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(54) **GAME MACHINE WITH LITTLE TRAIN GAME COIN CIRCULATING SYSTEM**

(57) The present invention discloses a game machine with a little train game coin circulating system. The game machine comprises a lamp box and a box for receiving falling coins. A coin discharging mechanism is arranged in the lamp box. The corresponding box for receiving falling coins is connected to the lower end of the corresponding coin discharging mechanism. A little train railway is arranged inside the lamp box. A little train mechanism is mounted on the little train railway. The coin discharging mechanism is provided with a winning coin

slideway. The winning coin slideway is matched with the corresponding little train mechanism and connected to a short coin conveying slideway on a short coin feeding motor. A game coin circulating module matched with the corresponding winning coin slideway is arranged in the box for receiving falling coins. The present invention aims to provide the game machine with the little train game coin circulating system, which has rich functions and high interestingness.

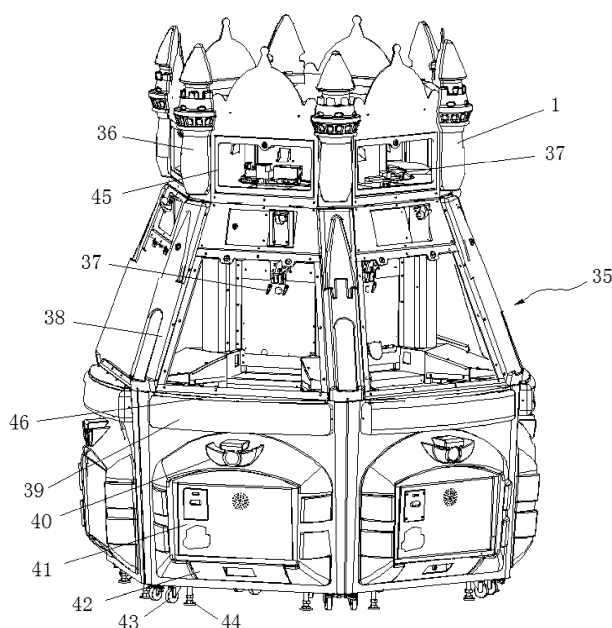


Fig. 1

Description

TECHNICAL FIELD

[0001] The present invention relates to the field of game machines for entertainment, and more particularly, to a game machine with a little train game coin circulating system.

BACKGROUND

[0002] In a traditional coin slot machine, if a player puts specific coins into the coin slot machine and pushes a button down, more game coins or lottery tickets or gifts are released through a coin bucket after prizewinning. Therefore, this traditional coin slot machine has relatively simple functions. When a game is played only with a light-effect, the interestingness is relatively low, and therefore the player loses interest after playing for a long time.

SUMMARY

[0003] The present invention aims to provide a game machine with a little train game coin circulating system with respect to the above cases, so as to overcome the defects in the prior art.

[0004] The technical solution of the present invention is implemented in such manners. A game machine with a little train game coin circulating system comprises a lamp box and a box for receiving falling coins, wherein: a castle blister is arranged on the lamp box; a maintenance door is arranged on one side of the castle blister; a decorative pillar is arranged on the box for receiving falling coins; a front decorative blister is arranged at the lower end of the decorative pillar; a light-emitting strip is arranged between the front decorative blister and the corresponding decorative pillar; a front door blister is arranged below the front decorative blister; a front door is arranged below the front door blister; a cashbox is arranged below the front door; casters and foot cups are arranged at the bottom end of the box for receiving falling coins; a coin discharging mechanism is arranged inside the lamp box; the corresponding box for receiving falling coins is connected to the lower end of the coin discharging mechanism; a little train railway is arranged inside the lamp box; a little train mechanism is mounted on the little train railway; the coin discharging mechanism is provided with a winning coin slideway; the winning coin slideway is matched with the corresponding little train mechanism and connected with a short coin conveying slideway on a short coin feeding motor; a game coin circulating module matched with the corresponding winning coin slideway is arranged in the box for receiving falling coins.

[0005] The present invention has the following beneficial effects: the winning coin slideway is matched with the corresponding little train mechanism, and the game coin circulating module is matched with the winning coin slideway, such that in a movement process of a little train,

game coins are conveyed to the winning coin slideway through the game coin circulating module, and are finally poured through the corresponding little train mechanism. Therefore, the functions are relatively rich. The little train mechanism is matched with the lamp box and the light-emitting strip to increase the interestingness.

[0006] Based on the above content, the following improvements may be made in the present invention.

[0007] Further, the game coin circulating module comprises a distributing funnel, a coin insertion slideway and a plate for receiving falling coins; a coin-falling swing needle and a bell are arranged on the plate for receiving falling coins; the distributing funnel is arranged at the upper end of the plate for receiving falling coins; a corresponding coin insertion panel is connected to the upper side of the coin insertion slideway; a left falling coin slideway is arranged on one side of the distributing funnel, and a right falling coin slideway is arranged on the other side of the distributing funnel; a push plate slideway is arranged at the lower end of the plate for receiving falling coins; a push plate is arranged in the push plate slideway; a front bucket for receiving falling coins is arranged below the push plate; a gate is arranged at the lower end of the front bucket for receiving falling coins; a coin return motor is arranged at the lower end of the gate; a coin box is arranged below the coin return motor and disposed inside the cashbox; a coin overflow slideway and a recovery slideway are arranged on two sides above the coin box respectively; the short coin feeding motor is connected to a long coin feeding motor via a long coin conveying slideway.

[0008] After the above further improvement is adopted, the game coin circulating module may complete coin falling directions of various branches through a plurality of coin buckets, complete a plurality of game modes and implement more game functions.

[0009] Further, the coin feeding slideway is communicated with the coin insertion panel and the plate for receiving falling coins respectively; a left coin return bucket is connected to the lower end of the left falling coin slideway; an inlet of the left coin return bucket is communicated with the left falling coin slideway and the push plate slideway respectively, and an outlet of the left coin return bucket is communicated with a coin collection bucket; a right coin return bucket is connected to the lower end of the right falling coin slideway; an inlet of the right coin return bucket is communicated with the push plate slideway and the right falling coin slideway respectively, and an outlet of the right coin return bucket is communicated with the coin collection bucket.

[0010] Further, one end of the coin overflow slideway is communicated with the long coin feeding motor, and the other end of the coin overflow slideway corresponds to the coin box; one end of the recovery slideway is communicated with the gate, and the other end of the recovery slideway corresponds to the coin box.

[0011] After the above further improvement is adopted, the corresponding slideway is communicated with the

coin bucket or the coin buckets are communicated, thereby realizing a game coin circulation process.

[0012] Further, the little train mechanism comprises a locomotive; one end of the locomotive is connected to a carriage overturning mechanism via a carriage connecting rod; a train bottom connecting plate which is matched with the little train railway is arranged below the locomotive and the carriage overturning mechanism; a wheel connecting rod is arranged on two sides of the train bottom connecting plate respectively; a wheel is mounted on the wheel connecting rod; an intermediate limiting shaft is arranged on the train bottom connecting plate; a lower train limiting shaft is arranged on two sides of the train bottom connecting plate respectively.

[0013] Further, a train positioning plate is arranged on one side of the train bottom connecting plate.

[0014] After the above further improvement is adopted, the little train mechanism is mounted on the corresponding little train railway through the train bottom connecting plate, such that the little train mechanism operates on the little train railway, and is positioned on a corresponding setting position through the train positioning plate.

[0015] Further, the carriage overturning mechanism comprises a front carriage overturning plate and a rear carriage overturning plate; two sides of the front carriage overturning plate are rotatably connected to two sides of the rear carriage overturning plate; two sides of the front carriage overturning plate are connected to one end of a carriage connecting rod, and the other end of the carriage connecting rod is rotatably connected to the train bottom connecting plate.

[0016] After the above further improvement is adopted, the carriage overturning mechanism is matched with the rear carriage overturning plate through the front carriage overturning plate, such that the rear carriage overturning plate is pushed to drive the front carriage overturning plate to be opened, thereby facilitating receiving of falling coins and increasing the interestingness.

[0017] Further, a bulged plate is arranged behind the rear carriage overturning plate.

[0018] After the above further improvement is adopted, the bulged plate can lift the rear carriage overturning plate conveniently, such that the structure is simple and stable.

[0019] Further, the game machine further comprises a mainboard; a lamp box plate is arranged inside the lamp box; the mainboard is connected to and controls the coin discharging mechanism, the box for receiving falling coins and the lamp box plate respectively; the lamp box plate controls and is connected to the little train mechanism.

[0020] After the above further improvement is adopted, the mainboard may control the coin discharging mechanism, the box for receiving falling coins and the lamp box plates simultaneously, i.e., control simultaneous operation and parking of the little train mechanisms, control the carriage overturning mechanism to overturn and make coins fall, and control the related lighting effect.

[0021] Further, at least one winning coin slideway and

at least one game coin circulating module are provided respectively.

[0022] After the above further improvement is adopted, when there are at least one winning coin slideway and at least one game coin circulating module, or there are a plurality of winning coin slideways and a plurality of game coin circulating modules. Multiple players may play games together, and therefore the interestingness is improved.

BRIEF DESCRIPTION OF DRAWINGS

[0023]

Fig. 1 is a perspective view of the present invention.

Fig. 2 is a schematic structural view of a coin discharging slideway and a game coin circulating module.

Fig. 3 is a schematic structural diagram of the game coin circulating module.

Fig. 4 is a schematic structural diagram of a left side surface of a little train mechanism.

Fig. 5 is a schematic structural diagram of a right side surface of the little train mechanism.

Fig. 6 is a block diagram of connection control of a mainboard.

[0024] In the drawings, the components are represented by the following reference symbols respectively: a lamp box 1; a winning coin slideway 2; a little train mechanism 3; a distributing funnel 4; a coin insertion panel 5; a coin insertion slideway 6; a plate 7 for receiving falling coins; a front bucket 8 for receiving falling coins; a coin collection bucket 9; a long coin feeding motor 10; a short coin feeding motor 11; a left falling coin slideway 12; a right falling coin slideway 13; a bell 14; a push plate 15; a left coin return bucket 16; a right coin return bucket 17; a gate 18; a coin overflow slideway 19; a coin return motor 20; a recovery slideway 21; a coin box 22; a long coin conveying slideway 23; a locomotive 24; an intermediate limiting shaft 25; a lower train limiting shaft 26; a train bottom connecting plate 27; a wheel connecting rod 28; a wheel 29; a carriage connecting rod 30; a front carriage overturning plate 31; a rear carriage overturning plate 32; a carriage connecting rod 33; a train positioning plate 34; a bulged plate 35; a castle blister 36; a little train slideway 37; a decorative pillar 38; a front decorative blister 39; a front door blister 40; a front door 41; a cashbox 42; a castor 43; a foot cup 44; a maintenance door 45; a light-emitting strip 46.

DETAILED DESCRIPTION

[0025] As shown in Fig. 1, a game machine with a little train game coin circulating system comprises a lamp box 1 and a box 35 for receiving falling coins. A castle blister 36 is arranged on the lamp box 1. A maintenance door 45 is arranged on one side of the castle blister 36. A decorative pillar 38 is arranged on the box 35 for receiving falling coins. A front decorative blister 39 is arranged at the lower end of the decorative pillar 38. A light-emitting strip 46 is arranged between the front decorative blister 39 and the corresponding decorative pillar 38. A front door blister 40 is arranged below the front decorative blister 39. A front door 41 is arranged below the front door blister 40. A cashbox 42 is arranged below the front door 41. Casters 43 and foot cups 44 are arranged at the bottom end of the box 35 for receiving falling coins. A coin discharging mechanism is arranged inside the lamp box 1. The corresponding box 35 for receiving falling coins is connected to the lower end of the coin discharging mechanism. A little train railway 37 is arranged inside the lamp box 1. A little train mechanism 3 is mounted on the little train railway. The coin discharging mechanism is provided with a winning coin slideway 2. The winning coin slideway 2 is matched with the corresponding little train mechanism 3 and connected to a short coin conveying slideway on a short coin feeding motor 11. A game coin circulating module matched with the corresponding winning coin slideway 2 is arranged in the box 35 for receiving falling coins.

[0026] According to the present invention, the winning coin slideway 2 is matched with the corresponding little train mechanism 3, and the game coin circulating module is matched with the corresponding winning coin slideway 2, such that in a movement process of a little train, game coins are conveyed to the winning coin slideway 2 through the game coin circulating module, and are finally poured through the corresponding little train mechanism 3. Therefore, the functions are rich relatively. The little train mechanism is matched with the lamp box and the light-emitting strip 46 to increase the interestingness.

[0027] As shown in Fig. 2 and Fig. 3, the game coin circulating module comprises a distributing funnel 4, a coin insertion slideway 6 and a plate 7 for receiving falling coins. A coin-falling swing needle 37 and a bell 14 are arranged on the plate 7 for receiving falling coins. The distributing funnel 4 is arranged at the upper end of the plate 7 for receiving falling coins. A corresponding coin insertion panel 5 is connected to the upper side of the coin insertion slideway 6. A left falling coin slideway 12 is arranged on one side of the distributing funnel 4, and a right falling coin slideway 13 is arranged on the other side of the distributing funnel 4. A push plate slideway is arranged at the lower end of the plate 7 for receiving falling coins. A push plate 15 is arranged in the push plate slideway. A front bucket 8 for receiving falling coins is arranged below the push plate 15. A gate 18 is arranged at the lower end of the front bucket 8 for receiving falling

coins. A coin return motor 20 is arranged at the lower end of the gate 18. A coin box 22 is arranged below the coin return motor 20 and disposed inside the cashbox 42. A coin overflow slideway 19 and a recovery slideway 21 are arranged on two sides above the coin box 22 respectively. The short coin feeding motor 11 is connected to a long coin feeding motor 10 via a long coin conveying slideway 23.

[0028] The coin insertion slideway 6 is communicated with the coin insertion panel 5 and the plate 7 for receiving falling coins respectively. A left coin return bucket 16 is connected to the lower end of the left falling coin slideway 12. An inlet of the left coin return bucket 16 is communicated with the left falling coin slideway 12 and the push plate slideway respectively, and an outlet of the left coin return bucket 16 is communicated with a coin collection bucket 9. A right coin return bucket 17 is connected to the lower end of the right falling coin slideway 13. An inlet of the right coin return bucket 17 is communicated with the push plate slideway and the right falling coin slideway 13 respectively, and an outlet of the right coin return bucket 17 is communicated with the coin collection bucket 9.

[0029] One end of the coin overflow slideway 19 is communicated with a long coin feeding motor 10, and the other end of the coin overflow slideway 19 corresponds to the coin box 22. One end of the recovery slideway 21 is communicated with the gate 18, and the other end of the recovery slideway 21 corresponds to the coin box 22.

[0030] The game coin circulating module may complete coin falling directions of various branches through a plurality of coin buckets, complete a plurality of game modes and implement more game functions. The corresponding slideway and the coin bucket are communicated or the coin buckets are communicated, and therefore the game coin circulation process is realized.

[0031] As shown in Fig. 4 and Fig. 5, the little train mechanism 3 comprises a locomotive 24. One end of the locomotive 24 is connected to a carriage overturning mechanism via a carriage connecting rod 33. A train bottom connecting plate 27 which is matched with the little train railway is arranged below the locomotive 24 and the carriage overturning mechanism. A wheel connecting rod 28 is arranged on two sides of the train bottom connecting plate 27 respectively. A wheel 29 is mounted on the wheel connecting rod 28. An intermediate limiting shaft 25 is arranged on the train bottom connecting plate 27. A lower train limiting shaft 26 is arranged on two sides of the train bottom connecting plate 27 respectively. A train positioning plate 34 is arranged on one side of the train connecting plate 27.

[0032] The carriage overturning mechanism comprises a front carriage overturning plate 31 and a rear carriage overturning plate 32. Two sides of the front carriage overturning plate 31 are rotatably connected to two sides of the rear carriage overturning plate 32. Two sides of the front carriage overturning plate 31 are connected to one end of a carriage connecting rod 30, and the other

end of the carriage connecting rod 30 is rotatably connected to the train bottom connecting plate 27. A bulged plate 35 is arranged behind the rear carriage overturning plate 32.

[0033] Each little train mechanism 3 is mounted on the corresponding little train railway through the train bottom connecting plate, such that the little train mechanism operates on the little train railway, and is positioned on a corresponding setting position through the train positioning plate 34. The carriage overturning mechanism is matched with the rear carriage overturning plate 32 through the front carriage overturning plate 31, such that the rear carriage overturning plate 32 is pushed to drive the front carriage overturning plate 31 to be opened, thereby facilitating receiving of falling coins and increasing the interestingness. The bulged plate 35 can lift the rear carriage overturning plate 32 conveniently, such that the structure is simple and stable.

[0034] As shown in Fig. 6, the game machine further comprises a mainboard. A lamp box plate is arranged inside the lamp box 1. The mainboard is connected to and controls the coin discharging mechanism, the box 35 for receiving falling coins and the lamp box plates respectively. The lamp box plate controls and is connected to the little train mechanism 3. The mainboard can control the coin discharging mechanism, the box 35 for receiving falling coins and the lamp box plate simultaneously, i.e., control simultaneous operation and parking of the little train mechanisms, control the carriage overturning mechanism to overturn and make coins fall, and control the related lighting effect.

[0035] As another embodiment of the present invention, at least one winning coin slideway 2 and at least one game coin circulating module are provided respectively. When a plurality of winning coin slideways 2 and a plurality of game coin circulating modules are adopted, a circular shape may be formed by the combination of buckles or screws. Each group of winning coin slideways 2 and the game coin circulating modules serves as a host. As shown in Fig. 6, when six hosts are arranged, one mainboard is adopted to control and to be connected to the host I, the host II, the host III, the host IV, the host V and the host VI respectively, such that multiple players may play games together, and therefore the interestingness is improved.

[0036] The above-mentioned embodiments are just preferred embodiments of the present invention, without limiting the present invention. Any modifications, equivalent replacements and improvements made within the spirit and principle of the present invention should be included within the protection scope of the present invention.

Claims

1. A game machine with a little train game coin circulating system, comprising a lamp box (1) and a box

(35) for receiving falling coins, wherein: a castle blister (36) is arranged on the lamp box (1); a maintenance door (45) is arranged on one side of the castle blister (36); a decorative pillar (38) is arranged on the box (35) for receiving falling coins; a front decorative blister (39) is arranged at the lower end of the decorative pillars (38); a light-emitting strip (46) is arranged between the front decorative blister (39) and the corresponding decorative pillar (38); a front door blister (40) is arranged below the front decorative blister (39); a front door (41) is arranged below the front door blister (40); a cashbox (42) is arranged below the front door (41); casters (43) and foot cups (44) are arranged at the bottom end of the box (35) for receiving falling coins; a coin discharging mechanism is arranged inside the lamp box (1); the corresponding box for receiving falling coins (35) is connected to the lower end of the coin discharging mechanism; a little train railway (37) is arranged inside the lamp box (1); a little train mechanism (3) is mounted on the little train railway; the coin discharging mechanism is provided with a winning coin slideway (2); the winning coin slideway (2) is matched with the corresponding little train mechanism (3) and connected with a short coin conveying slideway on a short coin feeding motor (11); a game coin circulating module matched with the corresponding winning coin slideway (2) is arranged in the box (35) for receiving falling coins.

2. The game machine with the little train game coin circulating system according to claim 1, wherein: the game coin circulating module comprises a distributing funnel (4), a coin insertion slideway (6) and a plate (7) for receiving falling coins; a coin-falling swing needle (37) and a bell (14) are arranged on the plate (7) for receiving falling coins; the distributing funnel (4) is arranged at the upper end of the plate (7) for receiving falling coins; a corresponding coin insertion panel (5) is connected to the upper side of the coin insertion slideway (6); a left falling coin slideway (12) is arranged on one side of the distributing funnel (4), and a right falling coin slideway (13) is arranged on the other side of the distributing funnel (4); a push plate slideway is arranged at the lower end of the plate (7) for receiving falling coins; a push plate (15) is arranged in the push plate slideway; a front bucket (8) for receiving falling coins is arranged below the push plate (15); a gate (18) is arranged at the lower end of the front bucket (8) for receiving falling coins; a coin return motor (20) is arranged at the lower end of the gate (18); a coin box (22) is arranged below the coin return motor (20) and disposed inside the cashbox (42); a coin overflow slideway (19) and a recovery slideway (21) are arranged on two sides above the coin box (22) respectively; the short coin feeding motor (11) is connected to a long coin feeding motor (10) via a long coin convey-

ing slideway (23).

3. The game machine with the little train game coin circulating system according to claim 2, wherein: the coin feeding slideway (6) is communicated with the coin insertion panel (5) and the plate (7) for receiving falling coins respectively; a left coin return bucket (16) is connected to the lower end of the left falling coin slideway (12); an inlet of the left coin return bucket (16) is communicated with the left falling coin slideway (12) and the push plate slideway respectively, and an outlet of the left coin return bucket (16) is communicated with a coin collection bucket (9); a right coin return bucket (17) is connected to the lower end of the right falling coin slideway (13); an inlet of the right coin return bucket (17) is communicated with the push plate slideway and the right falling coin slideway (13) respectively, and an outlet of the right coin return bucket (17) is communicated with the coin collection bucket (9). 5 10
4. The game machine with the little train game coin circulating system according to claim 2, wherein: one end of the coin overflow slideway (19) is communicated with the long coin feeding motor (10), and the other end of the coin overflow slideway (19) corresponds to the coin box (22); one end of the recovery slideway (21) is communicated with the gate (18), and the other end of the recovery slideway (21) corresponds to the coin box (22). 15 20 25 30
5. The game machine with the little train game coin circulating system according to claim 1, wherein: the little train mechanism (3) comprises a locomotive (24); one end of the locomotive (24) is connected to a carriage overturning mechanism via a carriage connecting rod (33); a train bottom connecting plate (27) which is matched with the little train railway is arranged below the locomotive (24) and the carriage overturning mechanism; a wheel connecting rod (28) is arranged on two sides of the train bottom connecting plate (27) respectively; a wheel (29) is mounted on the wheel connecting rod (28); an intermediate limiting shaft (25) is arranged on the train bottom connecting plate (27); a lower train limiting shaft (26) is arranged on two sides of the train bottom connecting plate (27) respectively. 35 40 45
6. The game machine with the little train game coin circulating system according to claim 5, wherein a train positioning plate (34) is arranged on one side of the train bottom connecting plate (27). 50
7. The game machine with the little train game coin circulating system according to claim 5, wherein: the carriage overturning mechanism comprises a front carriage overturning plate (31) and a rear carriage overturning plate (32); two sides of the front carriage overturning plate (31) are rotatably connected to two sides of the rear carriage overturning plate (32); two sides of the front carriage overturning plate (31) are connected to one end of a carriage connecting rod (30), and the other end of the carriage connecting rod (30) is rotatably connected to the train bottom connecting plate (27). 55
8. The game machine of the little train game coin circulating system according to claim 7, wherein a bulged plate (35) is arranged behind the rear carriage overturning plate (32).
9. The game machine with the little train game coin circulating system according to claim 1, further comprising a mainboard, wherein: a lamp box plate is arranged inside the lamp box (1); the mainboard is connected to and controls the coin discharging mechanism, the box for receiving falling coins (35) and the lamp box plate respectively; the lamp box plate controls and is connected to the little train mechanism (3).
10. The game machine with the little train game coin circulating system according to claim 1, wherein at least one wining coin slideway (2) and at least one game coin circulating module are provided respectively.

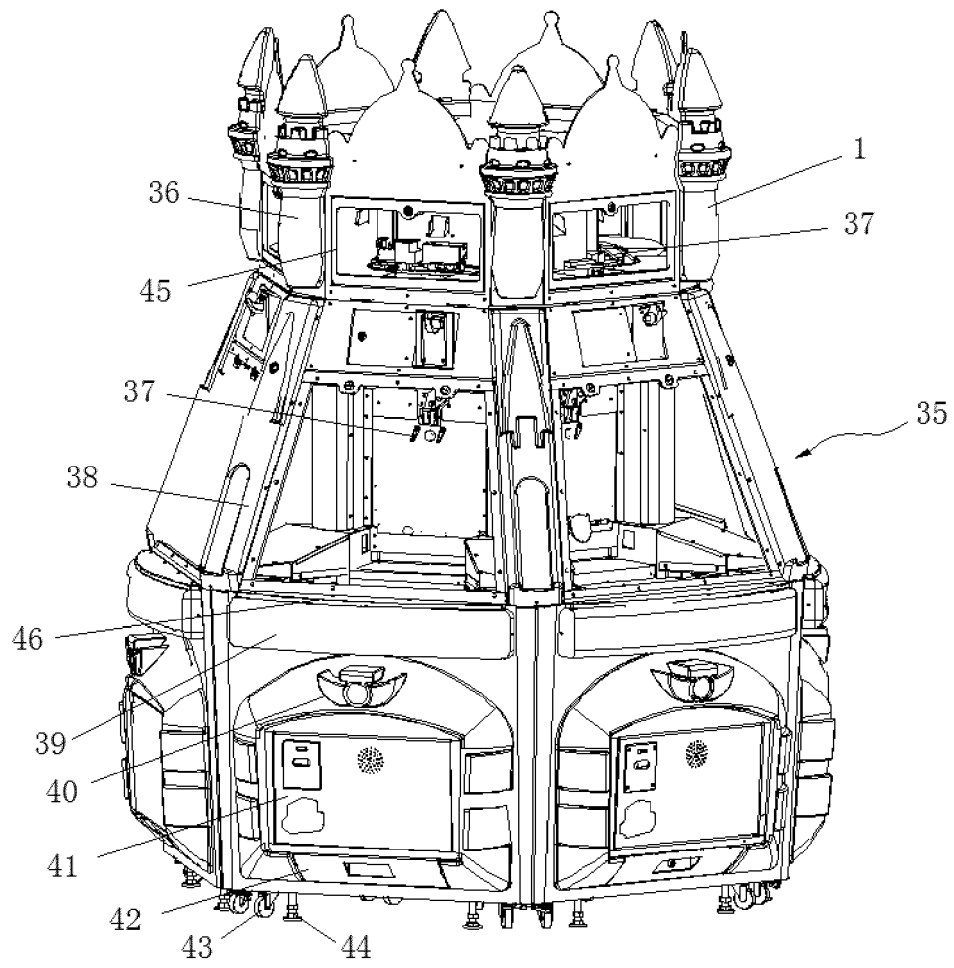


Fig. 1

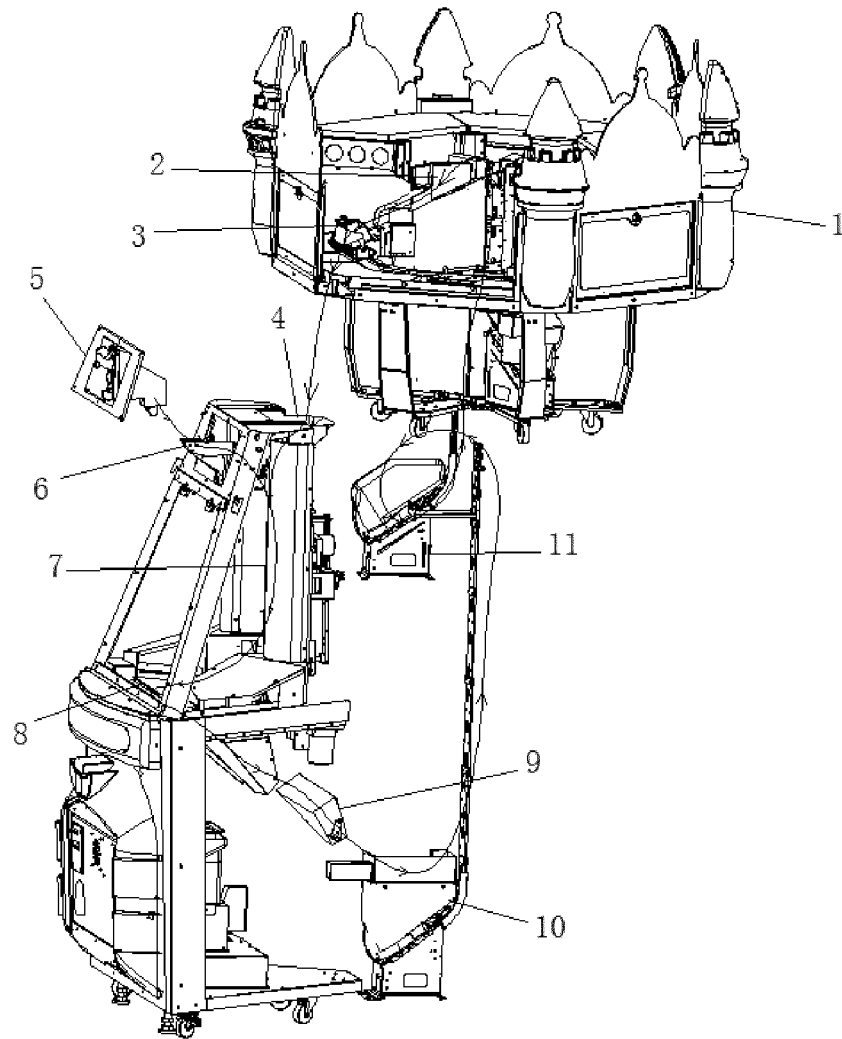


Fig. 2

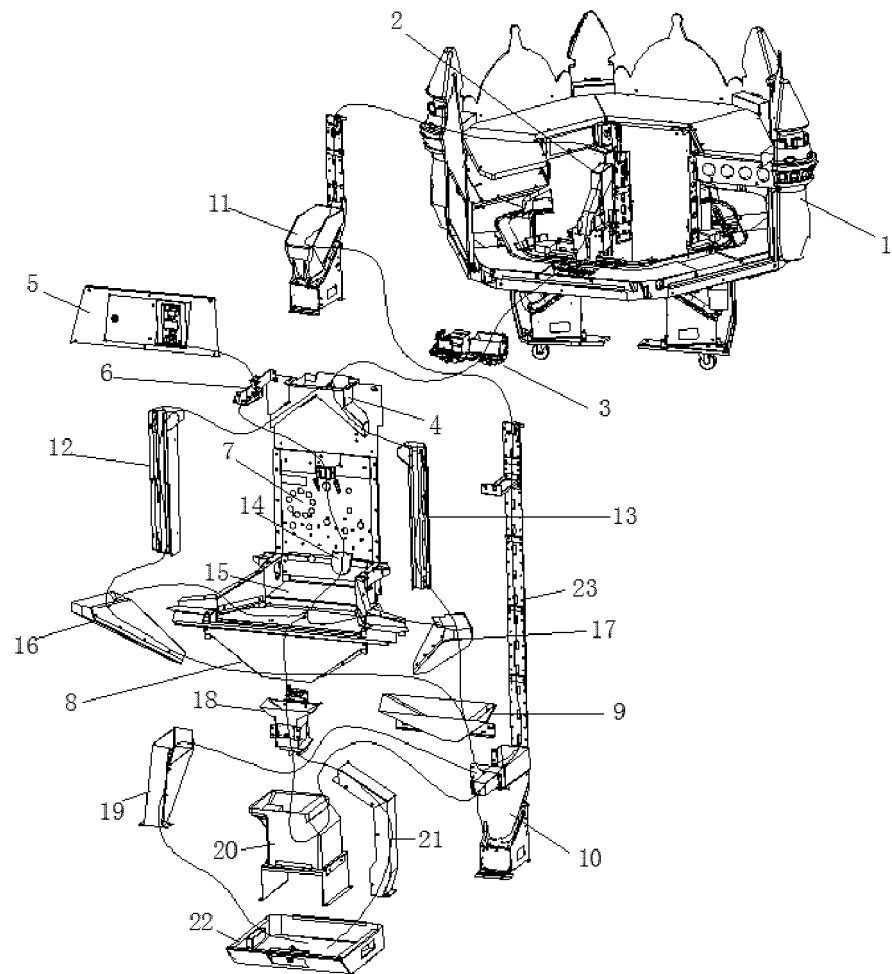


Fig. 3

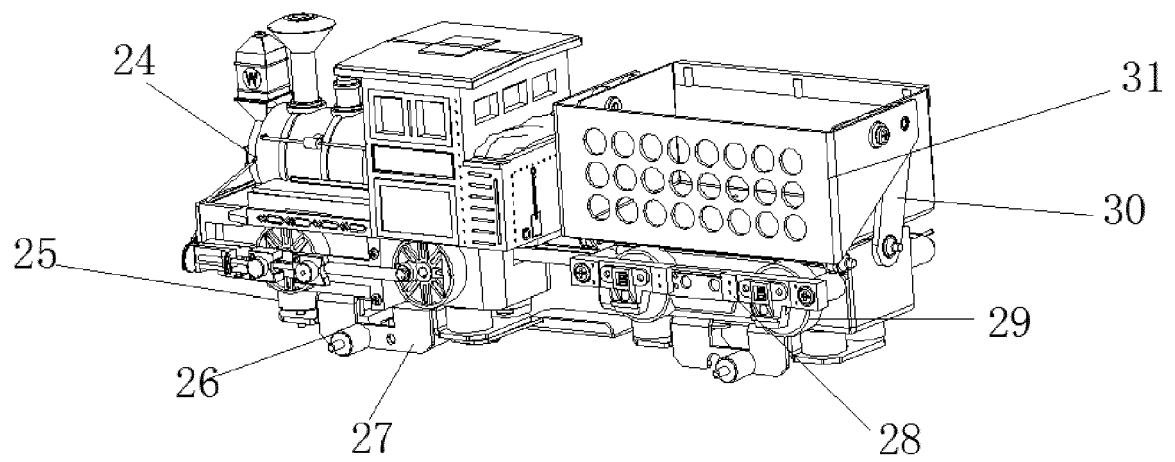


Fig. 4

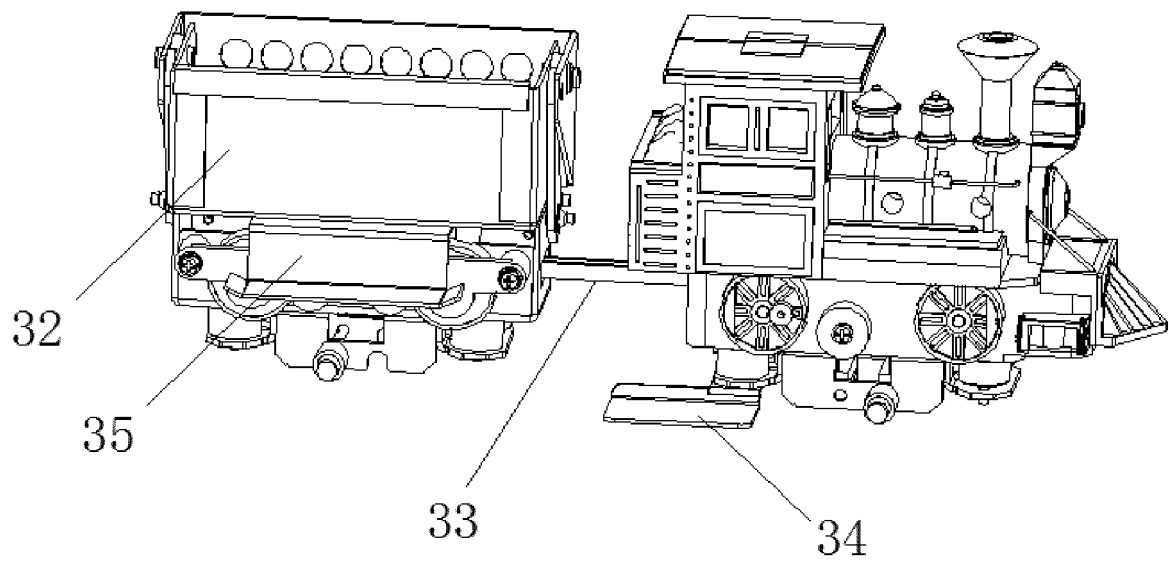


Fig. 5

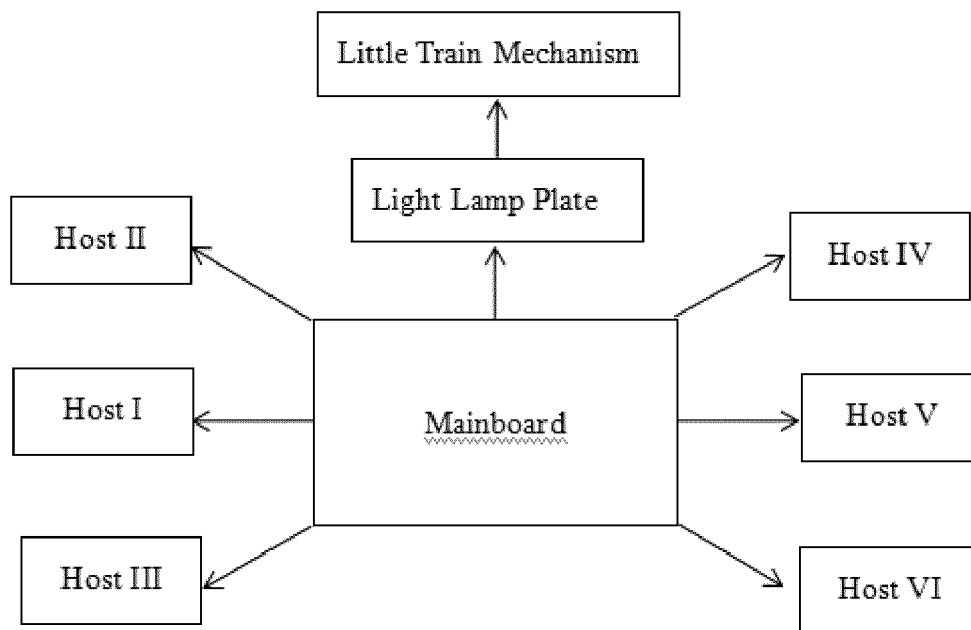


Fig. 6



EUROPEAN SEARCH REPORT

Application Number
EP 18 18 5631

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	Namer Merli: "SEGA Western Dream train unloaded", 9 August 2012 (2012-08-09), page 1, XP054978866, Retrieved from the Internet: URL:https://www.youtube.com/watch?v=2W0gVXfZXIE [retrieved on 2018-11-16] * the whole document * -----	1-10	INV. G07F17/32 A63F9/00
			TECHNICAL FIELDS SEARCHED (IPC) A63F G07F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 19 November 2018	Examiner Moynihan, Maurice
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