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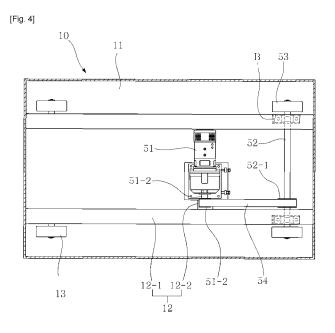
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(54) MOBILE BASKETBALL POST FOR A BASKETBALL GAME

(57) The present invention relates to a basketball post for a basketball game, and more particularly, to a mobile basketball post for a basketball game, which is movable using power. The mobile basketball post for a basketball game according to the present invention comprises: a base; a pillar mounted on the base; a backboard mounted on a top of the pillar; and a rim arranged at a lower portion of the backboard, wherein the base has an accommodation space formed therein, and a frame consisting of a plurality of bars is installed in the accommodation space, and a pair of driven wheels are installed at

one side of the frame. The mobile basketball post of the present invention further comprises: moving means including a motor which is fixed at an intermediate portion of the frame so as to be placed in the accommodation space, and which has a first pulley mounted on a rotating shaft thereof; a shaft which is installed in the accommodation space such that the shaft is rotatable by a bearing unit fixed at the other side of the frame, and which has a second pulley; driving wheels fixed at either end of the shaft; and a belt installed on both the first pulley and the second pulley.



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Description

Technical Field

⁵ **[0001]** The present invention relates to a basketball post, and in particular to a mobile basketball post for a basketball game which is movable by means of a driving force.

Background Art

[0002] A basketball post is generally formed of a base, a pillar, a backboard and a rim.

[0003] The conventional basketball is configured in such a way that a base comes into contact with the ground and weighs so heavy that a lot of people is needed to move it. For this, its mobility is worse.

[0004] In order to overcome the above-mentioned problems, a mobile basketball post with wheels engaged at a base is disclosed; however the mobile basketball post is characterized in that it is designed to move as the wheels are transferred to lower sides in a state that the wheels are embedded in the base.

[0005] In addition, the basketball is not automatically movable, in other words, it is designed to move as people push it, which construction needs fewer people than to transfer it by lifting, but a lot of people are still needed to move a heavy basketball post, so it is still hard to move a basketball post.

20 <u>Disclosure of Invention</u>

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[0006] Accordingly, the present invention is made to resolve the problems encountered in the conventional art, and it is an object of the present invention to provide a mobile basketball post for a basketball game which makes it possible to help a basketball post move automatically as wheels roll using a driving force from a motor, thus minimizing the use of manpower when moving a heavy basketball post.

[0007] In addition, it is another object of the present invention to provide a mobile basketball for a basketball game the moving direction of which can be adjustable by providing a steering part.

[0008] To achieve the above objects, there is provided a mobile basketball post for a basketball game formed of a base; a pillar installed at the base; a backboard installed at top of the pillar; and a rim installed at a lower side of the backboard. The base has an accommodation space therein, and a plurality of frames are installed in the accommodation space. A pair of driven wheels are installed at the frame to position at one side. A motor is positioned in the accommodation space and is fixedly installed at an intermediate portion of the frame. A first pulley is installed at a rotary shaft of the motor. A shaft is rotatably installed in the accommodation space with the aid of a bearing unit fixedly installed at the other side of the frame and has a second pulley. A driving wheel is fixedly installed at either side of the shaft. A moving part is formed of a belt installed at the first pulley and the second pulley.

[0009] In addition, it is characterized in that a controller controlling the motor is provided at one side of the base.

[0010] In addition, it is characterized in that the controller is formed of a remote controller.

[0011] In addition it is characterized in that there is further provided a steering part at the basketball post.

[0012] In addition, the steering part comprises a vertical shaft which is downwardly protruded from a lower surface of one side of the frame and has an engaging shoulder at its lower side, a rotary body which is rotatably installed at the vertical shaft, a pair of driven wheels which are rotatably installed at a front end of a rod connected to the rotary body, a connection piece one end of which is fixedly connected to the rotary body, a rotation bar which is disposed between the driven wheels, with one of it being rotatably installed at the frame, with the other end of it being exposed to the outside so as to be held, and a connection bar both ends of which are rotatably installed at the ends of the connection piece, with the intermediate portion of the body being installed to be rotatable along with the center of the rotation bar.

Advantageous effects

[0013] As described above, the basketball post for a basketball game according to the present invention can be easily moved as the driving wheels rotate by means of the driving operation of the motor.

[0014] In addition, the present invention does not need a lot of people to move a basketball post like the conventional art in such a way to use the driving force of the motor.

[0015] In addition, there are provided a controller or a remote controller by which operations become easy and a remote control is made possible.

[0016] In addition, since there is further provided a steering part, the basketball post can move in all directions, not a linear reciprocation movement.

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Brief Description of Drawings

[0017] Figure 1 is a perspective view illustrating a mobile basketball post for a basketball game according to the present invention.

⁵ **[0018]** Figure 2 is a front cross sectional view illustrating part of a mobile basketball post for a basketball game according to the present invention.

[0019] Figure 3 is a side cross sectional view of Figure 2.

[0020] Figure 4 is a plane cross sectional view of Figure 2.

[0021] Figure 5 is a view illustrating a construction that a controller is further provided.

[0022] Figure 6 is a view illustrating a construction that a remote controller is further provided.

[0023] Figure 7 is a view illustrating a construction that a steering part is further provided.

[0024] Figure 8 is a plane cross sectional view of Figure 7.

[0025] Figure 9 is a view illustrating a construction that a position fixing apparatus is further provided.

[0026] Figure 10 is a view illustrating a state that a moving part is driven.

[0027] Figure 11 is a view illustrating an operation state of a steering part.

[0028] * Descriptions of reference numerals *

[0029]

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10: base 11: accommodation space

 12: frame
 12-1: first bar

 12-2: second bar
 12-3: third bar

 20: pillar
 30: backboard

 40: rim
 50: moving part

 51: motor
 51-1: rotary shaft

51-2: first pulley 52: shaft

52-1: second pulley 53: driving wheel 54: belt 60: controller 70: steering part

71: vertical shaft 71-1: engaging shoulder

72: rotary body 72-1: hollow part 73: rod 74: connection piece 75: rotation bar 76: connection bar

80: position fixing apparatus

81: bolt 82: holding rod 83: pad B: bearing unit

Modes for carrying out the invention

[0030] The mobile basketball post for a basketball game according to a preferred embodiment of the present invention will be described with reference to the accompanying drawings.

[0031] Figure 1 is a perspective view illustrating a mobile basketball post for a basketball game according to the present invention. Figure 2 is a front cross sectional view illustrating part of a mobile basketball post for a basketball game according to the present invention. Figure 3 is a side cross sectional view of Figure 2. Figure 4 is a plane cross sectional view of Figure 2. Figure 5 is a view illustrating a construction that a controller is further provided. Figure 6 is a view illustrating a construction that a remote controller is further provided. Figure 7 is a view illustrating a construction that a steering part is further provided. Figure 8 is a plane cross sectional view of Figure 7. Figure 9 is a view illustrating a construction that a position fixing apparatus is further provided. Figure 10 is a view illustrating a state that a moving part is driven. Figure 11 is a view illustrating an operation state of a steering part.

[0032] The basketball post for a basketball game according to the present invention, as shown in Figures 1 to 4, comprises a base 10, a pillar 20 installed at the base 10, a backboard 30 installed at top of the pillar 20, a rim 40 installed at a lower side of the backboard 30 and a moving part 50 installed at the base 10.

[0033] The base 10 comprises an accommodation space 11 in the interior of it with its lower side being open. A frame 12 formed of a plurality of bars are installed in the accommodation space 11. A pair of driven wheels 13 are installed at one side of the base 10.

[0034] The frame 12 is formed of a plurality of bars for the purpose of ensuring that the driven wheels 13, the motor

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51 of the moving part 50 which will be described later, and the bearing unit B can be installed, and it is preferably formed in a H-shape. In other words, the frame 12 is formed of a pair of first bar 12-1 and a second bar 12-2 connecting the first bar 12-1. At one side of the first bar 12-1 is installed the driven wheel 13, and at the other side of it is installed a bearing unit B, and at the second bar 12-2 is installed a motor 51.

[0035] * The driven wheel 13 is installed at a protrusion protruded from a lower surface of one side of the first bar 12-1.
[0036] Since the pillar 20, the backboard 30 and the rim 40 are conventional elements, so the drawings and detailed descriptions of them will be omitted.

[0037] The moving part 50 is directed to moving a basketball post with the aid of a driving force. The moving part 50 comprises a motor 51, a shaft 52, a driving wheel 53 and a belt 54.

[0038] The motor 51 is fixedly installed at an upper surface of a center of the second bad 12-2 of the frame 12 so as to be positioned in the accommodation space 11 of the base 10 and comprises a first pulley 51-2 at the rotary shaft 51-1 of it, thus rotating in a normal direction or a reverse direction the driving wheel 53 in a normal or reverse rotation mode.

[0039] The shaft 52 is rotatably and horizontally installed in the accommodation space 11 of the base 10 by means

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of the bearing unit B fixedly installed at a lower surface of the other side of the first bar 12-1 of the frame 12, and a second pulley 52-1 is disposed at one side of the center.

[0040] The shaft 52 rotates as a driving force transferred via the belt 54, which will be described later, is applied thereto when the motor 51 is driven.

[0041] The driving wheels 53 are fixedly installed at either side of the shaft 52, so it rotates in sync with the rotation of the shaft 52, thus moving forward or backward the basketball post.

[0042] The belt 54 is installed at the first pulley 51-2 of the motor 51 and the second pulley 52-1 of the shaft 52, thus transferring a driving force of the motor 51 to the shaft 52 when the motor 51 is driven.

[0043] As shown in Figure 5, it is preferred that the controller 60 operating the operation of the motor 51 is installed at one side surface of the base 10. The controller 60 is formed of a normal driving button, a reverse driving button and a stop button of the motor the descriptions and drawing of which will be omitted since they are conventional arts.

[0044] As shown in Figure 6, the controller 60 might be formed of a remote controller 60' which can be controlled remotely.

[0045] As shown in Figures 7 and 8, the mobile basketball post for a basketball game according to the present invention is preferably further provided with a steering part 70 for the purpose of adjusting the moving directions including forward and backward direction movements. Here, there is further provided a third bar 12-3 connecting one side of each of a pair of first bars 12-1 for the sake of easier installations of the rotation bar 75 of the steering part 70 which will be descried later, thus forming in whole a trapezoid shape.

[0046] The steering part 70 comprises a pair of vertical shafts 71 which are downwardly protruded from a lower surface of one side of the first bar 12-1 of the frame 12, a pair of vertical shafts 71 with an engaging shoulder 71-1 at its lower side, a rotary body 72 which has a hollow part 72-1 accommodating the vertical shaft 71 and which is mounted on the engaging shoulder 71-1 and is rotatable, a pair of driven wheels 13 which are rotatably installed at the front sides of the rod 73 one end of which is connected to the rotary body 72, a connection piece 74 one end of which is fixedly connected to the rotary body 72, a rotation bar 75 one end of which is rotatably installed at the center of the third bar 12-3 of the frame 12 so as to be positioned between the driven wheels 13, and the other end of which is exposed to the outside so as to be held, and a connection bar 76 both ends of which are rotatably installed at the ends of the connection piece 74, the intermediate portion of the body being rotatably installed at the center of the rotation bar 75.

[0047] The mobile basketball post for a basketball game according to the present invention might further comprise a position fixing apparatus 80 for the purpose of preventing the escape of the mobile basketball post by means of an external force from when it is installed.

[0048] As shown in Figure 9, the position fixing apparatus 80 is characterized in that the bolt 81 descends when holding and rotating the holding rod 82 provided at the bolt 81 vertically thread-engaged with the base 10, and the pad 83 installed at the lower end of the bolt 81 comes into contact with the ground, thus limiting the movement of the basketball post.

[0049] The position fixing apparatus 80 might be formed in various forms such as a hydraulic type or a link type in addition to the above-mentioned thread engagement type.

[0050] The use state of the mobile basketball post for a basketball game according to the present invention will be described with reference to Figures 10 and 11.

[0051] First of all, when the motor 51 of the moving part 50 is driven by operating the controller 60, the rotary shaft 51-1 and the first pulley 51-2 installed at the rotary shaft 51-1 start operating in sync with each other.

[0052] At this time, the driving force from the motor 51 is transferred to the shaft 52 by way of the belt 54 installed at the first pulley 51-2 and the second pulley 52-1, so the shaft 52 rotates, and the driving wheels 53 installed at either side of the shaft 52 rotate, thus moving the basketball post.

[0053] When the basketball post moves and arrives at a desired position, the operation of the motor 51 of the moving part 50 is stopped by operating the controller 60.

[0054] There is provided a steering part 70, with which it is possible to control a moving direction by rotating the rotation

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bar 75 after holding the other end of the rotation 75 of the steering part 70 when it is needed to move the basketball post as the driving wheels 53 rotate by means of the operation of the motor 51 of the moving part 50.

[0055] Holding the other end of the rotation bar 75, when the rotation bar 75 is rotated, the connection piece 74 rotates by means of the connection bar 76, and the rotary body 72 rotatably installed at the vertical shaft 71 starts rotating about the vertical shaft 71. So, the driven wheels 13 connected with the rotary body 72 rotate by means of the rod 73, so the moving direction of the basketball post can be adjusted.

[0056] When the basketball post arrives at a desired position by means of the operation of the rotation bar 75, the operation of the motor 51 of the moving part 50 is stopped by operating the controller 60.

[0057] Holding the holding rod 82 of the position fixing part 80, when the holing rod 82 is rotated, the bolt 81 threadengaged with the base 10 moves downward, and the pad 83 installed at a lower side of the bolt 81 comes into contact with the ground, so it is possible to prevent the basketball post from moving by means of an external force.

Claims

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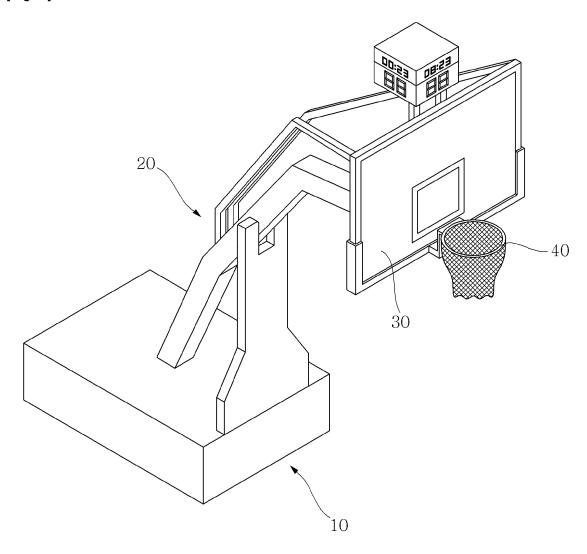
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- 1. A basketball post for a basketball game formed of a base, a pillar installed at the base, a backboard installed at top of the pillar, and a rim installed at a lower side of the backboard, comprising:
 - an accommodation space formed in the interior of the base;
 - a frame formed of a plurality of bars which are installed in the accommodation space;
 - a pair of driven wheels which are installed at the frame to be positioned at one side;
 - a motor which is fixedly installed at an intermediate portion of the frame to be positioned in the accommodation space and has a first pulley installed at a rotary shaft of the motor;
 - a moving means which comprises:
 - a shaft which is rotatably installed at the accommodation space by means of a bearing unit fixedly installed at the other side of the frame and has a second pulley;
 - a driving wheel which is fixedly installed at both sides of the shaft; and
 - a belt installed at the first pulley and the second pulley; and

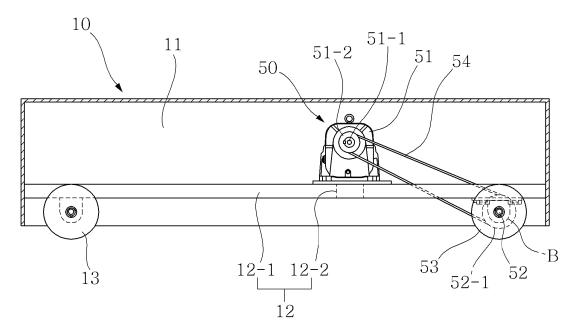
a steering means which comprises:

- a vertical shaft which is downwardly protruded from a lower surface of one side of the frame and has an engaging shoulder at a lower side;
- a rotary body which is rotatably installed at the vertical shaft;
- a pair of driven wheels which are rotatably installed at a front end of the rod connected to the rotary body; a connection piece one end of which is fixedly connected with the rotary body;
- a rotation bar one end of which is rotatably installed at the frame, and the other end of which is exposed to the outside to be held, thus being disposed between the driven wheels; and
- a connection bar both ends of which are rotatably installed at an end of each of the connection piece and an intermediate portion of the body is rotatably installed at the center of the rotation bar.
- 2. A basketball post for a basketball game according to claim 1, wherein a controller is provided at one side of the base for the purpose of controlling the operation of the motor.
- 3. A basketball post for a basketball game according to clam 2, wherein said controller is formed of a remote controller.

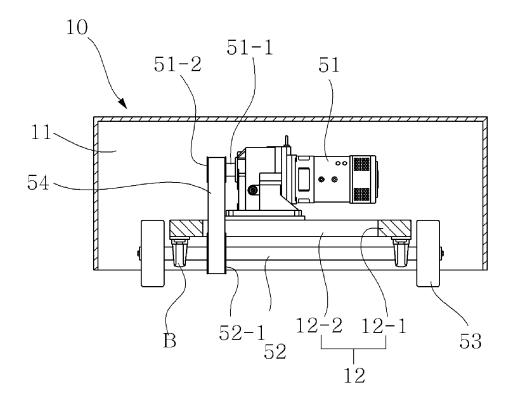




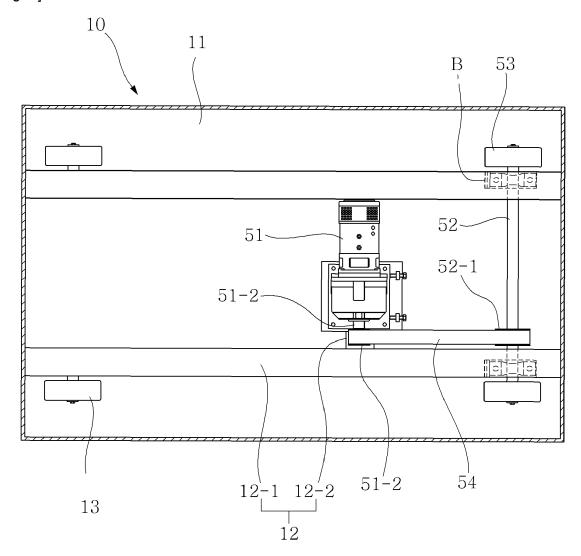
[Fig. 2]



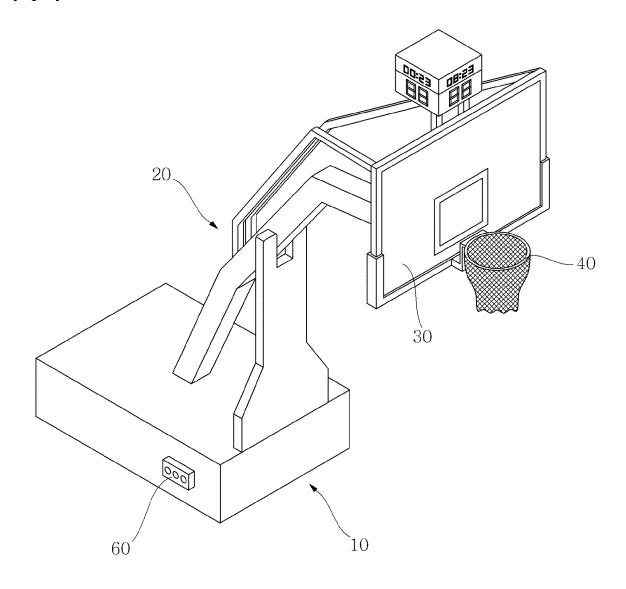
[Fig. 3]



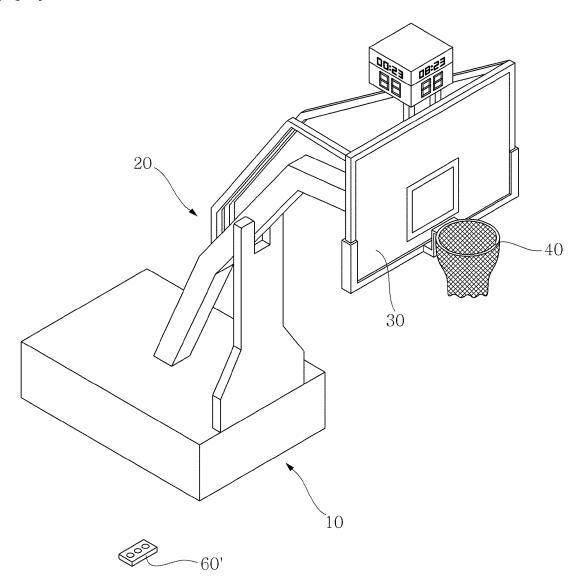
[Fig. 4]



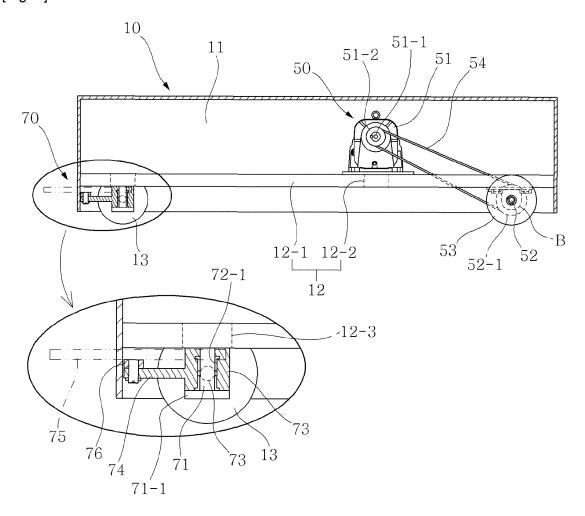
[Fig. 5]



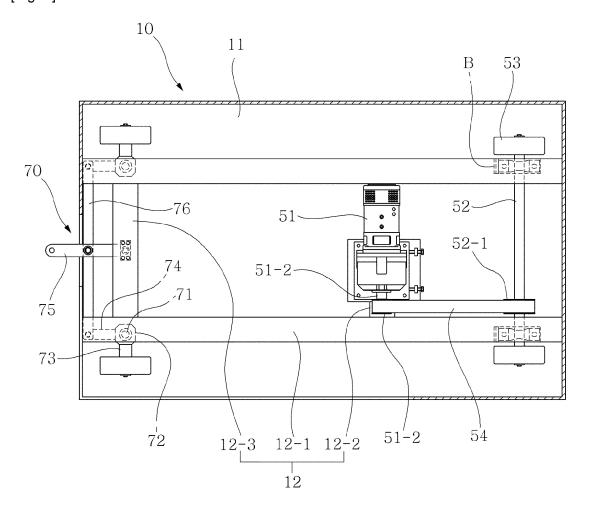
[Fig. 6]



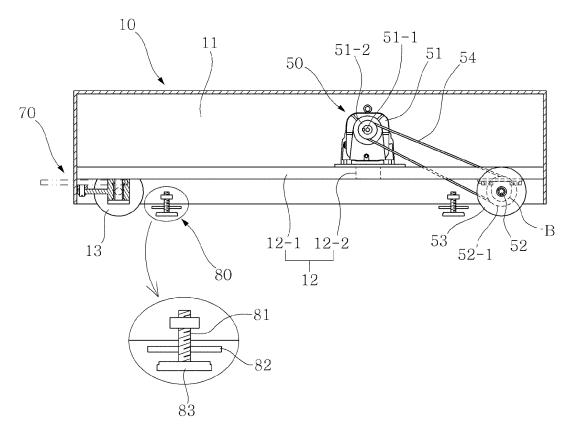
[Fig. 7]



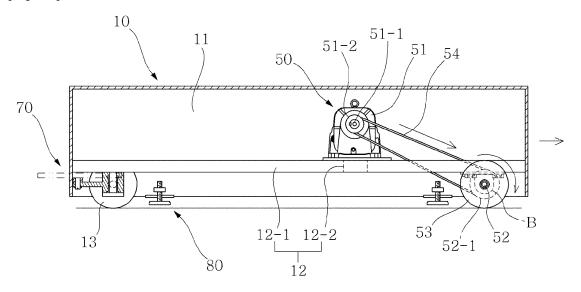
[Fig. 8]



[Fig. 9]



[Fig. 10]



[Fig. 11]

