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(54) **GAMING MACHINE**

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(57) **ABSTRACT**

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In the slot machine 1, when the touch panel 5k corresponding to the periphery of the denomination display part 32 is touched, the numerical keypad image, which constructs the numerical keypad device 35 in cooperation with the touch panel 5k, is displayed on the liquid crystal display panel 5d and input operation of voluntary denomination value through the numerical keypad device 35 is activated. After the sum is input through the numerical keypad device 35, if the player operates the start lever 9 or the spin switch 13 or the MAX BET switch 17, the numerical keypad image disappears. The denomination is recognized by the main CPU 42. Next, when the bet number is directed through operation of the 1-BET switch 16 or the MAX-BET switch 17, the sum calculated by multiplying the denomination with the bet number is set as the betted money. And based on the operation of the start lever 9 or the spin switch or the MAX BET switch 17 by the player, rotation process of the reels 2 to 4 is done, thereby the slot machine game is started.

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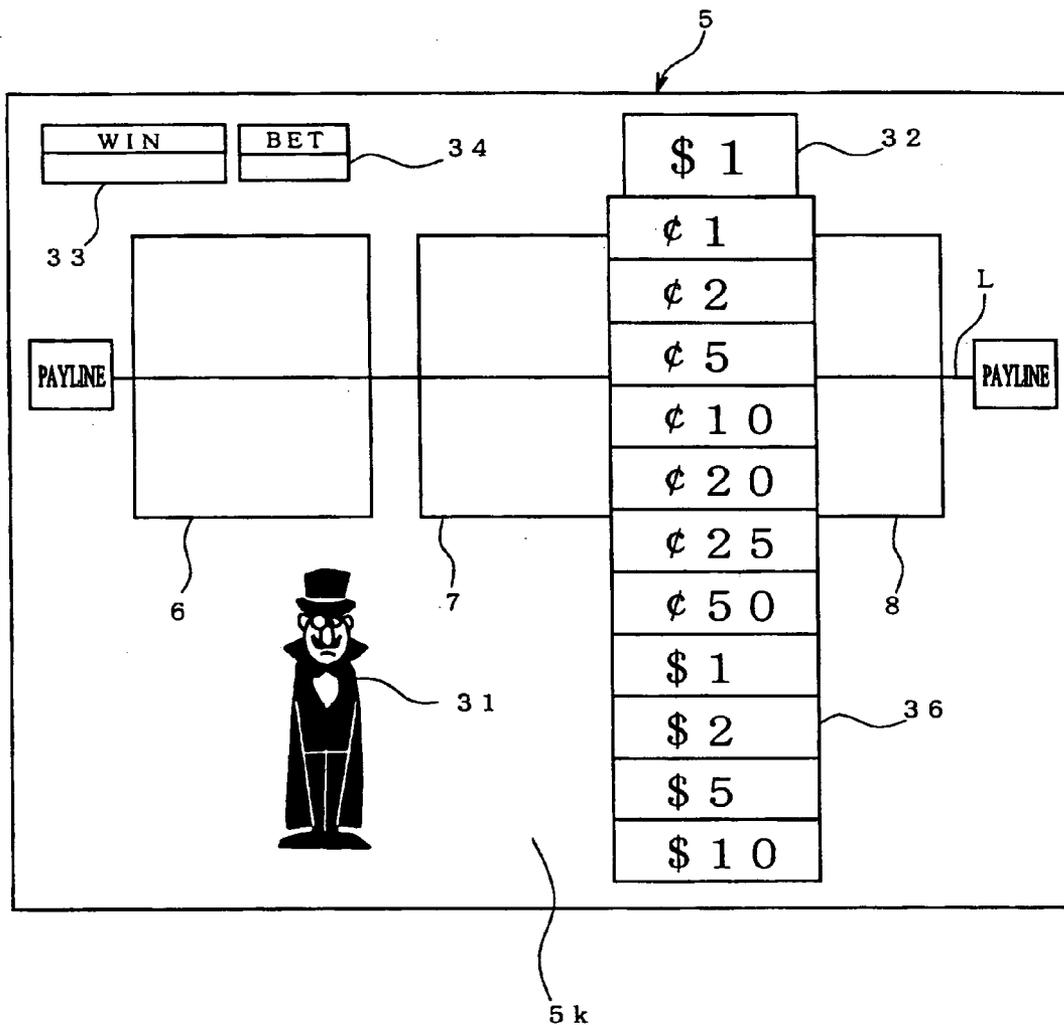


FIG. 1

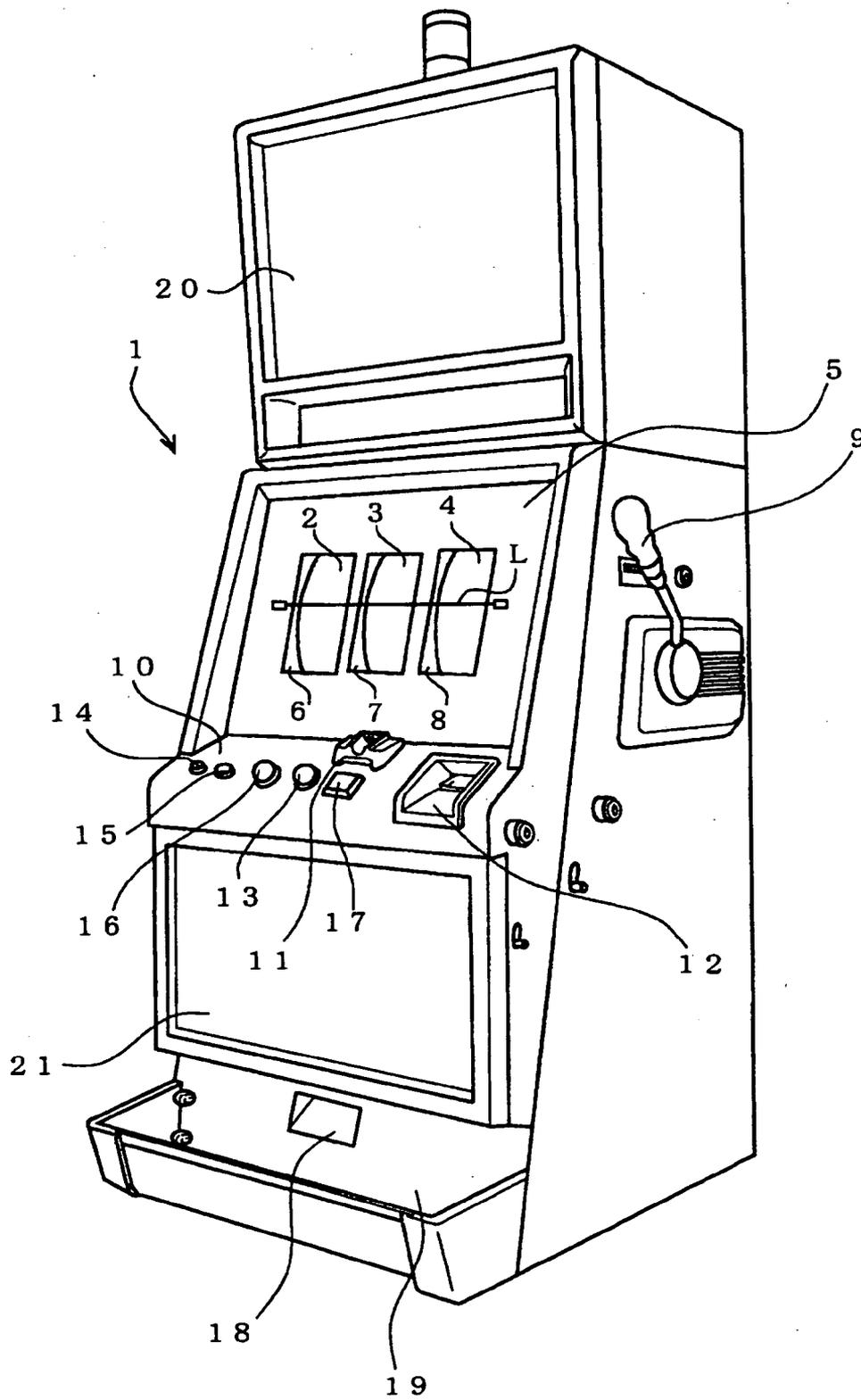


FIG. 2

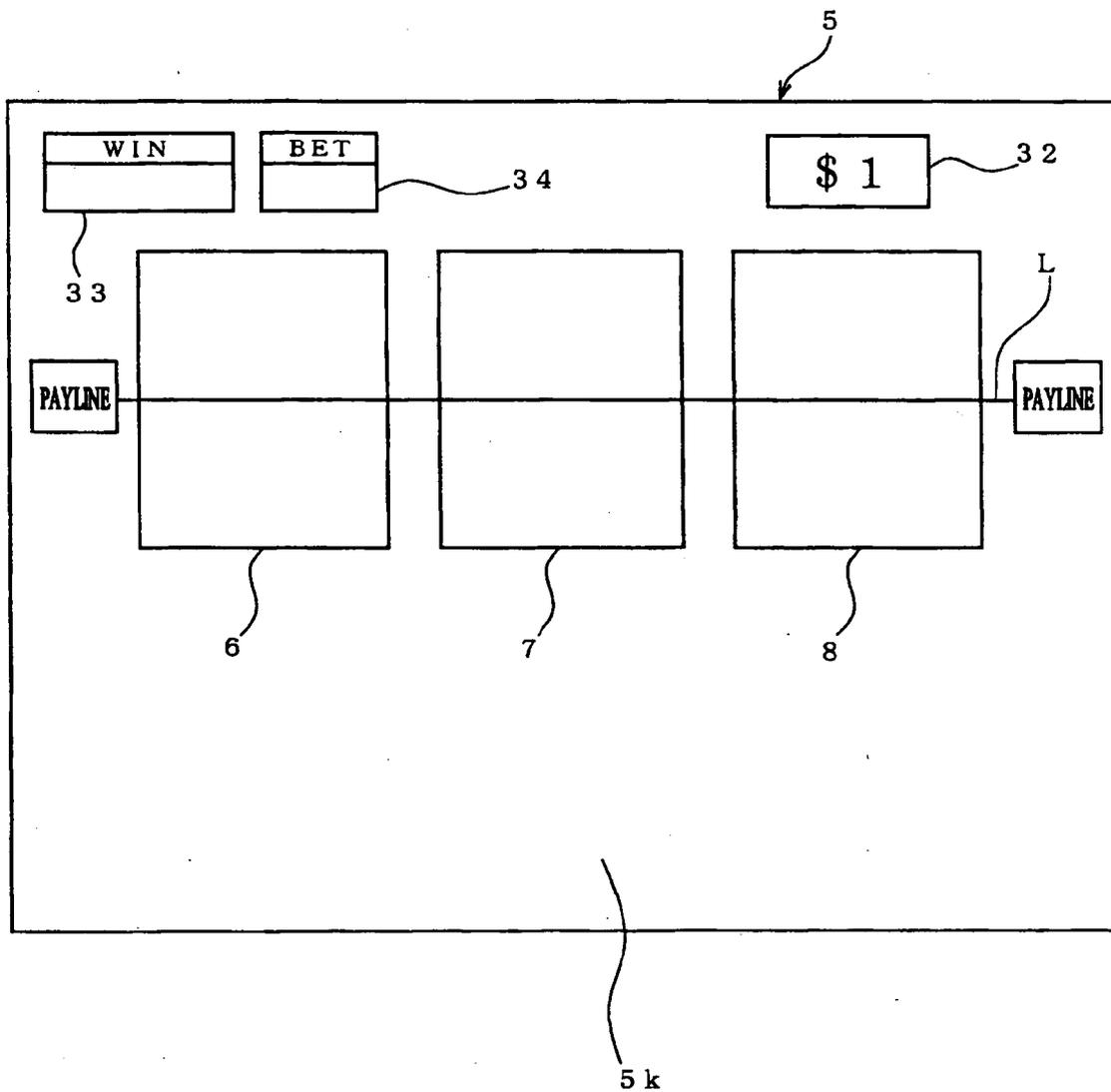


FIG. 4

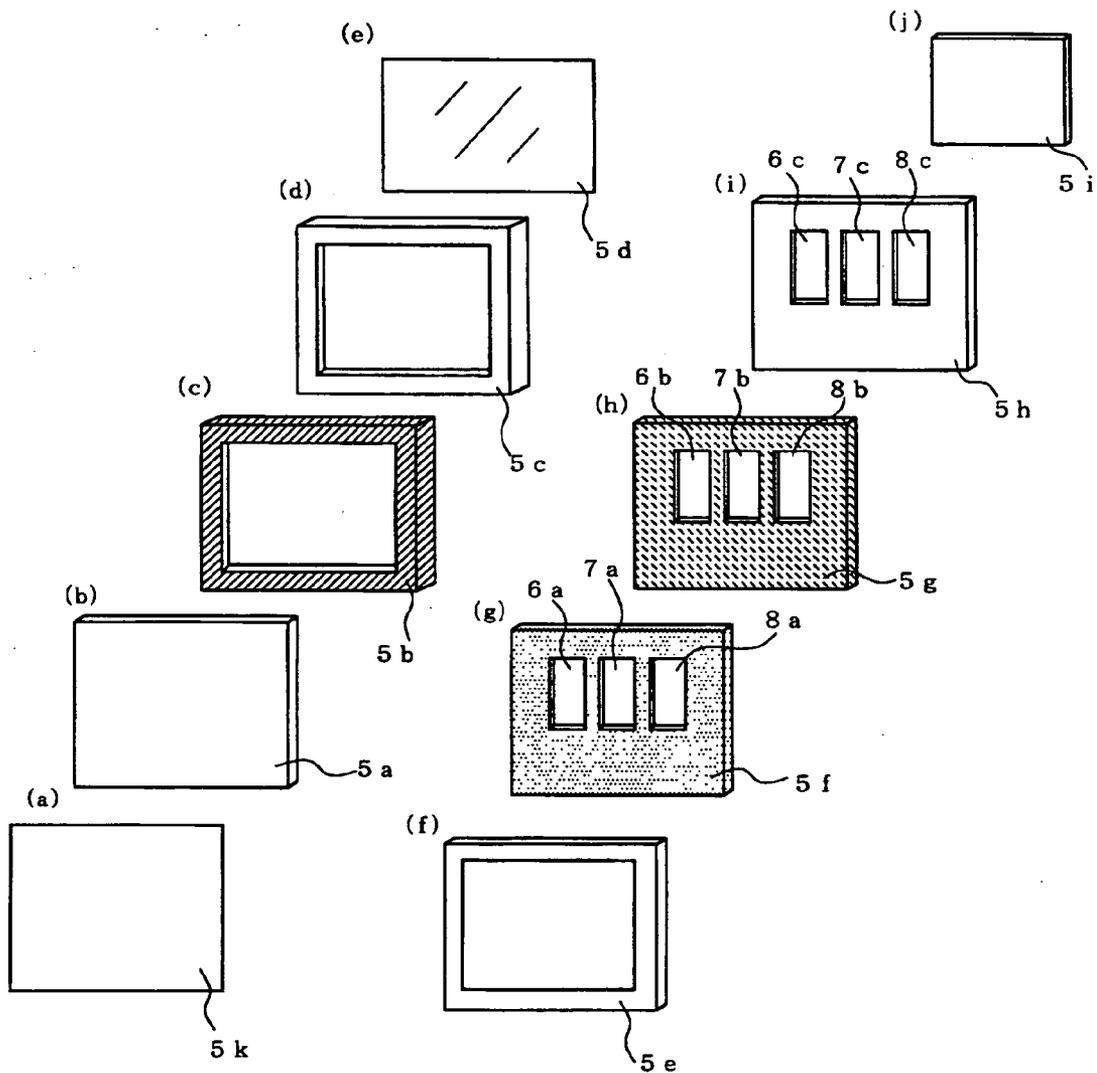


FIG. 5

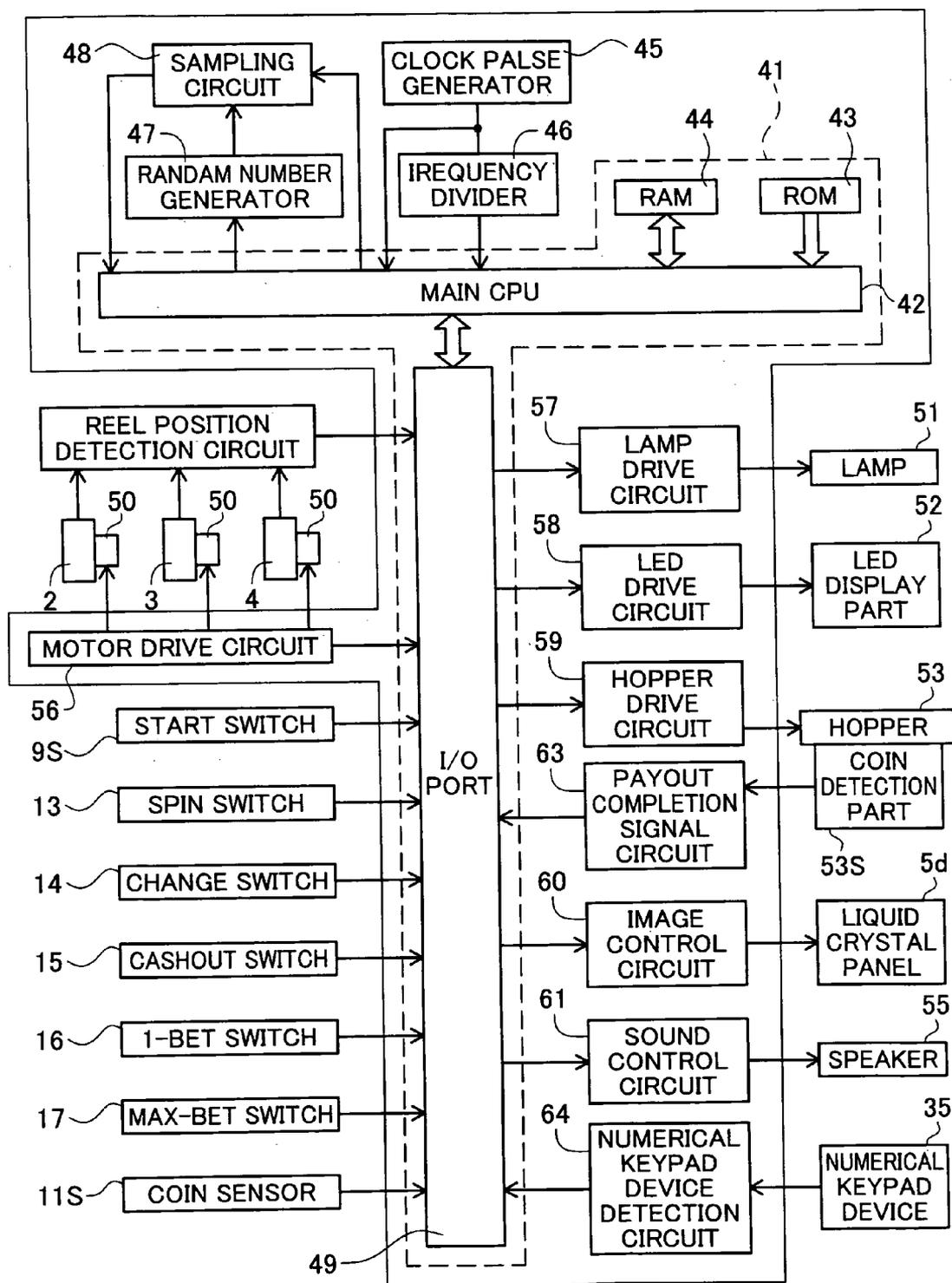


FIG. 6

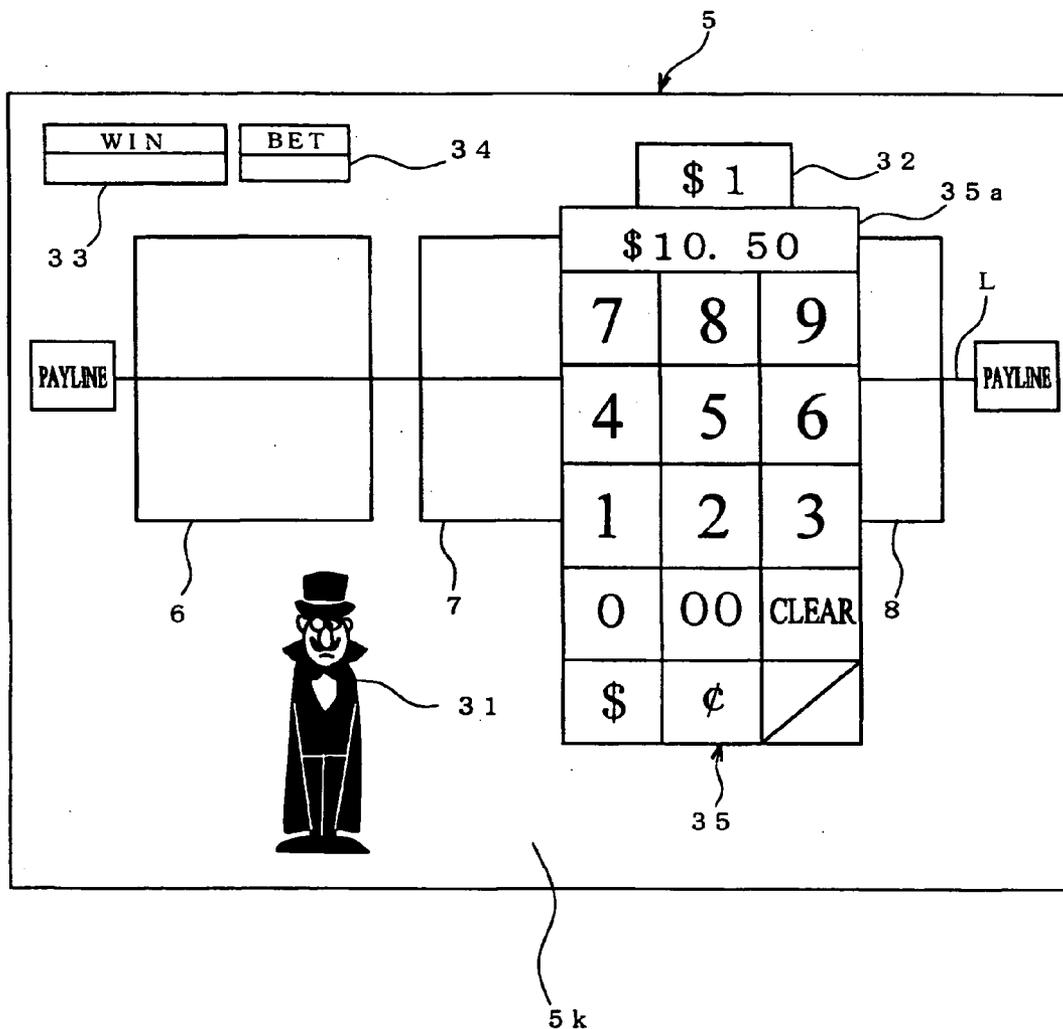
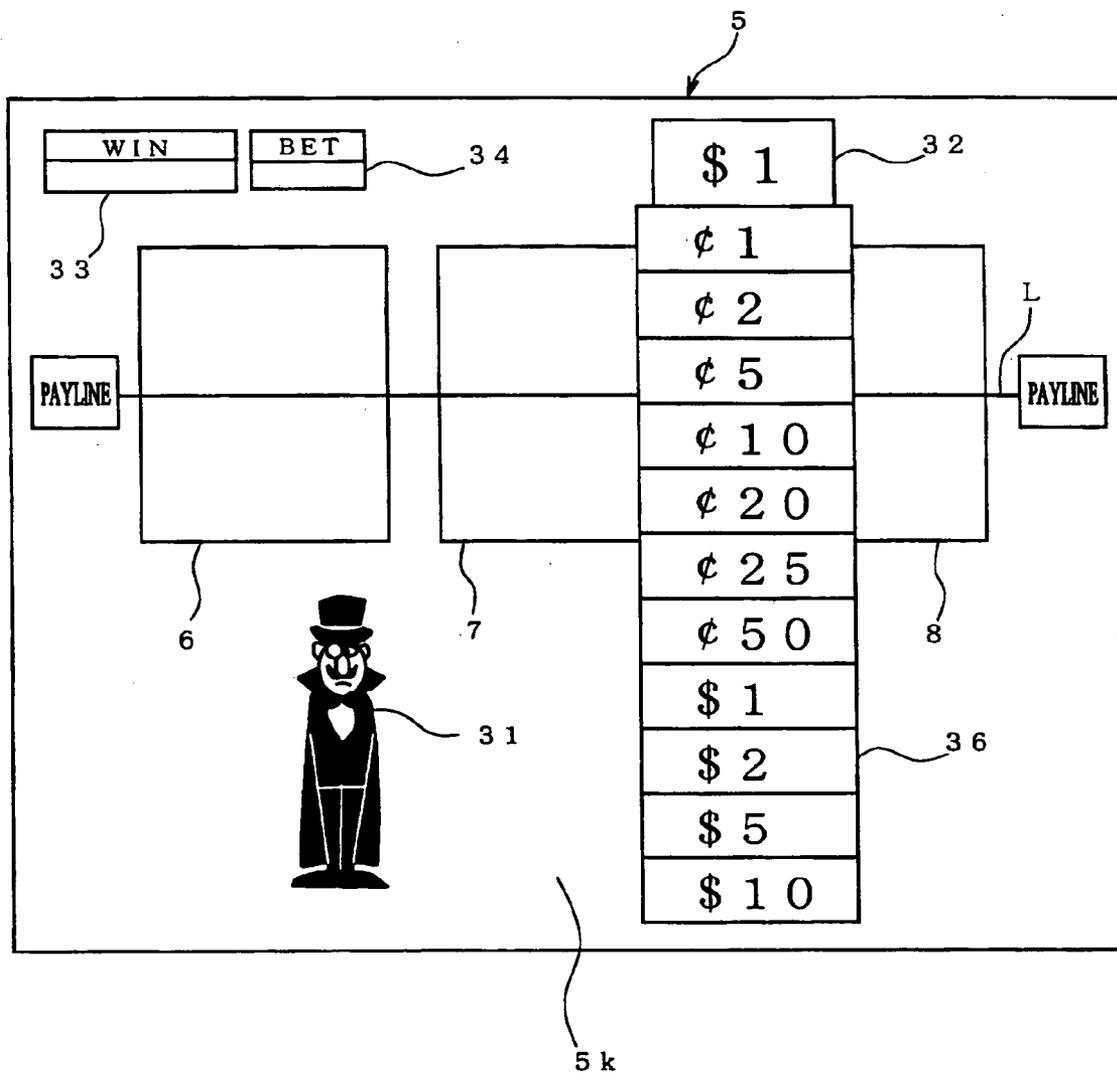


FIG. 7



GAMING MACHINE

CROSS-REFERENCE TO THE RELATED APPLICATION(S)

[0001] This application is based upon and claims a priority from the prior Japanese Patent Application No. 2003-352222 filed on Oct. 10, 2003, the entire contents of which are incorporated herein by reference. This application is related to a co-pending U.S. application entitled "GAMING MACHINE", filed on the same date as this application. The co-pending application is expressly incorporated herein by reference.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The present invention relates to a gaming machine in which a game is conducted by betting game media stored therein.

[0004] 2. Description of Related Art

[0005] Conventionally, as such kind of the gaming machine, it is, for example, well-known a slot machine disclosed in Unexamined Japanese Patent Publication No. 2001-120716. On a switch panel of the slot machine shown in the above reference, there are provided bet buttons through which a player determines a bet number to bet game media stored in the slot machine. The bet buttons are constructed from a 1-BET button that one bet number is added by every one operation thereof and a MAX-bet button that game media can be betted at the MAX bet number by operation thereof. The bet number is determined by operation of these bet buttons and thereafter a game is started by operating a start lever.

[0006] However, in the slot machine shown in the above Japanese reference, a coin number betted for one bet is fixed, therefore the player cannot freely determine the bet number.

SUMMARY OF THE INVENTION

[0007] The resent invention relates to a gaming machine in which a game medium amount betted for one bet can be voluntarily set and operability to determine the game medium amount can be raised.

[0008] In order to accomplish the above object, the present invention provides a gaming machine comprising a game medium storing device for storing game media, wherein a game is conducted by betting at least one of the game media, the gaming machine further comprising:

[0009] an input device for inputting a numerical value; and

[0010] a denomination recognition device for recognizing the numerical value input from the input device as an amount of the game media betted for one bet.

[0011] In the above gaming machine, when the numerical value is input by the input device, this numerical value is recognized as the amount of the game media betted for one bet by the denomination recognition device. Here, the above amount of the game media betted for one bet corresponds to a denomination, and the amount of the game media betted for one game is calculated by multiplying the denomination

with a bet number. Therefore, the player can voluntarily set the amount of the game media betted for one bet without being limited to an amount fixed beforehand as in the conventional gaming machine. And operability to determine the game medium amount can be raised.

[0012] The above and further objects and novel features of the invention will more fully appear from the following detailed description when the same is read in connection with the accompanying drawings. It is to be expressly understood, however, that the drawings are for purpose of illustration only and not intended as a definition of the limits of the invention.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] The accompanying drawings, which are incorporated in and constitute a part of this specification illustrate embodiments of the invention and, together with the description, serve to explain the objects, advantages and principles of the invention.

[0014] In the drawings,

[0015] FIG. 1 is a perspective view of a slot machine according to the first embodiment,

[0016] FIG. 2 is an enlarged front view of a reel display window portion formed in the slot machine according to the first embodiment,

[0017] FIG. 3 is a sectional view of the reel display window portion of the slot machine according to the first embodiment,

[0018] FIG. 4 is an exploded perspective view of the reel display window portion shown in FIG. 3,

[0019] FIG. 5 is a block diagram showing a circuitry construction of a control circuit in the slot machine according to the first embodiment, and

[0020] FIG. 6 is an explanatory view of the reel display window portion on which a numerical keypad for determining a denomination is provided to determine a bet number, according to the first embodiment, and

[0021] FIG. 7 is an explanatory view of the reel display window portion on which a denomination selection panel for determining the denomination is provided to determine the denomination, according to the second embodiment.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0022] The preferred embodiment of the present invention will be described hereinafter. Here, in the embodiment, although various game media such as coins, tokens, medals, coupons, tickets, memory media (cards and the like) can be utilized, it will be hereinafter explained the embodiment in which coins are utilized as an example.

[0023] FIG. 1 is a perspective view of a slot machine 1 in the first embodiment of a gaming machine according to the present invention. In a cabinet constructing a central main body of the slot machine 1, three reels comprising a first reel 2, a second reel 3 and a third reel 4 are rotatably arranged. On an outer periphery of each of the reels 2 to 4, a symbol row constructing from a plural kinds of symbols (abbreviated as "the symbol" hereinafter) is described. In front of

each of the reels **2** to **4**, a reel display window portion **5** is arranged. And in the reel display window portion **5**, three display windows **6**, **7** and **8** are formed, and three symbols of the symbol row described on the outer periphery of each of the reels **2** to **4** are displayed through each of the display windows **6** to **8**, respectively. When a player inserts coins as the game media into the slot machine and operates a start lever **9** arranged at a side of the cabinet, variable display of the symbols is conducted. And on the reel display window portion **5**, it is formed a pay line L according to which a symbol combination is defined and a winning combination is determined based on a symbol combination stopped and displayed along the pay line L through each of the display windows **6** to **8**.

[0024] On a control panel **10** positioned at a lower position of the reel display window portion **5**, a coin insertion slot **11** in which the player inserts coins and a bill insertion portion **12** to insert a bill are provided. And also on the control panel **10**, it is provided a spin switch **13** to start rotation of the reels **2** to **4** by press operation thereof, independently from the start lever **9** and further a change switch **14**, a cashout switch **15**, a 1-BET switch **16** and a MAX-BET switch **17** are arranged.

[0025] The change switch **14** is a switch used when the player calls an attendant of a game arcade, and when the change switch **14** is operated, a tower light arranged on an upper part of the slot machine **1** is turned on. The cashout switch **15** is a switch to pay out money betted and credited to a coin tray **19** as coins when pressed. The 1-BET switch **16** is a switch to bet the sum corresponding to the denomination among the money betted and credited, that is, only the sum betted for one bet by one press operation, and the MAX BET switch **17** is a switch to bet a sum corresponding to the max bet number (1000 coins in the embodiment) among the money betted and credited by one press operation.

[0026] And on a top glass **20** arranged at an upper position of the reel display window portion **5**, it is displayed a payout table indicating a relation that each of the winning combinations and payout thereof is corresponded. And on a bottom glass **21** positioned at a lower position of the reel display window portion **5**, characters relating to the slot machine are described.

[0027] FIG. 2 is an enlarged front view showing the reel display window portion **5** of the slot machine **1**. Here, in FIG. 2, the same elements, parts as in FIG. 1 are indicated by the same numbers as in FIG. 1 and explanation thereof will be omitted. The reel display window portion **5** constitutes a display device to display game image. On a surface of the reel display window portion **5**, it is arranged a touch panel **5k** to accept input operation by the player. The touch panel **5k** is made transparent so as to display there-through the symbols described on the reels **2** to **4** and information such as game effect images displayed on a liquid crystal display panel **5d**. Here, as well-known in the art, the touch panel **5k** is constructed from a pair of transparent sheets on each of which a plurality of transparent electrodes such as ITO are formed and transparent dot spacers formed between the transparent sheets. Concretely, the transparent dot spacers are formed on one of the transparent sheets or both of the transparent sheets so as not to superimpose with each other. And two transparent sheets are superimposed with each other so that the transparent electrodes on each

sheet are separated by a distance corresponding to the height of the dot spacers. When the touch panel **5k** is touched by a finger of the player, the transparent electrodes of the sheets are contacted at a touch position, thereby such touch position on the touch panel **5k** is detected based on a contact position where the transparent electrodes are contacted with each other. On the other hand, as mentioned later, a numerical keypad image (not shown in FIG. 2) is displayed on the liquid crystal display panel **5d** arranged behind the touch panel **5k**. And a numerical keypad device **35** (not shown in FIG. 2) is constructed from the numerical keypad image displayed on the liquid crystal display panel **5d** and a predetermined area of the touch panel **5k** corresponding to the numerical keypad image. The numerical keypad device **35** constructs a numerical input device to input the numerical value when the denomination is set.

[0028] FIG. 3 is a sectional view of the slot machine showing an inner construction of the reel display window portion **5**. As shown in FIG. 3, the reel display window portion **5** is arranged in front of the reels **2** to **4** and is constructed so as to have the liquid crystal display panel **5d**. And FIG. 4 is an exploded perspective view of the reel display window portion **5** shown in FIG. 3. As shown in FIGS. 4(a) to 4(j), the reel display window portion **5** is constructed from the touch panel **5k**, a transparent acrylic plate **5a**, a reel glass base **5b**, a bezel metallic frame **5c**, the liquid crystal display panel **5d**, a liquid crystal holder **5e**, a diffusion sheet **5f**, a light guiding plate **5g**, a rear holder **5h** and an antistatic sheet **5i**, these members being arranged from a front plane side of the device according to this order. The touch panel **5k** is arranged at a front side of the transparent acrylic plate **5a**, the front side thereof being faced to the player. And in the diffusion sheet **5f**, the light guiding plate **5g** and the rear holder **5h**, three openings **6a**, **6b**, **6c** forming the display window **6**, three openings **7a**, **7b**, **7c** forming the display window **7** and three openings **8a**, **8b**, **8c** forming the display window **8**, are formed.

[0029] And attachment of the reel display window portion **5** to a front panel of the device is, as shown in FIG. 3, is done by fixing brackets **5ba** formed in the glass base **5b** so as to project toward up and down directions to a rear side of the front panel of the device through screws **5j**.

[0030] At both an upper end and a lower end of the light guiding plate **5g**, a pair of cold cathode ray tubes **30a** are arranged as light sources of the liquid crystal display panel **5d**. And at an upper and a lower positions of display window parts on a rear side of the rear holder **5h**, a pair of cold cathode ray tubes **30b** to illuminate the symbols described on the outer periphery of each of the reels **2** to **4** are arranged.

[0031] The liquid crystal display panel **5d** is a transparent electric display panel which is disposed at the front side of the reels **2** to **4** and the reels **2** to **4** are seen and recognized through the liquid crystal display panel **5d**. A rear side around the display part of the liquid crystal display panel **5d** is held by the liquid crystal holder **5e**. The light guiding plate **5g** is formed from a light transmitting resin panel and lens cuts are formed to guide light emitted from the cold cathode ray tubes **30b** disposed at sides thereof toward the rear side of the liquid crystal display panel **5d**. The diffusion sheet **5f** is formed light transmitting resin sheet and constructs diffusion member to diffuse light guided by the light guiding

plate **5g** and levels light illuminated to the liquid crystal display panel **5d**. The liquid crystal holder **5e** holding the liquid crystal display panel **5d**, the diffusion sheet **5f** and the light guiding plate **5g** are formed into one-construction and the circumference thereof is inserted in the bezel metallic frame **5c**. By this insertion, the front side of the circumference of the display part in the liquid crystal display panel **5d** is held by the bezel metallic frame **5c**.

[0032] The liquid crystal holder **5e**, the diffusion sheet **5f** and the light guiding panel **5g**, which are inserted in the bezel metallic frame **5c** and formed into one-construction, are further inserted in the reel glass base **5b** at the circumference thereof, thereby are supported by the reel glass base **5b** in a state that the front side of the display part in the liquid crystal display panel **5d** is opened. The transparent acrylic plate **5a**, on the front surface of which the touch panel **5k** is arranged, is attached to the front plane of the device by fixing the reel glass base **5b** on the front panel of the device through the screws **5j**, thereby the transparent acrylic plate **5a** is pressed and attached to the front plane of the reel glass base **5b** with the touch panel **5k**. Thus, the transparent acrylic plate **5a** closes the above opening positioned on the front plane of the display part in the liquid crystal display panel **5d**.

[0033] The rear holder **5h** is formed from a white resin plate and retains the bezel metallic frame **5c**, the liquid crystal holder **5e** supporting the liquid crystal display panel **5d**, the diffusion sheet **5f** and the light guiding plate **5g**, all of which are supported to the reel glass base **5b**, to the reel glass base **5b** from the rear side thereof. The rear holder **5h** functions as a reflecting plate to reflect light emitted to the light guiding plate **5g** from the cold cathode ray tubes **30a** toward the liquid crystal display panel **5**. The antistatic sheet **5i** is made transparent and is adhered to the rear plane of the rear holder **5h** by a double-sided tape, thereby the antistatic sheet **5i** covers the openings formed in the rear holder **5h**.

[0034] FIG. 5 is a block diagram showing a circuitry construction of a control circuit **40** for controlling game operation process in the slot machine **1** of the embodiment.

[0035] The control circuit **40** is mainly constructed from a microcomputer **41** and the microcomputer **41** is constructed from a main CPU **42** (Central Processing Unit) for conducting control operation according to a program preset beforehand, a ROM (Read-Only Memory) **43** as a storing device and a RAM (Random Access Memory) **44**. In the ROM **43**, control procedures for wholly controlling the gamin machine are stored as a sequence program and the RAM **44** is utilized as a temporary memory work area and the like when such program is executed.

[0036] To the main CPU **42**, a clock pulse generator **45** for generating standard clock pulses and a frequency divider **46**, a random number generator **47** for generating random numbers within a predetermined range and a sampling circuit **48** for sampling one random number generated by the random number generator **47**, are connected. Further, an I/O port **49** to receive and output various signals between peripheral devices (actuators) mentioned later, is connected to the main CPU **42**. And the ROM **43** has also memory areas to store a winning combination table which is referred when the winning combination is determined based on a symbol combination, other than the sequence program.

[0037] Here, the microcomputer **41**, the random number generator **47** and the sampling circuit **48** constructs a lottery

device to determine the winning combination by a lottery and selects the symbols which are stopped and displayed on the display windows **6** to **8** or the liquid crystal display panel **5d** by a lottery and determines the winning combination based on the selected symbol combination. And the microcomputer **41** constructs a game medium storing device for storing the betted money inserted from the coin insertion slot **11** and the bill insertion portion **12** as data in the RAM **44**.

[0038] As the main actuator the operation of which is controlled by a control signal from the microcomputer **41**, there exist stepping motors **50** for rotating and driving the reels **2** to **4**, various lamps **51**, a LED display part **52**, a hopper **53** for storing coins, the liquid crystal display panel **5d** and a speaker **55**. These are driven and controlled by a motor drive circuit **56**, a lamp drive circuit **57**, a LED drive circuit **58**, a hopper drive circuit **59**, an image control circuit **60** and a sound control circuit **61**, respectively. These drive circuits **56** to **59** and the control circuits **60**, **61** are connected to the main CPU **42** through the I/O port **49**.

[0039] And as the main input signal generation device for generating input signals necessary for the main CPU **42** to produce control signals, there exist a start switch **9S** for detecting operation of the start lever **9**, the spin switch **13**, the change switch **14**, the cashout switch **15**, the 1-BET switch **16**, the MAX BET switch **17** and a coin sensor **11S** to detect coins inserted in the coin insertion slot **11**. Further, a reel position detection circuit **62** for detecting the rotation position of the reels **2** to **4** is provided.

[0040] And as the input signal generation device, there exist a coin detection part **53S** for counting the number of coins paid out from the hopper **53**, a payout completion signal generation circuit **63**, the numerical keypad device **35** constructed from the numerical keypad image displayed on the liquid crystal display panel **5d** and the predetermined area of the touch panel **5k** corresponding to the numerical keypad image and a numerical keypad device detection circuit **64**. The payout completion signal generation circuit **63** generates a signal to detect a coin payout completion when the coin count value corresponded to the coin number actually paid out and input from the coin detection part **53S** reaches to the payout coin number data. And the numerical keypad device detection circuit **64** detects operation of the numerical keypad device **35**, such operation being done by touching the touch panel **5k** corresponding to numerical keys of the numerical keypad image displayed on the liquid crystal display panel **5d** and outputs the detected operation signal to the main CPU **42**. The above payout completion signal generation circuit **63** and the numerical keypad device detection circuit **64** are also connected to the main CPU **42** through the I/O port **49**. Here, the main CPU **42** constructs a denomination recognition device to recognize the numerical value input from the numerical keypad device **35** as the sum betted for one bet.

[0041] In the above construction, before the game is conducted in the slot machine **1**, the play at first inserts coins in the coin insertion slot **11** or inserts a bill in the bill insertion slot **12**, thereby the betted money is stored in the slot machine **1**. Next, the sum betted for the game is directed by the player among the betted money which is stored. This direction is done by determining the denomination corresponding to the sum betted for one bet and the bet number.

[0042] On a game image displayed on the reel display window portion **5**, as shown in FIG. 6, a character image **31**,

a denomination display part **32**, a payout display part (WIN) **33** for displaying the payout number paid out to the player and a bet number display part (BET) **34** are displayed. When the touch panel **5k** corresponding to a periphery of the denomination display part **32** is touched, the numerical keypad image is displayed on the liquid crystal display panel **5d** as shown in **FIG. 6**, thereby denomination input operation is made effective through the numerical keypad device **35** constructed from the numerical keypad image on the liquid crystal display panel **5d** and the touch panel **5k**.

[0043] The numerical keypad device **35** is provided with numerical keys of "0"~"9" and "00", a clear key (CLEAR), a dollar (\$) display key and a cent (¢) display key. Here, the numerical keys, the clear key are, the dollar display key and the cent display key are constructed from the numerical key images, the clear key image, the dollar display key image and the cent display key image included in the numerical keypad image displayed on the liquid crystal display panel **5d** and the touch panel **5k**. And the numerical value input by touching the touch panel **5k** corresponding to the numeral key images is displayed in an upper input numerical value area **35a**. For example, in a case that touch panel **5k** corresponding to the dollar display key image is first pressed and thereafter the touch panel **5k** corresponding to the numerical key images "1" and "0" are pressed in this order, and further the touch panel **5k** corresponding to the cent display key image is pressed and thereafter the touch panel **5k** corresponding to the numerical key images "5" and "0" are pressed in this order, "\$ 10.50 (10 dollars and 50 cents)" is displayed in the input numerical value area **35a** as shown in **FIG. 6**. Thereafter, the numerical keypad image disappears at the timing that the player operates the start lever **9** or the spin switch **13** or the MAX BET switch **17** and the denomination is recognized as 10 dollars and 50 cents by the main CPU **42**, thereby this sum is displayed in the denomination display part **32**. In the first embodiment, the sum from 1 cent up to 100 dollars can be freely betted as the denomination by utilizing the numerical keypad device **35**. And when the denomination is input by the numerical keypad device **35** according to the above, if a false numerical value is input, such numerical value can be corrected by pressing the touch panel **5k** corresponding to the clear key image and again inputting the correct numerical value by touching the touch panel **5k** corresponding to the numerical key images.

[0044] Next, the bet number is directed. This direction is done by operating the 1-BET switch **16** or the MAX-BET switch **17**. For example, when the MAX-BET switch **17** is pressed one time, the bet number is recognized as 1000 by the main CPU **42**. And when the 1-BET switch **16** is pressed desired plural times, the pressed times are recognized as the bet number by the main CPU **42**.

[0045] When the bet number is recognized, the main CPU **42** sets the sum calculated by multiplying the bet number with the denomination directed according to the above as the betted money. And based on the operation of the start lever **9** or the spin switch **13** or the MAX BET switch **17** by the player, rotation process of the reels **2** to **4** is done and the slot machine game is started. And in a case that the symbol combination of the winning combination with payout is stopped and displayed along the pay line L, the payout corresponding to the betted money which is set by the main CPU **42** is given to the player. Thereby, the credit number is increased or coins are paid out to the coin tray **19**.

[0046] According to the slot machine of the first embodiment, as mentioned, when the numerical value is input through the numerical keypad device **35** constructed from the numerical keypad image displayed on the liquid crystal display panel **5d** and the touch panel **5k**, such numerical value is recognized as the denomination by the main CPU **42**. And the sum calculated by multiplying the denomination with the bet number set by the 1-BET switch **16** or the MAX-BET switch **17**, is betted, thereafter the slot machine game is conducted. Thereby, the player can voluntarily set the denomination without being limited to the sum which is fixed beforehand, as in the prior art.

[0047] And in the first embodiment, the numerical keypad image is displayed on the liquid crystal display panel **5d** in the reel display window portion **5** which displays the game image of the slot machine **1**, and the player can input the denomination by touching the touch panel **5k** corresponding to each of the numerical key images constructing the numerical keypad device **35** in cooperation with the touch panel **5k**. Therefore, the player can quickly operate the numerical keypad device **35** while seeing the reel display window portion **5** and operability to determine the denomination can be raised.

[0048] Next, the slot machine of the second embodiment according to the present invention will be described.

[0049] The slot machine of the second embodiment has the same construction as the slot machine **1** in the above mentioned first embodiment, except for the numerical value input device for setting the denomination which is different from that in the first embodiment.

[0050] **FIG. 7** is an explanatory view of the reel display window portion on which a denomination selection panel for determining the denomination is provided to determine the denomination, according to the second embodiment. Here, in **FIG. 7**, the same numbers are added to the members, the elements having the same construction as those in the first embodiment.

[0051] Similar to the above mentioned numerical keypad device **35**, the denomination selection panel **36** is constructed from a denomination selection panel image displayed on the liquid crystal display panel **5d** and a predetermined area of the touch panel **5k** corresponding to the denomination selection panel image.

[0052] When the player touches the touch panel **5k** corresponding to the periphery of the denomination display part **32**, a denomination display selection panel image is displayed on the liquid crystal display panel **5d** as shown in **FIG. 7**, thereby input operation of the denomination by the denomination selection panel **36** is made effective. The denomination selection panel image **36** is provided with eleven sum display areas which are set beforehand from 1 cent to 10 dollars. The denomination is changed to the sum displayed in the sum display area that the player touches the touch panel **5k** corresponding thereto, and the sum changed and input by the player is displayed in the denomination display part **32**. For example, when the player touches the touch panel **5k** corresponding to the area of "\$ 1", the sum "\$ 1" changed and input is displayed in the denomination display part **32**, as shown in **FIG. 7**. Thereafter, when the player again touches the touch panel **5k** corresponding to the periphery of the denomination display part **32**, the denomi-

nation selection panel image disappears, and the denomination is recognized as one dollar by the main CPU 42. The player conducts the game by determining the bet number based on the denomination selected according to the above.

[0053] In the slot machine of the second embodiment, similarly to the first embodiment, the player can freely set the denomination without being limited to the sum which is fixed beforehand, as in the prior art. And the player can quickly operate the denomination selection panel 36 while seeing the reel display window portion 5 and operability to determine the denomination can be raised.

[0054] Here, in the second embodiment, it may be constructed so that the denomination value input through the numerical keypad device 35 and the denomination selection panel 36 is used as the denomination over a plural times of games and such denomination is used for setting the betted money. That is to say, the denomination value input in the present game by the player may be stored as the data in the RAM 44 and the like and the stored data is used as the denomination in the present game and the next games, thereby the betted sum is set. In this case, the stored data in the RAM 44 is automatically treated as the initial value of the denomination, and so long as the player does not renew the denomination, that is, the denomination value is not again input, such initial value is continued to be used as the denomination. And when the denomination value is again input through the numerical keypad device 35 or the denomination selection panel 36, the initial value may be displayed in the denomination display part 32.

[0055] According to the above construction, in a case that the constant denomination is used over a plural times of games, the player can omit the input operation of the denomination value through the numerical keypad device 35 and the denomination selection panel 36 every the unit game, thereby operation in the game can be reduced. As a result, even if the player conducts games for a long time, the player can concentrate in games without feeling fatigue and improvement of motivation for games can be expected.

[0056] And it may be determined corresponding to gaming state whether or not the denomination value input through the numerical keypad device 35 or the denomination selection panel 36 by the player is used for setting the betted money. For example, it is supposed two gaming states, in which the expectation values of the payout paid out to the player in the unit game are different with each other, and it is supposed that the gaming state with lower expectation value is the first gaming state and the gaming state with high expectation value is the second gaming state. At that time, in one of the first gaming state and the second gaming state, the denomination value input through the numerical keypad device 35 or the denomination selection panel 36 by the player is used and in the other gaming state thereof the denomination value fixedly stored in the ROM 43 is used.

[0057] According to the above construction, there may be a case that the rate for getting coins in the specific gaming state may be controlled.

[0058] And according to the gaming state, it may be conceivable that a range of the denomination value which the player can input through the numerical keypad device 35 or the denomination selection panel 36 is changed. For example, in the above first gaming state, the denomination

may be selected within the range from 1 cent up to a predetermined first upper limit value (for example, 100 dollars) and in the above second gaming state, the denomination may be selected within the range from 1 cent up to a predetermined second upper limit value (for example, 10 dollars) lower than the above first upper limit value. Further, the second upper limit value may be set higher than the first upper limit value. And a lower limit value of the denomination value which the player can input may be changed according to the gaming state.

[0059] According to the above construction, there may be a case that the rate for getting coins in the specific gaming state may be controlled.

[0060] And in the above first and second embodiments, although it is explained the case that operation of the numerical keypad device 35 is detected by the numerical keypad device detection circuit 64 and the detected value is input to the main CPU 42, thereby the denomination value is determined, the present invention is not limited to this. For example, it may be conceivable that the function of the numerical keypad device detection circuit 64 is provided with the touch panel 5k and the numerical value input through the numerical keypad device 35 is directly given to the main CPU 42 from the touch panel 5k. According to this construction, in the cabinet to which the touch panel 5k is installed as the standard, the slot machine having the same function as the above embodiment may be realized by only changing software thereof, without adding a new parts such as the numerical keypad device detection circuit 64.

[0061] Further, in the above embodiments, although dollar (\$) and cent (¢) are utilized as the currency denomination displayed on the numerical keypad device 35 for inputting the denomination and the denomination selection panel 36 for selecting the denomination, the currency denomination is not limited to this. For example, the currency denomination displayed on the numerical keypad device 35 and the denomination selection panel 36 may be pound and penny and the like, thereby the currency denomination may be changed and displayed corresponding to the area where the slot machine 1 is used.

[0062] And in the second embodiment, although the denomination selection panel 36 is provided with eleven sum display areas set by stages between 1 cent and 10 dollars, the present invention is not limited to this. It may be constructed so that the number of the sum display areas can be voluntarily set according to the area where the slot machine is exported and the circumstance that the slot machine is used.

[0063] In each of the above mentioned modifications, the effect similar to the above mentioned embodiments may be obtained.

[0064] In the above mentioned embodiments, although it is explained a case that the gaming machine of the present invention is applied to the slot machine, the present invention can be applied to the gaming machine in which game media are betted, similar to the above embodiment. For example, the present invention can be applied to a Japanese Pachislot gaming machine that rotation of the reels is stopped by operating the stop buttons, a poker gaming machine, a trump gaming machine, a mah-jong gaming machine and the like. Further, the present invention can be

applied to a game program by which a home gaming machine can suspectedly execute the same operation as in each of the above gaming machines. In this case, as the recording medium to record the game program, various recording media such as CD-ROM, FD (Flexible Disk), flash memory card and the like can be utilized. If the present invention is applied to any of the above gaming machines, the same effect as that of the embodiment can be obtained.

[0065] Further, the numerical keypad image may be displayed on the liquid crystal display panel 5d every one game is terminated and when the player wants to change the bet number.

[0066] And the numerical keypad image may disappear when the touch panel 5k corresponding to the periphery of the bet number display part 32 is touched.

[0067] Further, in a case that the numerical keypad image includes an enter key image instead of the clear key image shown in FIG. 6, the numerical keypad image may disappear at the timing that the player touches the touch panel 5k corresponding to the enter key image.

What is claimed is:

1. A gaming machine comprising a game medium storing device for storing game media, wherein a game is conducted by betting at least one of the game media,

the gaming machine further comprising:

an input device for inputting a numerical value; and

a denomination recognition device for recognizing the numerical value input from the input device as an amount of the game media betted for one bet.

2. The gaming machine according to claim 1, further comprising:

a cabinet;

a liquid crystal display panel for displaying at least a numerical keypad image, the liquid crystal display panel being arranged at a front side of the cabinet; and

a transparent touch panel arranged at a front side of the liquid crystal display panel;

wherein the input device is constructed from the numerical keypad image displayed on the liquid crystal display panel and a predetermined area of the touch panel corresponding to the numerical keypad image.

3. The gaming machine according to claim 2, wherein a gaming image plane including a denomination display part is displayed on the liquid crystal display panel, and

wherein the numerical keypad image is displayed on the liquid crystal display panel when the touch panel corresponding to a periphery of the denomination display part is touched.

4. The gaming machine according to claim 3, wherein the numerical keypad image includes a plurality of numerical keys and a numerical value display part, and

wherein a numerical value input by touching the touch panel corresponding to the numerical keys is displayed in the numerical value display part.

5. The gaming machine according to claim 1, further comprising:

a cabinet;

a liquid crystal display panel for displaying at least a denomination selection panel image, the liquid crystal display panel being arranged at a front side of the cabinet; and

a transparent touch panel arranged at a front side of the liquid crystal display panel;

wherein the input device is constructed from the denomination selection panel image displayed on the liquid crystal display panel and a predetermined area of the touch panel corresponding to the denomination selection panel image.

6. The gaming machine according to claim 5, wherein a gaming image plane including a denomination display part is displayed on the liquid crystal display panel, and

wherein the denomination selection panel image is displayed on the liquid crystal display panel when the touch panel corresponding to a periphery of the denomination display part is touched.

7. The gaming machine according to claim 6, wherein the denomination selection panel image includes a plurality of sum display areas in each of which a predetermined sum is displayed, and

wherein the predetermined sum input by touching the touch panel corresponding to the sum display areas is displayed in the denomination display part.

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