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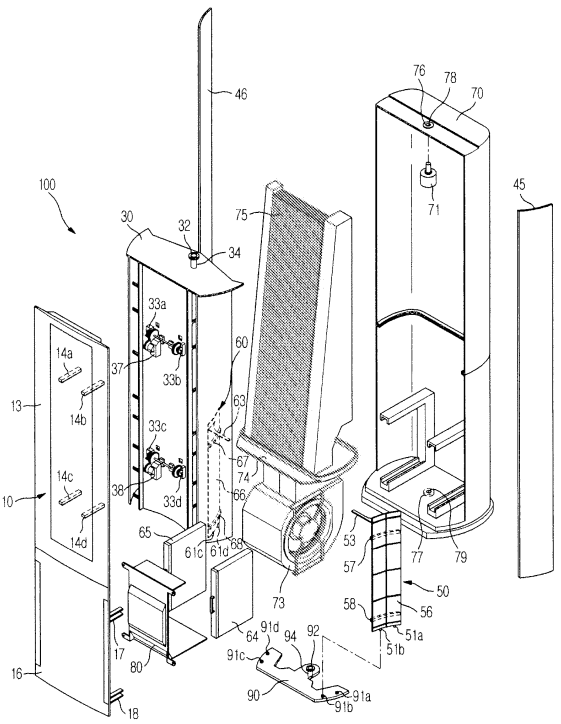
## (54) Air conditioner

(57) Disclosed herein is an air conditioner having an improved configuration to control an air current via leftward or rightward rotation of a front body that defines a front surface of the air conditioner. The air conditioner includes a back body (70), and a front body (100) rotatably coupled to a front surface of the back body. The front body (100) includes a front cover (30), a front panel (10) coupled to a front surface of the front cover, a lower cover (90) defining a bottom of the front body, and side covers (45,46) defining opposite exterior lateral sides of the front body.

FIG. 2

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## Description

BACKGROUND

1. Field

**[0001]** Embodiments of the present invention relate to an air conditioner, in which a front body defining a front surface of the air conditioner may be rotated leftward or rightward, thereby enabling control of an air current.

2. Description of the Related Art

**[0002]** Air conditioners are devised to adjust the temperature and/or humidity of air using heat transfer occurring during evaporation and condensation of a refrigerant. A representative example of air conditioners is an apparatus to maintain a pleasant indoor temperature using the enthalpy of vaporization of a refrigerant circulating through a compressor, condenser, expansion valve and/or evaporator.

**[0003]** More specifically, if the compressor compresses the refrigerant to raise a pressure of the refrigerant to a saturation pressure, the condenser liquefies the high-pressure refrigerant by absorbing heat of the refrigerant. The expansion valve reduces the pressure of the liquefied refrigerant via throttling. The refrigerant undergoes heat exchange with indoor air while being evaporated in the evaporator, maintaining a pleasant indoor temperature.

**[0004]** Air conditioners may be classified into separated air conditioners and integrated air conditioners according to whether or not mechanical devices, such as a compressor, etc., are installed to a discrete outdoor unit. Separated air conditioners may be subdivided into upright air conditioners that are erected on a floor of a room, and wall-mounted air conditioners that are installed to a wall of a room. The upright air conditioners may have a greater capacity than the wall-mounted air conditioners, enabling cooling/heating of a greater indoor space.

**[0005]** An upright air conditioner is configured such that air suctioned through a suction port is accelerated while passing through a scroll housing in which a blowing fan is received, and the accelerated air passes through a heat exchanger prior to being discharged through a discharge port.

**[0006]** Conventionally, an air conditioner may be installed at a fixed position of a room to discharge an air current only in a given direction, or discharge grills may be provided at upper and lower parts of an indoor unit to change a direction of an air current.

**[0007]** However, this may have difficulty in quick cooling/heating with respect to a specific direction and efficient temperature control for a specific region.

SUMMARY

**[0008]** Therefore, it is an aspect of the present invention to provide an air conditioner in which a front body thereof may be rotated leftward or rightward, thereby enabling control of an air current to be discharged into a room.

**[0009]** Additional aspects of the invention will be set forth in part in the description which follows and, in part, will be obvious from the description, or may be learned by practice of the invention.

**[0010]** In accordance with one aspect of the present invention, an air conditioner includes a back body, and a front body arranged in front of the back body to define a front surface of the air conditioner, the front body being rotated leftward or rightward to control an air current to be discharged.

**[0011]** The back body may include a rotation support, the front body may include a rotator, the rotator may be connected to the rotation support, and the front body may be rotatable about the rotation support.

**[0012]** The back body may include an upper rotation support and a lower rotation support, and the front body may include an upper rotator and a lower rotator. The upper rotator may be coupled to the upper rotation support, and the lower rotator may be coupled to the lower rotation support.

**[0013]** The upper rotation support and the lower rotation support may respectively include through-holes, the upper rotator and the lower rotator may respectively include fitting shafts, and the fitting shafts of the upper and lower rotators may be respectively coupled into the through-holes of the upper and lower rotation supports.

**[0014]** The air conditioner may further include a drive motor to enable rotation of the front body.

**[0015]** The front body may include a front cover rotatably coupled to the back body, and a front panel slidably coupled to the front cover.

**[0016]** The front panel may include a rail formed at a rear surface thereof, and the front cover may include a rail coupling portion formed at a front surface thereof to allow the rail to be slidably seated on the rail coupling portion.

**[0017]** The front cover may further include a sliding motor to slide the front panel forward or rearward.

**[0018]** The front body may include a forwardly slidable front panel, and the front panel may be rotated leftward or rightward to control the air current to be discharged.

**[0019]** The front panel may include rails formed at left and right positions of a rear surface thereof. The back body may include rail coupling portions formed at left and right positions of a front surface thereof to allow the respective rails to be slidably seated on the rail coupling portions, and a sliding motor to slide each of the rails. The left and right rails may slide in opposite directions to allow the front panel to be rotated leftward or rightward.

**[0020]** In accordance with another aspect of the present invention, an air conditioner includes a back body, and a front body rotatably coupled to a front surface of the back body, wherein the front body includes a front cover, a front panel slidably coupled to a front surface of

the front cover, a lower cover defining a bottom of the front body, and side covers defining opposite exterior lateral sides of the front body.

**[0021]** The back body may include an upper rotation support and a lower rotation support, and the front cover may include an upper rotator. The lower cover may include a lower rotator, the upper rotator may be coupled to the upper rotation support, and the lower rotator may be coupled to the lower rotation support.

**[0022]** The upper rotation support and the lower rotation support may respectively include through-holes, the upper rotator and the lower rotator may respectively include fitting shafts, and the fitting shafts of the upper and lower rotators may be respectively coupled into the through-holes of the upper and lower rotation supports.

**[0023]** The air conditioner may further include a drive motor to enable rotation of the front body.

**[0024]** The front panel may include a rail formed at a rear surface thereof, and the front cover may include a rail coupling portion formed at a front surface thereof to allow the rail to be slidably seated on the rail coupling portion.

**[0025]** The front cover may further include a sliding motor to slide the front panel forward or rearward.

**[0026]** In accordance with another aspect of the present invention, an air conditioner includes a back body, and a front panel slidably coupled to a front surface of the back body, wherein the front panel is rotated leftward or rightward to control an air current to be discharged.

**[0027]** The front panel may include rails formed at left and right positions of a rear surface thereof, and the back body may include rail coupling portions formed at left and right positions of a front surface thereof to allow the respective rails to be slidably seated on the rail coupling portions, and a sliding motor to slide each of the rails. The left and right rails may slide in opposite directions to allow the front panel to be rotated leftward or rightward.

**[0028]** In accordance with a further aspect of the present invention, an air conditioner includes a main body to control an air current via leftward or rightward rotation thereof, a rotator provided at a lower surface of the main body to rotate the main body, and a rotation supporting base provided at a lower surface of the rotator to support the main body and the rotator.

**[0029]** The main body may include a front panel slidably coupled at a front surface thereof, and a drive motor received therein to drive the rotator.

## BRIEF DESCRIPTION OF THE DRAWINGS

**[0030]** These and/or other aspects of the invention will become apparent and more readily appreciated from the following description of the embodiments, taken in conjunction with the accompanying drawings of which:

FIG. 1 is a schematic perspective view of an air conditioner according to an exemplary embodiment of the present invention;

FIG. 2 is an exploded perspective view of the air conditioner according to the exemplary embodiment;

FIG. 3A is a perspective view illustrating important parts of a partition member according to the exemplary embodiment;

FIG. 3B is a side view of the portion A of FIG. 3A;

FIG. 4A is a plan view illustrating a stationary state of the air conditioner according to the exemplary embodiment;

FIG. 4B is a plan view illustrating a forwardly moved front panel of the air conditioner according to the exemplary embodiment;

FIG. 4C is a plan view illustrating leftward discharge of an air current from the air conditioner according to the exemplary embodiment;

FIG. 4D is a plan view illustrating rightward discharge of an air current from the air conditioner according to the exemplary embodiment;

FIG. 5A is a perspective view illustrating leftward discharge of an air current from the air conditioner according to the exemplary embodiment;

FIG. 5B is a perspective view illustrating rightward discharge of an air current from the air conditioner according to the exemplary embodiment;

FIG. 6 is a graph illustrating air current control effects according to the exemplary embodiment;

FIG. 7 is a perspective view of an air conditioner according to another exemplary embodiment of the present invention; and

FIG. 8 is a perspective view of an air conditioner according to a further exemplary embodiment of the present invention.

## DETAILED DESCRIPTION

**[0031]** Reference will now be made in detail to the embodiments of the present invention, examples of which are illustrated in the accompanying drawings, wherein like reference numerals refer to like elements throughout.

**[0032]** FIG. 1 is a schematic perspective view of an air conditioner according to an exemplary embodiment of the present invention, and FIG. 2 is an exploded perspective view of the air conditioner according to the exemplary embodiment.

**[0033]** As shown in FIGS. 1 and 2, the air conditioner

according to the exemplary embodiment includes a body 1 consisting of a back body 70 and a front body 100. A variety of parts, such as a heat exchanger 75, a scroll housing 73, etc., are mounted to the back body 70. The front body 100 is coupled to a front surface of the back body 70 and functions to control an air current via leftward or rightward rotation thereof.

**[0034]** The back body 70 has an open front surface. The back body 70 is coupled with the front body 100 and serves to support the front body 100 during leftward or rightward rotation of the front body 100. Also, the back body 70 serves as an outer case to which the variety of parts, such as the heat exchanger 75, the scroll housing 73, etc. are mounted. The heat exchanger 75 heat-exchanges air suctioned from a room with a refrigerant. The scroll housing 73 blows indoor air to the heat exchanger 75 using a blowing fan. Dust collecting filters 64 and 65 are installed to opposite lateral sides of the scroll housing 73 to filter the suctioned air. A cover duct 80 is installed to a front surface of the scroll housing 73, to allow the suctioned air to be smoothly introduced into the dust collecting filters 64 and 65 provided at opposite lateral sides of the scroll housing 73.

**[0035]** An upper rotation support 76 having a through-hole 78 and a lower rotation support 77 having a through-hole 79 are provided at the top and bottom of the back body 70. An upper rotator 32 and a lower rotator 92 are coupled to the respective rotation supports 76 and 77. The entire front body 100 is rotated leftward or rightward about the upper rotation support 76 and the lower rotation support 77. A drive motor 71 is provided within the back body 70, to rotate the front body 100. The drive motor 71 is connected to the upper rotator 32 of a front cover 30, to rotate the front body 100 leftward or rightward. A suction grill (not shown) is installed to a lower position of a rear surface of the back body 70, to enable suction of indoor air.

**[0036]** The front body 100 is coupled to the front surface of the back body 70 to define an exterior front surface of the body 1 and serves to control an air current via leftward or rightward rotation thereof. The front body 100 includes the front cover 30 provided with the upper rotator 32, a front panel 10 slidably installed to a front surface of the front cover 30, partition members 50 and 60 attached to lower portions of opposite side edges of the front panel 10, a lower cover 90 provided with the lower rotator 92, and side covers 45 and 46 attached to opposite side surfaces of the front cover 30.

**[0037]** The front cover 30 is a main component of the front body 100. The heat exchanger 75 is located inside a rear surface of the front cover 30, and the front panel 10 is slidably coupled to the front surface of the front cover 30. The upper rotator 32 is provided at the top of the front cover 30 and is coupled to the upper rotation support 76 of the back body 70. A fitting shaft 34 is provided at the center of the upper rotator 32 and is fitted and coupled into the through-hole 78 perforated in the upper rotation support 76 of the back body 70.

**[0038]** The front cover 30 is provided at the front surface thereof with rail coupling portions 33, so that rails 14 of the front panel 10 are slidably seated on the rail coupling portions 33. The rail coupling portions 33 are formed respectively at upper and lower and left and right positions of the front surface of the front cover 30, to enable insertion and separation of the rails 14. An upper sliding motor 37 and a lower sliding motor 38 are provided to allow the rails 14 to be inserted into or separated from the rail coupling portions 33.

**[0039]** The front panel 10 defines an exterior front surface of the body 1 and includes an upper panel 13 and a lower panel 16. The lower panel 16 is detachably provided for exchange of the dust collecting filters 64 and 65.

**[0040]** The rails 14 are provided at a rear surface of the front panel 10 and are slidably coupled to the rail coupling portions 33 of the front cover 30. The rails 14 protrude rearward from the rear surface of the front panel 10, thus being seated in the rail coupling portions 33 of the front cover 30. The sliding motors 37 and 38 installed to the front cover 30 enable sliding operation of the rails 14. If the air conditioner begins to be operated, the front panel 10 slides forward, allowing an air current for cooling/heating to be discharged through left and right sides of the upper panel 13 and indoor air to be suctioned through left and right sides of the lower panel 16.

**[0041]** Referring to FIGS. 3A and 3B, FIG. 3A is a perspective view illustrating important parts of the partition member, and FIG. 3B is a side view of the portion "A" of FIG. 3A.

**[0042]** The partition members 50 and 60 are symmetrically installed to left and right sides of the scroll housing 73, and serve to prevent an air current discharged from an upper region of the body 1 from being suctioned into a lower region of the body 1. The partition members 50 and 60 respectively include partitions 53 and 63 to divide the interior of the body 1 into the upper and lower regions, and supporting plates 56 and 66 to support the partitions 53 and 63. The supporting plates 56 and 66 are perpendicular to the partitions 53 and 63.

**[0043]** The partitions 53 and 63 are located between a holding plate 19 formed at the front panel 10 and a protruding plane portion 74 of the scroll housing 73 to define a multilayer configuration. The multilayer configuration is defined as the partitions 53 and 63 are located above the protruding plane portion 74 and sequentially, the holding plate 19 is located above the partitions 53 and 63.

**[0044]** With this configuration, even if the holding plate 19 of the front panel 10 slides forward simultaneously with forward sliding of the front panel 10, the partitions 53 and 63 located below the holding plate 19 occupy an empty space created by the forward sliding of the holding plate 19. Accordingly, there exists no space for reintroduction of an air current discharged from the upper region of the body 1. If the front panel 10 having undergone the forward sliding is rotated leftward or rightward, the partition members 50 and 60 are simultaneously rotated left-

ward or rightward. Therefore, the partitions 53 and 63 still serve to divide the interior of the body 1 into the upper and lower regions, thereby preventing an air current discharged from the upper region of the body 1 from being suctioned into the lower region of the body 1.

**[0045]** Although the multilayer configuration is defined as the protruding plane portion 74, partitions 53 and 63, and holding plate 19 are sequentially stacked one above another from the bottom, the stacking sequence may be changed variously.

**[0046]** The supporting plate 56 of the right partition member 50 has guides 57 and 58 formed at upper and lower positions thereof. The guides 57 and 58 are connected to the lower panel 16 of the front panel 10 and more particularly, are coupled to panel guides 17 and 18 formed at upper and lower positions of the lower panel 16. The panel guides 17 and 18 are forwardly slidable. The guides 57 and 58 serve to facilitate smooth sliding of the front panel 10 and to support the lower part of the front panel 10.

**[0047]** Similar to the right partition member 50, the left partition member 60 has guides 67 and 68, and panel guides (not shown) formed at the front panel 10 are coupled to the guides 67 and 68 so as to be slidable forward.

**[0048]** The lower cover 90 is coupled to the partition members 50 and 60 and is provided with the lower rotator 92. Coupling bosses 51 a, 51 b, 61 c and 61d, formed at lower surfaces of the respective partition members 50 and 60, are fitted and coupled into coupling recesses 91 a, 91 b, 91 c and 91 d formed in opposite side edges of the lower cover 90. The lower rotator 92 is coupled to the lower rotation support 77 of the back body 70, and a fitting shaft 94 is provide at the center of the lower rotator 92. The fitting shaft 94 is fitted and coupled into the through-hole 79 of the lower rotation support 77 of the back body 70.

**[0049]** The side covers 45 and 46 define exterior opposite side surfaces of the body 1. The side covers 45 and 46 are coupled to left and right side surfaces of the front cover 30 to constitute a part of the front body 100, and are rotated leftward or rightward together with the front body 100.

**[0050]** Hereinafter, operation of the air conditioner according to the exemplary embodiment of the present invention will be described.

**[0051]** FIG. 4A is a plan view illustrating a stationary state of the air conditioner according to the exemplary embodiment, FIG. 4B is a plan view illustrating the forward moved front panel of the air conditioner according to the exemplary embodiment, FIG. 4C is a plan view illustrating leftward discharge of an air current from the air conditioner according to the exemplary embodiment, and FIG. 4D is a plan view illustrating rightward discharge of an air current from the air conditioner according to the exemplary embodiment. FIG. 5A is a perspective view illustrating leftward discharge of an air current from the air conditioner according to the exemplary embodiment, and FIG. 5B is a perspective view illustrating rightward discharge of an air current from the air conditioner according to the exemplary embodiment.

**[0052]** In a stationary state of the air conditioner, as shown in FIG. 4A, the front panel 10 is kept retreated rearward. If a user operates the air conditioner, the sliding motors 37 and 38 are driven, causing forward sliding of the front panel (FIG. 4B). Thereby, upper and lower spaces 200 and 300 are created (FIG. 1) between left and right side edges of the front panel 10 and the side covers 45 and 46. The upper space 200 is a space for discharge of a cooling/heating air current, and the lower space 300 is a space for suction of indoor air. More specifically, an air current, having undergone heat exchange in the heat exchanger 75, is discharged through the upper space 200, to enable cooling or heating of a room, whereas indoor air is suctioned through the lower space 300 so as to move to the scroll housing 73 by passing through the dust collecting filters 64 and 65.

**[0053]** If the user operates the air conditioner in a rotation mode to realize cooling/heating for a specific direction or for a specific region, the drive motor 71 is driven to rotate the entire front body 100 leftward or rightward, enabling leftward or rightward discharge of a cooling/heating air current (FIGS. 4C and 4D). According to a user manipulation, the front body 100 may be continuously rotated to discharge an air current, or may discharge an air current while pointed in a specific direction, thus achieving enhanced cooling/heating efficiency for a specific region.

**[0054]** In this case, the partition members 50 and 60 separate the upper interior region of the body from the lower interior region, preventing creation of an unwanted empty space due to rotation of the front body 100 and consequently, preventing an air current discharged from the upper region of the body from being introduced into the lower region of the body. In other words, if there are no partition members 50 and 60, an empty space is created between the side covers 45 and 46 and an upper surface of the scroll housing 73 when the front body 100 is rotated leftward or rightward, causing the air current, having undergone heat exchange, to be suctioned backward through the space and resulting in loss of cooling/heating efficiency. However, in the exemplary embodiment using the partition members 50 and 60, the partitions 53 and 63 of the partition members 50 and 60 may divide the empty space, which may be created upon leftward or rightward rotation of the front body 100, into upper and lower spaces, thereby preventing loss of cooling/heating efficiency caused by backward suction of the discharged air current.

**[0055]** FIG. 6 is a graph illustrating air current control effects according to the exemplary embodiment. As shown in the graph, although a centrally oriented air current has the same flow rate as that of a conventional air conditioner, flow rates for specific directions (left and right directions) are greatly increased than those of the conventional air conditioner, resulting in a significant improvement in cooling/heating efficiency for specific re-

gions.

**[0056]** An air conditioner according to another embodiment of the present invention will be described with reference to FIG. 7. FIG. 7 is a perspective view of the air conditioner according to another exemplary embodiment of the present invention. A description related to the same configurations as those of the previously described embodiment will be omitted.

**[0057]** The air conditioner according to the present exemplary embodiment includes a body 2 consisting of a back body 170 and a front panel 110 slidably coupled to a front surface of the back body 170. The front panel 110 includes rails 114a, 114b, 114c and 114d provided at upper and lower and left and right positions of a rear surface thereof. The back body 170 includes rail coupling portions 133a, 133b, 133c and 133d provided at upper and lower and left and right positions of a front surface thereof, on which the respective rails 114a, 114b, 114c and 114d are slidably seated, and sliding motors 137a, 137b, 137c and 137d to enable sliding of the respective rails 114a, 114b, 114c and 114d. The rails 114a, 114b, 114c and 114d are coupled to pin couplers 135a, 135b, 135c and 135d formed at the rear surface of the front panel 110 by use of pins 136a, 136b, 136c and 136d. Coupling using the pins 136a, 136b, 136c and 136d enables rotation of the front panel 110.

**[0058]** Operation of the air conditioner according to the present exemplary embodiment will be described hereinafter.

**[0059]** Differently from the previously described embodiment in which the front panel 10 performs forward or rearward sliding operation, in the front panel 110 of the present embodiment, the left rails 114a and 114c and the right rails 114b and 114d slide in opposite directions, realizing leftward or rightward pivoting rotation of the front panel 110 when viewed from the front side of the air conditioner. More specifically, the right rails 114b and 114d slide rearward when the left rails 114a and 114c slide forward, causing the front panel 110 to be rotated rightward. On the contrary, the left rails 114a and 114c slide rearward when the right rails 114b and 114d slide forward, causing the front panel 110 to be rotated leftward. In this way, the front panel 110 is rotated leftward or rightward, causing an air current to be discharged from opposite sides of the front panel 110 and consequently, achieving efficient cooling/heating for specific regions.

**[0060]** An air conditioner according to a further embodiment of the present invention will be described with reference to FIG. 8. FIG. 8 is a perspective view of the air conditioner according to a further exemplary embodiment of the present invention. A description related to the same configurations as those of the previously described embodiments will be omitted.

**[0061]** A body 3 of the air conditioner according to the present exemplary embodiment includes a main body 270 to control an air current via leftward or rightward rotation thereof, a rotator 280 provided at a lower surface of the main body 270 to rotate the main body 270, and a rotation supporting base 290 provided at a lower surface of the rotator 280 to support the main body 270 and the rotator 280. The main body 270 accommodates a drive motor 271 therein to drive the rotator 280. A front panel 210 is slidably coupled to a front surface of the main body 270.

**[0062]** Operation of the air conditioner according to the present exemplary embodiment will be described hereinafter.

**[0063]** If the user operates the air conditioner, the front panel 210 slides forward, causing an air current to be discharged from opposite sides of the front panel 210 to accomplish cooling/heating of a room. Then, if the user operates the air conditioner in a rotation mode, the drive motor 271 rotates the rotator 280, so that the entire main body 270 connected to the rotator 280 is rotated leftward or rightward. The rotation supporting base 290 stably supports the main body 270 and the rotator 280 arranged thereon during rotation of the main body 270 and the rotator 280. In this way, efficient cooling/heating for specific directions or specific regions is accomplished.

**[0064]** As apparent from the above description, an air conditioner according to an exemplary embodiment of the present invention may control an air current to be discharged at a constant flow rate via rotation of an indoor unit.

**[0065]** Further, the air conditioner may allow quick cooling/heating with respect to a specific direction, and may achieve efficient temperature control for a specific region.

**[0066]** Although a few embodiments of the present invention have been shown and described, it would be appreciated by those skilled in the art that changes may be made in these embodiments without departing from the principles and spirit of the invention, the scope of which is defined in the claims and their equivalents.

## Claims

**1.** An air conditioner comprising:

a back body; and
a front body arranged in front of the back body to define a front surface of the air conditioner, the front body being rotated leftward or rightward to control an air current to be discharged.

**2.** The air conditioner according to claim 1, wherein:

the back body includes a rotation support;
the front body includes a rotator; and
the rotator is connected to the rotation support, and the front body is rotatable about the rotation support.

**3.** The air conditioner according to claim 2, wherein:

the back body includes an upper rotation support and a lower rotation support; the front body includes an upper rotator and a lower rotator; and the upper rotator is coupled to the upper rotation support, and the lower rotator is coupled to the lower rotation support.

**4.** The air conditioner according to claim 3, wherein:

the upper rotation support and the lower rotation support respectively include through-holes;
the upper rotator and the lower rotator respectively include fitting shafts; and
the fitting shafts of the upper and lower rotators are respectively coupled into the through-holes of the upper and lower rotation supports.

**5.** The air conditioner according to claim 1, further comprising a drive motor to enable rotation of the front body.

**6.** The air conditioner according to claim 1, wherein the front body includes:

a front cover rotatably coupled to the back body; and
a front panel slidably coupled to the front cover.

**7.** The air conditioner according to claim 6, wherein:

the front panel includes a rail formed at a rear surface thereof; and
the front cover includes a rail coupling portion formed at a front surface thereof to allow the rail to be slidably seated on the rail coupling portion.

**8.** The air conditioner according to claim 6, wherein the front cover further includes a sliding motor to slide the front panel forward or rearward.

**9.** The air conditioner according to claim 1, wherein:

the front body includes a forwardly slidable front panel; and
the front panel is rotated leftward or rightward to control the air current to be discharged.

**10.** The air conditioner according to claim 9, wherein:

the front panel includes rails formed at left and right positions of a rear surface thereof;
the back body includes rail coupling portions formed at left and right positions of a front surface thereof to allow the respective rails to be slidably seated on the rail coupling portions, and
a sliding motor to slide each of the rails; and
the left and right rails slide in opposite directions to allow the front panel to be rotated leftward or rightward.

**11.** The air conditioner according to claim 1, wherein the front body includes a partition member to prevent the discharged air current from being suctioned backward into the front body.

**12.** The air conditioner according to claim 11, wherein the partition member is rotated leftward or rightward together with the front body.

**13.** The air conditioner according to claim 11, wherein the partition member includes:

a partition to divide an interior of the air conditioner into upper and lower regions; and
a supporting plate to support the partition.

**14.** The air conditioner according to claim 13, wherein:

the front body includes a front panel installed to a front surface thereof, and the back body includes a scroll housing mounted therein; and
the partition is located between a holding plate formed at the front panel and a protruding plane portion formed at the top of the scroll housing, to define a multilayer configuration.

**15.** The air conditioner according to claim 14, wherein:

the supporting plate includes a guide to be connected to the front panel; and
the front panel includes a panel guide formed at a lower side edge thereof so as to be slidably coupled to the guide.

FIG. 1

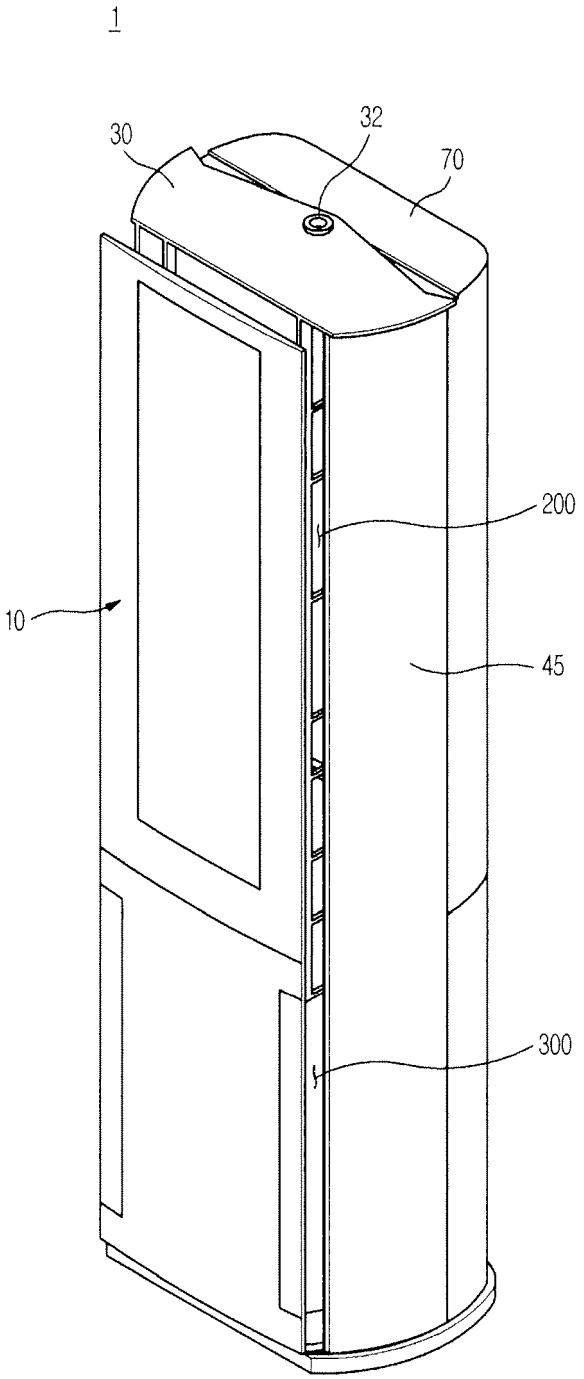
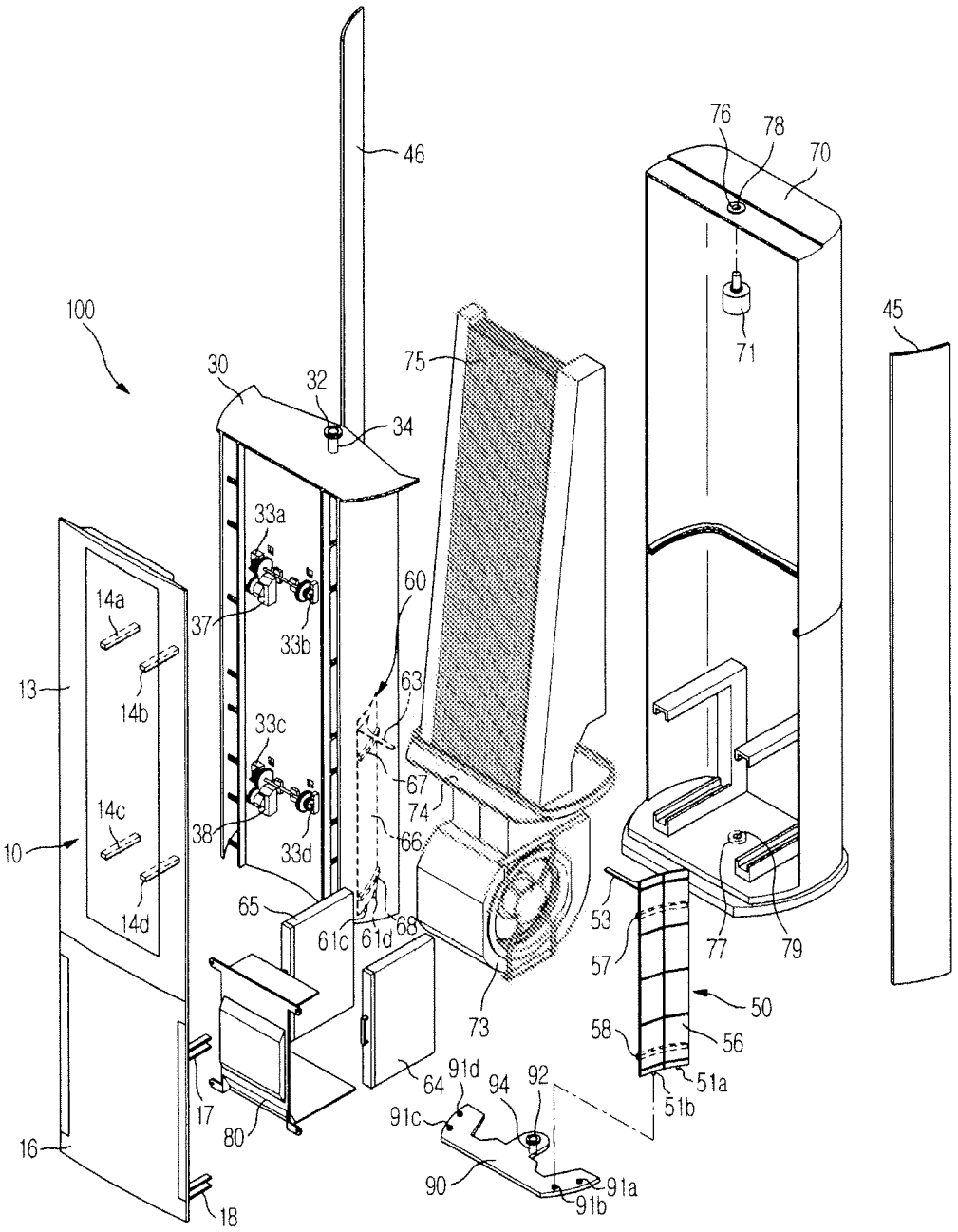


FIG. 2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14b
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14d
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16
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65
61c
61d
68
80
73
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91d
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91c
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91a
91b
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51a
51b

FIG. 3A

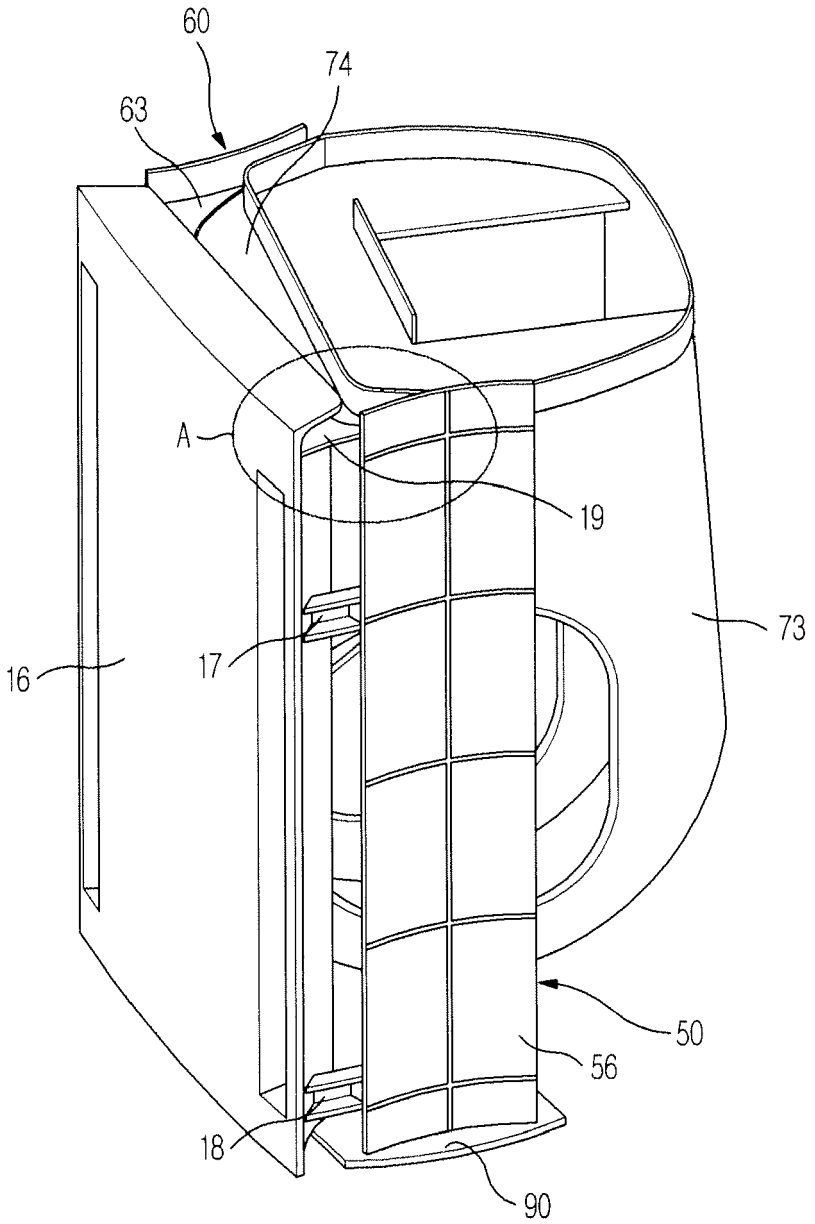

FIG. 3B

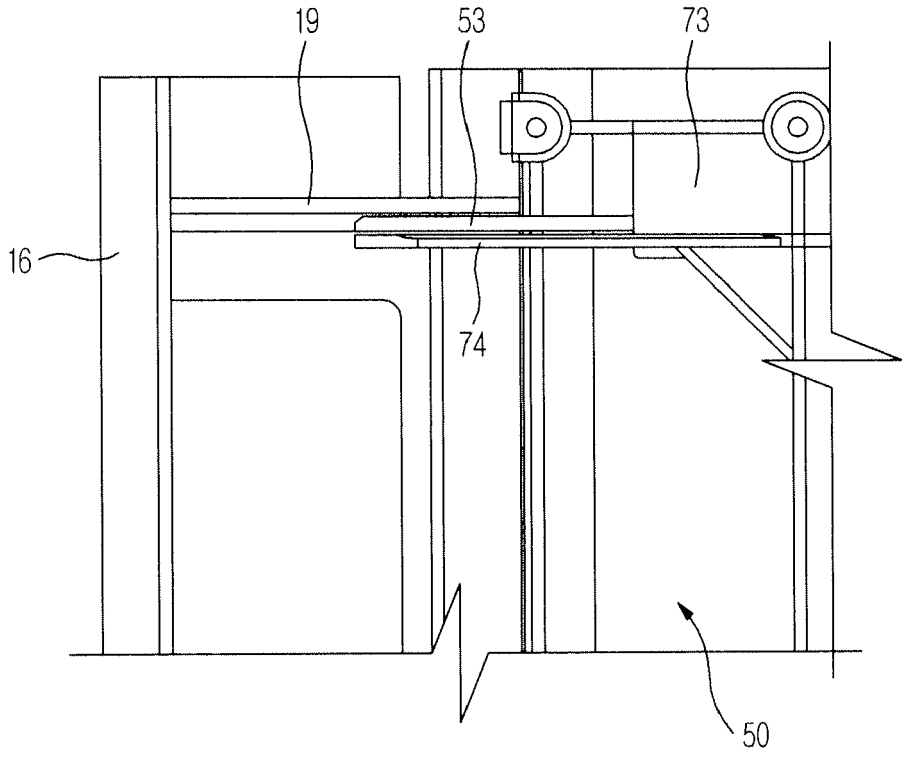

FIG. 4A

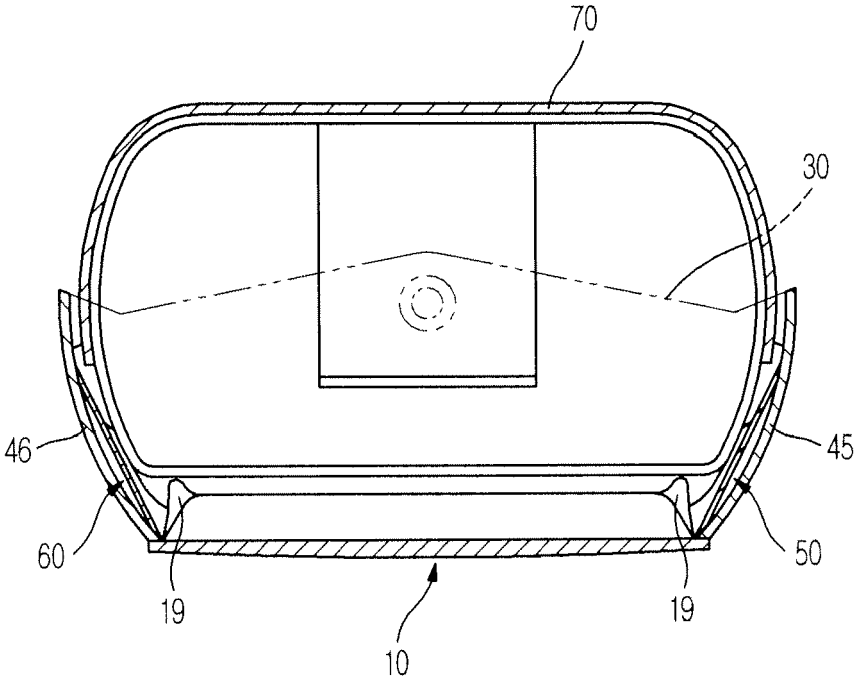

FIG. 4B

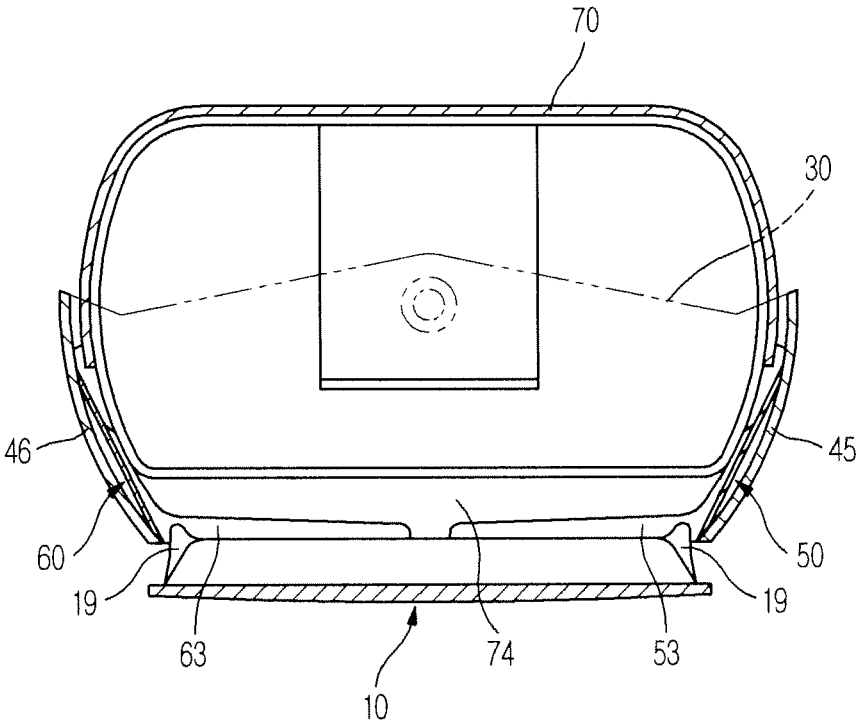

FIG. 4C

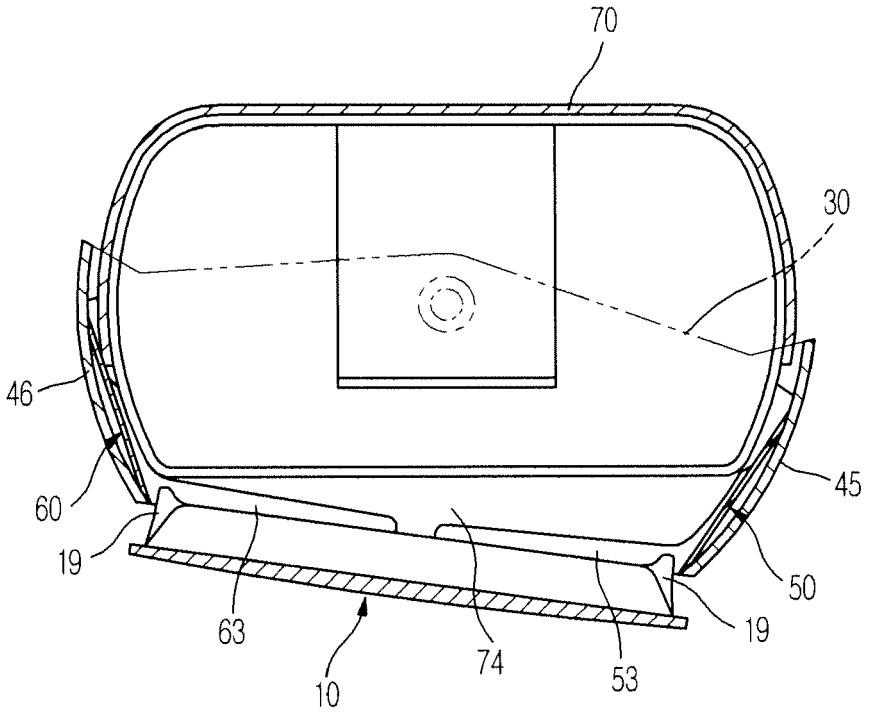

FIG. 4D

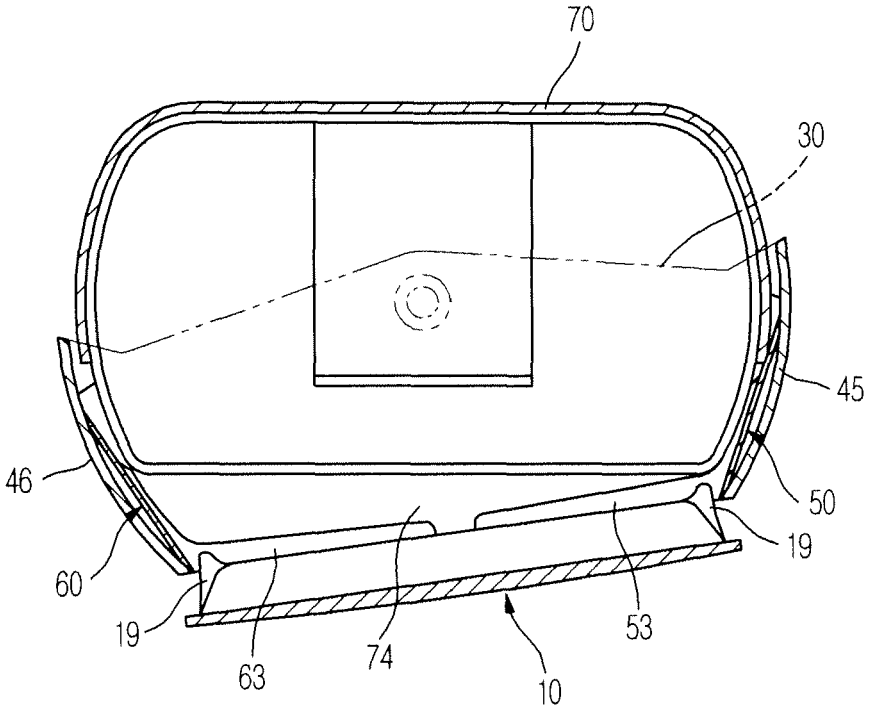

FIG. 5A

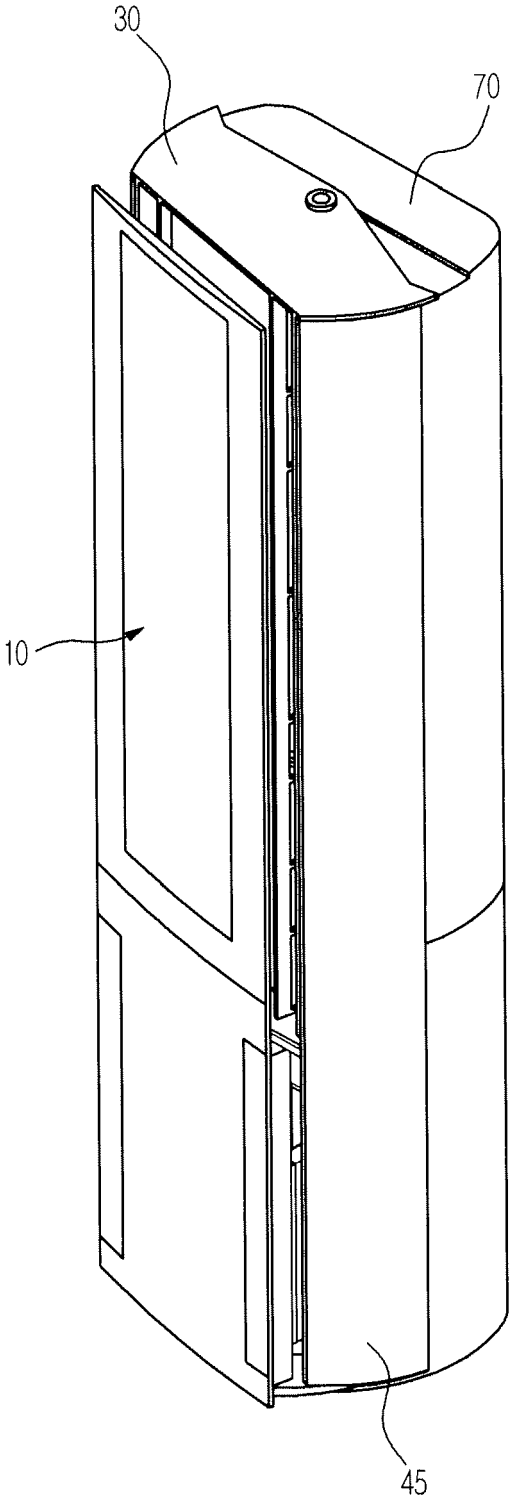

FIG. 5B

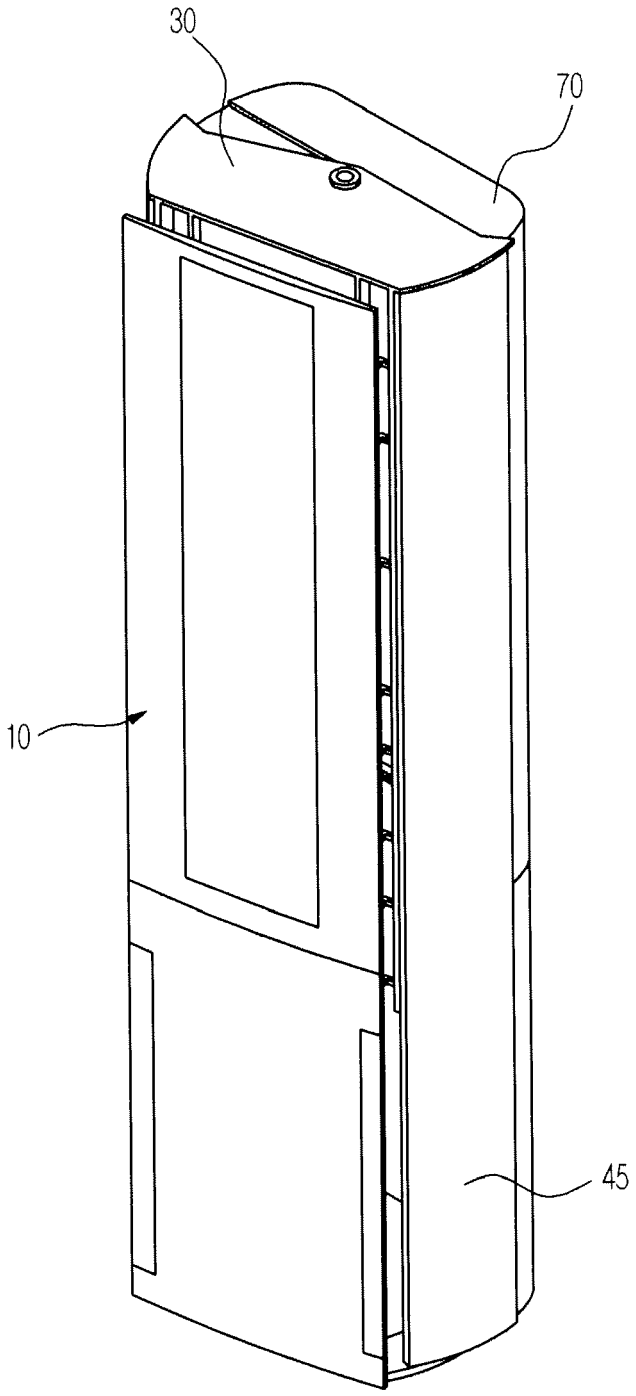

FIG. 6

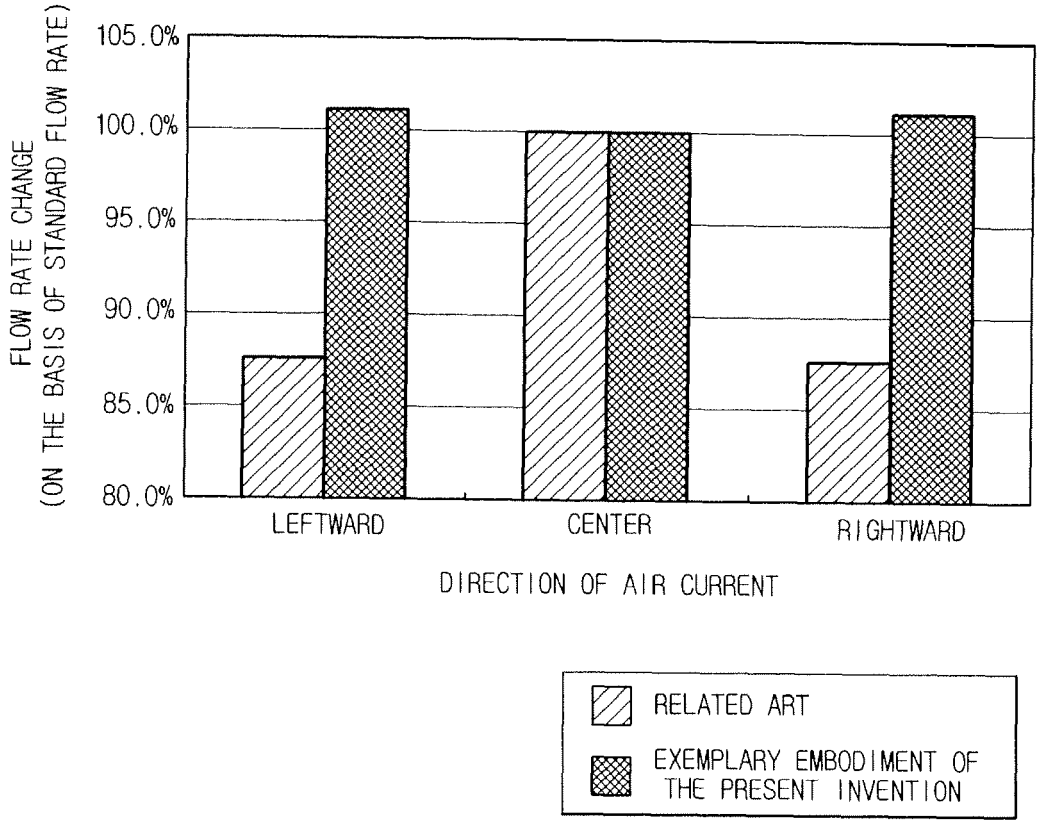
FLOW RATE CHANGE
(ON THE BASIS OF STANDARD FLOW RATE)
105.0%
100.0%
95.0%
90.0%
85.0%
80.0%
LEFTWARD
CENTER
RIGHTWARD
DIRECTION OF AIR CURRENT
RELATED ART
EXEMPLARY EMBODIMENT OF THE PRESENT INVENTION

FIG. 7

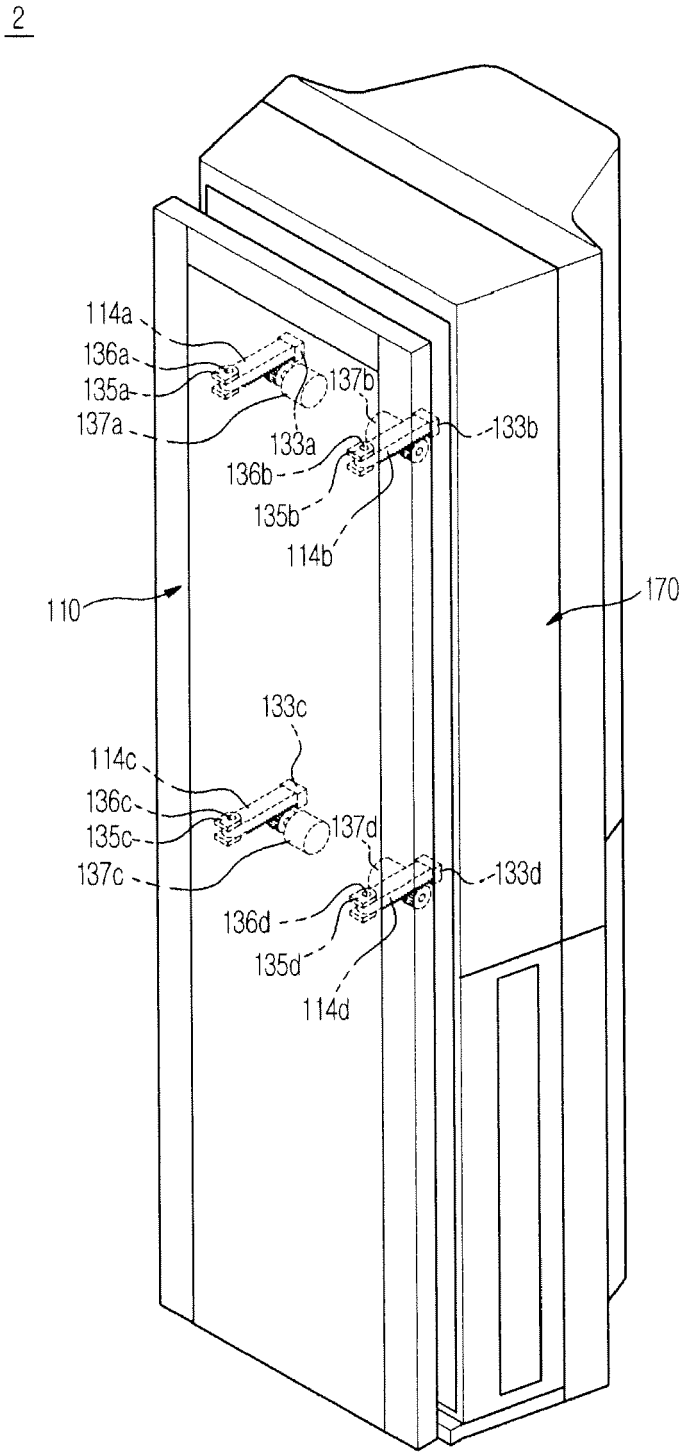
2
114a
136a
135a
137a
137b
133a
133b
136b
135b
114b
110
170
133c
114c
136c
135c
137c
137d
133d
136d
135d
114d

FIG. 8