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(54) **AIR CONDITIONER**

(57) An air conditioner is provided, which includes a base part (10), and a driving box (20) or a driving support (30), wherein the driving box (20) and the driving support (30) are both selectively mounted on the base part (10) by mounting portions which are structurally consistent, so that during assembly, two kinds of air guide plates, i.e. a fully closed air guide plate (60) and a non-fully closed air guide plate (70), can be quickly switched and mounted on a same base part (10), thereby reducing a development costs of an air conditioner product, shortening a product development cycle and improving product development efficiency.

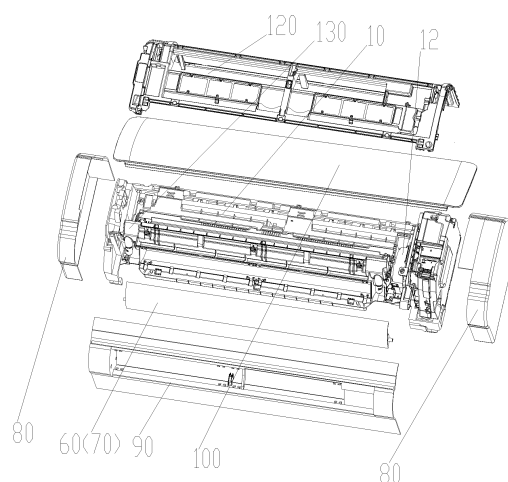


Fig. 1

Description

Technical Field

[0001] The present invention relates to a technical field of air conditioning, and more particularly, to an air conditioner.

Background

[0002] At present, there are two main types of housing popular in an air conditioner market, one is a fully closed air guide plate housing, and the other is a non-fully closed air guide plate housing. The fully closed air guide plate housing is a housing in which an air guide plate is pushed out of a housing space through a driving device to achieve an air guide effect and the air guide plate is capable of fully closing an air outlet of an air conditioner when the air guide plate is closed. The non-fully closed air guide plate housing is a housing in which an air guide plate is always within a range of a housing space in a working state or a non-working state and the air guide plate does not fully close an air outlet of an air conditioner when the air guide plate is in a closed state.

[0003] The above two housings are very inconvenient when they are disassembled and cleaned: when an air duct system of the air conditioner needs to be cleaned, appearance parts such as a panel, a panel body and the air guide plate need to be removed one by one. After the appearance parts are removed, an air outlet part of the air duct system is only exposed, and the air duct system is partially cleaned during cleaning and cannot be thoroughly cleaned.

[0004] During a development process, any one of the above two types of housings does not realize a quick switching between the fully closed air guide plate and the non-fully closed air guide plate, that is, both the fully closed air guide plate and the non-fully closed air guide plate are mounted on one housing. A reason why any one of the two types of housings does not be switched is that mounting portions of the two types of air guide plates does not be used universally, and non-universal mounting portions are limited by a layout of a whole machine. In a process of product development, the above two housing designs make a product development efficiency very low and a product development flexibility not high, and also does not quickly meet potential demands of a market for a diversity of air conditioners.

Summary

[0005] Some embodiments of the present invention provide an air conditioner to solve a problem that a fully closed air guide plate and a non-fully closed air guide plate of the air conditioner in the art known to inventors does not be mounted on a same housing.

[0006] Some embodiments of the present invention provide an air conditioner, which includes: a base part;

and a driving box or a driving support, the driving box and the driving support being both selectively mounted on the base part by mounting portions which are structurally consistent.

[0007] In some embodiments, each of the mounting portions include a buckle assembly, the buckle assembly being disposed between the base part and the driving box, or between the base part and the driving support.

[0008] In some embodiments, the buckle assembly includes a clamping hook and a clamping hole, one of the clamping hook and the clamping hole is disposed on the driving box or the driving support, and the other one of the clamping hook and the clamping hole is disposed on the base part.

[0009] In some embodiments, the mounting portion further includes a fastener, the fastener being configured to fix the driving box and the driving support to the base part.

[0010] In some embodiments, the fastener is a positioning column fixedly disposed on the base part, and the driving box and the driving support are both provided with a positioning hole cooperating with the positioning column.

[0011] In some embodiments, the air conditioner further includes a fully closed air guide plate, the fully closed air guide plate is in driving connection with the driving box; or the air conditioner further includes a non-fully closed air guide plate, the non-fully closed air guide plate is in driving connection with the driving support.

[0012] In some embodiments, the air conditioner further includes a base and a motor seat, the motor seat is mounted at a first end of the base, an end of the base away from the motor seat and the motor seat are provided with mounting lug blocks, and the driving box or the driving support is mounted on the mounting lug block.

[0013] In some embodiments, there are two driving boxes and two driving supports, and the two driving boxes or the two driving supports are mounted at both ends of the base part respectively.

[0014] In some embodiments, there are two driving boxes and one driving support, the two driving boxes are mounted at both ends of the base part respectively, or the driving support is mounted at one end of the base part.

[0015] In some embodiments, the air conditioner further includes two side plates, an air outlet frame, a panel part, an evaporation part, a middle frame panel body part, a bottom housing part, and an electrical box part, the base part is mounted on the bottom housing part, the electrical box part and the evaporation part are both mounted on the base part, the two side plates are mounted at both ends of the base part respectively, and the air outlet frame, the panel part and the middle frame panel body part are all mounted on the bottom housing part.

[0016] By using the technical solution of the present invention, during a development of the air conditioner, a driving box and a driving support are both mounted on a base part by mounting portions which are structurally consistent, and the driving box and the driving support

are selectively mounted on the base part. During assembly, two kinds of air guide plates, i.e. a fully closed air guide plate and a non-fully closed air guide plate, can be quickly switched and mounted on a same base part, thereby reducing development costs of an air conditioner product, shortening a product development cycle and improving product development efficiency. Meanwhile, market or customer needs for a diversity of air conditioners can be quickly met.

Brief Description of the Drawings

[0017] The accompanying drawings, which constitute a part of this invention, are used to provide a further understanding of the present invention, and the exemplary embodiments of the present invention and the description thereof are used to explain the present invention, but do not constitute improper limitations to the present invention. In the drawings:

Fig. 1 illustrates a first exploded diagram of an air conditioner of some embodiments of the present invention;

Fig. 2 illustrates a second exploded diagram of an air conditioner of some embodiments of the present invention;

Fig. 3 illustrates a side view of a fully closed air guide plate mounted on an air conditioner of some embodiments of the present invention;

Fig. 4 illustrates a first three-dimensional diagram of a fully closed air guide plate mounted on an air conditioner of some embodiments of the present invention;

Fig. 5 illustrates a second three-dimensional diagram of a fully closed air guide plate mounted on an air conditioner of some embodiments of the present invention;

Fig. 6 illustrates a first three-dimensional diagram of a driving box mounted on a base part of some embodiments of the present invention;

Fig. 7 illustrates an enlarged diagram of a region M in Fig. 6;

Fig. 8 illustrates an enlarged diagram of a region N in Fig. 6;

Fig. 9 illustrates a third three-dimensional diagram of a driving box mounted on a base part of some embodiments of the present invention;

Fig. 10 illustrates a fourth three-dimensional diagram of a driving box mounted on a base part of some embodiments of the present invention;

Fig. 11 illustrates an enlarged diagram of a region P in Fig. 10;

Fig. 12 illustrates a fifth three-dimensional diagram of a driving box mounted on a base part of some embodiments of the present invention;

Fig. 13 illustrates an enlarged diagram of a region F in Fig. 12;

Fig. 14 illustrates a sixth three-dimensional diagram

of a driving box mounted on a base part of some embodiments of the present invention;

Fig. 15 illustrates a seventh three-dimensional diagram of a driving box mounted on a base part of some embodiments of the present invention;

Fig. 16 illustrates an enlarged diagram of a region K in Fig. 15;

Fig. 17 illustrates a first three-dimensional diagram of a non-fully closed air guide plate mounted on an air conditioner of some embodiments of the present invention;

Fig. 18 illustrates a second three-dimensional diagram of a non-fully closed air guide plate mounted on an air conditioner of some embodiments of the present invention;

Fig. 19 illustrates a third three-dimensional view of a non-fully closed air guide plate mounted on an air conditioner of some embodiments of the present invention;

Fig. 20 illustrates a first three-dimensional diagram of a driving support mounted on a base part of some embodiments of the present invention;

Fig. 21 illustrates a second three-dimensional diagram of a driving support mounted on a base part of some embodiments of the present invention;

Fig. 22 illustrates an enlarged diagram of a region H in Fig. 21;

Fig. 23 illustrates a third three-dimensional diagram of a driving support mounted on a base part of some embodiments of the present invention;

Fig. 24 illustrates a fourth three-dimensional diagram of a driving support mounted on a base part of some embodiments of the present invention;

Fig. 25 illustrates an enlarged diagram of a region I in Fig. 24; and

Fig. 26 illustrates an enlarged diagram of a region J in Fig. 24.

[0018] The drawings include the following reference signs:

10, base part; 11, base; 12, motor seat; 13, mounting lug block; 20, driving box; 30, driving support; 41, buckle assembly; 411, clamping hook; 412, clamping hole; 42, fastener; 50, positioning hole; 60, fully closed air guide plate; 70, non-fully closed air guide plate; 80, side plate; 90, air outlet frame; 100, panel part; 110, evaporation part; 120, middle frame panel body part; 130, bottom housing part; 140, electrical box part.

Detailed Description of the Embodiments

[0019] It is to be noted that embodiments in the present invention and characteristics in the embodiments may be combined under the condition of no conflicts. The present invention is described below with reference to the drawings and in conjunction with the embodiments in detail.

[0020] It is to be noted that terms used herein only aim

to describe specific implementation manners, and are not intended to limit exemplar implementations of this invention. Unless otherwise directed by the context, singular forms of terms used herein are intended to include plural forms. Besides, it will be also appreciated that when terms "contain" and/or "include" are used in the description, it is indicated that features, steps, operations, devices, assemblies and/or a combination thereof exist.

[0021] It is to be noted that the specification and claims of the invention and the terms "first", "second" and the like in the drawings are used to distinguish similar objects, and do not need to describe a specific sequence or a precedence order. It will be appreciated that data used in such a way is exchanged under appropriate conditions, in order that the embodiments of the invention described here can be implemented in a sequence other than sequences graphically shown or described here. In addition, terms "include" and "have" and any variations thereof are intended to cover non-exclusive inclusions. For example, it is not limited for processes, methods, systems, products or devices containing a series of steps or units to clearly list those steps or units, and other steps or units which are not clearly listed or are inherent to these processes, methods, products or devices may be included instead.

[0022] For ease of description, spatial relative terms such as "over", "above", "on an upper surface" and "upper" may be used herein for describing a spatial position relation between a device or feature and other devices or features shown in the drawings. It will be appreciated that the spatial relative terms aim to contain different orientations in usage or operation besides the orientations of the devices described in the drawings. For example, if the devices in the drawings are inverted, devices described as "above other devices or structures" or "over other devices or structures" will be located as "below other devices or structures" or "under other devices or structures". Thus, an exemplar term "above" may include two orientations namely "above" and "below". The device may be located in other different modes (rotated by 90 degrees or located in other orientations), and spatial relative descriptions used herein are correspondingly explained.

[0023] Referring to Fig. 1 to Fig. 26, some embodiments of the present invention provide an air conditioner. The air conditioner in some embodiments includes a base part 10, two side plates 80, an air outlet frame 90, a panel part 100, an evaporation part 110, a middle frame panel body part 120, a bottom housing part 130, an electrical box part 140, a fully closed air guide plate 60 or a non-fully closed air guide plate 70, and a driving box 20 for driving the fully closed air guide plate 60 or a driving support 30 for driving the non-fully closed air guide plate 70.

[0024] During assembly, the base part 10 is mounted on the bottom housing part 130, the two side plates 80 are mounted at both ends of the base part 10 respectively, the evaporation part 110 is mounted on the base part

10, the middle frame panel body part 120 is mounted on the bottom housing part 130 and located on a periphery of the evaporation part 110, the electrical box part 140 is mounted on the base part 10 and configured to provide power for a driving motor on the driving box 20 or the driving support 30, and the air outlet frame 90 and the panel part 100 are mounted on the bottom housing part 130.

[0025] As noted in the background, fully closed air guide plate air conditioners and non-fully closed air guide plates known to inventors cannot be mounted on one housing, which makes a development efficiency of air conditioners low and a flexibility of air-conditioning products not high. For this reason, a structure of the air conditioner has been improved in some embodiments of the present invention.

[0026] In some embodiments, the air conditioner in the present invention includes the driving box 20 or the driving support 30. During actual mounting, the driving box 20 and the driving support 30 are both selectively mounted on the base part 10 by mounting portions which are structurally consistent, thereby driving the corresponding fully closed air guide plate 60 or non-fully closed air guide plate 70 to move.

[0027] That is to say, during a development of the air conditioner, the driving box 20 and the driving support 30 are both mounted on the base part 10 by mounting portions which are structurally consistent, and the driving box 20 and the driving support 30 are selectively mounted on the base part 10. During assembly, two kinds of air guide plates, i.e. the fully closed air guide plate 60 and the non-fully closed air guide plate 70, are quickly switched and mounted on a same base part 10, thereby reducing a development costs of an air conditioner product, shortening a product development cycle and improving product development efficiency. Meanwhile, market or customer needs for a diversity of air conditioners is quickly met.

[0028] As shown in Fig. 6 to Fig. 26, each of the mounting portions in the present embodiment include a buckle assembly 41, and the buckle assembly 41 is disposed between the base part 10 and the driving box 20, or between the base part 10 and the driving support 30.

[0029] The buckle assembly 41 is disposed between the base part 10 and the driving box 20 to facilitate assembly of the driving box 20 and the base part 10, and the buckle assembly 41 is disposed between the base part 10 and the driving support 30 to facilitate assembly of the base part 10 and the driving support 30. In actual assembly, the fully closed air guide plate air conditioner or the non-fully closed air guide plate air conditioner is quickly assembled according to specific needs of customers and use.

[0030] In some embodiments, the buckle assembly 41 includes a clamping hook 411 and a clamping hole 412, one of the clamping hook 411 and the clamping hole 412 is disposed on the driving box 20 and the driving support 30, and the other one of the clamping hook 411 and the

clamping hole 412 is disposed on the base part 10.

[0031] In some embodiments, the clamping hole 412 is provided on the base part 10, and the clamping hook 411 is disposed on the driving box 20 and the driving support 30 correspondingly, so that the driving box 20 or the driving support 30 is disposed on the base part 10 quickly.

[0032] In other non-shown embodiments of the present invention, the mounting portion is structurally configured to cooperate with a sliding block and a sliding groove. In actual assembly, it is only necessary to provide the sliding block and the sliding groove in the driving box 20, the driving support 30 or the base part 10, respectively. For example, the sliding blocks are provided on the driving box 20 and the driving support 30 respectively, and correspondingly, the sliding groove is provided on the base part 10. In specific design, the sliding block structures on the driving box 20 and the driving support 30 need to be set to a same structure. The meaning of the same structure here should be understood to be a same shape and size, to ensure that the driving box 20 and the driving support 30 are quickly mounted on the base part 10, to achieve a purpose of mounting the fully closed air guide plate 60 and the non-fully closed air guide plate 70 on a same housing. In this process, limiting is performed in cooperation with a structure such as a limiting groove or a limiting pin.

[0033] Similarly, in another not-shown embodiment of the present invention, the mounting portion is provided as a structure of a plurality of mounting holes and locking screws. When specifically disposed, positions of the driving box 20 and the driving support 30 for cooperating with the base part 10 are processed with mounting holes with a same clearance and aperture, and correspondingly, mounting holes corresponding to the mounting holes on the driving box 20 and the driving support 30 are also provided on the base part 10. Then, the driving box 10 and the base part 10 are locked by a locking screw or the driving support 30 and the base part 10 are locked to achieve a purpose of mounting the fully closed air guide plate 60 and the non-fully closed air guide plate 70 on the same housing. The defect of the above mode is low assembly efficiency.

[0034] Of course, in other embodiments of the present invention, the mounting portion is structurally configured to the structures that hooks cooperate with other hooks. It is only necessary to ensure that assembly structures of the driving box 20, the driving support 30 with the base part 10 are consistent. In order to improve a mounting stability of the driving box 20 and the driving support 30 in the some embodiments, the mounting portion of some embodiments of the present invention further includes a fastener 42. The fastener 42 is configured to fix the driving box 20 and the driving support 30 to the base part 10.

[0035] In some embodiments, the fastener 42 is a positioning column fixedly disposed on the base part 10, and the driving box 20 and the driving support 30 are both provided with positioning holes 50 that cooperate

with the positioning column. The cooperation of the positioning column and the positioning holes 50 facilitates a definition of the driving box 20 and the driving support 30 on the base part 10 and also facilitates a quick mounting of the driving box 20 and the driving support 30 on the base part 10.

[0036] In other embodiments of the present invention, the fastener 42 is configured as a screw, pin, or rivet structure, as long as it is other variants under the concept of the present invention, it is within a scope of the present invention.

[0037] The air conditioner in the present embodiment further includes the fully closed air guide plate 60 or the non-fully closed air guide plate 70. In actual assembly, the fully closed air guide plate 60 is in driving connection with the driving box 20, and the non-fully closed air guide plate 70 is in driving connection with the driving support 30, and is specifically assembled according to use demands of the market and customers.

[0038] As shown in Fig. 1 to Fig. 26 again, the base part 10 in some embodiments includes a base 11 and a motor seat 12, the motor seat 12 is mounted at a first end of the base 11, an end of the base 11 away from the motor seat 12 and the motor seat 12 are provided with mounting lug blocks 13, and during mounting, the driving box 20 and the driving support 30 are both mounted on the mounting lug blocks 13. In some embodiments, the mounting lug blocks 13 are provided with clamping holes 412, the driving box 20 and the driving support 30 are provided with clamping hooks 411 cooperating with the clamping holes 412 to facilitate quick mounting of the driving box 20 and the driving support 30 on the base part 10.

[0039] In an embodiment of the present invention, there are two driving boxes 20 and two driving supports 30, and the two driving boxes 20 or the two driving supports 30 are mounted at both ends of the base part 10 respectively. In some embodiments, one driving box 20 or driving support 30 is mounted at an end of the base 11 away from the motor seat 12, and the other driving box 20 or driving support 30 is mounted on the motor seat 12.

[0040] In some another embodiments of the present invention, there are two driving boxes 20, one driving box 20 is mounted at an end of the base 11 away from the motor seat 12, and the other driving box 20 is mounted on the motor seat 12. There is only one driving support 30. The driving support 30 is mounted on the motor seat 12 of the base part 10. When the non-fully closed air guide plate 70 is mounted, only one of the above driving support 30 is mounted on one end of the base part 10. A driving motor is mounted on the driving support 30 to drive the non-fully closed air guide plate 70 to rotate. The other end of the non-fully closed air guide plate 70 is mounted on the air outlet frame 90, that is, one end of the non-fully closed air guide plate 70 is driven by the driving support 30, the other end of the non-fully closed air guide plate 70 (designed with a rotating shaft) is in-

serted into the mounting shaft hole on the air outlet frame 90, and this end serves as a support.

[0041] It can be known from the above embodiments that under a guidance of a development concept of modular air conditioners, consumer home appliances have becoming more and more attention to green and healthy technologies, and some embodiments of the present invention re-lays out a structure of the entire air conditioner and creates a modular air conditioner that is easy to disassemble and clean. In order to meet market demands for air conditioners of different grades or price levels, the present invention deeply digs the air conditioners of this structure. As mentioned in the background, although there are a non-fully closed air guide plate base part and a fully closed air guide plate base part in an air conditioner market, the two base parts are similar, and the basic main structure of the air conditioner is the same. As shown in Fig. 1, the two air guide plates commonly use an evaporation portion 110, a base part 10, an air water channel part, that is, a bottom housing part 130, an electrical box part 140, and some appearance parts such as a panel part 100. The above structure is common to both housings, which lays a solid foundation for the subsequent non-fully closed air guide plate 70 and fully closed air guide plate 60 to achieve quick switching on a same base part, which also improves a design efficiency of designers for quick product development and greatly reduces the cost of product development.

[0042] The fully closed air guide plate 60 and the non-fully closed air guide plate 70 of some embodiments of the present invention realize quick switching on one base part 10. Mainly, the base parts 10 are used in common, and the base part 10 includes the base 11 and the motor base 12, and a structure for driving the fully closed air guide plate 60 is mounted on the base part 10: the driving box 20, as shown in Fig. 6. One driving box 20 is mounted at an end of the base 11, and the other driving box 20 is mounted on the motor seat 12. The fully closed air guide plate 60 is pushed out of the whole machine by the two driving boxes 20 on the base part 10 and guides air (the driving box 20 is a structure with a telescopic rod and a motor: the telescopic rod realizes that the fully closed air guide plate 60 is pushed out and retracted; the motor drives the fully closed air guide plate 60 to rotate to achieve up and down sweeping).

[0043] The mounting of the driving box 20 on a left side and the base 11 is shown in Fig. 8 to Fig. 11, Fig. 15 and Fig. 16. They are fixed by a cooperation of the clamping hook 411, the clamping hole 412, and the fastener 42. The driving box 20 on a right side is mounted on the motor seat 12 (the motor seat is assembled on the base) as shown in Fig. 12 to Fig. 14: the driving box 20 and the motor base 12 are also fixed by a cooperation of the clamping hook 411, the clamping hole 412, and the fastener 42.

[0044] As shown in Fig. 17, an overall structure of the air conditioner with the non-fully closed air guide plate 70 includes a foregoing common basic part, the non-fully

closed air guide plate 70 is in a space of the housing when in closed and open states, as shown in Fig. 17 and Fig. 18.

[0045] The driving support 30 of the non-fully closed air guide plate 70 is also mounted on the base part 10, one of the driving supports 30 is mounted on the base 11, and the other driving support 30 is mounted on the motor seat 12 (the motor seat is mounted on the base), as shown in Fig. 20. The non-fully closed air guide plate 70 is mounted on the two driving supports 30 by means of buckles. The driving supports 30 have such a structure: the driving support 30 on the left side is only a structural member, and its function is to mount and support one end of the non-fully closed air guide plate 70. The other driving support 30 is further provided with a driving motor in addition to the above non-fully closed air guide plate 70. The driving motor is configured to drive the non-fully closed air guide plate 70 to rotate, thereby achieving an up and down sweeping function of the non-fully closed air guide plate 70.

[0046] A structural cooperation between the driving support 30 on the left side and the base 11 is shown in Fig. 23, and they are fixed by the cooperation of the clamping hook 411, the clamping hole 412, and the fastener 42. A mounting of a driving support 30 on the right side and the base 11 is shown in Fig. 24 to Fig. 26, and a structural cooperation between the driving support 30 on the right side and the motor seat 12 is realized by the cooperation of the clamping hook 411, the clamping hole 412, and the fastener 42.

[0047] A cooperation between the driving box 20 of the fully closed air guide plate 60 and the base part 10 and a cooperation between the driving support 30 of the non-fully closed air guide plate 70 and the base part 10 are common matching structures, namely a matching structure between the driving box 20 and the base part 10 and a matching structure between the driving support 30 and the base part 10 are the same: a matching structure on the driving box 20 is the same as a matching structure on the driving support 30, and the mounting portion structure on the base part 10 is commonly used. In this way, the base part 10 realizes a function of simultaneously mounting the driving box 20 and the driving support 30 according to different air guide plate needs, and the fully closed air guide plate 60 and the non-fully closed air guide plate 70 are quickly switched on the base part 10.

[0048] Through a cooperation of the above structures, a fixed cooperation of the non-fully closed air guide plate 70 and the fully closed air guide plate 60 on the same base part 10 is realized, the non-fully closed air guide plate 70 and the fully closed air guide plate 60 are quickly switched, the product development efficiency is improved, and the product development cost is greatly reduced. Motors are designed and mounted on the driving box 20 and the driving support 30. The driving box 20 and the driving support 30 are mounted on the base part 10. When cleaning the air conditioner, charged parts do not need to be disassembled, and a safety performance

of the whole machine is improved.

[0049] From the above description, it can be seen that the above embodiments of the present invention achieve the following technical effects.

[0050] The above two air guide plates namely the non-fully closed air guide plates and the fully closed air guide plate are switched on the same housing, but in actual production, several different parts need to be manufactured: the side plate and the air outlet frame. The two parts need to be cooperated with the air guide plate in the appearance of the whole machine. A mounting of the fully closed air guide plate and the non-fully closed air guide plate on the same housing will make the appearance of the whole machine different, so in order to match different appearance housings, it is necessary to manufacture side plates and air outlet frames suitable for different housings respectively. However, although there are structural differences between the side plates and the air outlet frames suitable for two different housings, the matching structure between the side plates and the air outlet frames suitable for the two housings and the parts shared by the two housings is still the same, that is, a same buckle assembly and fastener are used for cooperation at a same position.

[0051] Some embodiments of the present invention are suitable for an easy-to-disassemble and easy-to-clean housing common to a fully-closed air guide plate and a non-fully closed air guide plate. The housing structure includes at least: the base part, the air outlet frame, the air guide plate, the driving box or the driving support. The base part includes the base and the motor seat. At least one end of the base part is designed with a common mounting portion for mounting the driving box or the driving support: the driving box is mounted on the mounting portion to form the fully closed air guide plate, and the driving support is mounted on the mounting portion to form the non-fully closed air guide plate, so that the fully closed air guide plate and the non-fully closed air guide plate can be quickly switched on one housing.

[0052] The above is only the embodiments of the present invention, not intended to limit the present invention. As will occur to those skilled in the art, the present invention is susceptible to various modifications and changes. Any modifications, equivalent replacements, improvements and the like made within the spirit and principle of the present invention shall fall within the scope of protection of the present invention.

Claims

1. An air conditioner, comprising:

a base part (10); and
a driving box (20) or a driving support (30), the driving box (20) and the driving support (30) being both selectively mounted on the base part (10) by mounting portions which are structurally

consistent.

2. The air conditioner according to claim 1, wherein each of the mounting portions comprise a buckle assembly (41), the buckle assembly (41) being disposed between the base part (10) and the driving box (20), or between the base part (10) and the driving support (30).
3. The air conditioner according to claim 2, wherein the buckle assembly (41) comprises a clamping hook (411) and a clamping hole (412), one of the clamping hook (411) and the clamping hole (412) is disposed on the driving box (20) and the driving support (30), and the other one of the clamping hook (411) and the clamping hole (412) is disposed on the base part (10).
4. The air conditioner according to claim 1, wherein the mounting portion further comprises a fastener (42), wherein the fastener (42) is configured to fix the driving box (20) or the driving support (30) to the base part (10).
5. The air conditioner according to claim 4, wherein the fastener (42) is a positioning column fixedly disposed on the base part (10), and the driving box (20) and the driving support (30) are both provided with a positioning hole (50) cooperating with the positioning column.
6. The air conditioner according to claim 1, wherein the air conditioner further comprises a fully closed air guide plate (60), the fully closed air guide plate (60) is in driving connection with the driving box (20); or the air conditioner further comprises a non-fully closed air guide plate (70), the non-fully closed air guide plate (70) is in driving connection with the driving support (30).
7. The air conditioner according to claim 1, wherein the base part (10) comprises a base (11) and a motor seat (12), the motor seat (12) is mounted at a first end of the base (11), an end of the base (11) away from the motor seat (12) and the motor seat (12) are provided with mounting lug blocks (13), and the driving box (20) or the driving support (30) is mounted on the mounting lug block (13).
8. The air conditioner according to claim 1, wherein there are two driving boxes (20) and two driving supports (30), and the two driving boxes (20) or the two driving supports (30) are mounted at both ends of the base part (10) respectively.
9. The air conditioner according to claim 1, wherein there are two driving boxes (20) and one driving support (30), the two driving boxes (20) are mounted at

both ends of the base part (10) respectively, or the driving support (30) is mounted at one end of the base part (10).

10. The air conditioner according to any one of claims 1 to 9, further comprising two side plates (80), an air outlet frame (90), a panel part (100), an evaporation part (110), a middle frame panel body part (120), a bottom housing part (130), and an electrical box part (140), wherein the base part (10) is mounted on the bottom housing part (130), the electrical box part (140) and the evaporation part (110) are both mounted on the base part (10), the two side plates (80) are mounted at both ends of the base part (10) respectively, and the air outlet frame (90), the panel part (100) and the middle frame panel body part (120) are all mounted on the bottom housing part (130).

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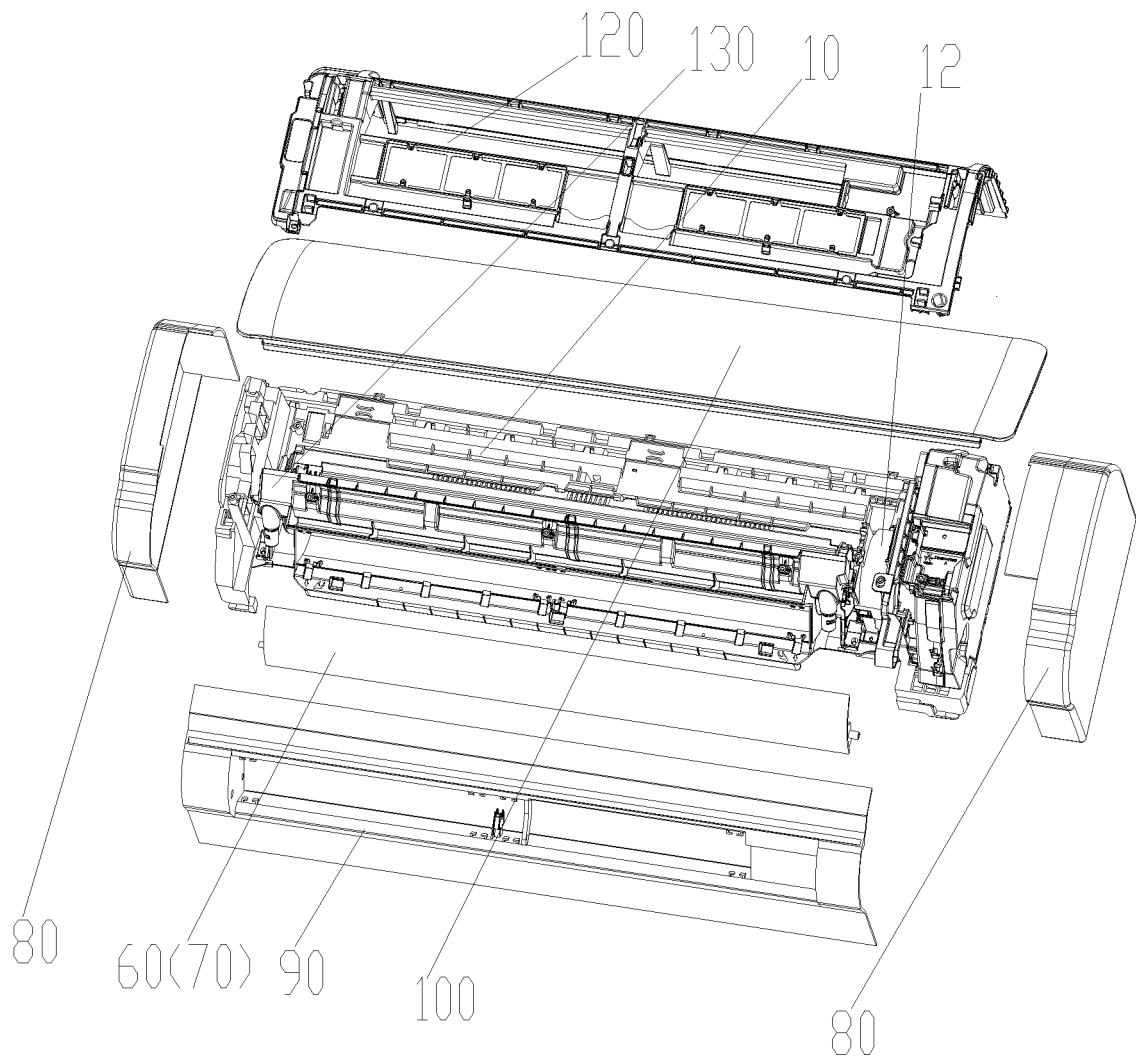


Fig. 1

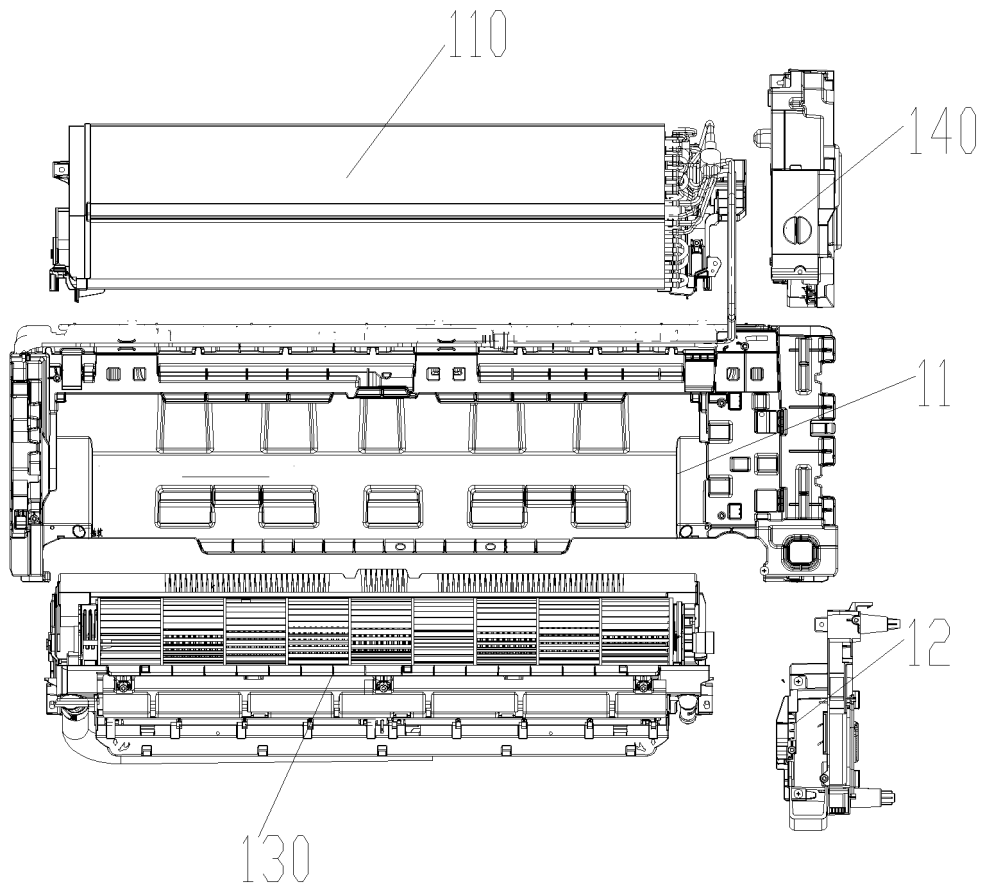


Fig. 2

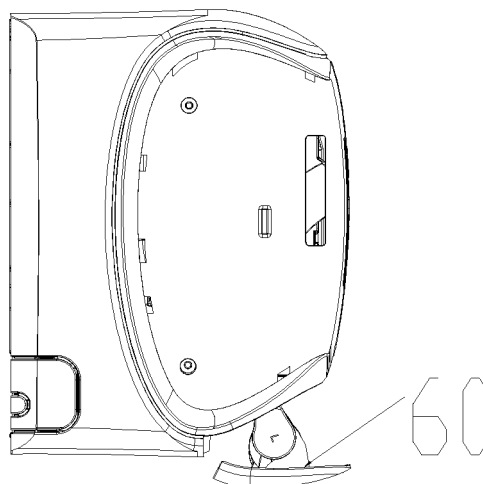


Fig. 3

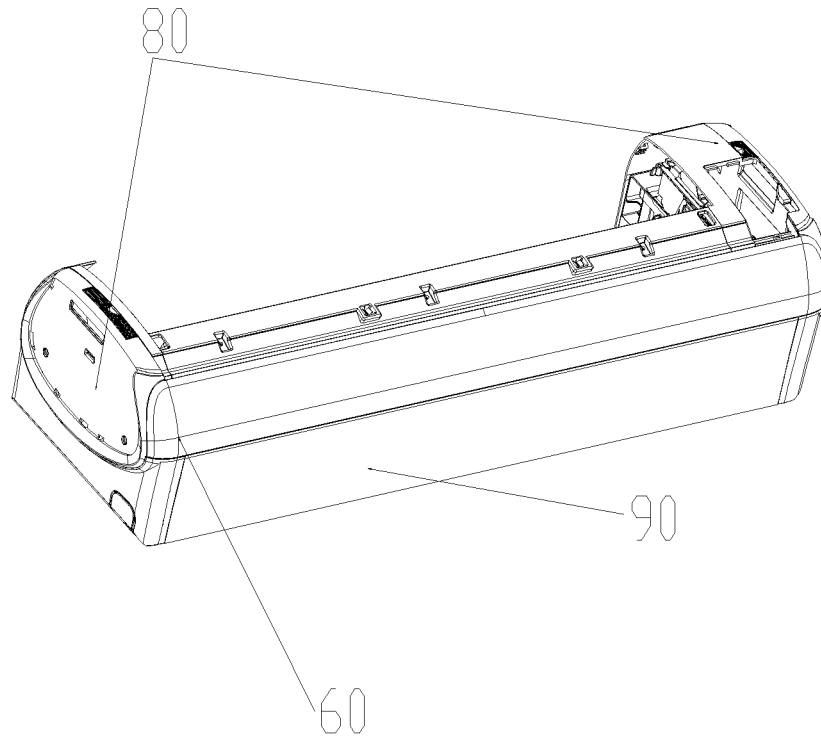


Fig. 4

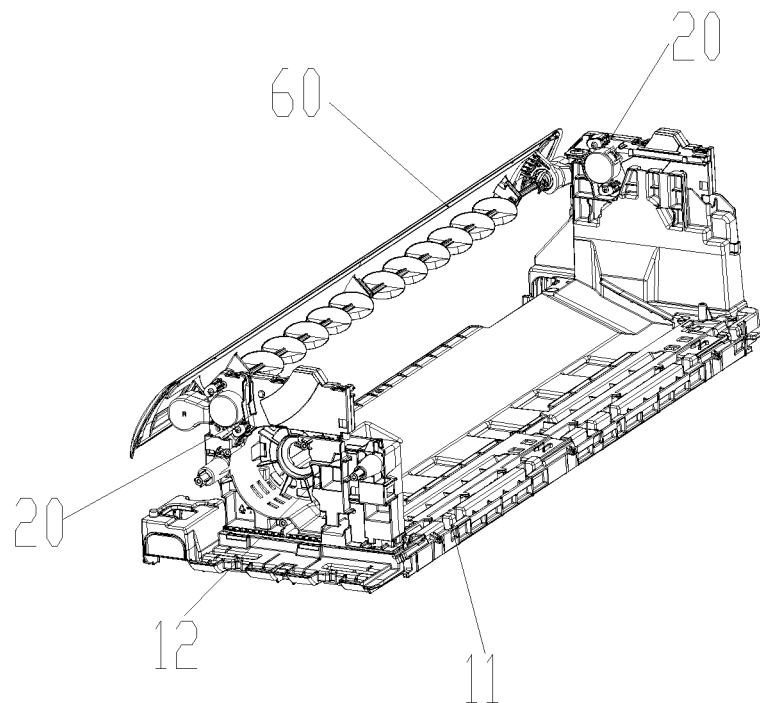


Fig. 5

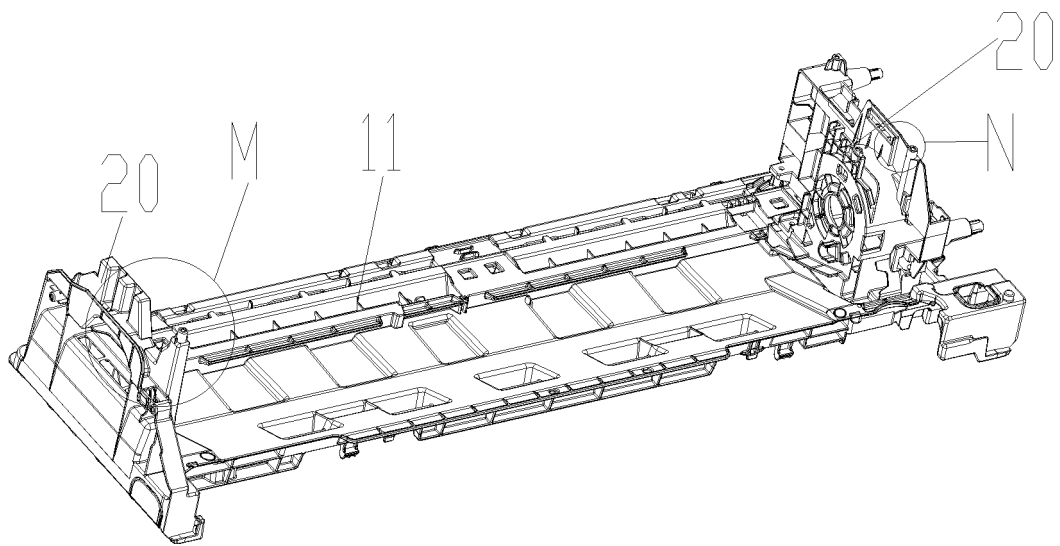


Fig. 6

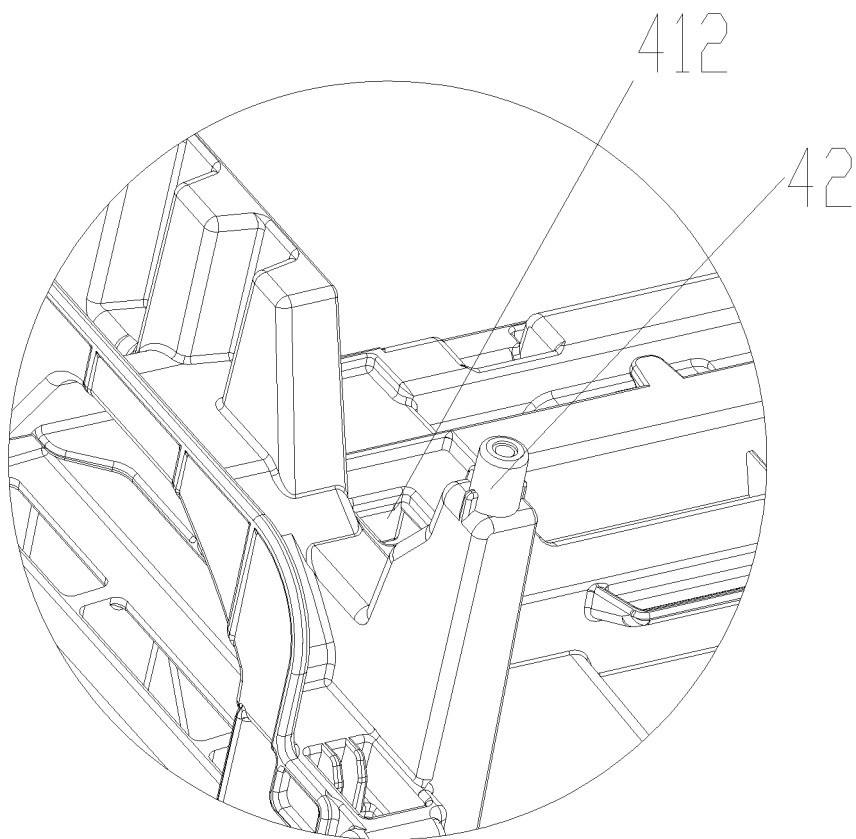


Fig. 7

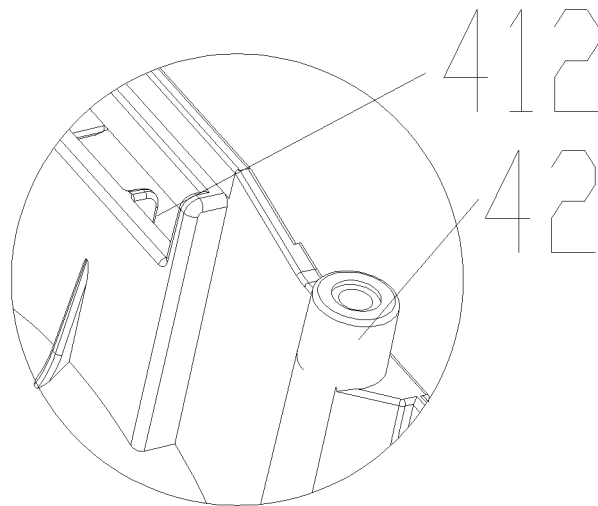


Fig. 8

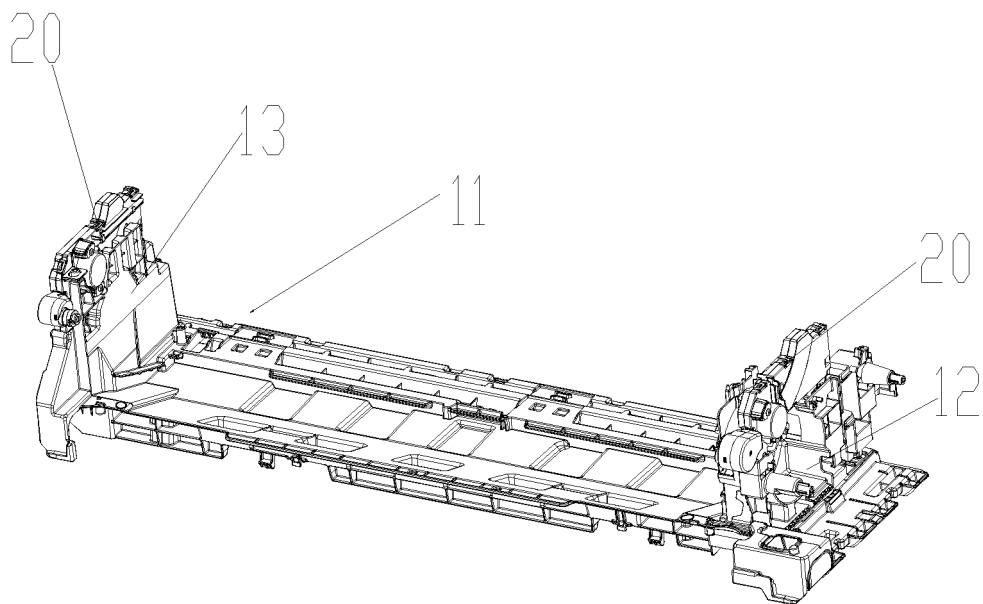


Fig. 9

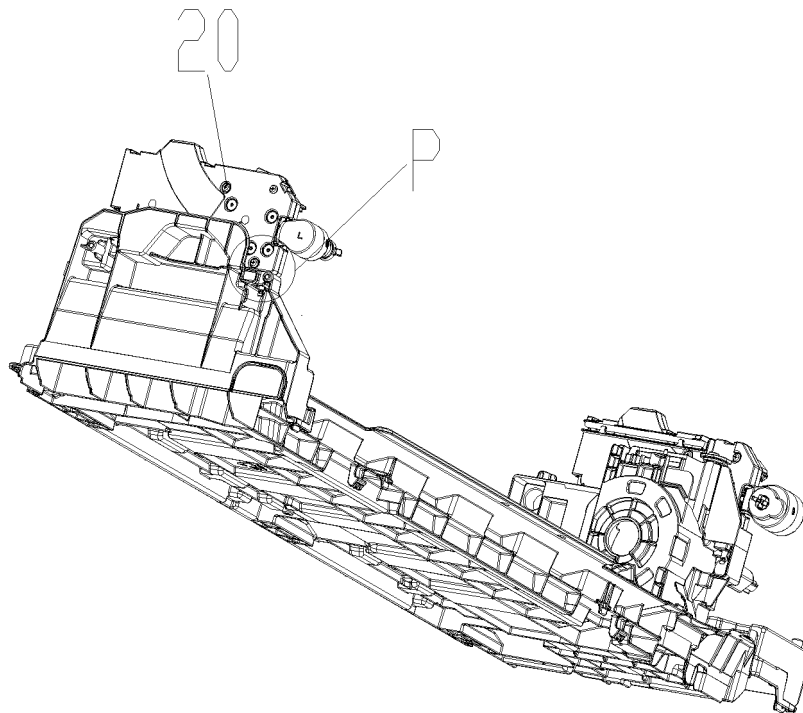


Fig. 10

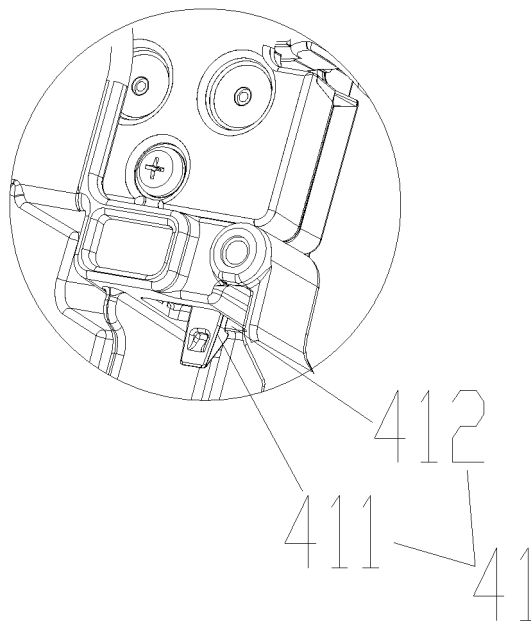


Fig. 11

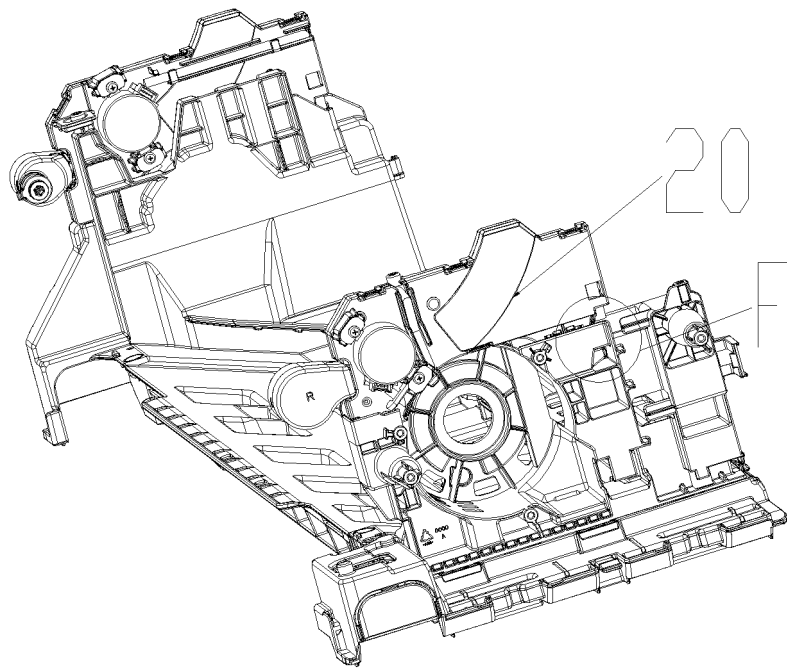


Fig. 12

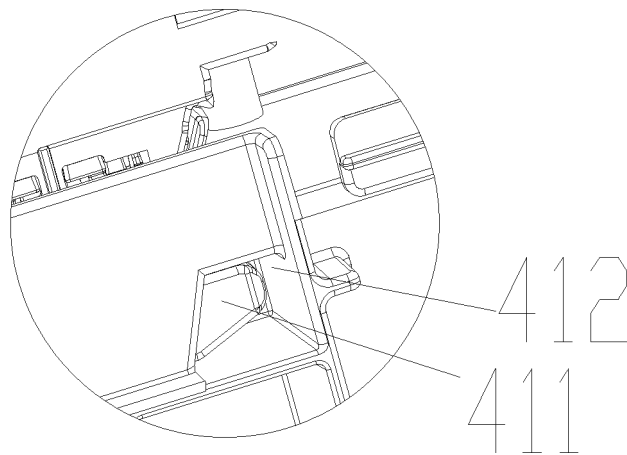


Fig. 13

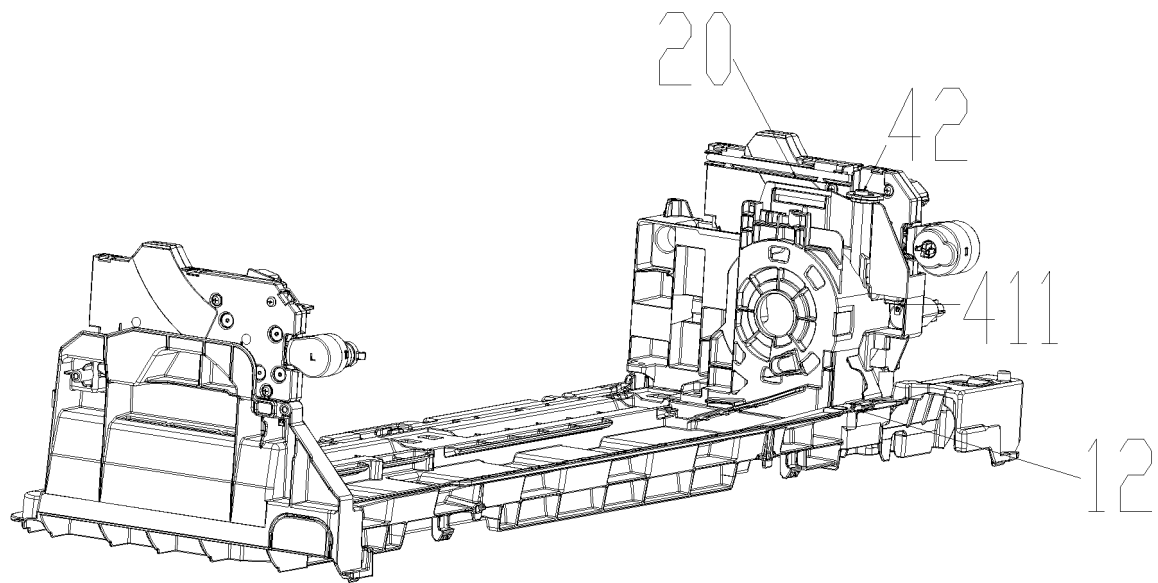


Fig. 14

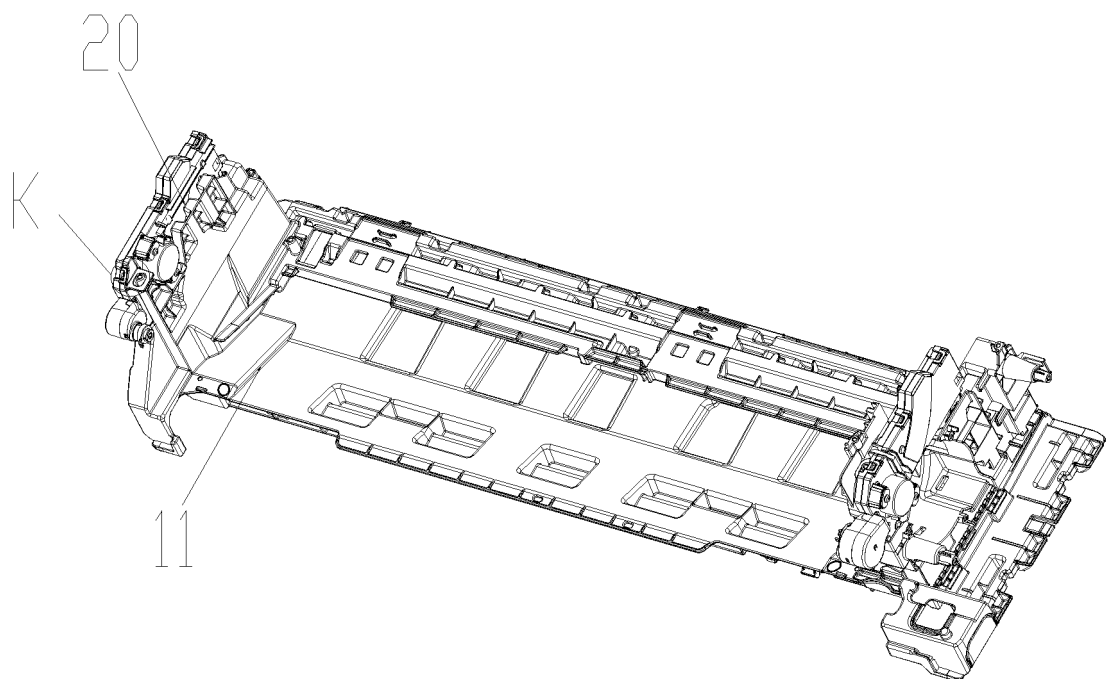


Fig. 15

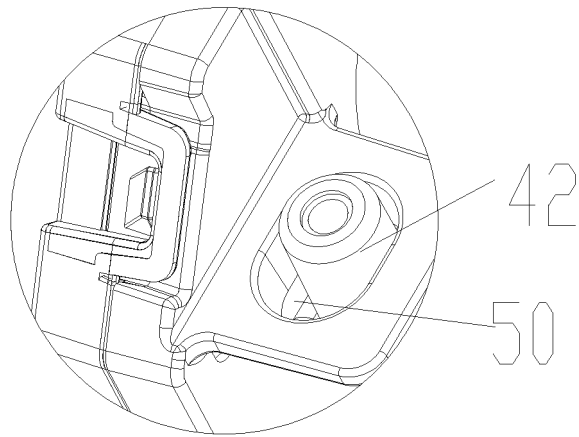


Fig. 16

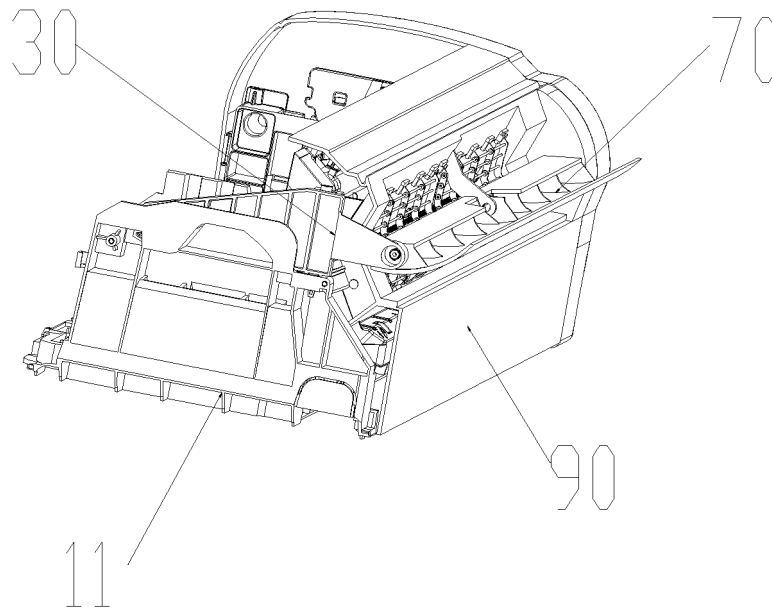


Fig. 17

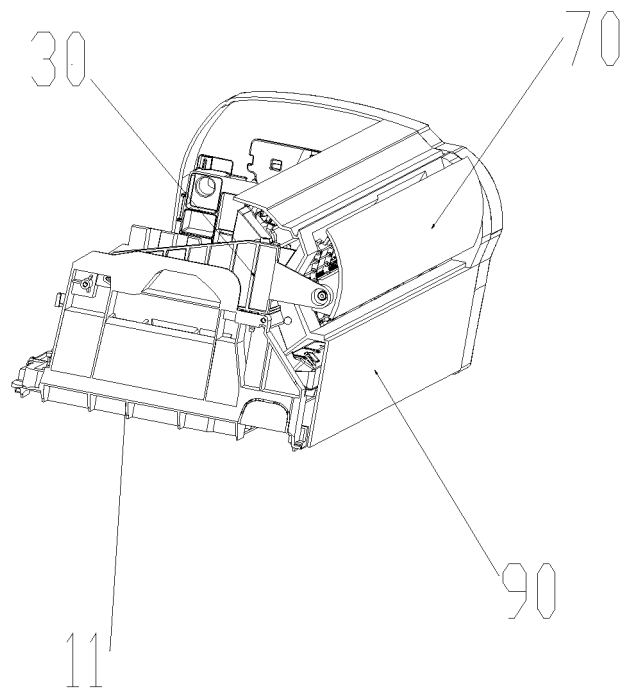


Fig. 18

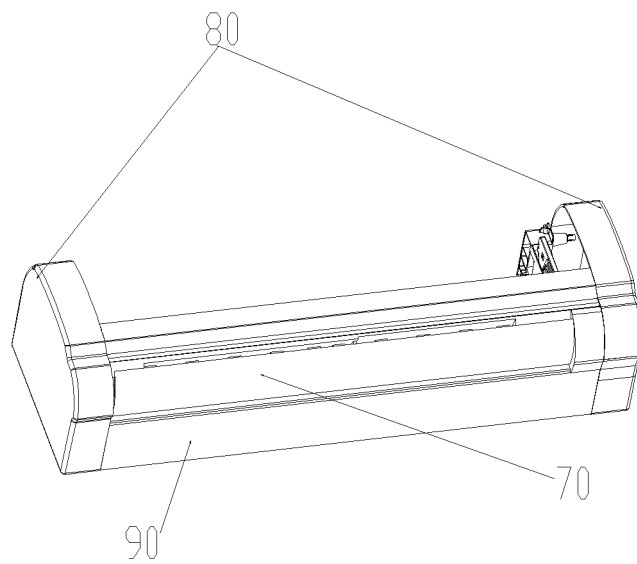


Fig. 19

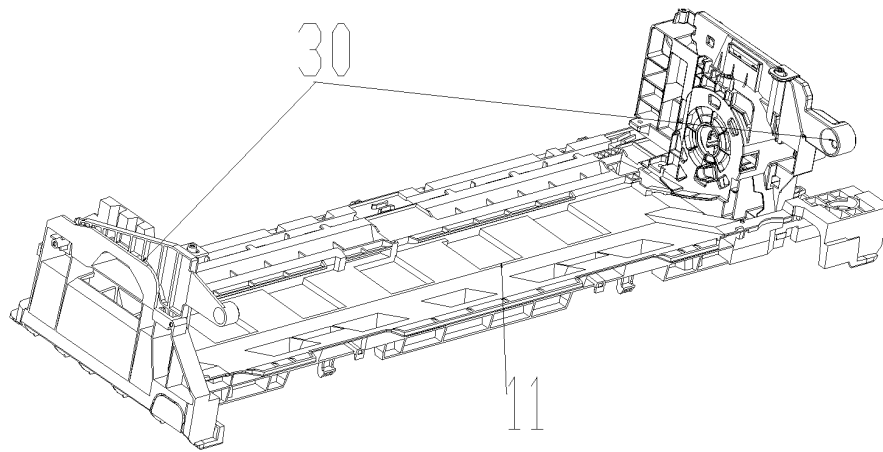


Fig. 20

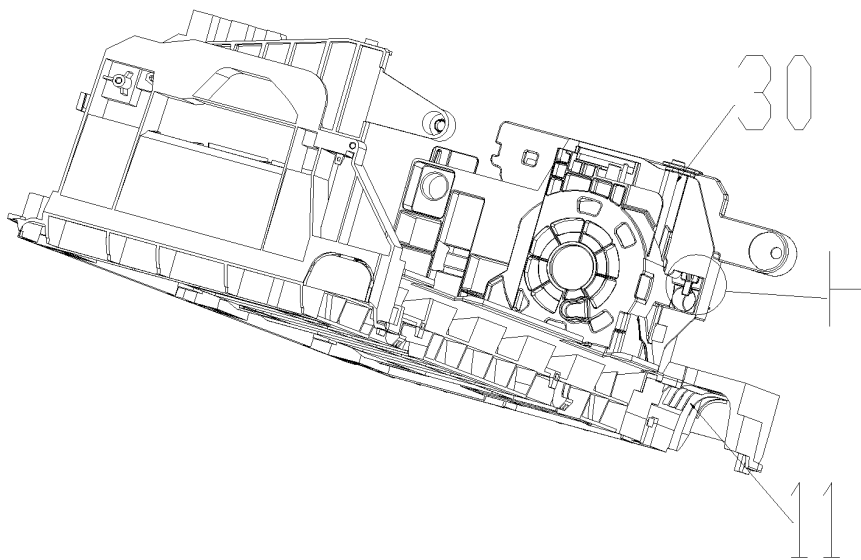


Fig. 21

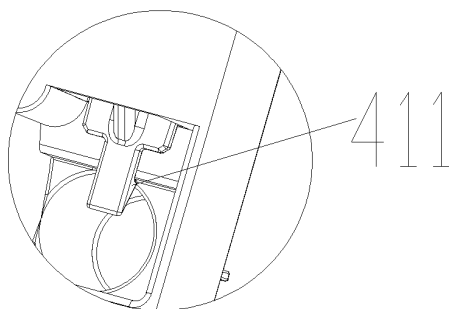


Fig. 22

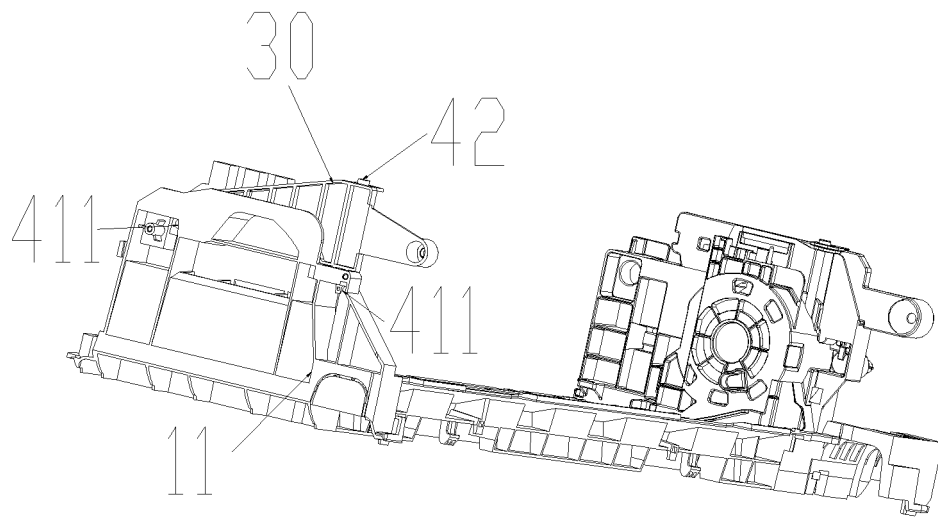


Fig. 23

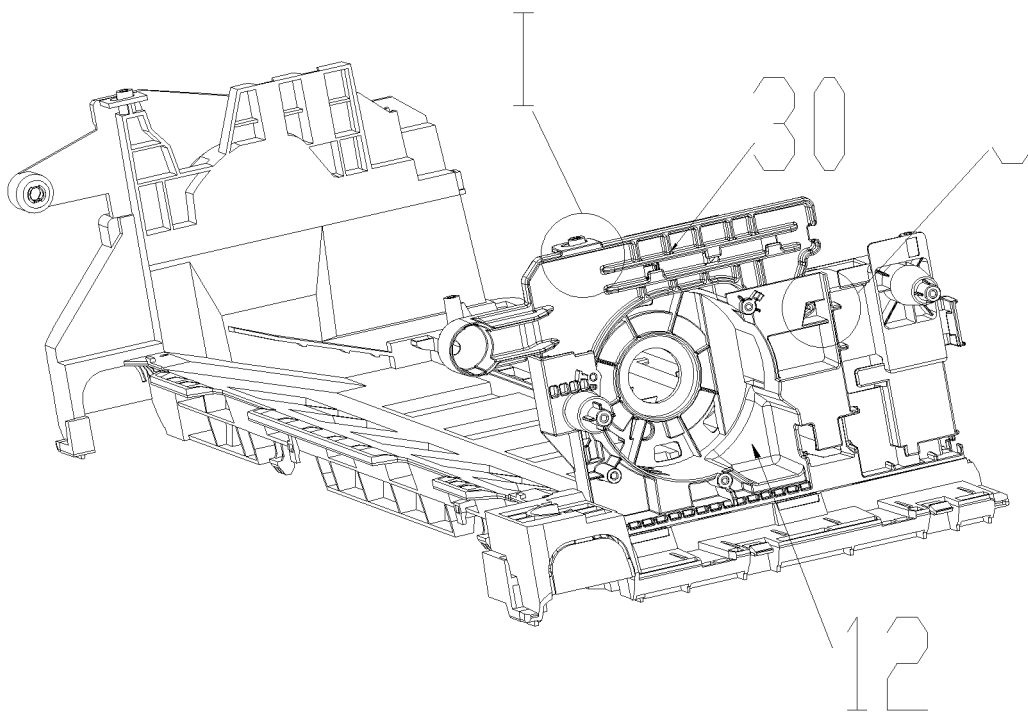


Fig. 24

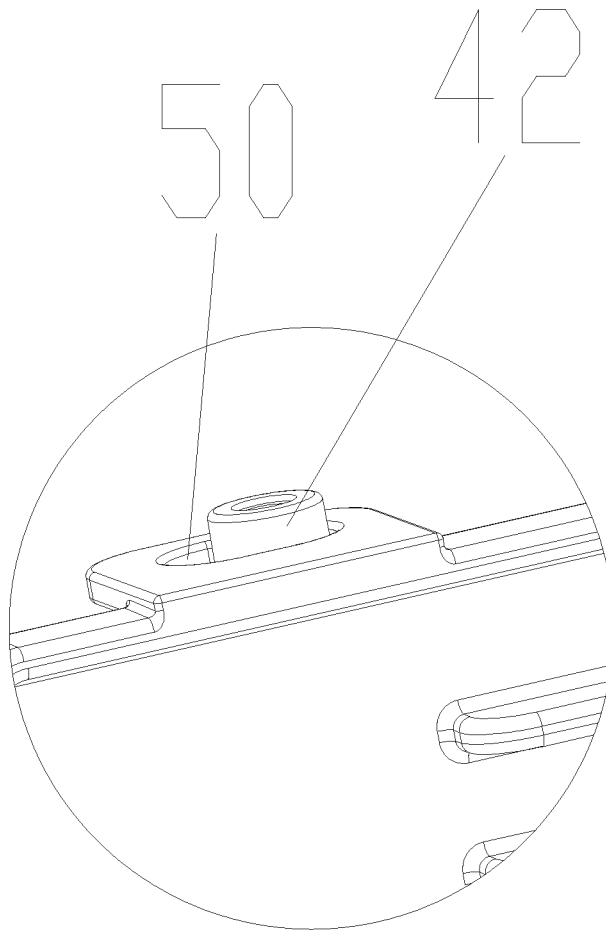


Fig. 25

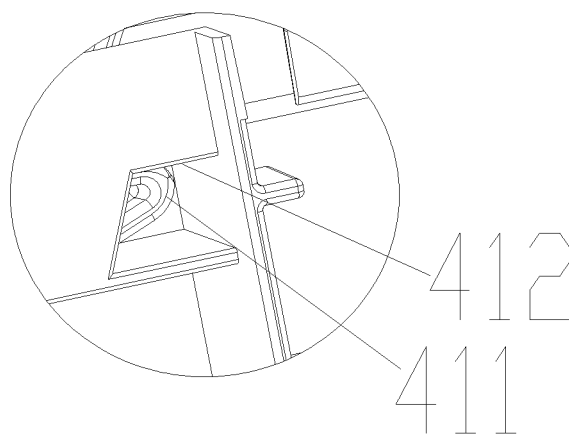


Fig. 26

INTERNATIONAL SEARCH REPORT

International application No.

PCT/CN2018/105167

A. CLASSIFICATION OF SUBJECT MATTER F24F 13/10(2006.01)i; F24F 13/14(2006.01)i; F24F 1/00(2019.01)i According to International Patent Classification (IPC) or to both national classification and IPC																		
B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) F24F13/-; F24F1/- Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched																		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) CNKI, CNABS, DWPI, SIPOABS, PANTENTICS: 空调, 导风, 导向, 面板, 驱动, 驱动盒, 驱动支架, 转动, 旋转, 闭合, 封闭, 密封, 安装, 固定, 紧固, 卡扣, 卡接, 定位, air condition, baffle, air deflector, outlet, exhaust+, rotat+, revolv+, drive?, driving, air guide plate, base, seal+, set+, fix+, install+, faceplate, panel																		
C. DOCUMENTS CONSIDERED TO BE RELEVANT <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>PX</td> <td>CN 108488932 A (GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI) 04 September 2018 (2018-09-04) claims 1-10</td> <td>1-10</td> </tr> <tr> <td>E</td> <td>CN 208332466 U (GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI) 04 January 2019 (2019-01-04) claims 1-10</td> <td>1-10</td> </tr> <tr> <td>A</td> <td>CN 204786803 U (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 18 November 2015 (2015-11-18) description, paragraphs [0027]-[0034], and figures 1-3</td> <td>1-10</td> </tr> <tr> <td>A</td> <td>CN 204629732 U (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 09 September 2015 (2015-09-09) entire document</td> <td>1-10</td> </tr> <tr> <td>A</td> <td>CN 107490073 A (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 19 December 2017 (2017-12-19) entire document</td> <td>1-10</td> </tr> </tbody> </table>	Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	PX	CN 108488932 A (GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI) 04 September 2018 (2018-09-04) claims 1-10	1-10	E	CN 208332466 U (GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI) 04 January 2019 (2019-01-04) claims 1-10	1-10	A	CN 204786803 U (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 18 November 2015 (2015-11-18) description, paragraphs [0027]-[0034], and figures 1-3	1-10	A	CN 204629732 U (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 09 September 2015 (2015-09-09) entire document	1-10	A	CN 107490073 A (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 19 December 2017 (2017-12-19) entire document	1-10
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A	CN 204786803 U (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 18 November 2015 (2015-11-18) description, paragraphs [0027]-[0034], and figures 1-3	1-10																
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A	CN 107490073 A (GUANGDONG MIDEA REFRIGERATION EQUIPMENT CO., LTD. ET AL.) 19 December 2017 (2017-12-19) entire document	1-10																
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex. * Special categories of cited documents: “A” document defining the general state of the art which is not considered to be of particular relevance “E” earlier application or patent but published on or after the international filing date “L” document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) “O” document referring to an oral disclosure, use, exhibition or other means “P” document published prior to the international filing date but later than the priority date claimed “T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention “X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone “Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art “&” document member of the same patent family																		
Date of the actual completion of the international search 06 March 2019	Date of mailing of the international search report 14 March 2019																	
Name and mailing address of the ISA/CN China National Intellectual Property Administration (ISA/CN) No. 6, Xitucheng Road, Jimenqiao, Haidian District, Beijing 100088 China Facsimile No. (86-10)62019451	Authorized officer Telephone No.																	

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INTERNATIONAL SEARCH REPORT

International application No.

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C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

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CN 108488932 A	04 September 2018	None	
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