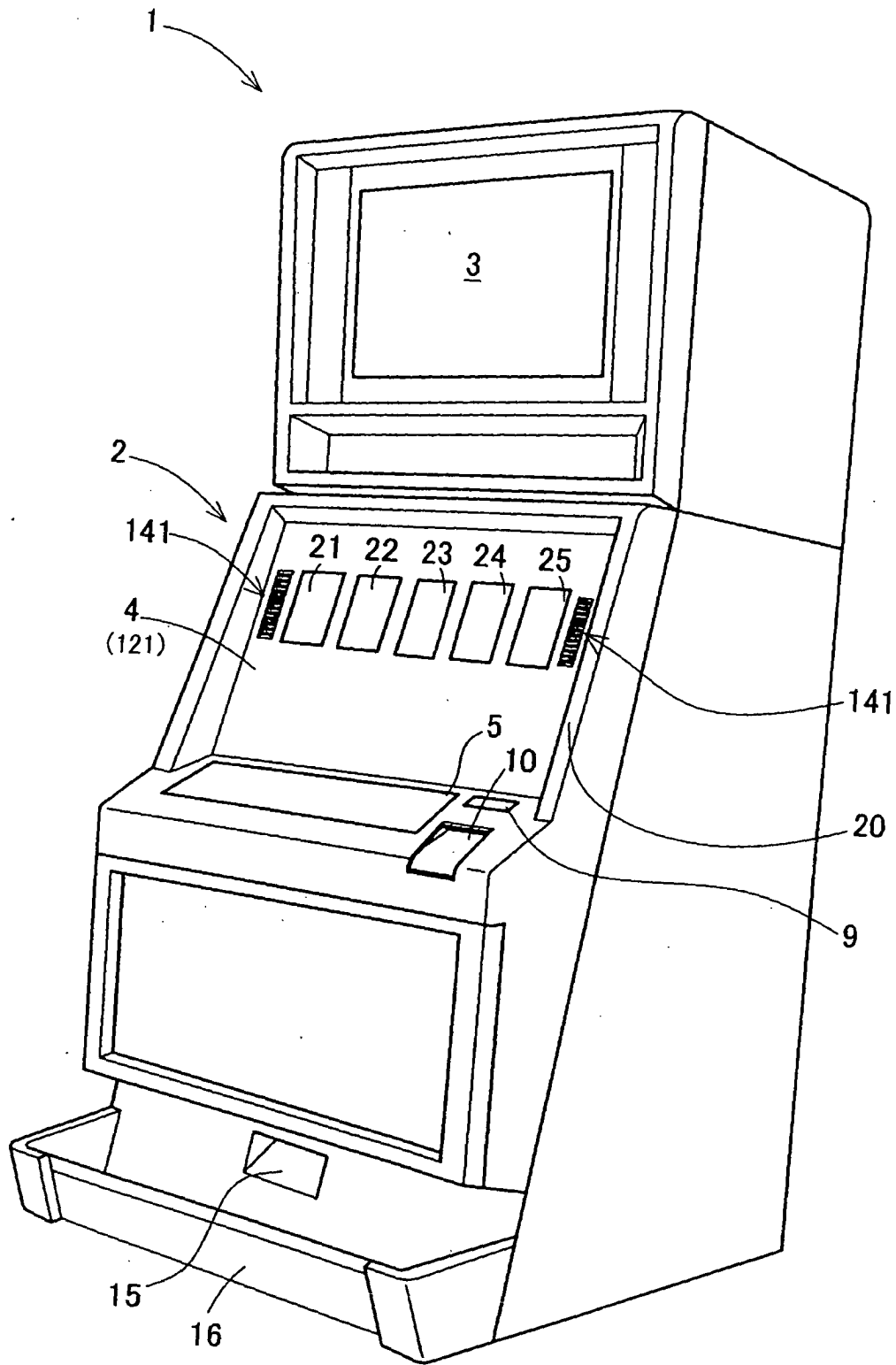


FIG. 3

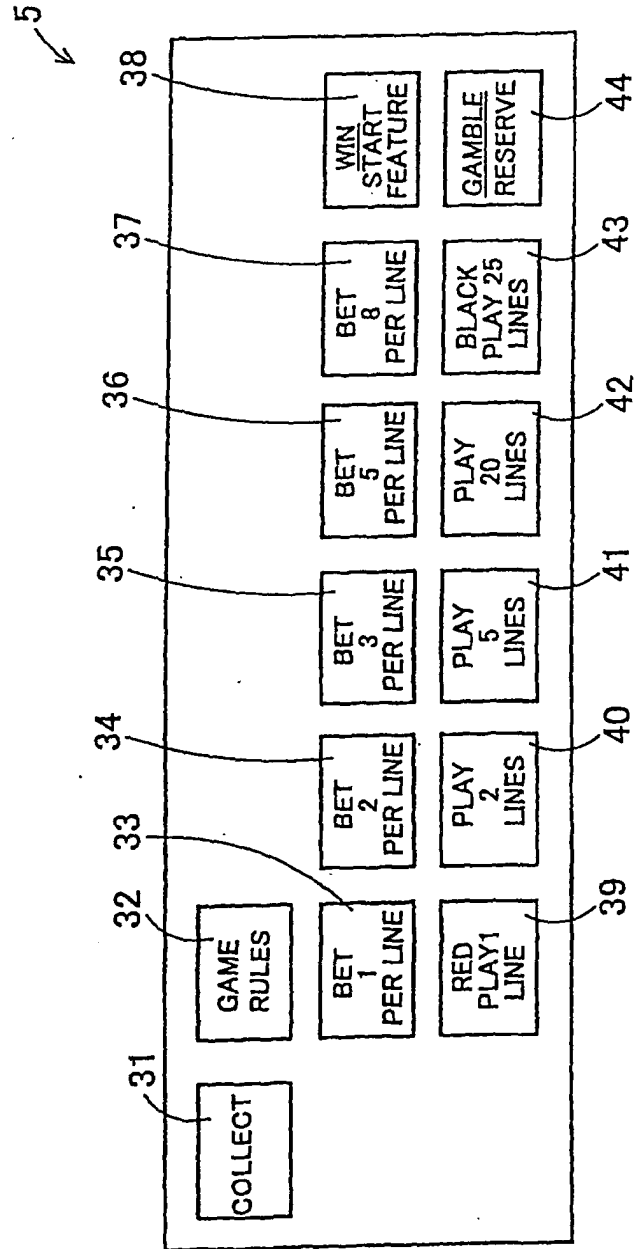
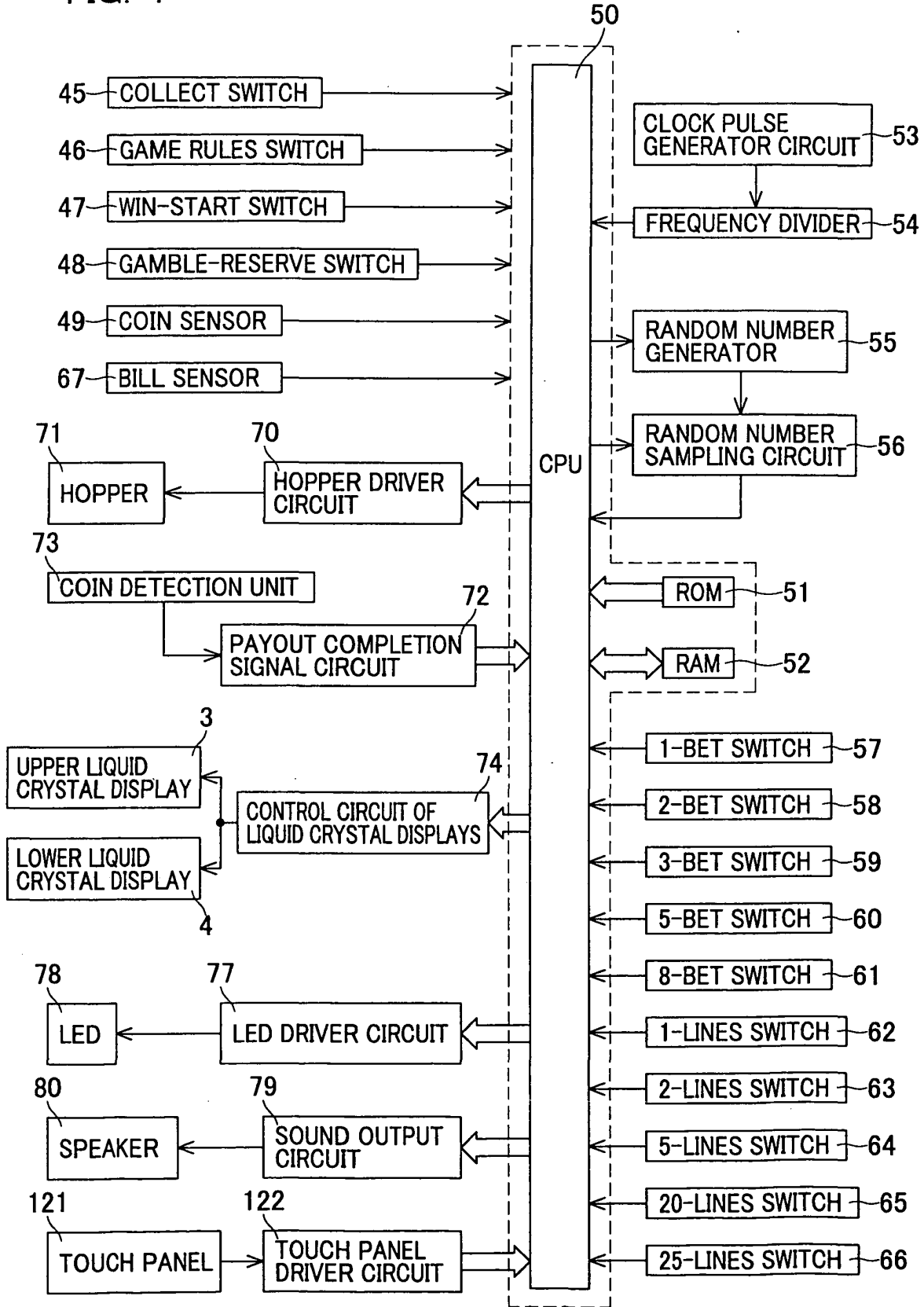


FIG. 4



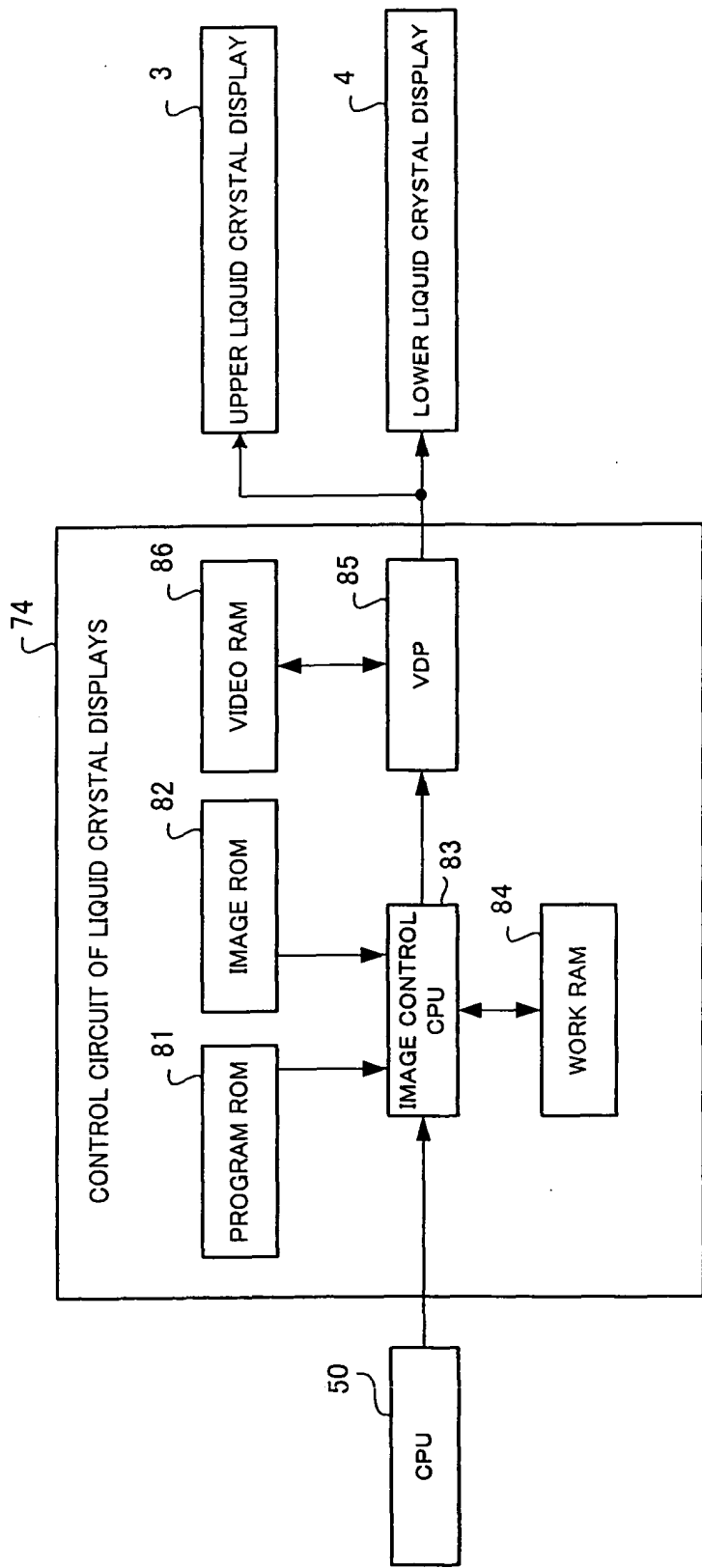


FIG. 5

FIG. 6

FIRST REEL BAND		SECOND REEL BAND		THIRD REEL BAND		FOURTH REEL BAND		FIFTH REEL BAND	
CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS
00	J	00	OCTOPUS	00	A	00	Q	00	J
01	Q	01	A	01	K	01	J	01	A
02	LOBSTER	02	LOBSTER	02	LOBSTER	02	LOBSTER	02	LOBSTER
03	J	03	OCTOPUS	03	WORM	03	Q	03	J
04	Q	04	K	04	Q	04	K	04	A
05	CRAB	05	J	05	LOBSTER	05	LOBSTER	05	FISH
06	A	06	FISH	06	PUNK	06	A	06	CRAB
07	WORM	07	WORM	07	A	07	K	07	PUNK
08	K	08	J	08	SARDINE	08	SARDINE	08	K
09	FISH	09	CRAB	09	J	09	A	09	SARDINE
10	PUNK	10	OCTOPUS	10	A	10	A	10	Q
11	Q	11	A	11	Q	11	K	11	CRAB
12	SHARK	12	SARDINE	12	WORM	12	CRAB	12	K
13	CRAB	13	WORM	13	K	13	PUNK	13	WORM
14	K	14	J	14	FISH	14	SHARK	14	FISH
15	A	15	OCTOPUS	15	Q	15	WORM	15	J
16	OCTOPUS	16	SHARK	16	CRAB	16	A	16	OCTOPUS
17	J	17	J	17	A	17	OCTOPUS	17	Q
18	Q	18	OCTOPUS	18	K	18	FISH	18	WORM
19	FISH	19	CRAB	19	SHARK	19	K	19	J
20	K	20	Q	20	Q	20	WORM	20	Q
21	J	21	PUNK	21	K	21	PUNK	21	OCTOPUS
22	SARDINE	22	CRAB	22	OCTOPUS	22	A	22	A
23	CRAB	23	OCTOPUS	23	Q	23	FISH	23	PUNK
24	J	24	J	24	A	24	CRAB	24	WORM
25	WORM	25	WORM	25	WORM	25	K	25	Q
26	Q	26	CRAB	26	J	26	Q	26	CRAB
27	CRAB	27	K	27	Q	27	OCTOPUS	27	PUNK
28	A	28	OCTOPUS	28	PUNK	28	WORM	28	K
29	FISH	29	WORM	29	K	29	Q	29	OCTOPUS

FIG. 7

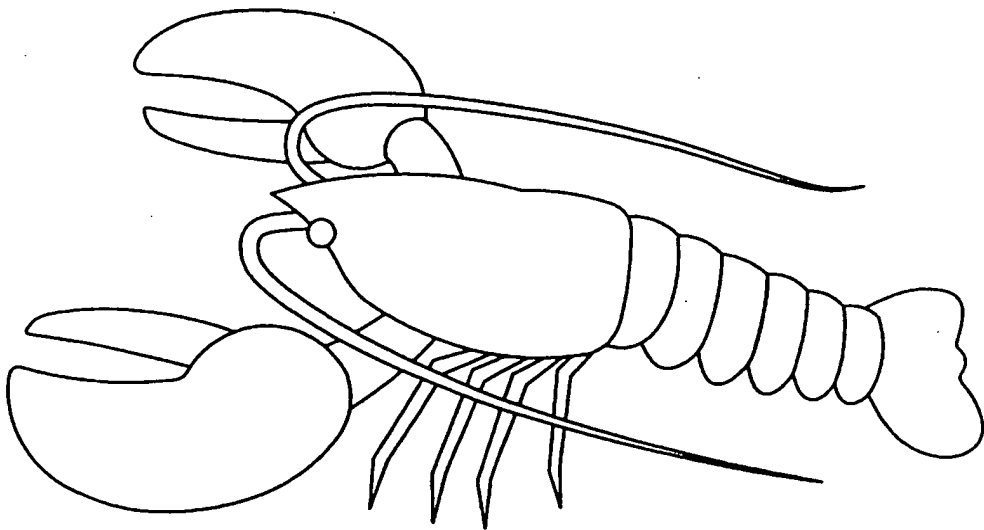


FIG. 8

	2K	3K	4K	5K	
LOBSTER	10	320	2500	6000	Left→Right
SHARK	3	25	150	1000	Left→Right
FISH	2	15	120	500	Left→Right
PUNK	2	10	120	400	Left→Right
OCTOPUS	2	8	50	300	Left→Right
CRAB		7	50	200	Left→Right
WORM		6	40	150	Left→Right
A		5	25	120	Left→Right
K		5	25	120	Left→Right
Q		5	20	100	Left→Right
J		5	20	100	Left→Right
SARDINE	2	5	10	125	SCATTER/Trigger

FIG. 9

CODE NOs.	RANDOM NUMBERS
00	0
01	1
02	2
03	3
04	4
05	5
06	6
07	7
08	8
09	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29

FIG. 10

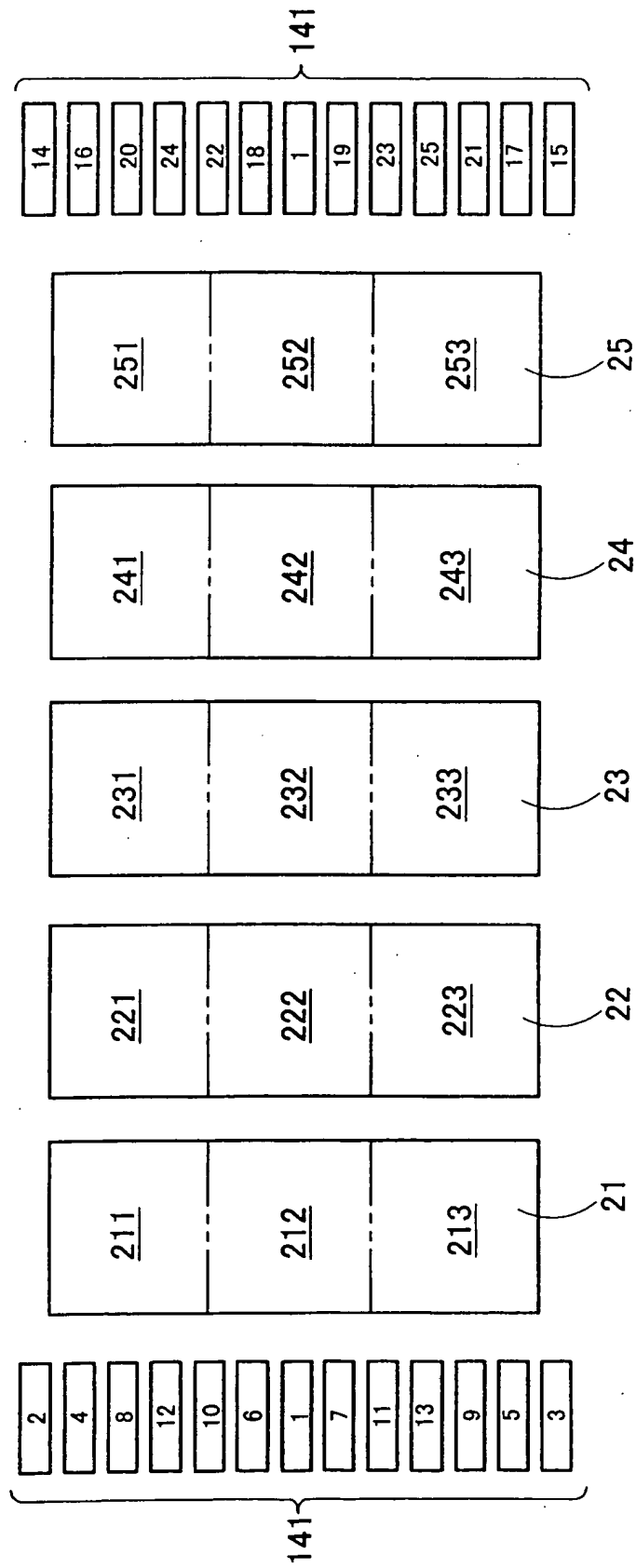


FIG. 11

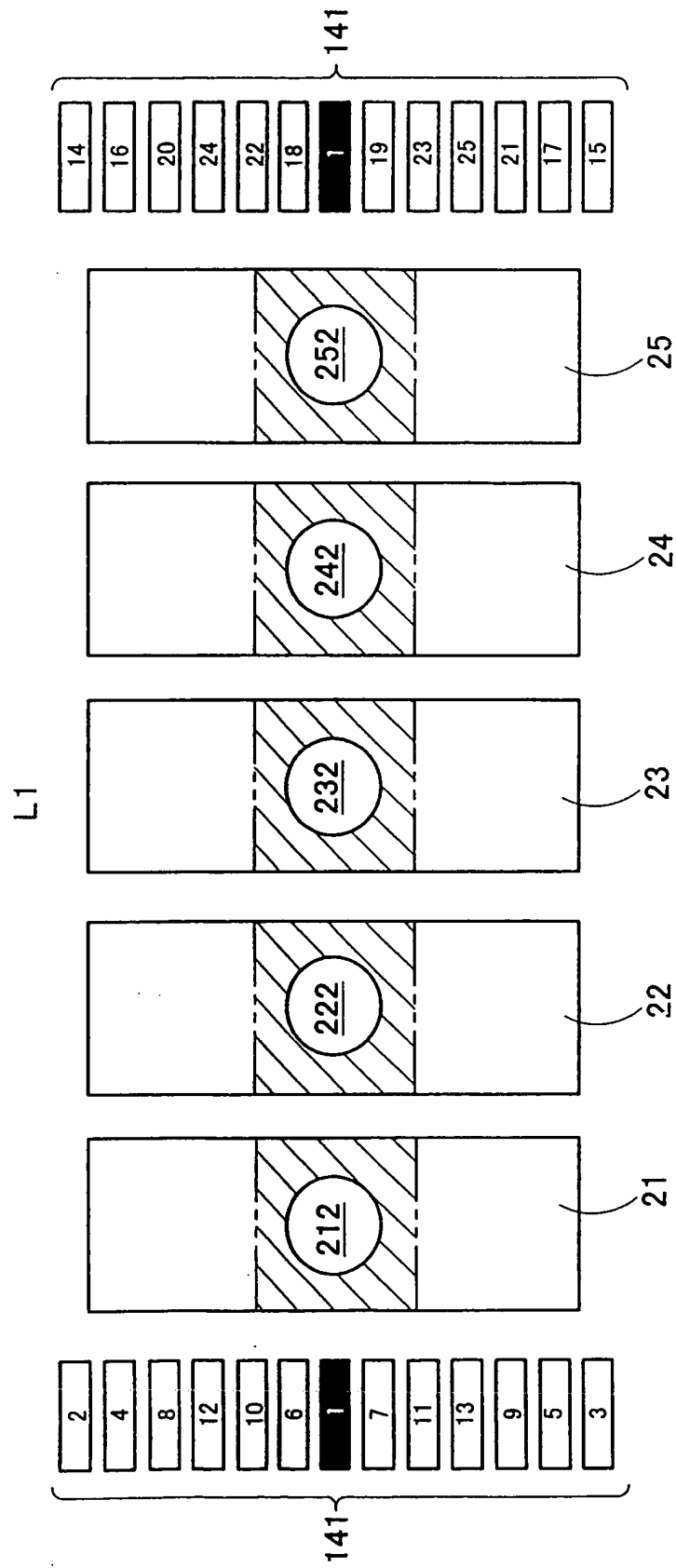


FIG. 12

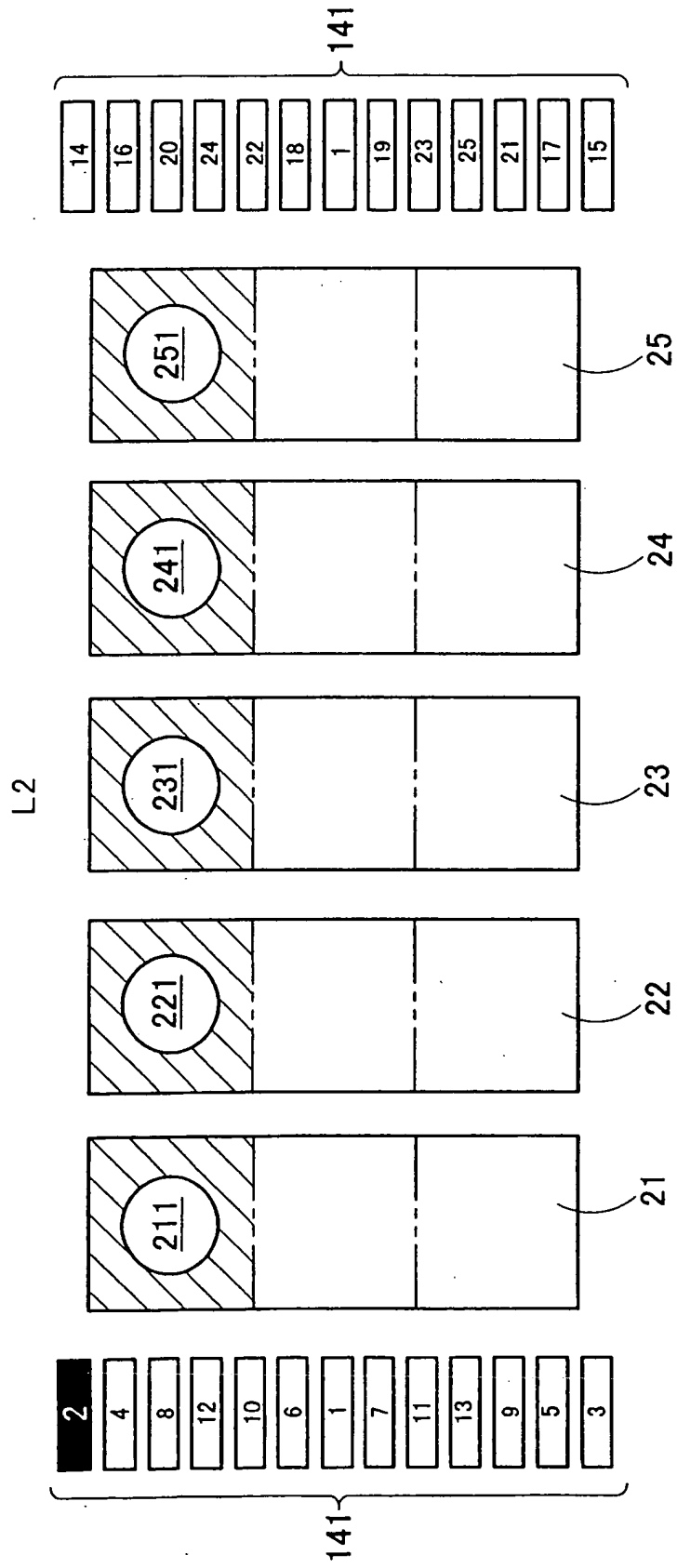


FIG. 13

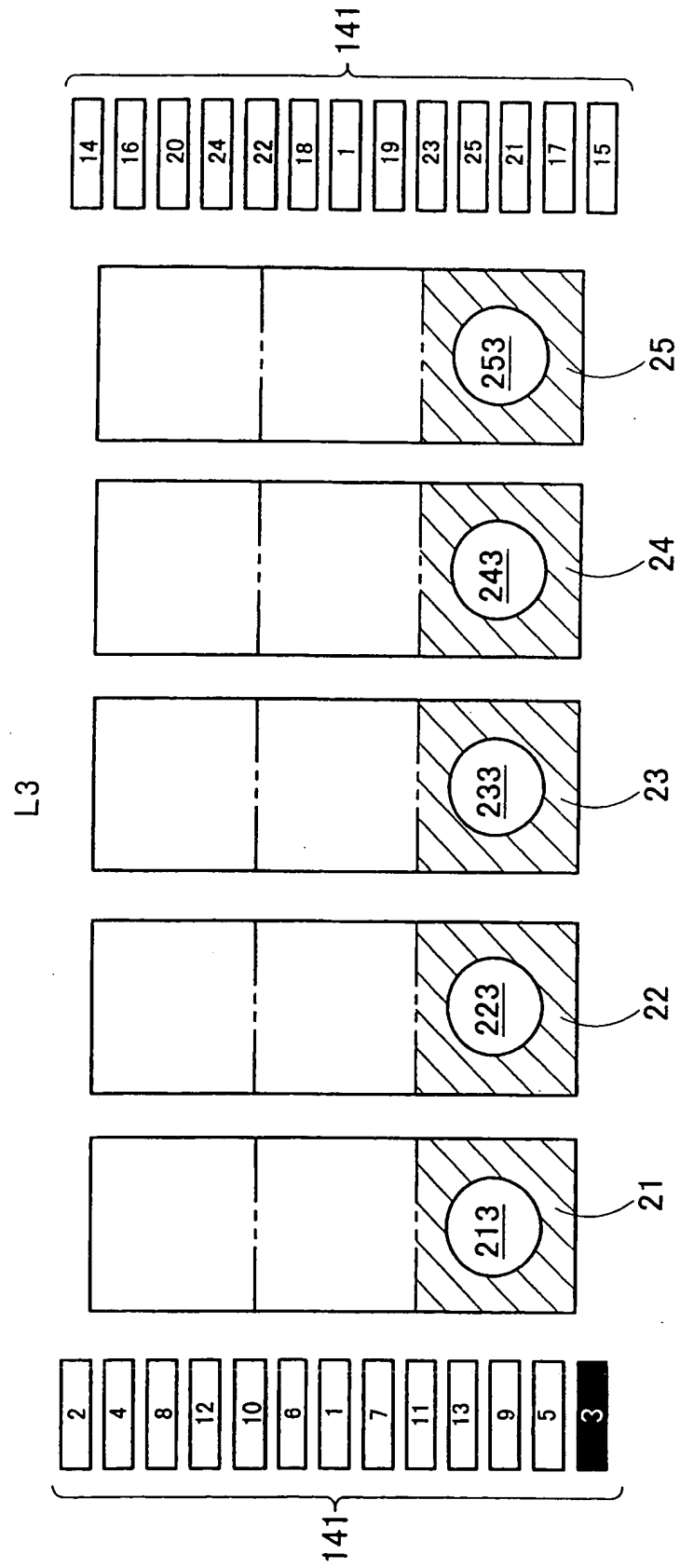


FIG. 14

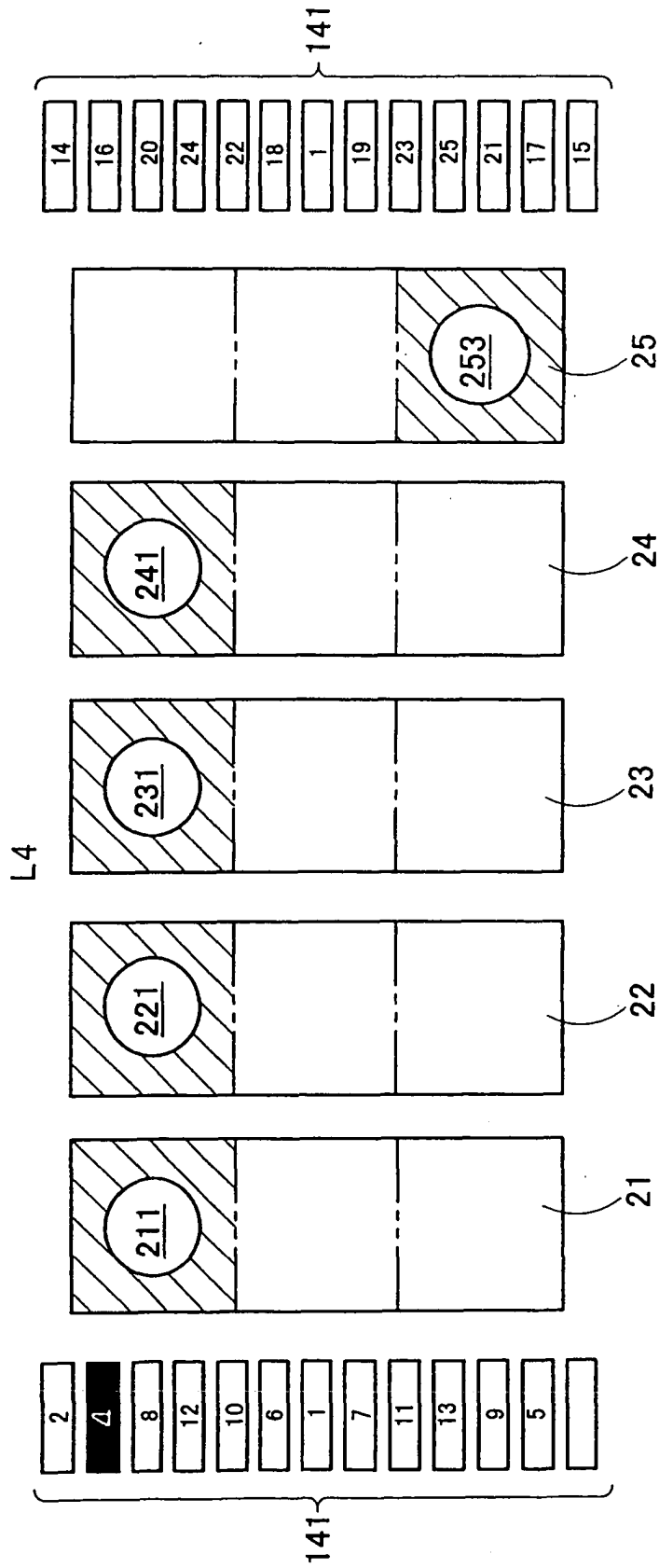
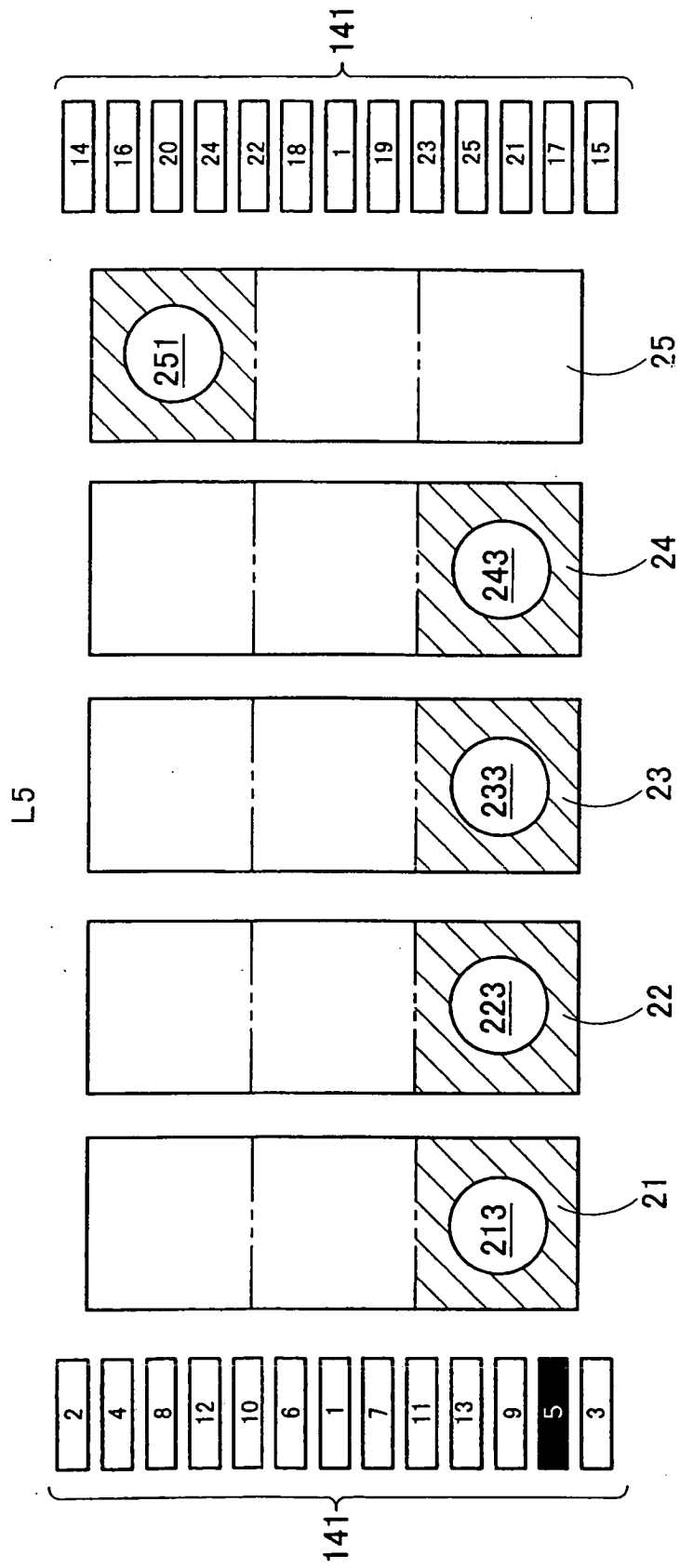
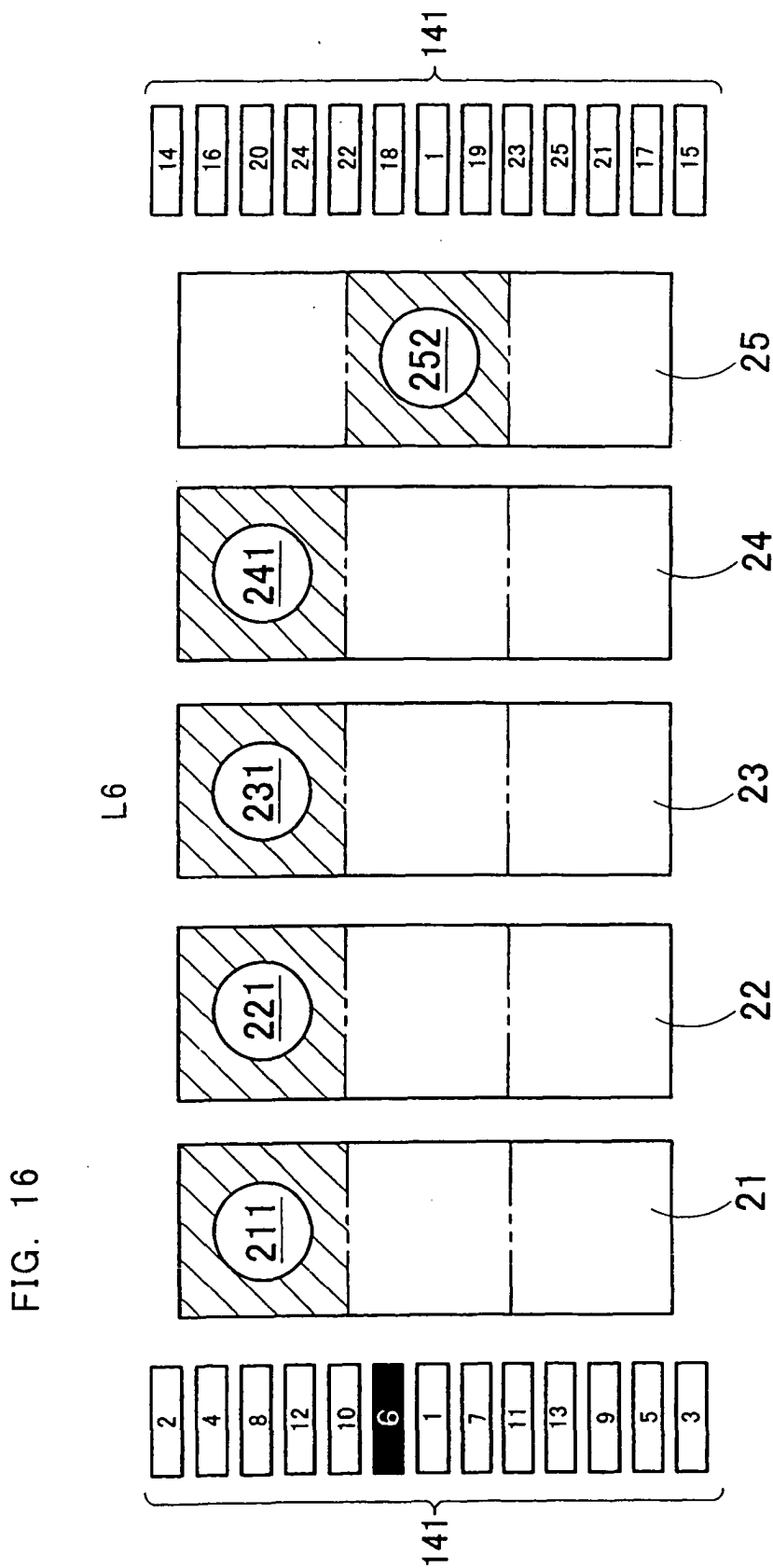
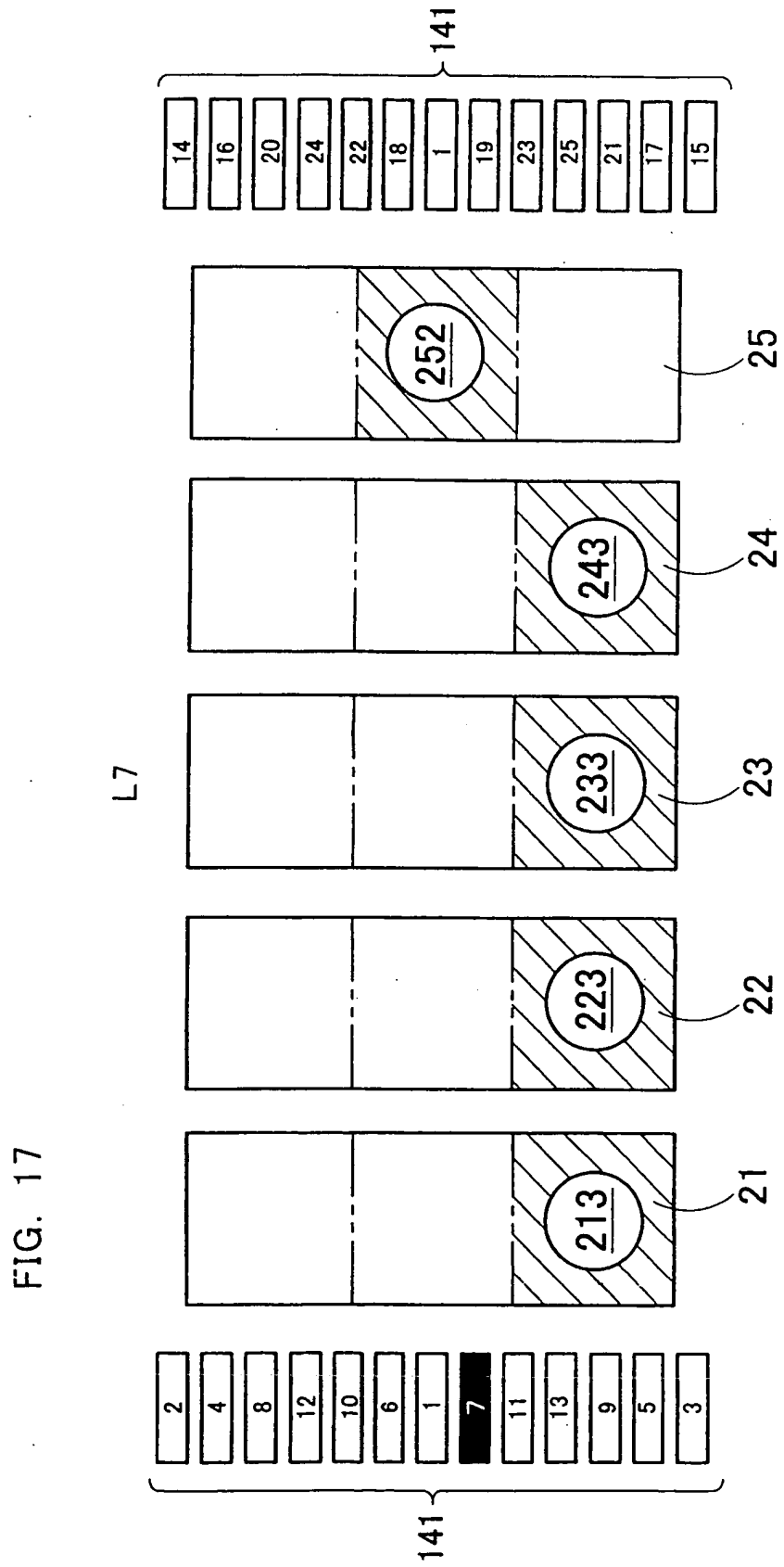
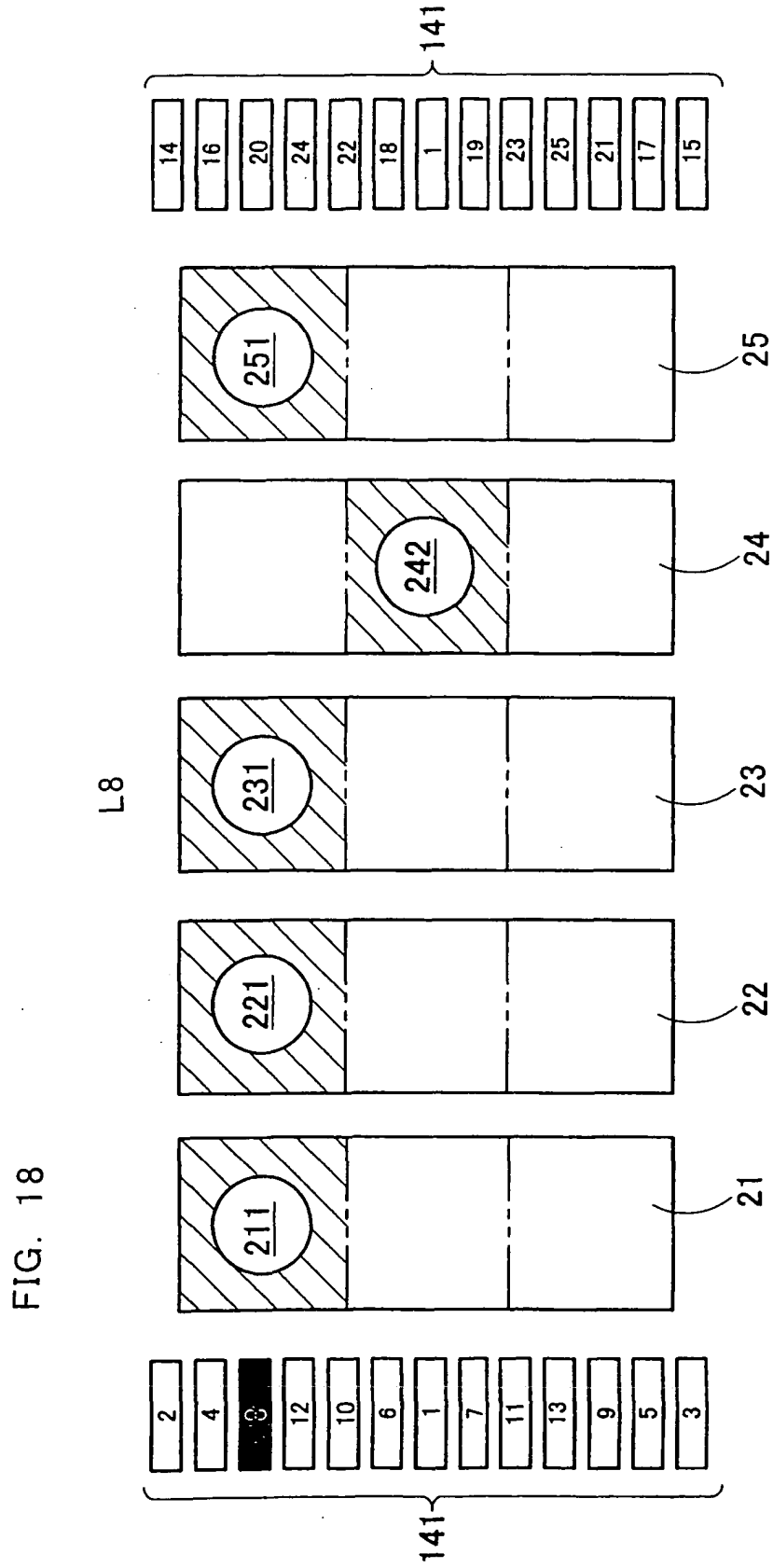


FIG. 15









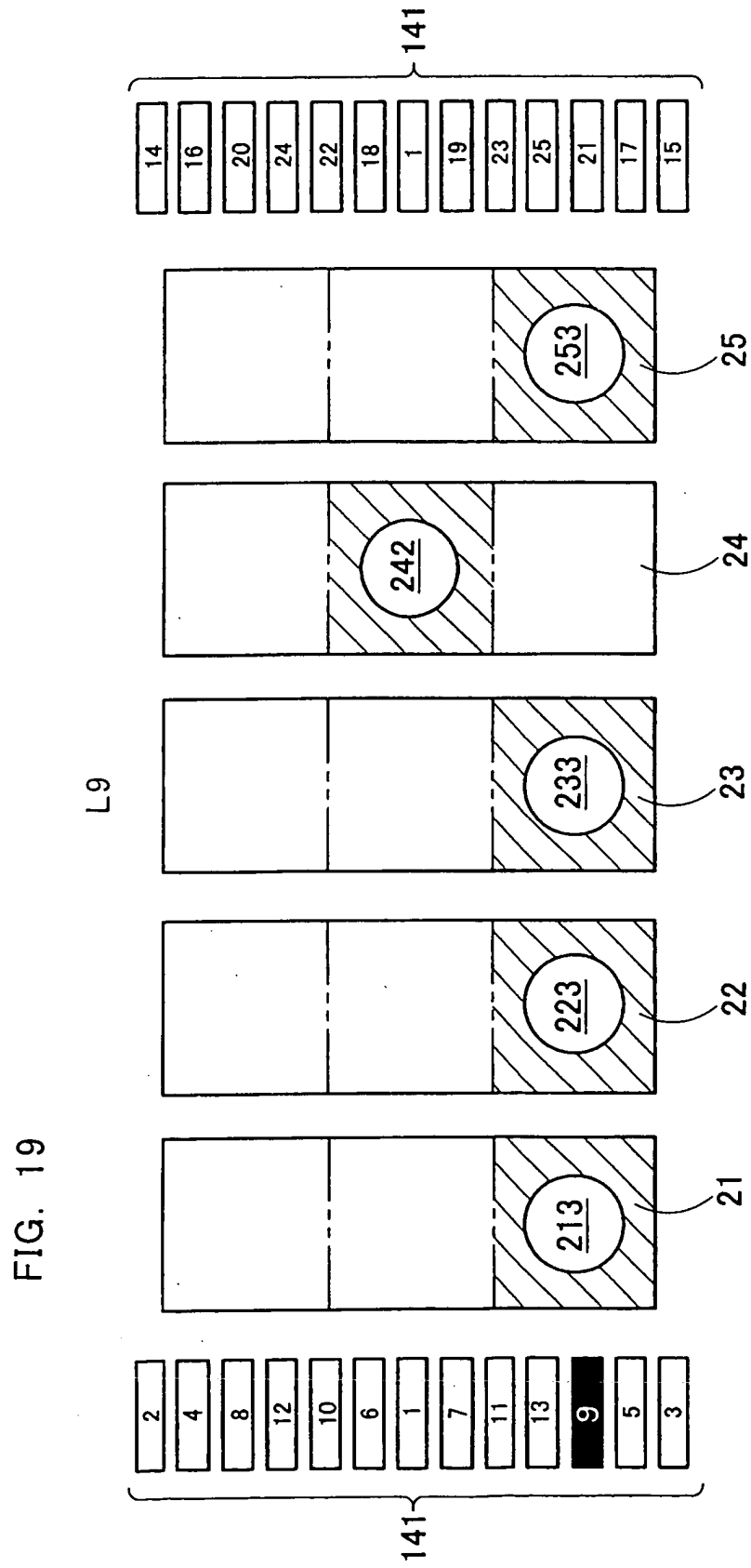


FIG. 20

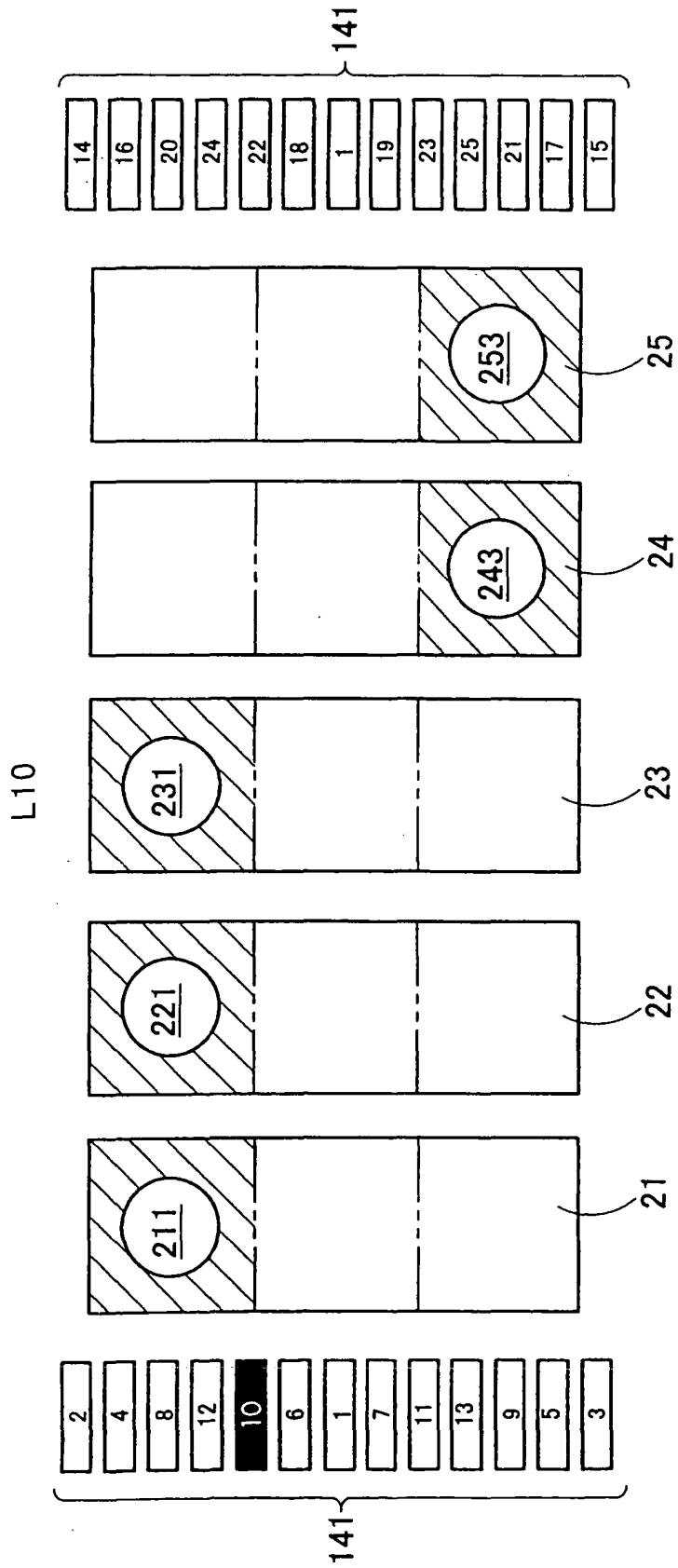


FIG. 21

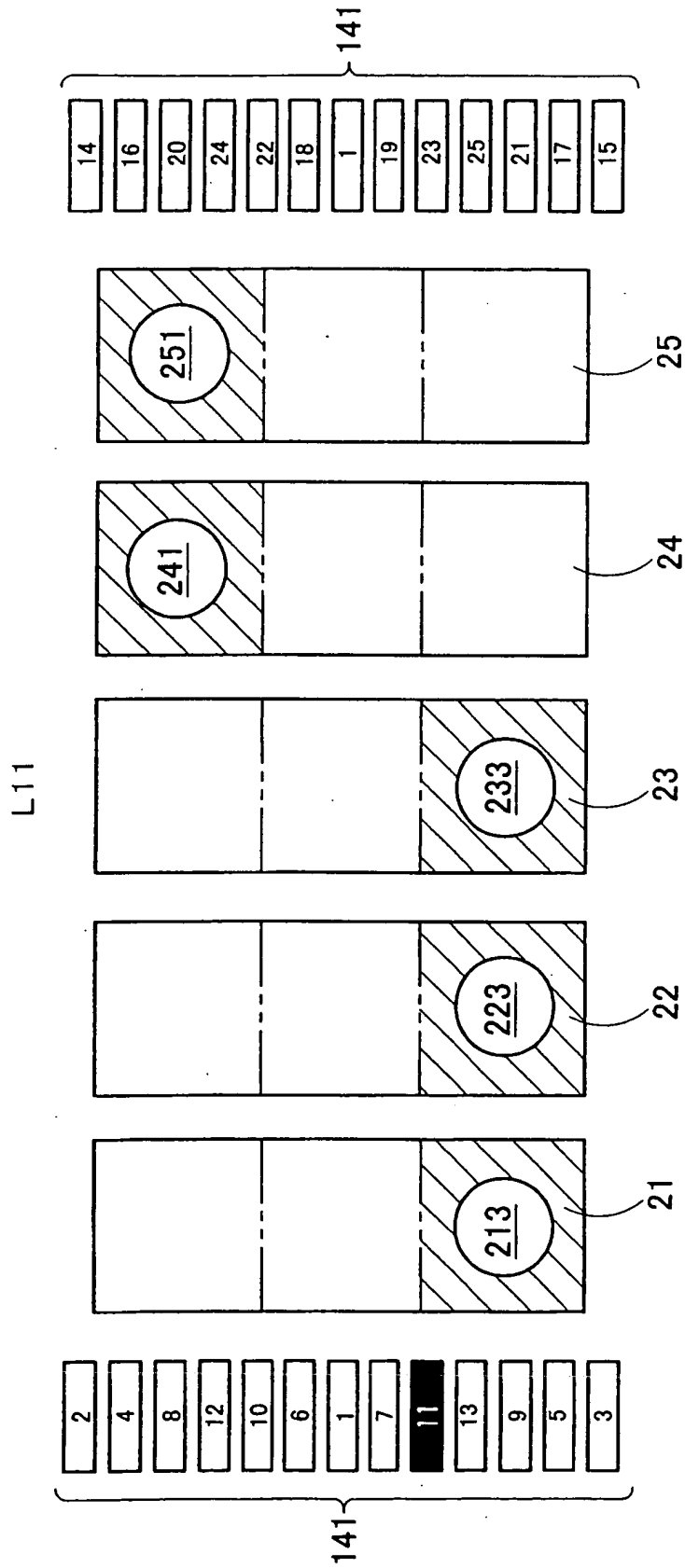


FIG. 22

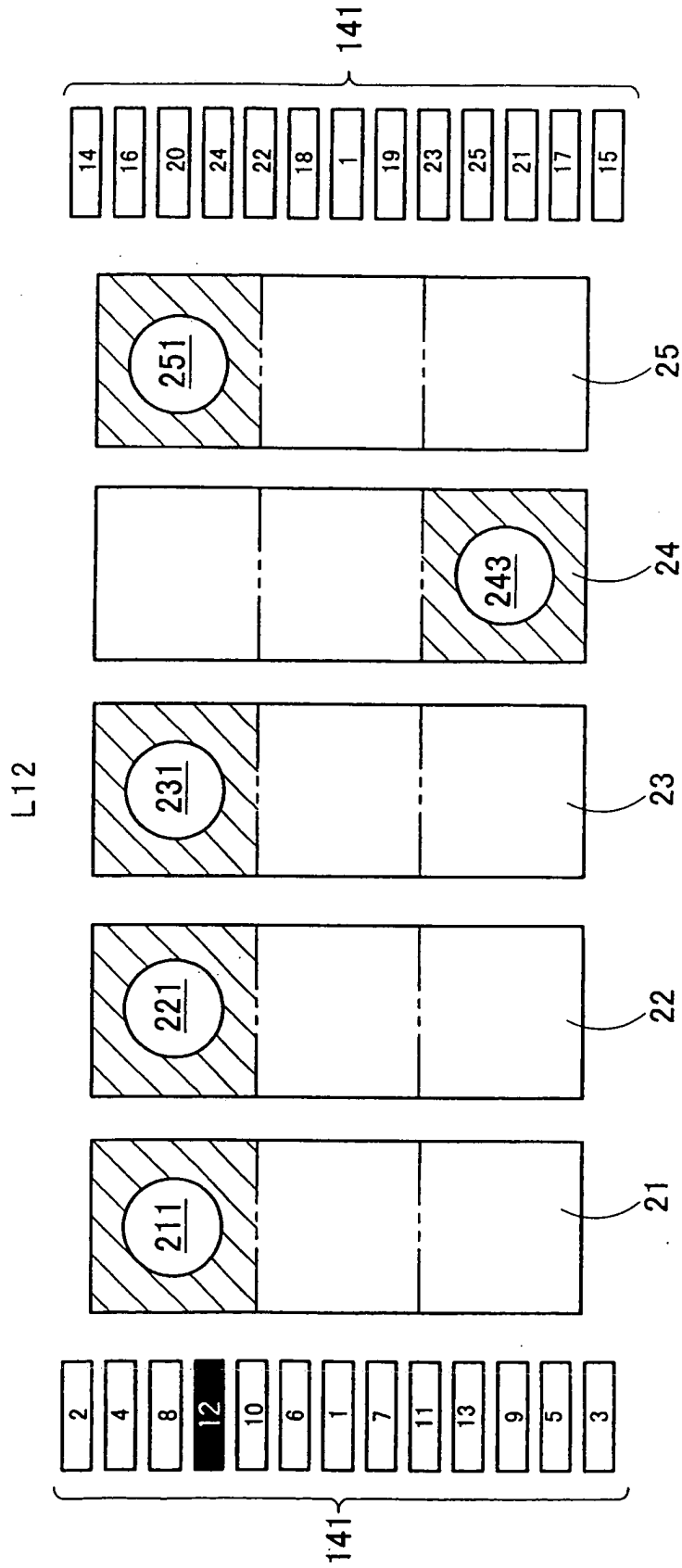


FIG. 23

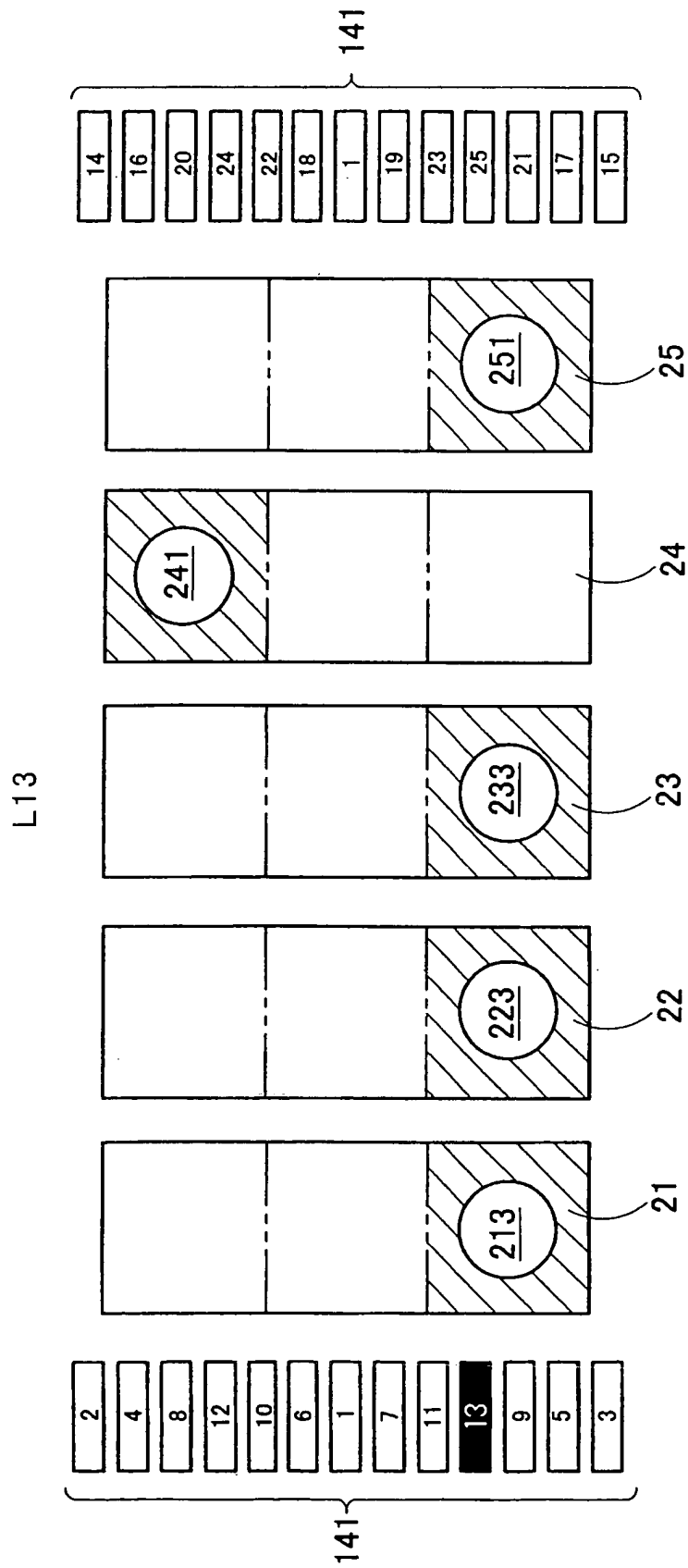
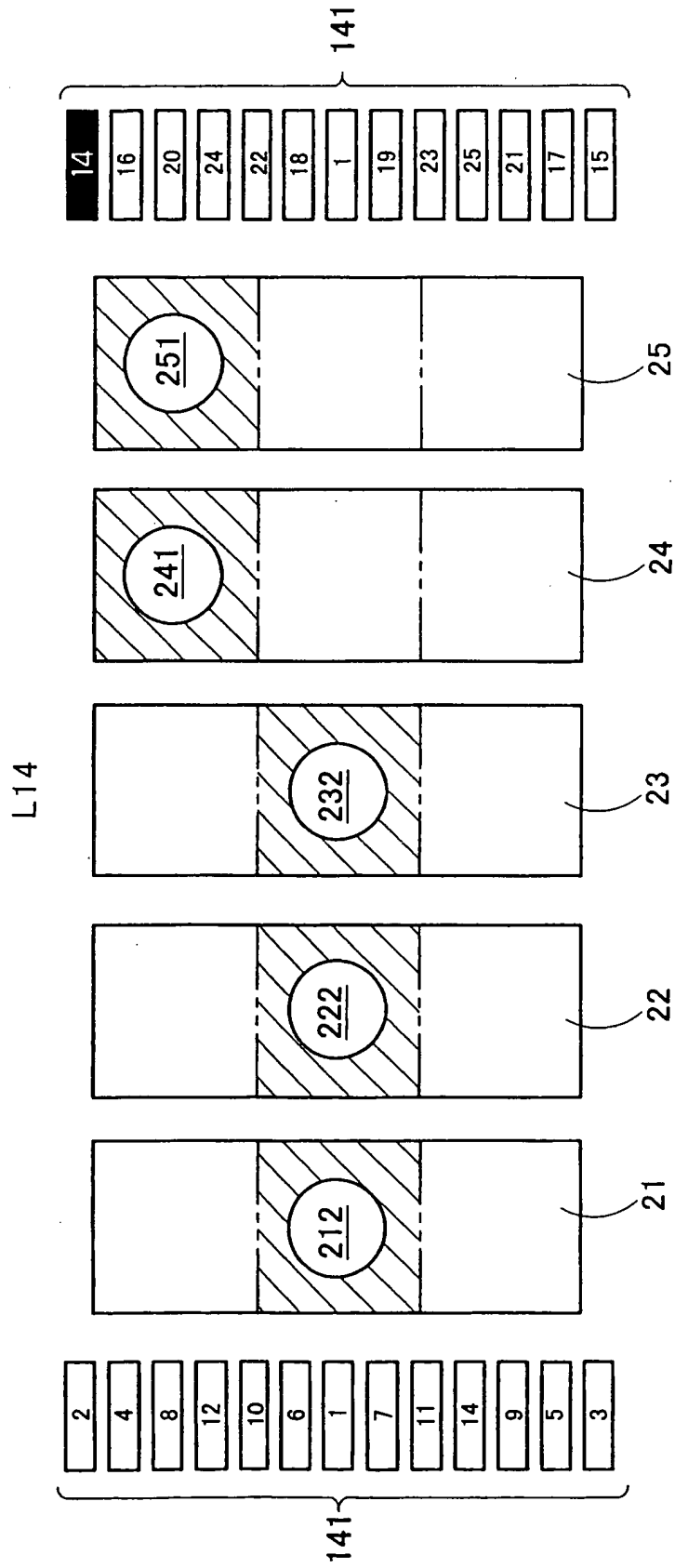
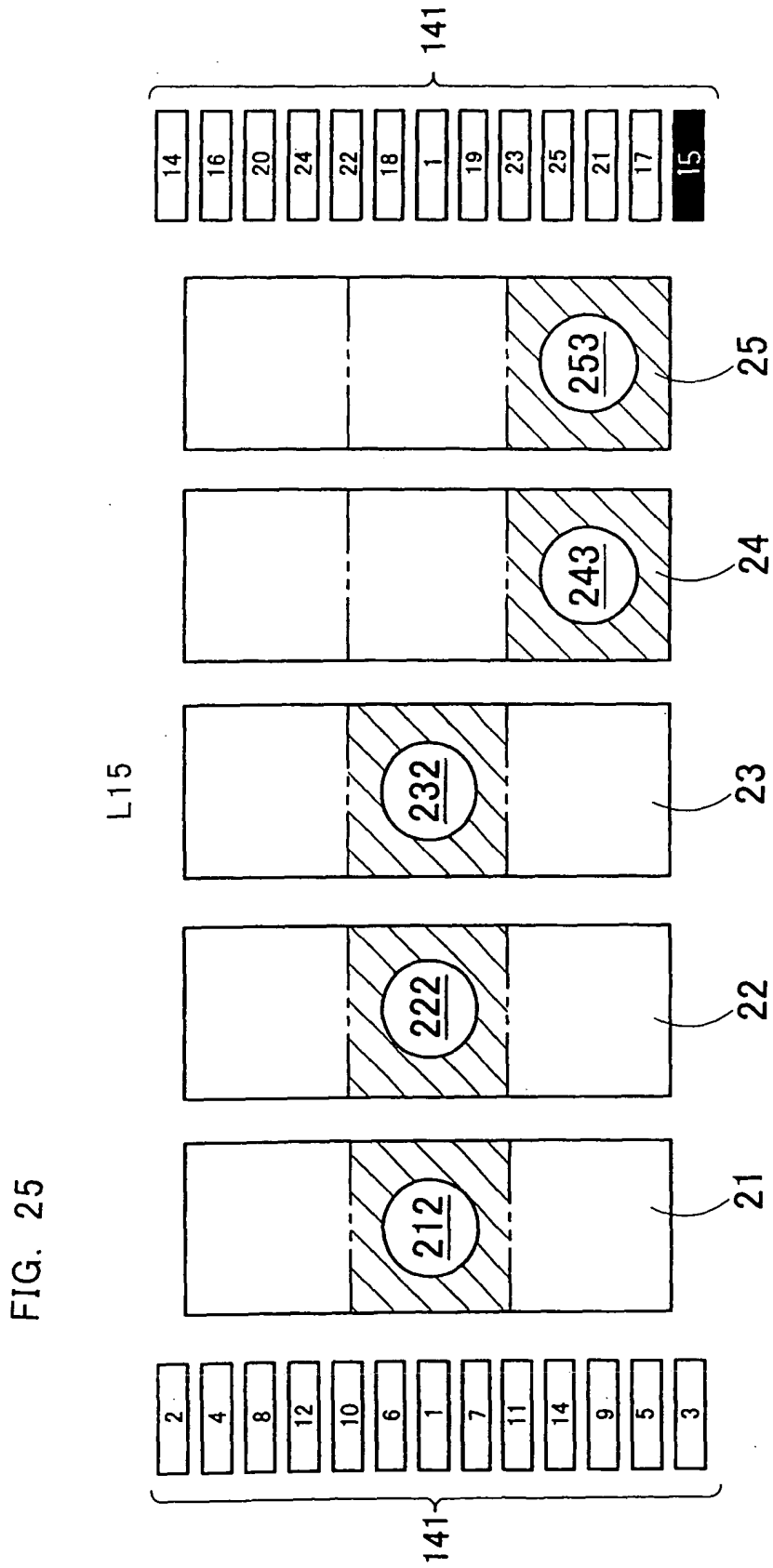


FIG. 24





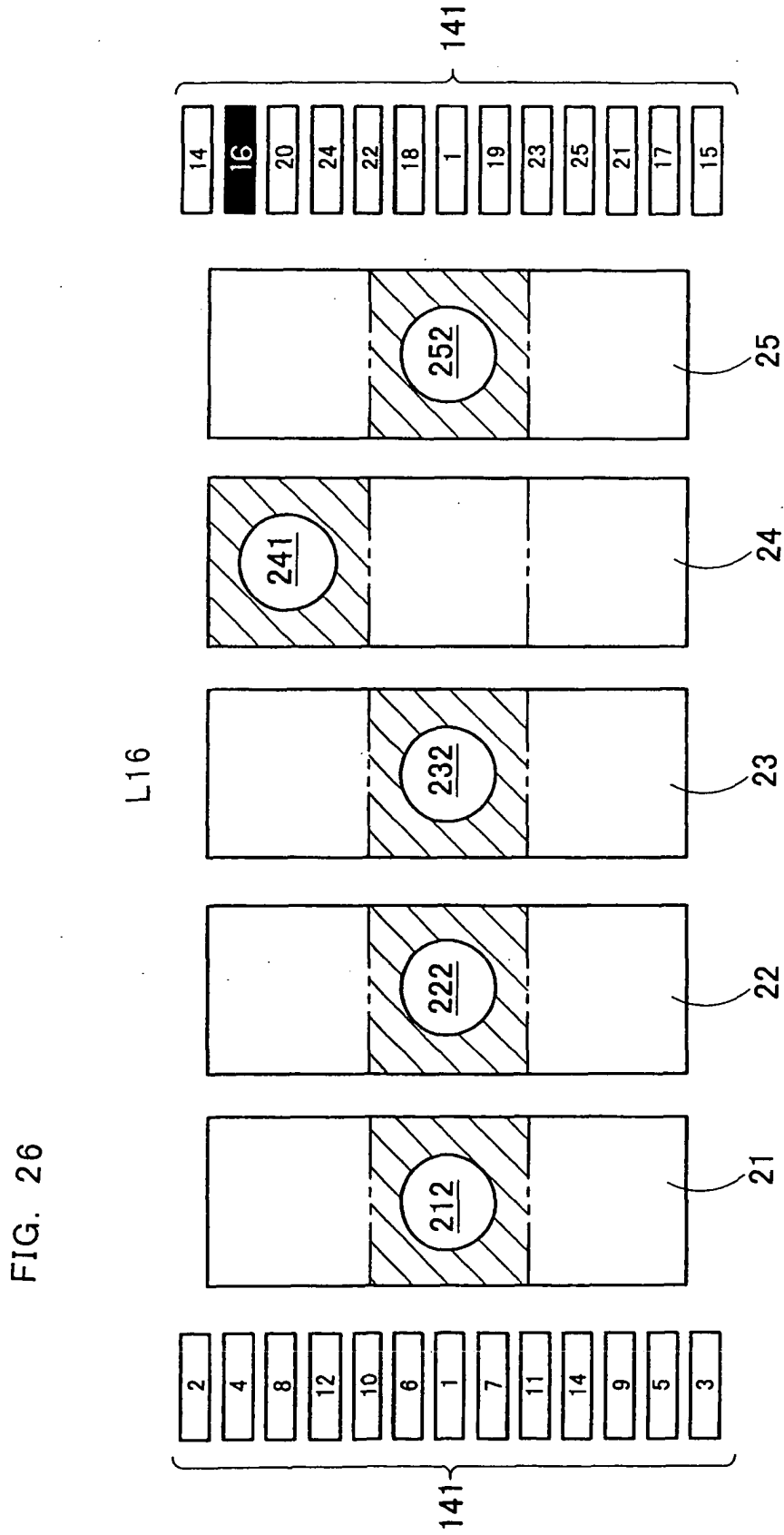


FIG. 27

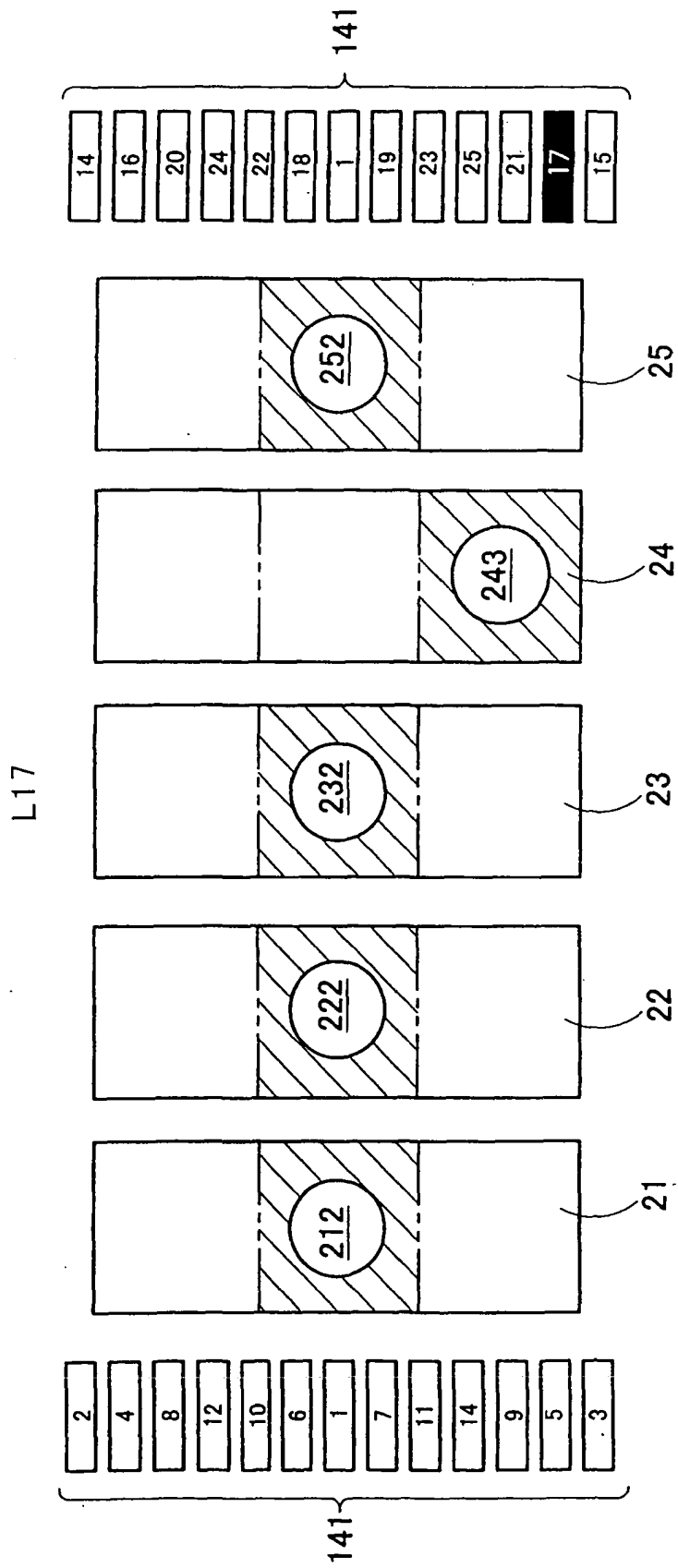


FIG. 28

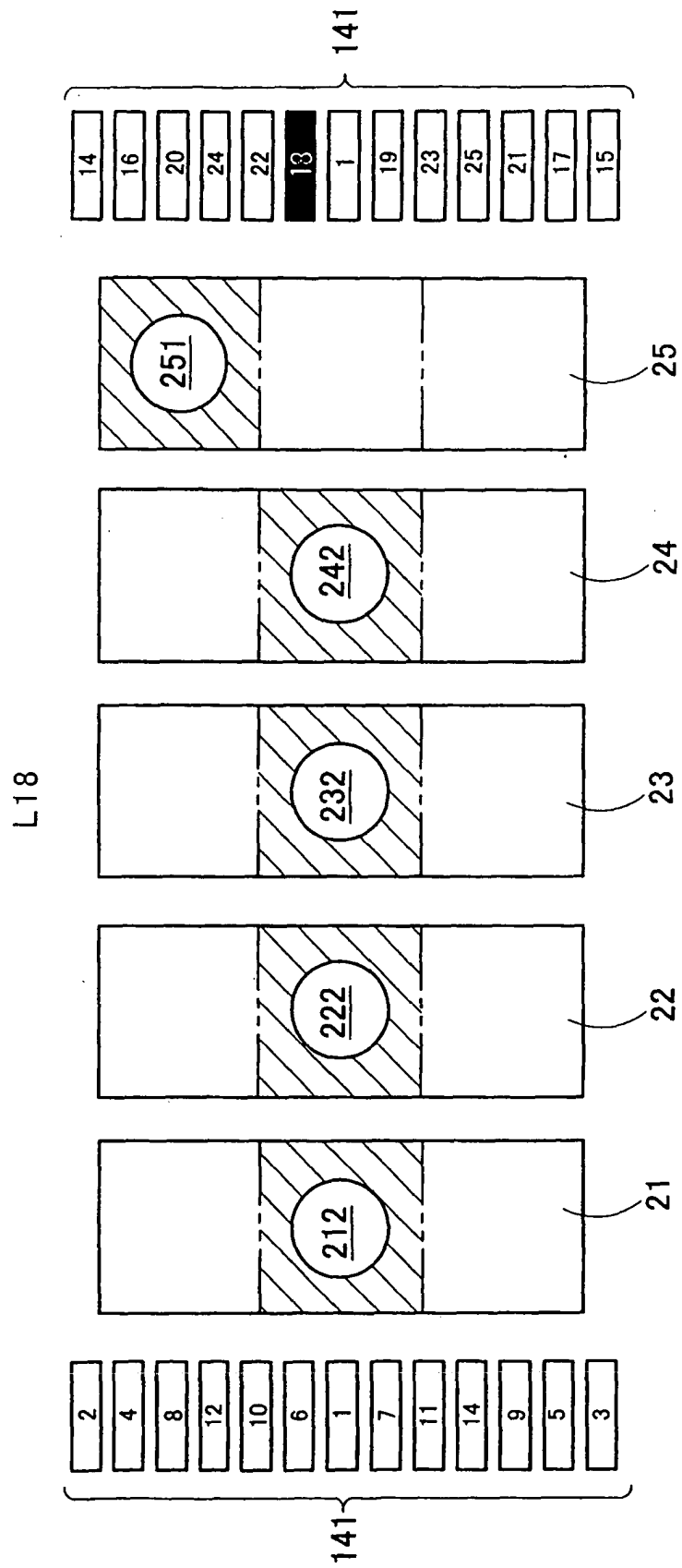


FIG. 29

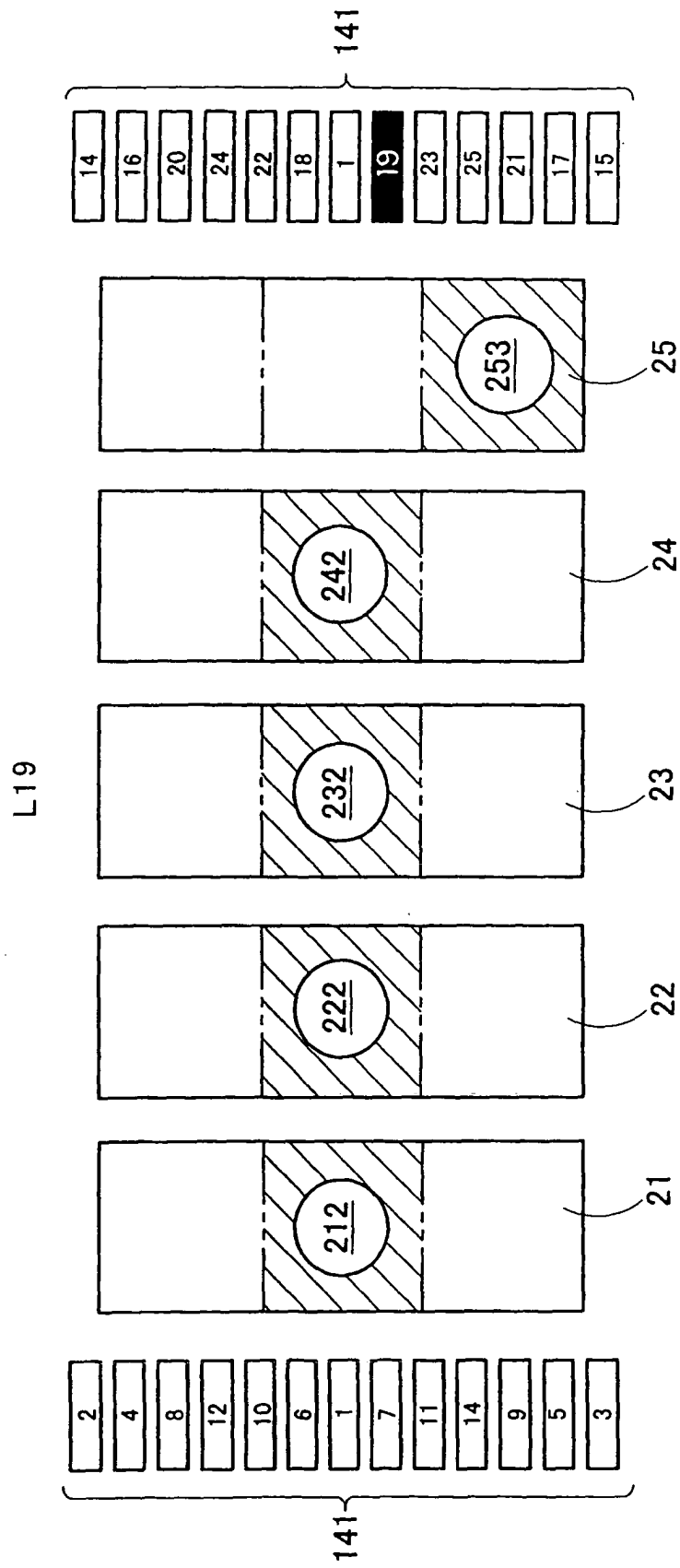
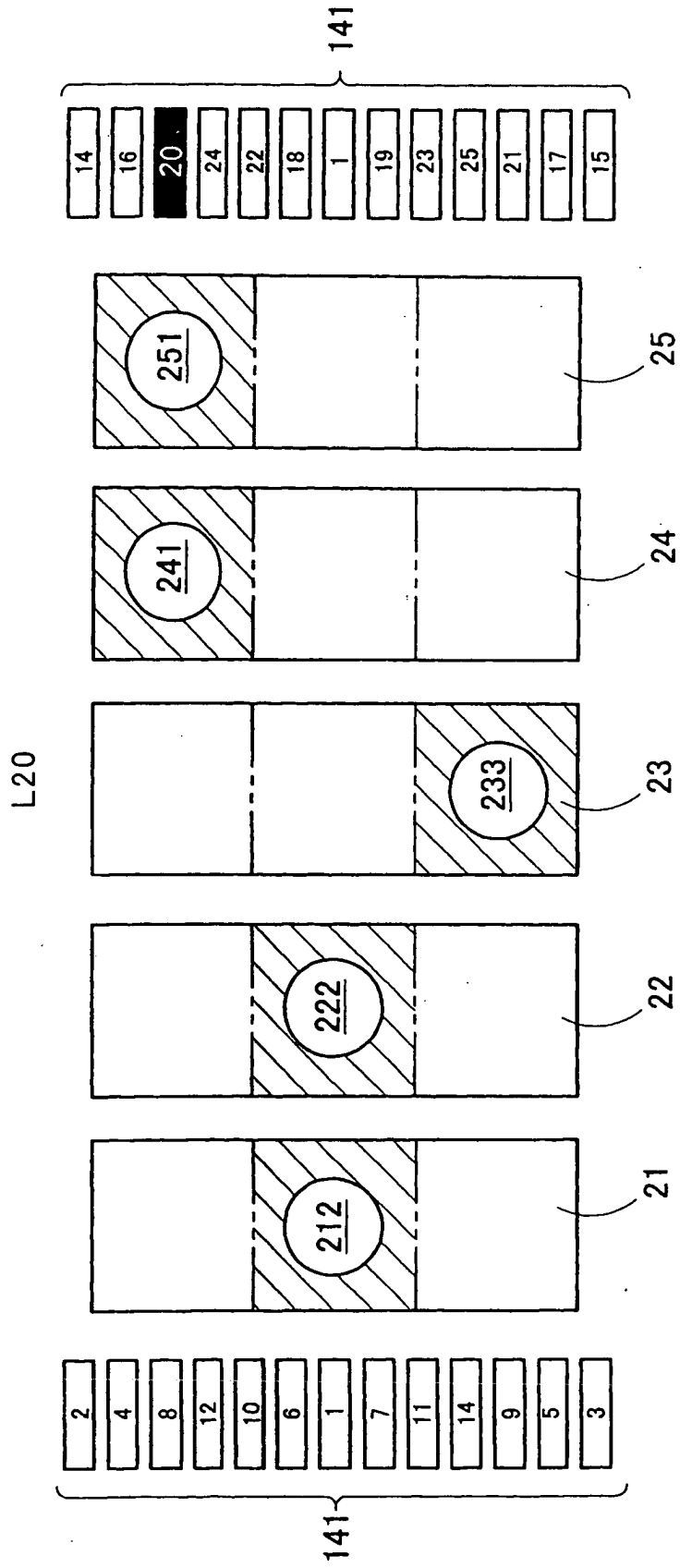


FIG. 30



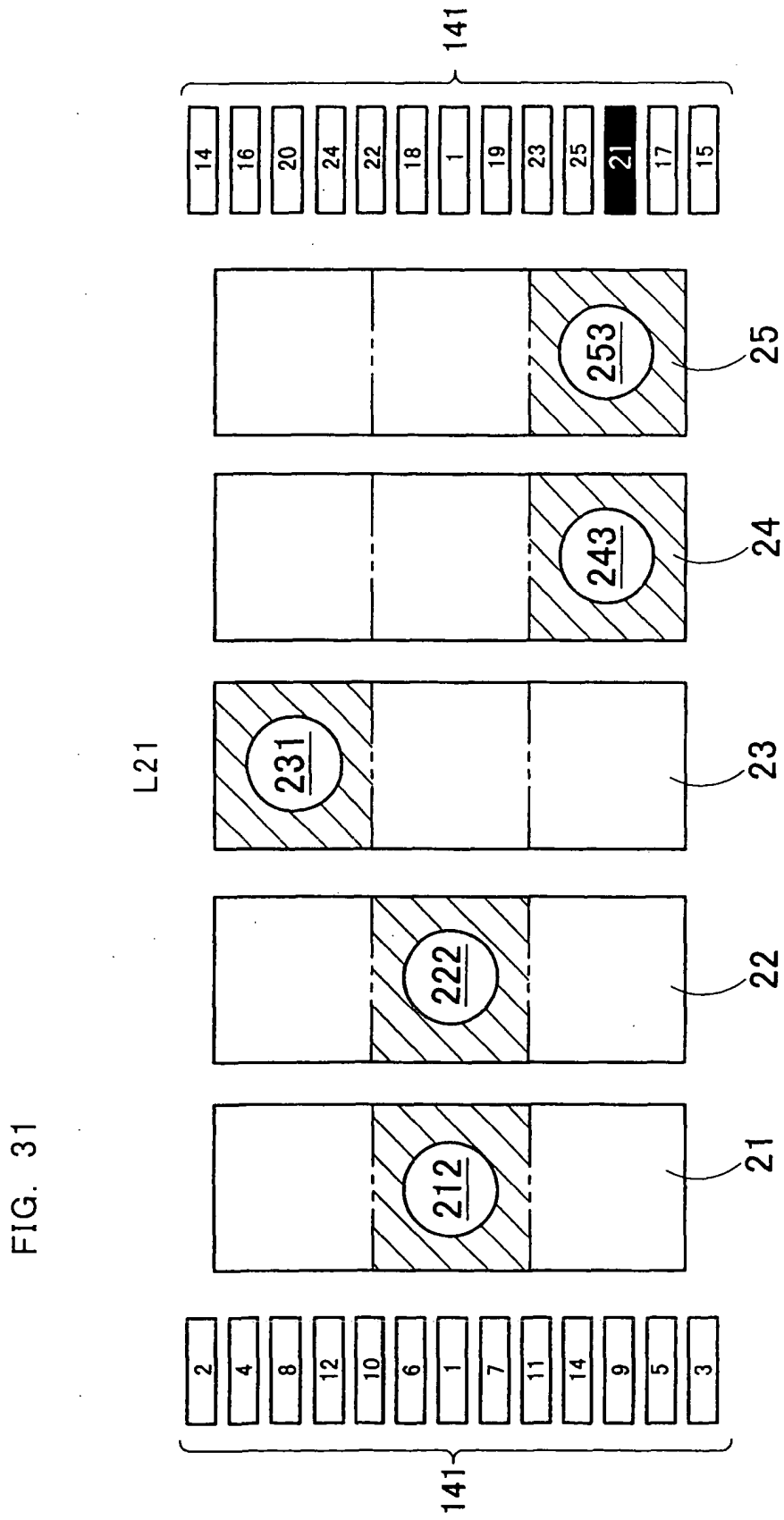


FIG. 32

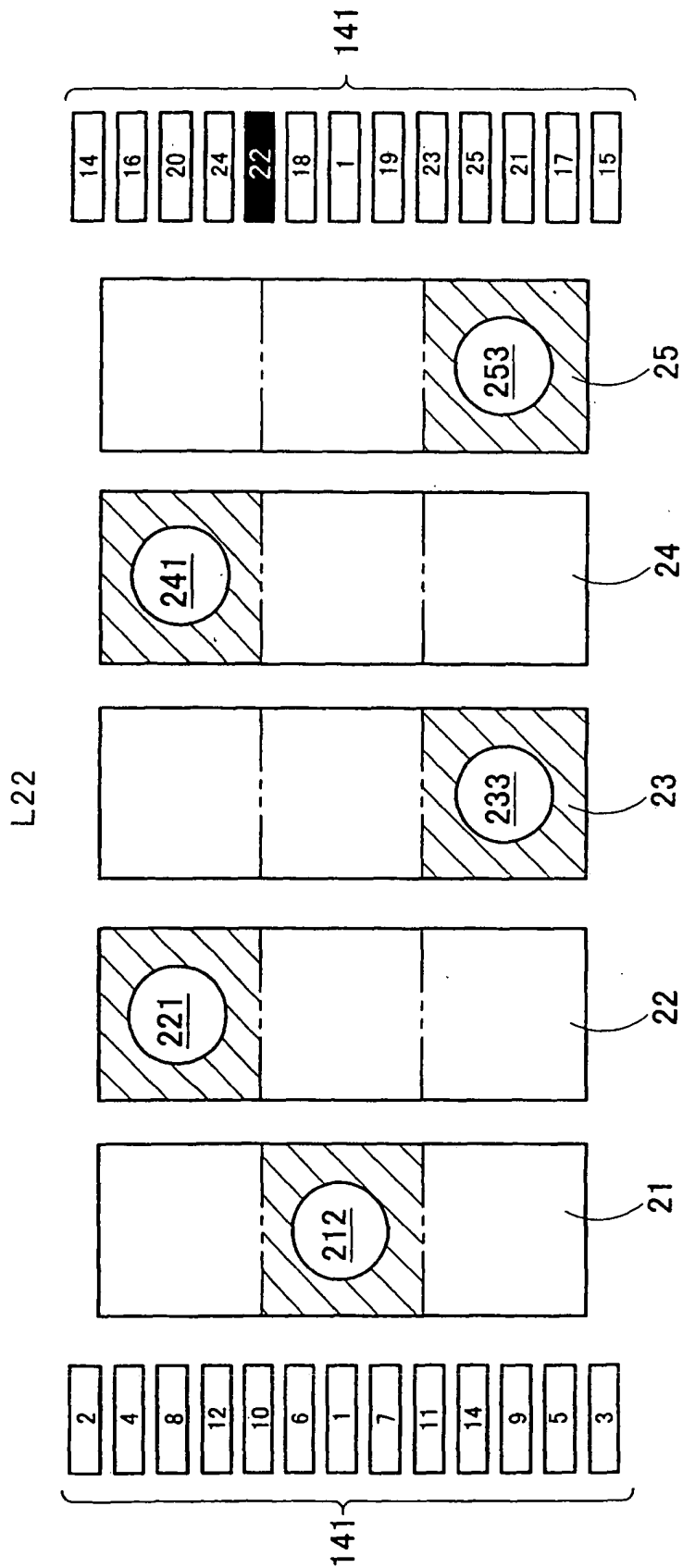


FIG. 33

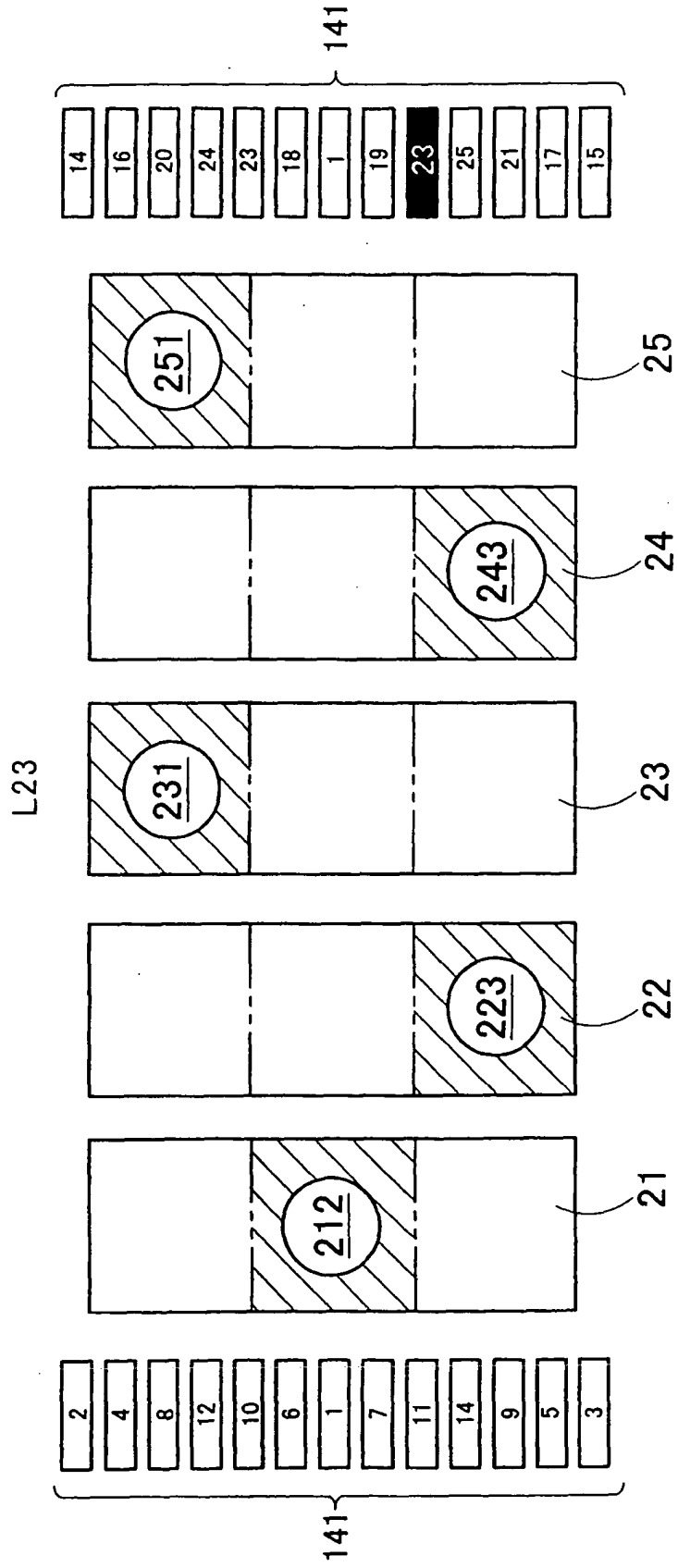


FIG. 34

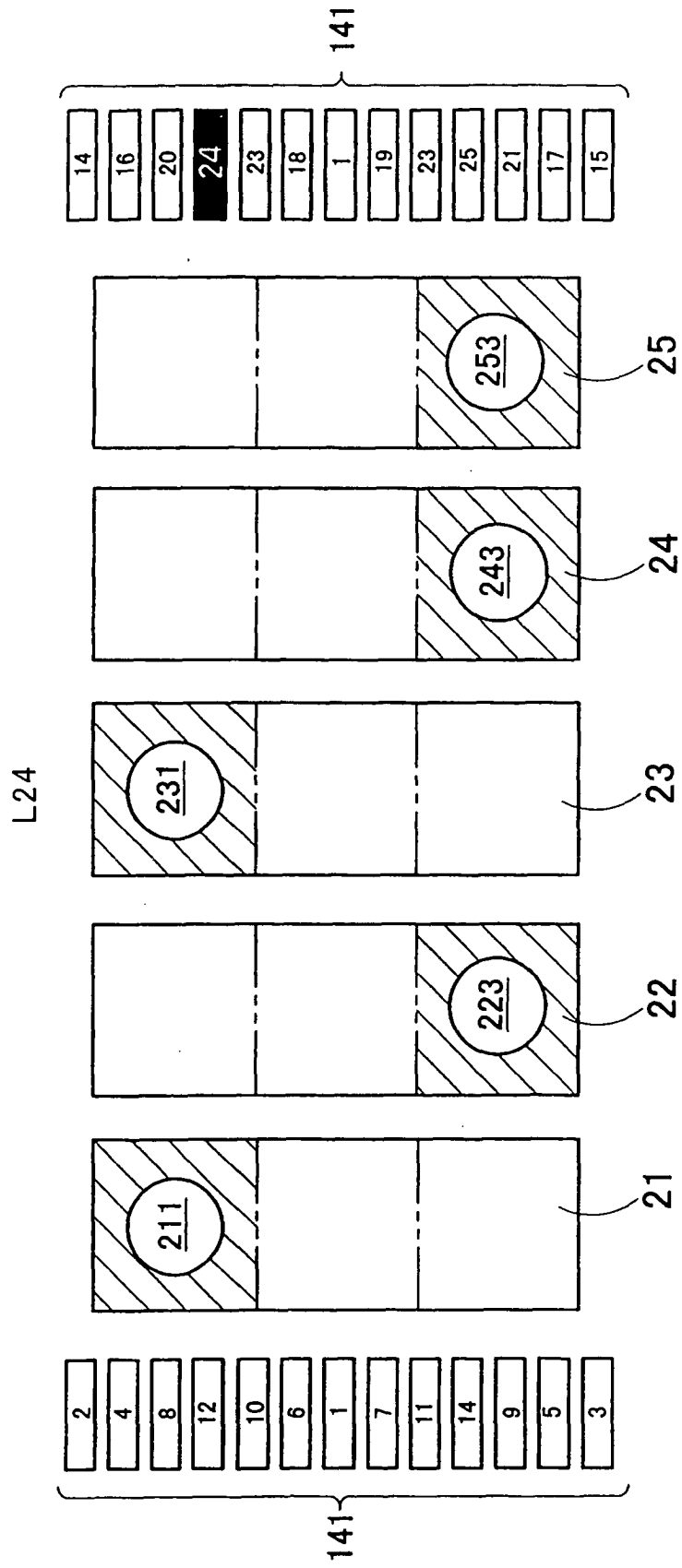


FIG. 35

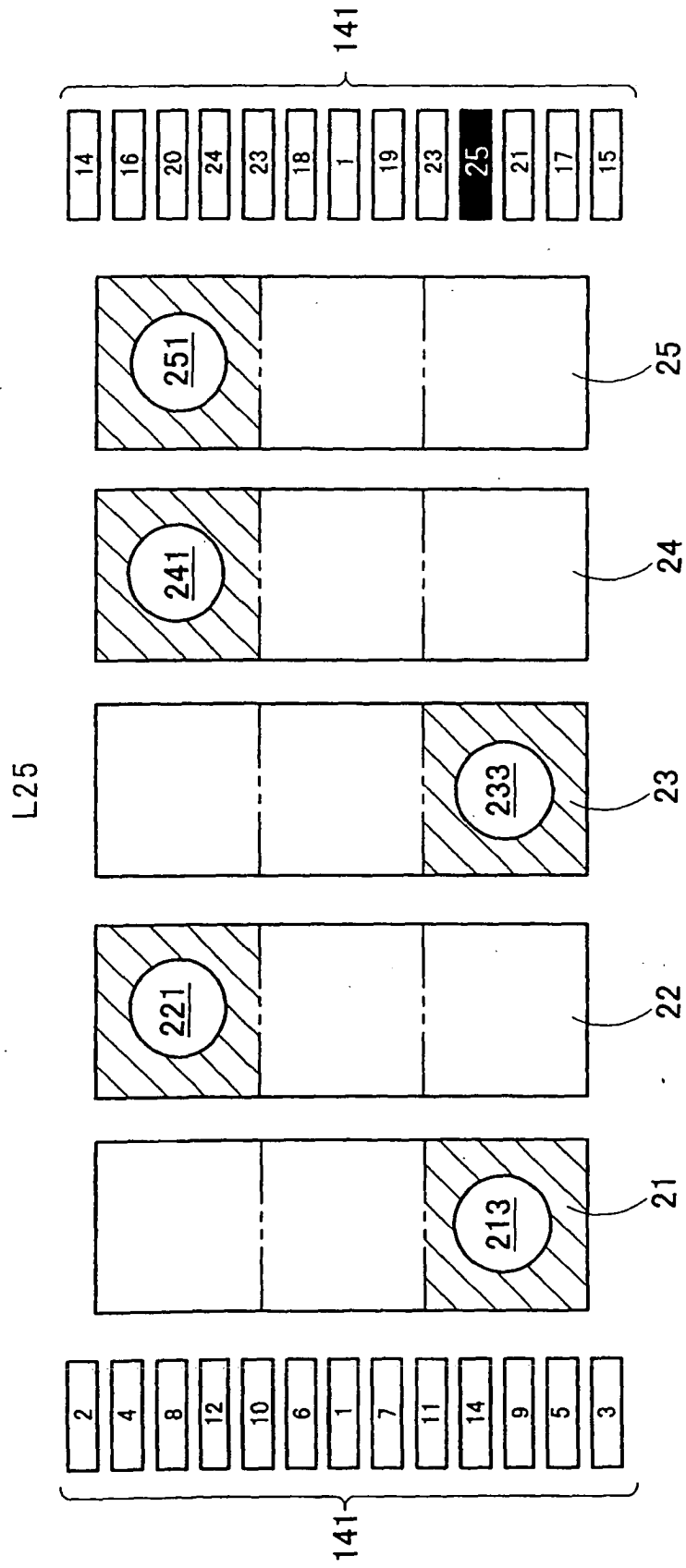


FIG. 36

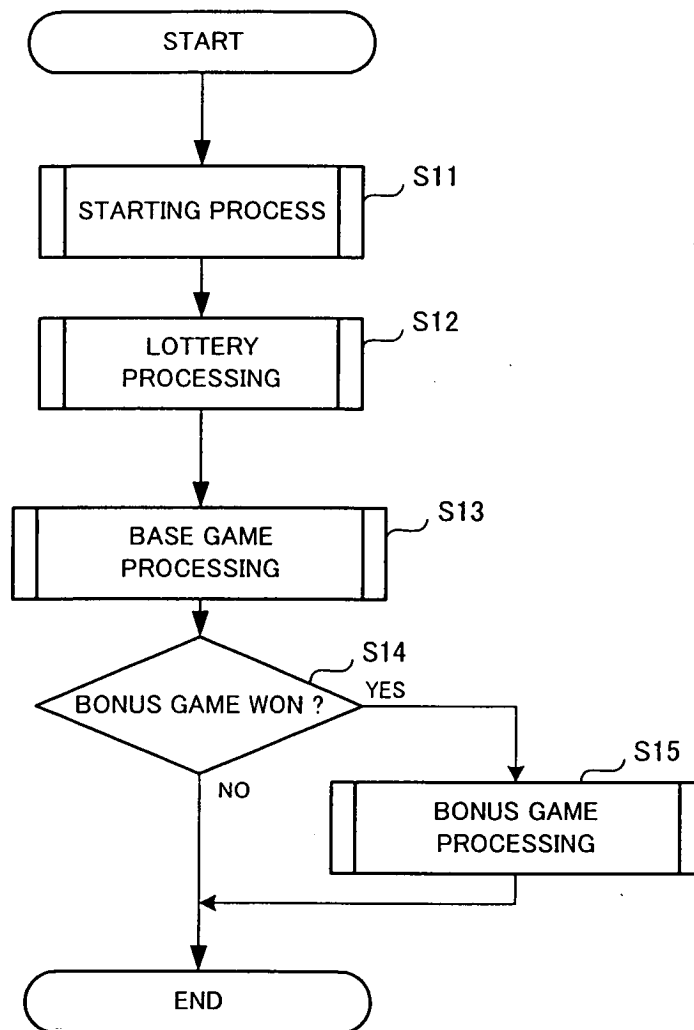


FIG. 37

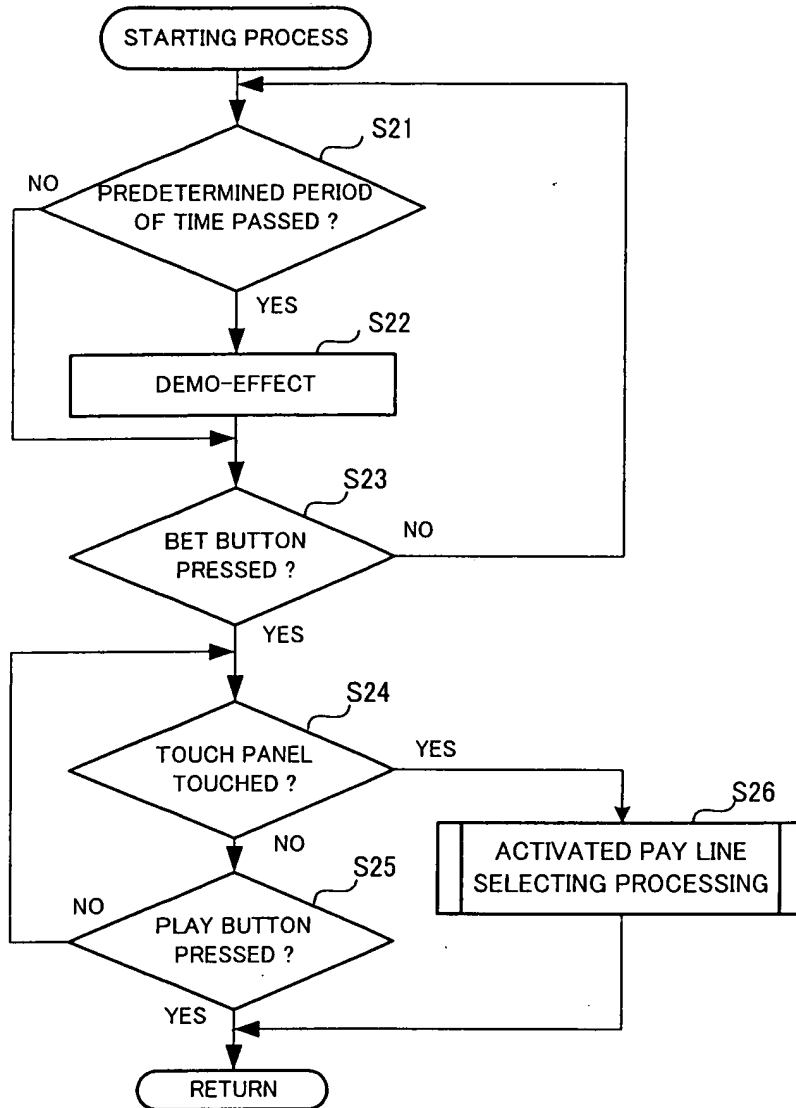


FIG. 38

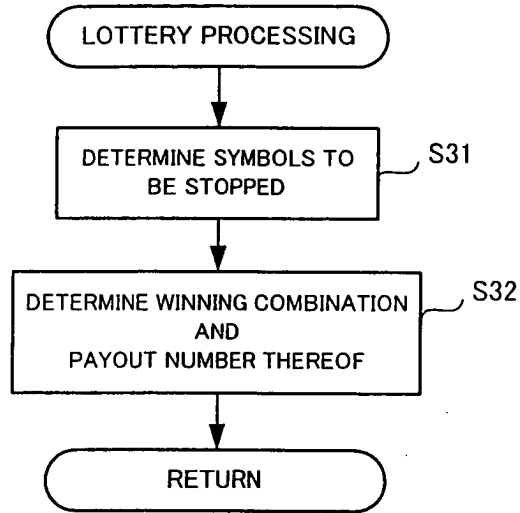


FIG. 39

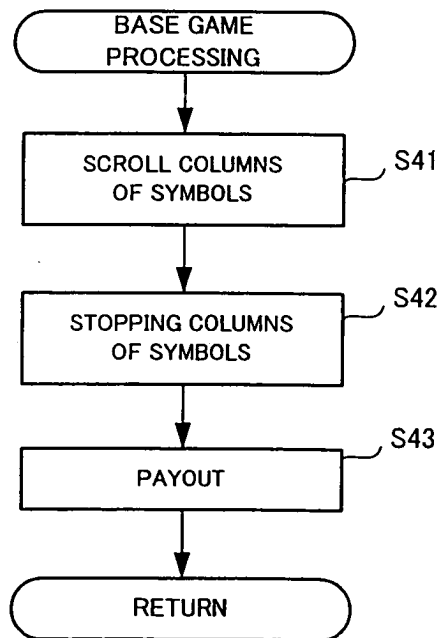


FIG. 40

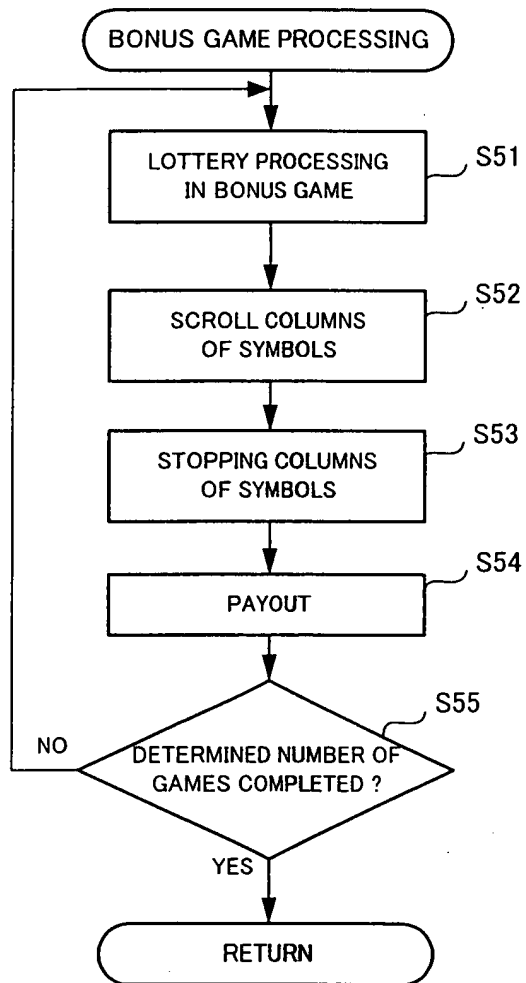


FIG. 41

CODE NOs.	RANDOM NUMBERS
0	0~539
1	540~1040
2	1041~1592
3	1593~2131
4	2132~2665
5	2666~3215
6	3216~3751
7	3752~4299
8	4300~4821
9	4822~5351
10	5352~5972
11	5973~6321
12	6322~6953
13	6954~7492
14	7493~8121
15	8122~8630
16	8631~9151
17	9152~9723
18	9724~10257
19	10258~10872
20	10873~11327
21	11328~11874
22	11875~12450
23	12451~13011
24	13012~13552
25	13553~14033
26	14034~14624
27	14625~15121
28	15122~15722
29	15723~16383

FIG. 42

FIRST REEL BAND		SECOND REEL BAND		THIRD REEL BAND		FOURTH REEL BAND		FIFTH REEL BAND	
CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS	CODE NOs.	SYMBOLS
00	J	00	OCTOPUS	00	A	00	Q	00	
01	Q	01	LOBSTER	01	K	01	LOBSTER	01	J
02	LOBSTER	02	OCTOPUS	02	LOBSTER	02	LOBSTER	02	A
03	J	03	K	03	WORM	03	Q	03	LOBSTER
04	Q	04	J	04	LOBSTER	04	K	04	J
05	CRAB	05	FISH	05	LOBSTER	05	LOBSTER	05	A
06	A	06	WORM	06	PUNK	06	A	06	FISH
07	WORM	07	WORM	07	A	07	K	07	CRAB
08	K	08	CRAB	08	SARDINE	08	SARDINE	08	PUNK
09	FISH	09	OCTOPUS	09	J	09	A	09	K
10	PUNK	10	SARDINE	10	A	10	A	10	SARDINE
11	Q	11	WORM	11	Q	11	K	11	LOBSTER
12	SHARK	12	WORM	12	WORM	12	CRAB	12	CRAB
13	CRAB	13	J	13	K	13	PUNK	13	K
14	K	14	OCTOPUS	14	FISH	14	SHARK	14	WORM
15	A	15	SHARK	15	OCTOPUS	15	WORM	15	FISH
16	OCTOPUS	16	OCTOPUS	16	CRAB	16	A	16	J
17	J	17	SHARK	17	A	17	OCTOPUS	17	OCTOPUS
18	Q	18	OCTOPUS	18	K	18	FISH	18	Q
19	FISH	19	CRAB	19	SHARK	19	K	19	WORM
20	K	20	PUNK	20	Q	20	WORM	20	J
21	J	21	CRAB	21	K	21	PUNK	21	Q
22	SARDINE	22	OCTOPUS	22	OCTOPUS	22	A	22	OCTOPUS
23	CRAB	23	J	23	Q	23	FISH	23	A
24	J	24	WORM	24	A	24	CRAB	24	PUNK
25	WORM	25	CRAB	25	WORM	25	K	25	WORM
26	Q	26	K	26	J	26	Q	26	Q
27	CRAB	27	OCTOPUS	27	Q	27	OCTOPUS	27	CRAB
28	A	28	WORM	28	PUNK	28	WORM	28	PUNK
29	FISH	29		29	K	29	Q	29	K
									OCTOPUS

FIG. 43

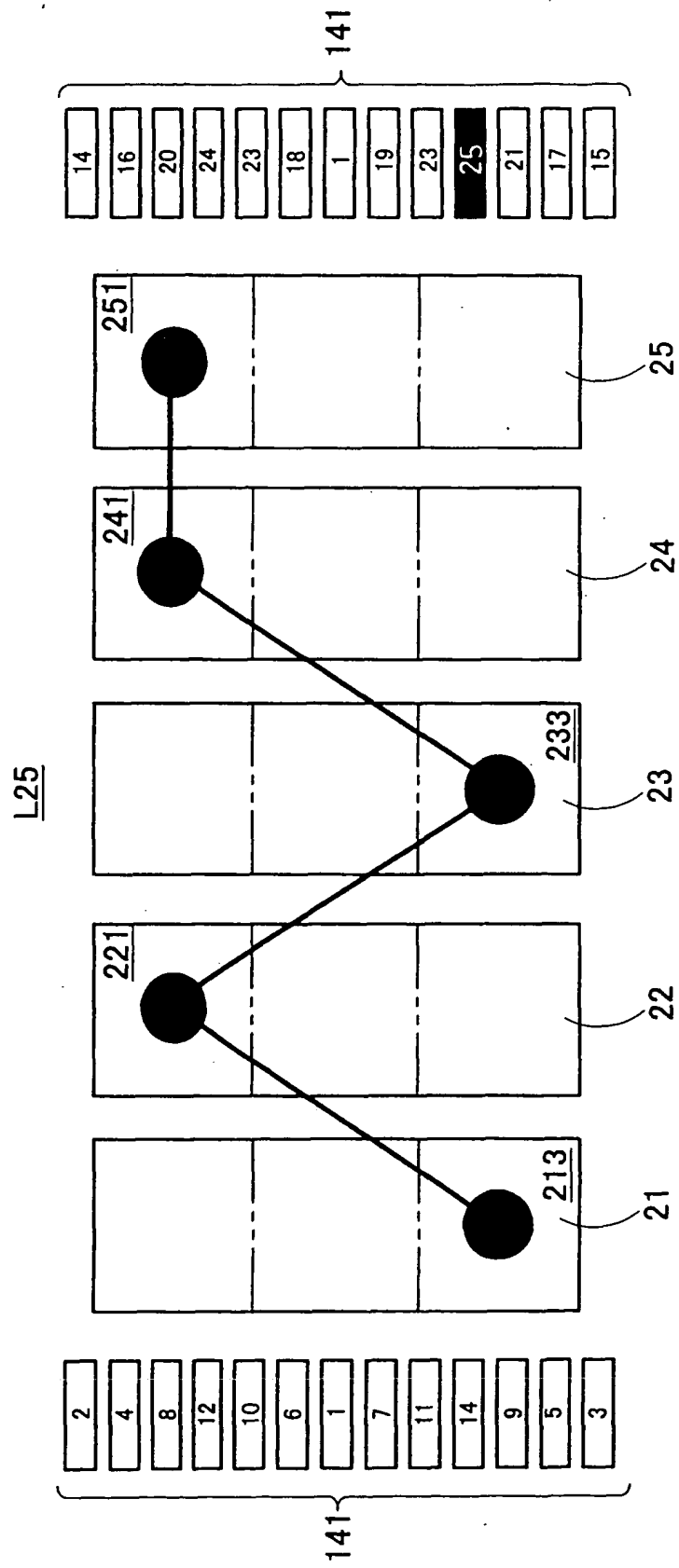
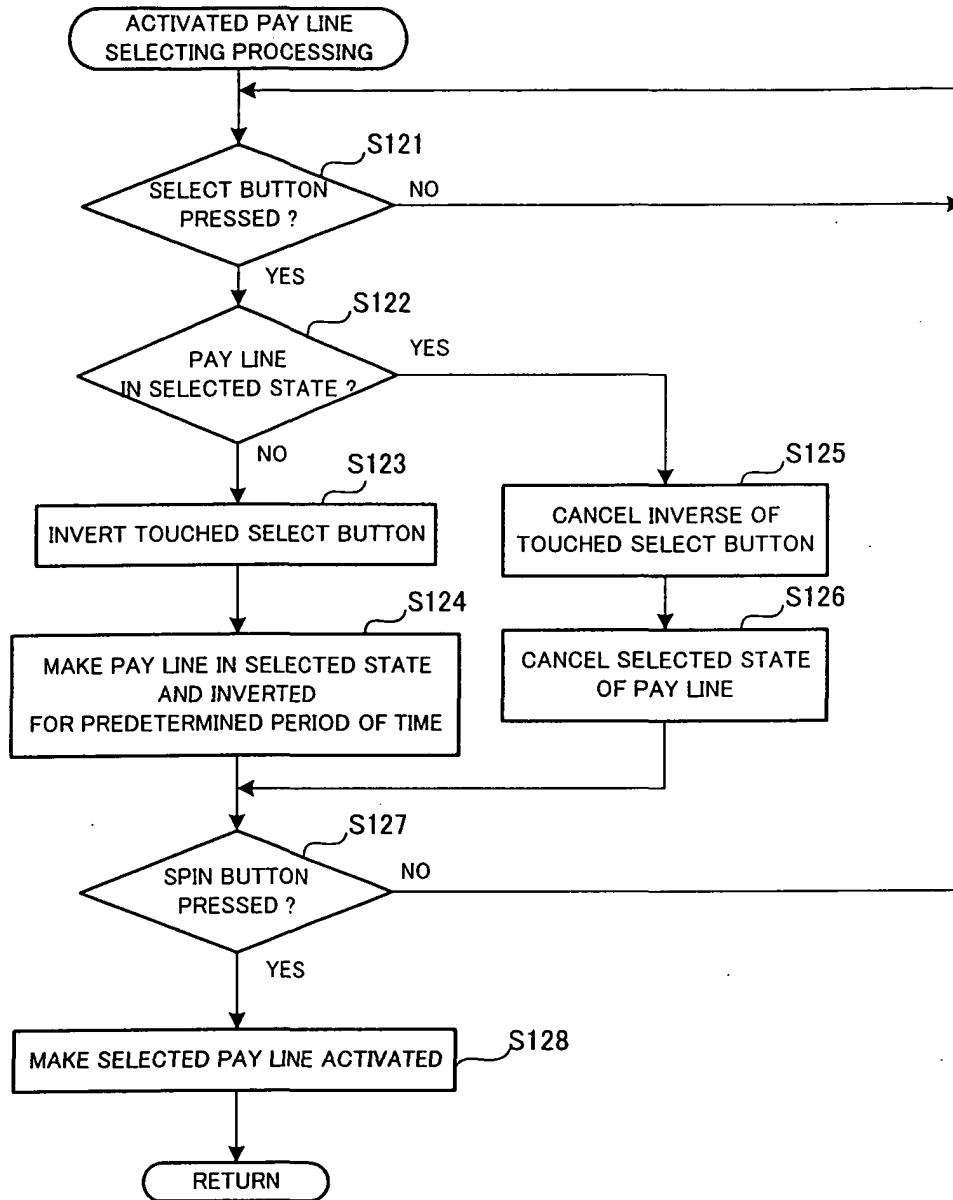


FIG. 44





European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 05 00 9129

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 2003/125102 A1 (CANNON LEE E) 3 July 2003 (2003-07-03) * paragraphs [0052], [0056] * -----	1-10	G07F17/34 G07F17/32
X	US 2003/054875 A1 (MARKS HOWARD M ET AL) 20 March 2003 (2003-03-20) * paragraph [0031] * -----	1-10	
X	US 2002/119818 A1 (SAVIO RUSSELL ET AL) 29 August 2002 (2002-08-29) * paragraph [0033] * -----	1-10	
A	WO 98/07124 A (SIGMA GAME, INC) 19 February 1998 (1998-02-19) * page 4, line 1 - line 4 * -----	1-10	
A	GB 2 316 214 A (* SHOWA YUEN KABUSHIKI KAISHA) 18 February 1998 (1998-02-18) * page 2, line 23 - page 3, line 19 * -----	1-10	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			G07F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 5 August 2005	Examiner Verhoef, P
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