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(54) **BASE ASSEMBLY FOR DRYER AND DRYER PROVIDED WITH SAME**

BASISANORDNUNG FÜR EINEN TROCKNER UND DAMIT AUSGESTATTETER TROCKNER

ENSEMBLE DE BASE POUR SÉCHOIR ET SÉCHOIR POURVU DE CELUI-CI

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Description

CROSS-REFERENCE TO RELATED APPLICATIONS

FIELD

[0001] The present invention relates to the field of laundry treatment apparatus, and in particular, to a base assembly for a dryer and a dryer having the same.

BACKGROUND

[0002] In the related art, a base part of a dryer is an integral molded piece, and an air duct is designed inside the base, which results in large part design, complex structure and complex mold design, and higher production requirements. Since it is an integral piece, new material cannot be used in an overall operation. As a result, the material cost is high. CN106087362B relates generally to a heat pump installation box for a heat pump.

SUMMARY

[0003] Aspects of the invention are set out in the claims. In the following, each of the described methods, apparatuses, embodiments, examples, and aspects, which do not fully correspond to the invention as defined in the claims is thus not according to the invention and is, as well as the whole following description, present for illustration purposes only or to highlight specific aspects or features of the claims. Embodiments not falling under the scope of the claims should be interpreted as examples useful for understanding the invention. The present invention aims to solve at least one of the technical problems existing in the related art. To this end, the present disclosure proposes a base assembly for a dryer, in which an air duct shell and a connection base can be designed separately, which is beneficial to reduce difficulty of a mold design and production requirements. Since the air duct shell and the connection base are separated components, the air duct shell can be made of different material from the connection base, which facilitates application of a new material and reduction of material cost.

[0004] The present invention proposes a dryer having the base assembly for the dryer as described above.

[0005] A base assembly for the dryer according to an embodiment of the present invention includes: an air duct shell having a cavity where a heat exchanger is mounted; a connection base having a channel in communication with the cavity. The connection base is detachably disposed at a side of the air duct shell.

[0006] According to the base assembly for the dryer according to the embodiment of the present invention, by detachably arranging the connection base at the side of the air duct shell, the air duct shell and the connection base can be designed separately, which is beneficial to reduce the difficulty of mold design and production requirements. Further, since the air duct shell and connection base are separated components, the air duct shell can be made of the different material from the connection base, which facilitates the application of the new material and reduction of material cost.

[0007] In some embodiments of the present invention, one of the connection base and the air duct shell has a sealing groove, and the other of the connection base and the air duct shell has a sealing rib engaged in the sealing groove to seal a connection between the air duct shell and the air duct shell.

[0008] In some embodiments of the present invention, the air duct shell has an air duct opening defined on a side thereof opposite to the connection base and in communication with the cavity, and the connection base has a channel opening defined on a side thereof opposite to the air duct shell and in communication with the channel. One of the sealing groove and the sealing rib extends in a circumferential direction of the air duct opening, and the other of the sealing groove and the sealing rib extends in a circumferential direction of the channel opening.

[0009] In some embodiments of the present invention, the one of the connection base and the air duct shell has a first protruding rib and a second protruding rib that are spaced apart from each other in an arrangement direction of the air duct shell and the connection base. The sealing groove is located between the first protruding rib and the second protruding rib.

[0010] In some embodiments of the present invention, the other one of the connection base and the air duct shell has a positioning groove close to the sealing rib, and one of the first protruding rib and the second protruding ribs is inserted into the positioning groove.

[0011] In some embodiments of the present invention, the sealing groove is located on an outer wall surface of the connection base, and the sealing rib is located on an inner wall surface of the air duct shell.

[0012] In some embodiments of the present invention, the base assembly also includes a bottom plate. The connection base and the air duct shell are detachably disposed on the bottom plate, respectively.

[0013] In some embodiments of the present invention, the connection base has a first positioning portion provided on a bottom thereof. The bottom plate has a second positioning portion provided thereon. The first positioning portion is engaged with the second positioning portion to position the connection base.

[0014] In some embodiments of the present invention, the bottom plate has a fixing flange provided on an edge thereof and bent upwardly. A side of the connection base is connected to the fixing flange by a fastener.

[0015] In some embodiments of the present invention, the base assembly also includes a support member having one end connected to the connection base and another end connected to the bottom plate.

[0016] In some embodiments of the present invention, the bottom plate is a metal piece, and the connection base is configured as a plastic piece formed separately from the bottom plate.

[0017] In some embodiments of the present invention, the air duct shell is fixedly mounted on the bottom plate by at least one connection member.

[0018] In some embodiments of the present invention, the at least one connection member has two ends detachably connected to the bottom plate, respectively. At least a part of the air duct shell is located between a middle part of the at least one connection member and the bottom plate.

[0019] In some embodiments of the present invention, the at least one connection member matches with an outer contour of the air duct shell.

[0020] In some embodiments of the present invention, the at least one connection member includes a first abutting section located above the bottom plate and spaced apart from the bottom plate, a first vertical section, and a second vertical section. The bottom plate is connected to one end of the first vertical section and one end of the second vertical section, respectively, and the first abutting section is connected to another end of the first vertical section and another end of the second vertical section, respectively. The first abutting section is engaged with a top wall of the air duct shell, and the first vertical section and/or the second vertical section is engaged with a side wall of the air duct shell.

[0021] In some embodiments of the present invention, the at least one connection member has one end snapped with the bottom plate and another end connected to the bottom plate by a threaded fastener.

[0022] In some embodiments of the present invention, the at least one connection member includes a plurality of connection members arranged at intervals in a length direction of the air duct shell.

[0023] A dryer according to an embodiment of the present invention includes the base assembly for the dryer as described above.

[0024] According to the dryer of the embodiment of the present invention, by providing the base assembly for the dryer as described above, the air duct shell and the connection base can be designed separately, which is beneficial to reduce the difficulty of mold design and production requirements. Further, since the air duct shell and connection base are separate components, the air duct shell can be made a different material from the connection base, which facilitates application of a new material and reduction of material cost.

[0025] Additional aspects and advantages of the present invention will be set forth in part from the following description, and in part will become apparent from the following description, or may be learned by practice of the present disclosure.

BRIEF DESCRIPTION OF DRAWINGS

[0026] The above and/or additional aspects and advantages of the present disclosure will become apparent and readily understood from the following description of embodiments in conjunction with the accompanying drawings, in which:

FIG. 1 is a perspective structural view of a base assembly for a dryer according to an embodiment of the present disclosure.
FIG. 2 is a schematic plan view of FIG. 1.
FIG. 3 is a schematic cross-sectional view taken along a line A-A in FIG. 2.
FIG. 4 is an enlarged view at B in FIG. 3.
FIG. 5 is an enlarged view at C in FIG. 3.
FIG. 6 is an enlarged view at D in FIG. 2.
FIG. 7 is a bottom view of FIG. 2.
FIG. 8 is a top view of FIG. 2.
FIG. 9 is a left side view of FIG. 2.
FIG. 10 is a rear view of FIG. 2.
FIG. 11 is a schematic structural view of a bottom plate and a connection base according to an embodiment of the present disclosure.
FIG. 12 is a schematic cross-sectional view taken along a line E-E in FIG. 11.
FIG. 13 is a schematic structural view of a first connection member according to an embodiment of the present disclosure.
FIG. 14 is a schematic structural view of a second connection member according to an embodiment of the present disclosure.
FIG. 15 is a schematic structural view of a third connection member according to an embodiment of the present disclosure.
FIG. 16 is a partial structural schematic view of a base assembly for a dryer according to another embodiment of the present disclosure.
FIG. 17 is a schematic cross-sectional view taken along a line F-F in FIG. 16.
FIG. 18 is a rear view of FIG. 16.

[0027] Reference Signs:

base assembly 100;
air duct shell 1; cavity 1a; sealing rib 1b; positioning groove 1c; first air duct shell 11; second air duct shell 12;
upper air duct shell 13; lower air duct shell 14;
connection base 2; channel 2a; sealing groove 2b; first protruding rib 22; second protruding rib 23; first positioning portion 24;
door body 25; handle 26; first snapping hook 27;
bottom plate 3; second positioning portion 31; first snapping hole 32; second snapping hole 33;
fixing flange 34; first fixing hole 341; second fixing hole 35;
support member 4; first snapping hole 41; first through hole 42; second through hole 43;
connection member 5;
first connection member 6; first abutting section 61; second snapping hole 611; first vertical section 62; first snapping portion 621; second vertical section 63; first connection hole 631;

second connection member 7; second abutting section 71; second snapping hook 711; third vertical section 72; second snapping portion 721; second connection hole 722;
third connection member 8; third abutting section 81; third snapping hook 811; fourth vertical section 82; third connection hole 821;
liquid drainage separator 9; liquid drainage channel 91;
evaporator 200;
condenser 300.

DESCRIPTION OF EMBODIMENTS

[0028] The embodiments of the present disclosure are described in detail below, examples of which are illustrated in the accompanying drawings, where the same or similar reference numerals refer to the same or similar elements or elements having the same or similar functions throughout. The embodiments described below with reference to the accompanying drawings are exemplary and are only used to explain the present disclosure, rather than being as a limitation on the present disclosure.

[0029] The following disclosure provides many different embodiments or examples for implementing different structures of the present disclosure. In order to simplify the present disclosure, components and arrangements of specific examples are described below. Of course, they are merely examples and are not intended to limit the present disclosure. Furthermore, the present disclosure may repeat reference signs and/or letters in different examples. This repetition is for the purpose of simplicity and clarity and does not in itself indicate a relationship between the various embodiments and/or arrangements as discussed. In addition, the present disclosure provides examples of various specific processes and materials. However, those of ordinary skill in the art will recognize applicability of other processes and/or the use of other materials.

[0030] A base assembly 100 for a dryer according to an embodiment of the present disclosure is described below with reference to the accompanying drawings. For example, the dryer may be a heat pump dryer.

[0031] Referring to FIGS. 1 and 2, the base assembly 100 for the dryer according to an embodiment of the present disclosure may include an air duct shell 1, a connection base 2, a bottom plate 3, a support member 4 and at least one connection member 5.

[0032] Referring to FIGS. 3 and 4, the air duct shell 1 has a cavity 1a where a heat exchanger is mounted. For example, the heat exchanger may be an evaporator 200 and a condenser 300. The connection base 2 has a channel 2a in communication with the cavity 1a, and is detachably disposed at a side of the air duct shell 1.

[0033] For example, in some examples, the connection base 2 may be connected to the air duct shell 1 by a snapping-connection or a threaded fastener. In order to improve a sealing performance between the connection base 2 and the air duct shell 1, a sealing ring may also be disposed between the connection base 2 and the air duct shell 1. When the connection base 2 is mounted at the side of the air duct shell 1 by the snapping-connection or the threaded fastener, the sealing ring is in a sealing-fit with the connection base 2 and the air duct shell 1 at two axial sides thereof, respectively, to seal a connection between the connection base 2 and the air duct shell 1.

[0034] It should be understood that by detachably arranging the connection base 2 at the side of the air duct shell 1, the air duct shell 1 and the connection base 2 can be designed separately, which is beneficial to reduce difficulty of mold design and production requirements. Further, since the air duct shell 1 and the connection base 2 are separated components, the air duct shell 1 can be made of a different material from the connection base 2, which facilitates application of a new material and reduction of material cost.

[0035] According to the base assembly for the dryer according to the embodiment of the present disclosure, by detachably arranging the connection base 2 at the side of the air duct shell 1, the air duct shell 1 and the connection base 2 can be designed separately, which is beneficial to reduce the difficulty of the mold design and the production requirements. Since the air duct shell 1 and the connection base 2 are separated components, the air duct shell 1 can be made the different material from the connection base 2, which facilitates the application of the new material and the reduction of the material cost.

[0036] In some embodiments of the present disclosure, as shown in FIG. 3, one of the connection base 2 and the air duct shell 1 has a sealing groove 2b, and the other has a sealing rib 1b. Here, the connection base 2 may have the sealing rib 1b, and the air duct shell 1 may have the sealing groove 2b in a sealing-fit with the sealing rib 1b. Alternatively, as shown in FIGS. 4 and 5, the connection base 2 has the sealing groove 2b, and the air duct shell 1 has the sealing rib 1b in a sealing-fit with the sealing groove 2b. The sealing groove 2b is engaged with the sealing rib 1b to seal a connection between the air duct shell 1 and the connection base 2.

[0037] Therefore, by forming the sealing groove 2b on one of the connection base 2 and the air duct shell 1 and forming the sealing rib 1b on the other of the connection base 2 and the air duct shell 1, the sealing groove 2b can be engaged with the sealing rib 1b to seal the connection between the air duct shell 1 and the connection base 2. Thus, the connection between the air duct shell 1 and the connection base 2 has a good sealing performance, which is beneficial to ensure drying efficiency of the dryer. In addition, when assembling the air duct shell 1 and the connection base 2, the sealing groove 2b is engaged with the sealing rib 1b to realize a pre-positioning between the air duct shell 1 and the connection base 2, which facilitates a fixing between the air duct shell 1 and the connection base 2 and improving an assembling efficiency of the base assembly 100.

[0038] In some embodiments of the present disclosure, as shown in FIGS. 4 and 5, the air duct shell 1 has an air duct opening defined on a side thereof opposite to the connection base 2, and the connection base 2 has a channel opening defined on a side thereof opposite to the air duct shell 1. Here, the air duct opening is in communication with the cavity 1a, and the channel opening is in communication with the channel 2a. One of the sealing groove 2b and the sealing rib 1b extends in a circumferential direction of the air duct opening, and the other of the sealing groove 2b and the sealing rib 1b extends in a circumferential direction of the channel opening.

[0039] For example, the air duct shell 1 has a sealing groove 2b extending into a ring shape in the circumferential direction of the air duct opening. The connection base 2 has a sealing rib 1b extending into a ring shape in the circumferential direction of the channel opening. In some embodiments, as shown in FIGS. 4 and 5, the air duct shell 1 has a sealing rib 1b extending into a ring shape in the circumferential direction of the air duct opening. The connection base 2 has a sealing groove 2b extending into a ring shape in the circumferential direction of the channel opening.

[0040] Therefore, since one of the sealing groove 2b and the sealing rib 1b extends in the circumferential direction of the air duct opening, and the other of the sealing groove 2b and the sealing rib 1b extends in the circumferential direction of the channel opening, it is beneficial to further improve a sealing effect between the groove 2b and the sealing rib 1b, thereby preventing air from leaking at the connection between the air duct shell 1 and the connection base 2 and improving the drying efficiency of the dryer.

[0041] In some embodiments of the present disclosure, as shown in FIGS. 4 and 5, one of the connection base 2 and the air duct shell 1 has a first protruding rib 22 and a second protruding rib 23. The first protruding rib 22 and the second protruding rib 23 are spaced apart from each other in an arrangement direction (e.g., a front-rear direction as shown in FIG. 1) of the air duct shell 1 and the connection base 2. The sealing groove 2b is located between the first protruding rib 22 and the second protruding rib 23. It should be understood that the sealing rib 1b is partially engaged with the first protruding rib 22 or the second protruding rib 23 to further improve reliability of the pre-positioning-fit between the air duct shell 1 and the connection base 2 through the engagement between the sealing rib 1b and the first protruding rib 22 or the second protruding rib 23, which is beneficial to further reduce difficulty of assembling between the connection base 2 and the air duct shell 1.

[0042] For example, as shown in FIG. 3, the connection base 2 has an annular first protruding rib 22 and an annular second protruding rib 23 on an outer peripheral wall thereof. The first protruding rib 22 and the second protruding rib 23 are spaced apart from each other in the front-rear direction. The sealing groove 2b is disposed on the outer peripheral wall of the connection base 2, and is located between the first protruding rib 22 and the second protruding rib 23. The air duct shell 1 has an annular sealing rib 1b on an inner peripheral wall thereof. Front and rear side walls of the sealing rib 1b are adapted to abut with the first protruding rib 22 and the second protruding rib 23, respectively.

[0043] In some embodiments of the present disclosure, as shown in FIGS. 4 and 5, the other of the connection base 2 and the air duct shell 1 has a positioning groove 1c close to the sealing rib 1b, and one of the first protruding rib 22 and the second protruding rib 23 is inserted into the positioning groove 1c. For example, as shown in FIG. 4, the air duct shell 1a has a positioning groove 1c defined on the inner peripheral wall thereof and close to the sealing rib 1b, and the first protruding rib 22 is inserted into the positioning groove 1c.

[0044] It should be understood that, by forming the positioning groove 1c to be adapted to be inserted into one of the first protruding rib 22 and the second protruding rib 23, on the one hand, it is beneficial to increase a sealing area between the connection base 2 and the air duct shell 1, and improve the sealing effect between the connection base 2 and the air duct shell 1. On the other hand, it is beneficial to further improve the reliability of the pre-positioning-fit between the air duct shell 1 and the connection base 2, thereby further reducing the assembly difficulty between the connection base 2 and the air duct shell 1.

[0045] In some embodiments of the present disclosure, as shown in FIGS. 3 to 5, the sealing groove 2b is located on an outer wall surface of the connection base 2, and the sealing rib 1b is located on an inner wall surface of the air duct shell 1. It should be understood that, since the sealing groove 2b is located on the outer wall surface of the connection base 2, and the sealing rib 1b is located on the inner wall surface of the air duct shell 1, when the sealing rib 1b is engaged with the sealing groove 2b, the connection base 2 and the air duct shell 1 can be positioned in the circumferential direction, and can be also positioned in the arrangement direction of the air duct shell 1 and the connection base 2. Such a positioning is more reliable with simple structure, and thus processing difficulty and cost are low.

[0046] In some embodiments of the present disclosure, as shown in FIGS. 7 and 8, the base assembly 100 further includes a bottom plate 3. The connection base 2 and the air duct shell 1 are detachably disposed on the bottom plate 3, respectively. It should be understood that, in the related art, the connection base, the air duct shell and the bottom plate may be integrally formed into one piece, so that the base assembly has a relatively larger overall weight, relatively complicated process structure, as well as inconvenient disassembly, assembly and maintenance. In this disclosure, since the bottom plate 3, the connection base 2 and the air duct shell 1 each have modular designs, the bottom plate 3, the connection base 2 and the air duct shell 1 all have independently molded structures, a molding process of the base as-

sembly 100 can be simplified. These three structures can be replaced separately when repaired and mounted, and can be made of different materials, which is beneficial to reduce the weight of the base assembly 100.

[0047] In some embodiments of the present disclosure, as shown in FIG. 10, the connection base 2 has a first positioning portion 24 provided on a bottom thereof, and the bottom plate 3 has a second positioning portion 31 provided thereon. The first positioning portion 24 is snapped with the second positioning portion 31 to position the connection base 2. For example, as shown in FIGS. 11 and 12, the first positioning portion 24 is formed as a positioning post, and the second positioning portion 31 is formed as a positioning hole. Therefore, a snapping-connection between the connection base 2 and the bottom plate 3 can be realized, in which the structure is simple, and the connection is convenient.

[0048] In some embodiments, as shown in FIG. 12, the connection base 2 has a plurality of first positioning portions 24 provided on the bottom thereof, and the bottom plate 3 has a plurality of second positioning portions 31 provided thereon. The plurality of first positioning portions 24 is snapped with the plurality of first positioning portions 24 in a one-to-one correspondence to position the connection base 2.

[0049] In some embodiments of the present disclosure, as shown in FIG. 1, the bottom plate 3 has a fixing flange 34 provided on an edge thereof and bent upwardly. A side of the connection base 2 is connected to the fixing flange 34 by a fastener. For example, as shown in FIG. 1, two fixing flanges 34 are provided and located at left and right ends of the bottom plate 3, respectively. Each of the two fixing flanges 34 has a first fixing hole 341 defined thereon. The connection base 2 has sides connected to the two fixing flanges 34 by fasteners, respectively, and abutting with the two fixing flanges 34. Therefore, the structure is simple, which is beneficial to enhance the reliability of the connection between the bottom plate 3 and the connection base 2.

[0050] In some embodiments, as shown in FIG. 10, the bottom plate 3 also has a second fixing hole 35 defined thereon, and the fastener passes through the second fixing hole 35 to be connected to the bottom of the connection base 2. Therefore, it is beneficial to further improve the reliability of the connection between the bottom plate 3 and the connection base 2.

[0051] In some embodiments of the present disclosure, as shown in FIG. 8, the base assembly 100 also includes a support member 4 having one end connected to the connection base 2 and another end connected to the bottom plate 3. For example, the support member 4 may be formed into an elongated strip, and the base has a first snapping hook 27 dispose thereon. The support member 4 has a first snapping hole 41 defined at one end thereof and engaged with the first snapping hook 27. Further, the support member 4 also has a first through hole 42 defined on one end thereof. A threaded fastener passes through the first through hole 42 to fix the one end of the support member 4 to a base. The support member 4 has a second through hole 43 defined at the other end thereof. A threaded fastener passes through the second through hole 43 to fix the other end of the support member 4 on the bottom plate 3.

[0052] In this way, it is beneficial to prevent the connection base 2 from being inclined relative to the bottom plate 3 in a subsequent installation, which is beneficial to further improve the reliability of the connection between the connection base 2 and the bottom plate 3. In some embodiments, two support members 4 may be provided and located on the left and right sides of the connection base 2, respectively.

[0053] In some examples, as shown in FIG. 1, the connection base 2 has an access opening, and a door body 25 that can be opened and closed is disposed at the access opening, The door body 25 has a handle 26 to facilitate opening and closing the door body 25 by a user.

[0054] In some embodiments, as shown in FIG. 1, the bottom plate 3 is a metal piece, and the connection base 2 is configured as a plastic piece formed separately from the bottom plate 3. For example, the bottom plate 3 may be an iron plate or a stainless-steel plate. Therefore, on the one hand, since the bottom plate 3 is the metal piece, it is beneficial to ensure a structural strength of the base assembly 100. On the other hand, since the connection base 2 is configured as the plastic piece formed separately from the bottom plate 3, it is beneficial to reduce the overall weight of the base assembly 100.

[0055] In some embodiments of the present disclosure, as shown in FIG. 1, the air duct shell 1 is fixedly mounted on the bottom plate 3 by at least one connection member 5. Therefore, the structure is simple, which is beneficial to reduce the difficulty of assembling and improve the assembling efficiency.

[0056] In some embodiments of the present disclosure, as shown in FIG. 1, the at least one connection member 5 is detachably connected to the bottom plate 3 at both ends thereof, respectively, and at least a part of the air duct shell 1 is located between a middle part of the at least one connection member 5 and the bottom plate 3. Therefore, while reducing the difficulty of assembling, it is beneficial to realize reliable fixing of the air duct shell 1 and reduce the damage to the air duct shell 1. For example, as shown in FIG. 13, the at least one connection member 5 includes a first connection member 6. The first connection member 6 is detachably connected to the bottom plate 3 at both ends thereof, respectively, and at least a part of the air duct shell 1 is located between a middle of the first connection member 6 and the bottom plate 3.

[0057] In some embodiments, as shown in FIG. 1, the at least one connection member 5 matches with an outer contour of the air duct shell 1. Therefore, it is beneficial to increase the engagement area between the at least one connection member 5 and the air duct shell 1, thereby further realizing the reliable fixing of the air duct shell 1.

[0058] In some embodiments of the present disclo-

sure, as shown in FIG. 1, the air duct shell 1 is configured as a thermal insulation member formed separately from the bottom plate 3. For example, the air duct shell 1 may be a foamed piece such as a foamed plastic and a foamed rubber. Therefore, it is beneficial to improve a thermal insulation effect of the air duct shell 1 whiling reducing the weight of the air duct shell 1.

[0059] In some embodiments of the present disclosure, as shown in FIGS. 1 and 13, the at least one connection member 5 includes a first abutting section 61, a first vertical section 62 and a second vertical section 63. The first abutting section 61 is located above the bottom plate 3 and spaced apart from the bottom plate 3. Each of the first vertical section 62 and the second vertical section 63 has one end connected to the bottom plate 3, respectively, and another end connected to both ends of the first abutting section 61, respectively.

[0060] Here, the first abutting section 61 is engaged with a top wall of the air duct shell 1, and the first vertical section 62 and/or the second vertical section 63 is engaged with a side wall of the air duct shell 1. In other words, one of the first vertical section 62 and the second vertical section 63 may be engaged with a side wall of the air duct shell 1, or the first vertical section 62 and the second vertical section 63 may be engaged with opposite side walls of the air duct shell 1, respectively. Therefore, it is beneficial to increase an engagement area between the at least one connection member 5 and the air duct shell 1, and further realize the reliable fixing of the air duct shell 1. In addition, the at least one connection member 5 has a simple structure and low cost.

[0061] In some embodiments of the present disclosure, as shown in FIG. 13, the at least one connection member 5 has one end snapped with the bottom plate 3 and another end connected to the bottom plate 3 by a threaded fastener. It should be understood that, when the air duct shell 1 is fixed on the bottom plate 3 by the at least one connection member 5, the one end of the at least one connection member 5 can be snapped with the bottom plate 3 first, and then the other end of the at least one connection member 5 can be connected to the bottom plate 3 by the threaded fastener. Thus, the connection is convenient and the assembly effect is high, thereby improving the reliability of fixing of the air duct shell 1.

[0062] In some embodiments of the present disclosure, as shown in FIG. 1, the at least one connection member 5 includes a plurality of connection members arranged at intervals in a length direction of the air duct shell 1. For example, two connection members 5 are provided and spaced apart from each other in the length direction of the air duct shell 1. Therefore, it is beneficial to further realize the reliable fixing of the air duct shell 1.

[0063] In some embodiments of the present disclosure, as shown in FIG. 1, the at least one connection member 5 includes a first connection member 6 having two ends detachably connected to the bottom plate 3, respectively. At least a part of the air duct shell 1 is located between a middle part of the first connection member 6 and the bottom plate 3. Therefore, while reducing the difficulty of assembling, it is beneficial to realize the reliable fixing of the air duct shell 1 and reduce the damage to the air duct shell 1. For example, a plurality of first connection members 6 may be provided and arranged at intervals in the length direction of the first air duct shell 11.

[0064] Further, as shown in FIG. 13, the first connection member 6 includes a first abutting section 61, a first vertical section 62 and a second vertical section 63. The first abutting section 61 is located above the bottom plate 3 and space apart from the bottom plate 3. Each of the first vertical section 62 and the second vertical section 63 has one end connected to the bottom plate 3, respectively, and another end connected to both ends of the first abutting section 61, respectively.

[0065] The first abutting section 61 is engaged with the top wall of the air duct shell 1, and the first vertical section 62 and/or the second vertical section 63 are/is engaged with the side wall of the air duct shell 1. In other words, one of the first vertical section 62 and the second vertical section 63 may be engaged with one side wall of the air duct shell 1, or the first vertical section 62 and the second vertical section 63 may be engaged with the opposite side walls of the air duct shell 1, respectively. Therefore, it is beneficial to increase an engagement area of the connection member 5 and the air duct shell 1, and further realize the reliable fixing of the air duct shell 1. In addition, the first connection member 6 has a simple structure and low cost.

[0066] In some embodiments of the present disclosure, as shown in FIG. 13, the first connection member 6 has one end snapped with the bottom plate 3, and another end connected to the bottom plate 3 by a threaded fastener. For example, the first vertical section 62 has a first snapping portion 621 on a free end thereof, and the bottom plate 3 has a first snapping hole 32 (refer to FIG. 10) engaged with the first snapping portion 621. The second vertical section 63 has a first connection hole 631 defined thereon. The first connection hole 631 is adapted for a threaded fastener to pass therethrough. It should be understood that, when the air duct shell 1 is fixed on the bottom plate 3 by the at least one connection member 5, the one end of the at least one connection member 5 can be snapped with the bottom plate 3 first, and then the other end of the at least one connection member 5 can be connected to the bottom plate 3 by the threaded fastener. Thus, the connection is convenient, and the assembly effect is high, thereby improving the reliability of fixing of the air duct shell 1.

[0067] In some embodiments of the present disclosure, as shown in FIG. 1, a plurality of first connection members 6 is provided and arranged at intervals in the length direction of the air duct shell 1. Therefore, it is beneficial to further realize the reliable fixing of the air duct shell 1.

[0068] In some embodiments of the present disclosure, as shown in FIG. 1, the air duct shell 1 includes a

first air duct shell 11 and a second air duct shell 12 in communication with the first air duct shell 11. Here, the first air duct shell 11 is at least partially fixed on the bottom plate 3 by the first connection member 6. The at least one connection member 5 also includes a second connection member 7. The second connection member 7 has one end connected to the first connection member 6, and another end detachably connected to the bottom plate 3. The second air duct shell 12 is at least partially fixed on the bottom plate 3 by the second connection member 7.

[0069] Therefore, fixing of the first air duct shell 11 can be realized by the first connection member 6, and fixing of the second air duct shell 12 can be realized by the second connection member 7. As a result, it is beneficial to further improve the effect of fixing of the air duct shell 1. Meanwhile, the second connection member 7 is connected to the first connection member 6 at one end thereof and is detachably connected to the bottom plate 3 at the other end thereof, the second air duct shell 12 is at least partially fixed to the bottom plate 3 by the second connection member 7. Thus, it is beneficial to simplify a structure of the second connection member 7, thereby easily realizing the fixing of the second connection member 7.

[0070] Further, as shown in FIG. 14, the second connection member 7 includes a second abutting section 71 and a third vertical section 72. The second abutting section 71 is located above the bottom plate 3 and spaced apart from the bottom plate 3. The third vertical section 71 has one end connected to the bottom plate 3, and another end connected to the second abutting section 71. The second abutting section 71 is engaged with a top wall of the second air duct shell 12, and the third vertical section 72 is engaged with a side wall of the second air duct shell 12.

[0071] Therefore, it is beneficial to increase an engagement area between the second connection member 7 and the second air duct shell 12, and further realize the reliable fixing of the air duct shell 1. Thus, the second connection member 7 has simple structure and lower cost.

[0072] In some embodiments of the present disclosure, as shown in FIGS. 1 and 6, the second connection member 7 has one end snapped to the first connection member 6, and another end detachably connected to the bottom plate 3. For example, as shown in FIG. 6, the second connection member 7 has a second snapping hook 711 at the one end thereof, and the first connection member 6 has a second snapping hole 611 defined thereon and adapted to be engaged with the second snapping hook 711. The second connection member 7 has another end connected to the bottom plate 3 through a snapping-connection or a threaded fastener. Therefore, the structure is simple, and the assembly and disassembly of the second connection member 7 are facilitated. Thus, the fixing of the second connection member 7 to the second air duct shell 12 is reliable.

[0073] In some embodiments, as shown in FIG. 14, the third vertical section 72 has a second snapping portion 721 provided at a free end thereof, and the bottom plate 3 has a second snapping hole 33 defined thereon and engaged with the second snapping portion 721 (as shown in FIG. 9). The third vertical section 72 of the second connection member 7 also has a second connection hole 722 defined thereon. A threaded fastener passes through the second connection hole 722 to be connected to a casing of the dryer to fix the third vertical section 72 to the casing of the dryer. Thus, it is beneficial to further improve fixing effect of the second air duct shell 12 by the second connection member 7.

[0074] In some embodiments of the present disclosure, as shown in FIGS. 1 and 15, the at least one connection member 5 also includes a third connection member 8 spaced apart from the second connection member 7 in a length direction of the second air duct shell 12. The third connection member 8 has one end detachably connected to the bottom plate 3, and another end connected to an external structure. For example, the external structure may be the casing of the dryer. The third connection member 8 has a third connection hole 821 defined at one end thereof, and a threaded fastener passes through the third connection hole 821 to fix the one end of the third connection member 8 to the bottom plate 3. Further, the third connection member 8 has another end detachably connected to the casing of the dryer.

[0075] Therefore, by arranging the second connection member 7 and the third connection member 8, the second air duct shell 12 has good fixing effect, which ensures a reliable operation of the air duct shell 1.

[0076] In some embodiments of the present disclosure, as shown in FIG. 15, the third connection member 8 includes a third abutting section 81 and a fourth vertical section 82. The third abutting section 81 is located above the bottom plate 3 and spaced apart from the bottom plate 3. The fourth vertical section 82 has one end connected to the bottom plate 3, and another end connected to the third abutting section 81. The third abutting section 81 is engaged with the top wall of the second air duct shell 12, and the fourth vertical section 82 is engaged with the side wall of the second air duct shell 12. For example, the third abutting section 81 has a third snapping hook 811 at a free end thereof and adapted to be engaged with the casing of the dryer. Therefore, it is beneficial to increase an engagement area of the third connection member 8 and the second air duct shell 12, which further realizes the reliable fixing of the air duct shell 1. In addition, the third connection member 8 has simple structure, low cost, and reliable connection.

[0077] In some embodiments of the present disclosure, as shown in FIG. 1, the length direction of the first air duct shell 11 is perpendicular to the length direction of the second air duct shell 12. For example, the first air duct shell 11 and the second air duct shell 12 are arranged in the front-rear direction, and the first air duct shell 11 is perpendicular to the second air duct shell 12.

Therefore, it is beneficial to reduce an overall space occupation of the first air duct shell 11 and the second air duct shell 12, thereby facilitating reduction of the space occupation of the air duct shell 1.

[0078] In some examples, as shown in FIG. 3, a liquid drainage separator 9 is disposed in the first air duct shell 11. The liquid drainage separator 9 has a liquid guide groove with an inlet and an outlet located at two ends in a length direction (the front-rear direction as shown in FIG. 1) thereof. The liquid drainage separator 9 also has a liquid distribution groove located on at least one side in a width direction (a left-right direction as shown in FIG. 1) thereof. The liquid distribution groove is in communication with the liquid guide groove through a liquid passage opening. A liquid drainage channel 91 for a condensate is defined by the liquid guide groove, the liquid distribution groove, and an inner bottom wall of the cavity 1a. Therefore, when a negative pressure is generated in an air duct, the condensate flowing back at the outlet of the liquid guide groove can flow to the liquid guide groove and the liquid distribution groove respectively. In this way, on the one hand, a liquid distribution can be provided to reduce hydraulic pressure, and on the other hand, it is possible to increase a backflow path of the condensate, which is beneficial to prevent the condensate from flowing back into the air duct, thereby improving drying efficiency.

[0079] In some examples, referring to FIG. 1, the air duct shell 1 includes an upper air duct shell 13 and a lower air duct shell 14 that are connected to each other. The cavity 1a of the air duct shell 1 is defined by the upper air duct shell 13 and the lower air duct shell 14. A part of the sealing rib 1b is formed on an inner peripheral wall of the upper air duct shell 13, and the remaining part of the sealing rib 1b is formed on the lower air duct shell 14. The sealing rib 1b is defined by the upper air duct shell 13 and the lower air duct shell 14 together. When assembling the base assembly 100, the connection base 2 may be mounted on the bottom plate 3 first, then the lower air duct shell 14 is brought into the sealing-fit with the connection base 2, and then the upper air duct shell 13 is brought into the sealing-fit with the connection base 2, to achieve the pre-positioning of the air duct shell 1. Then, the two ends of the support member 4 are fixed to the connection base 2 and the air duct shell 1, respectively, to realize the fixing connection between the connection base 2 and the air duct shell 1, and prevent the connecting seat 2 from being inclined relative to the air duct shell 1 before supporting other components in the subsequent installation. Finally, the first connection member 6, the second connection member 7 and the third connection member 8 are mounted, respectively, to fix the air duct shell 1 on the bottom plate 3. Thus, the assembly of the base assembly 100 is completed. As a result, the base assembly 100 is simply assembled, and has good sealing performance and light weight.

[0080] In other embodiments of the present disclosure, as shown in FIG. 16, at least one connection member 5 is a threaded fastener, by which the air duct shell 1 and the bottom plate 3 are connected to each other. For example, as shown in FIGS. 17 and 18, the at least one connection member 5 includes a plurality of connection members 5, each of which is a threaded fastener. The air duct shell 1 and the bottom plate 3 are connected to each other by the plurality of threaded fasteners. Therefore, the connection between the air duct shell 1 and the bottom plate 3 can be made reliable, and the cost is low.

[0081] In some embodiments, as shown in FIGS. 17 and 18, the air duct shell 1 includes an upper air duct shell 13 and a lower air duct shell 14 that are connected to each other. The cavity 1a of the air duct shell 1 is defined by the upper air duct shell 13 and the lower air duct shell 14 together. Each of the plurality of connection members 5 is a screw. When the air duct shell 1 is mounted on the bottom plate 3, the lower air duct shell 14 may be placed on the bottom plate 3 first, and then the plurality of screws passes through the lower air duct shell 14 and the bottom plate 3 from top to bottom, respectively, to fix the lower air duct shell 14 on the bottom plate 3. Finally, the upper air duct shell 13 is mounted on the lower air duct shell 14.

[0082] A dryer according to an embodiment of the present disclosure includes the base assembly 100 for the dryer according to the above embodiments of the present disclosure.

[0083] In the dryer according to the embodiments of the present disclosure, by arranging the base assembly 100 for the dryer according to the embodiments of the present disclosure as described above, the air duct shell 1 and the connection base 2 can be designed separately, which is beneficial to reduce the difficulty of mold design and production requirements. Further, since the air duct shell and connection base are separated components, the air duct shell can be made the different material from the connection base, which facilitates an application of a new material and reduction of material cost.

[0084] Other structures and operations of the dryer according to the embodiments of the present disclosure are known to those of ordinary skill in the art, and will not be described in detail herein.

[0085] In the specification, it is to be understood that terms such as "central," "length," "width," "thickness," "upper," "lower," "front," "rear," "left," "right," "vertical," "horizontal," "top," "bottom," "inner," "outer," "axial," "radial," "circumferential," and the like should be construed to refer to the orientation or direction as shown in the drawings, which are merely for the convenience of description and simplifying the description, rather than indicating or implying that the associated apparatuses or elements must have a specific orientation, and be constructed and operate in a specific orientation, and therefore should not be construed as a limitation on the present disclosure..

[0086] In addition, terms such as "first" and "second" are used herein for purposes of description and are not intended to indicate or imply relative importance or sig-

nificance or to imply the number of indicated technical features. Thus, the feature associated with "first" and "second" may indicate or imply that one or more of these features are included. In the description of the present disclosure, "a plurality of" means two or more than two, unless specified otherwise.

[0087] In the present disclosure, unless specified or limited otherwise, the terms "mounted," "connected," "coupled," "fixed" and the like should be understood broadly, and may be, for example, fixed connections, detachable connections, or integral connections; it may also be a mechanical connection or an electrical connection or a communication with each other; it may also be a direct connection or an indirect connection through an intermediating structure; it may also be an inner communication of two elements or an interaction relationship between the two elements. For those of ordinary skill in the art, the specific meanings of the above terms in the present disclosure can be understood according to specific situations.

[0088] Reference throughout this specification to "an embodiment," "some embodiments," "an example," "specific examples" or "some examples" means that a particular feature, structure, material, or characteristic described in connection with the embodiment or example is included in at least one embodiment or example of the present disclosure. Thus, the appearances of the above phrases throughout this specification are not necessarily referring to the same embodiment or example of the present disclosure. Furthermore, the particular features, structures, materials, or characteristics as described may be combined in one or more embodiments or examples in any suitable manner. Furthermore, those skilled in the art may combine the different embodiments or examples described in this specification, as well as the features of the different embodiments or examples with each other without conflicting each other.

Claims

1. A base assembly (100) for a dryer, the base assembly comprising: an air duct shell (1) having a cavity (1a), wherein the cavity (1a) is suitable for accommodating a heat exchanger; and a connection base (2) having a channel (2a) in communication with the cavity (1a), the connection base (2) being detachably disposed at a side of the air duct shell (1),

   characterised in that one of the connection base (2) and the air duct shell (1) has a sealing groove (2b), and the other of the connection base (2) and the air duct shell (1) has a sealing rib (1b) engaged in the sealing groove (2b) to seal a connection between the air duct shell (1) and the connection base (2);
   wherein the one of the connection base (2) and the air duct shell (1) has a first protruding rib (22) and a second protruding rib (23) that are spaced apart from each other in an arrangement direction of the air duct shell (1) and the connection base (2); and the sealing groove (2b) is located between the first protruding rib (22) and the second protruding rib (23); and
   wherein the other of the connection base (2) and the air duct shell (1) has a positioning groove (1c) close to the sealing rib (1b); and one of the first protruding rib (22) and the second protruding rib (23) is inserted into the positioning groove (1c).

2. The base assembly (100) for the dryer according to claim 1, wherein: the air duct shell (1) has an air duct opening defined on a side thereof opposite to the connection base (2) and in communication with the cavity (1a); the connection base (2) has a channel opening defined on a side thereof opposite to the air duct shell (1) and in communication with the channel (2a); and one of the sealing groove (2b) and the sealing rib (1b) extends in a circumferential direction of the air duct opening, and the other of the sealing groove (2b) and the sealing rib (1b) extends in a circumferential direction of the channel opening.

3. The base assembly (100) for the dryer according to claim 1, wherein: the sealing groove (2b) is located on an outer wall surface of the connection base (2); and the sealing rib (1b) is located on an inner wall surface of the air duct shell (1).

4. The base assembly (100) for the dryer according to any one of claims 1 to 3, further comprising a bottom plate (3), wherein the connection base (2) and the air duct shell (1) are detachably disposed on the bottom plate (3), respectively.

5. The base assembly (100) for the dryer according to claim 4, wherein: the connection base (2) has a first positioning portion (24) provided on a bottom thereof; and the bottom plate (3) has a second positioning portion (31) provided thereon, the first positioning portion (24) being snapped with the second positioning portion (31) to position the connection base (2).

6. The base assembly (100) for the dryer according to claim 4, wherein: the bottom plate (3) has a fixing flange (34) provided on an edge thereof and bent upwardly; and a side of the connection base (2) is connected to the fixing flange (34) by a fastener.

7. The base assembly (100) for the dryer according to claim 4, wherein:

   the base assembly (100) further comprises a support member (4) having one end connected to the connection base (2) and another end con-

nected to the bottom plate (3); or
the bottom plate (3) is a metal piece, and the connection base (2) is configured as a plastic piece formed separately from the bottom plate (3).

8. The base assembly (100) for the dryer according to any one of claims 4 to 7, wherein the air duct shell is fixedly mounted on the bottom plate (3) by at least one connection member (5).

9. The base assembly (100) for the dryer according to claim 8, wherein: the at least one connection member (5) has two ends detachably connected to the bottom plate (3), respectively; and at least a part of the air duct shell (1) is located between a middle part of the at least one connection member (5) and the bottom plate (3).

10. The base assembly (100) for the dryer according to claim 9, wherein:

the at least one connection member matches with an outer counter of the air duct shell (1); or the at least one connection member (5) comprises: a first abutting section (61) located above the bottom plate (3) and spaced apart from the bottom plate (3); a first vertical section; and a second vertical section, wherein: the bottom plate (3) is connected to one end of the first vertical section and one end of the second vertical section, respectively; the first abutting section (61) is connected to another end of the first vertical section and another end of the second vertical section, respectively; the first abutting section (61) is engaged with a top wall of the air duct shell (1); and the first vertical section and/or the second vertical section is engaged with a side wall of the air duct shell (1); or
the at least one connection member (5) has one end snapped with the bottom plate (3), and another end connected to the bottom plate (3) by a threaded fastener.

11. The base assembly (100) for the dryer according to any one of claims 8 to 10, wherein the at least one connection member (5) comprises a plurality of connection members arranged at intervals in a length direction of the air duct shell (1).

12. A dryer, comprising the base assembly (100) for the dryer according to any one of claims 1 to 11.

Patentansprüche

1. Sockelbaugruppe (100) für einen Trockner, die Folgendes umfasst: einen Luftkanalmantel (1) mit einem Hohlraum (1a), wobei sich der Hohlraum (1a) zum Unterbringen eines Wärmetauschers eignet, und einen Verbindungssockel (2) mit einem Durchgang (2a), der mit dem Hohlraum (1a) in Verbindung steht, wobei der Verbindungssockel (2) lösbar an einer Seite des Luftkanalmantels (1) angeordnet ist, **dadurch gekennzeichnet, dass** der Verbindungssockel (2) oder der Luftkanalmantel (1) eine Dichtungsnut (2b) und das jeweils andere Element von dem Verbindungssockel (2) und dem Luftkanalmantel (1) eine Dichtungsrippe (1b) aufweist, die in die Dichtungsnut (2b) eingreift und so eine Verbindung zwischen dem Luftkanalmantel (1) und dem Verbindungssockel (2) abdichtet,

wobei der Verbindungssockel (2) oder der Luftkanalmantel (1) eine erste vorstehende Rippe (22) und eine zweite vorstehende Rippe (23) aufweist, die in einer Anordnungsrichtung des Luftkanalmantels (1) und des Verbindungssockels (2) voneinander beabstandet sind, und sich die Dichtungsnut (2b) zwischen der ersten vorstehenden Rippe (22) und der zweiten vorstehenden Rippe (23) befindet, und
wobei das jeweils andere Element von dem Verbindungssockel (2) und dem Luftkanalmantel (1) eine Positioniernut (1c) in der Nähe der Dichtungsrippe (1b) aufweist und die erste vorstehende Rippe (22) oder die zweite vorstehende Rippe (23) in die Positioniernut (1c) eingeführt ist.

2. Sockelbaugruppe (100) für den Trockner nach Anspruch 1, wobei: an dem Luftkanalmantel (1) auf einer Seite, die dem Verbindungssockel (2) gegenüberliegt, eine Luftkanalöffnung definiert ist, die mit dem Hohlraum (1a) in Verbindung steht, an dem Verbindungssockel (2) auf einer Seite, die dem Luftkanalmantel (1) gegenüberliegt, eine Durchgangsöffnung definiert ist, die mit dem Durchgang (2a) in Verbindung steht, und sich die Dichtungsnut (2b) oder die Dichtungsrippe (1b) in Umfangsrichtung der Luftkanalöffnung und das jeweils andere Element von der Dichtungsnut (2b) und der Dichtungsrippe (1b) in Umfangsrichtung der Durchgangsöffnung erstreckt.

3. Sockelbaugruppe (100) für den Trockner nach Anspruch 1, wobei: sich die Dichtungsnut (2b) an einer Außenwandfläche des Verbindungssockels (2) und die Dichtungsrippe (1b) an einer Innenwandfläche des Luftkanalmantels (1) befindet.

4. Sockelbaugruppe (100) für den Trockner nach einem der Ansprüche 1 bis 3, die ferner eine Bodenplatte (3) umfasst, wobei der Verbindungssockel (2) und der Luftkanalmantel (1) jeweils lösbar an der Bodenplatte (3) angeordnet sind.

5. Sockelbaugruppe (100) für den Trockner nach Anspruch 4, wobei: an einem Boden des Verbindungssockels (2) ein erster Positionierabschnitt (24) und an der Bodenplatte (3) ein zweiter Positionierabschnitt (31) vorgesehen ist, wobei der erste Positionierabschnitt (24) zum Positionieren des Verbindungssockels (2) in den zweiten Positionierabschnitt (31) einschnappt.

6. Sockelbaugruppe (100) für den Trockner nach Anspruch 4, wobei: an einem Rand der Bodenplatte (3) ein Befestigungsflansch (34) vorgesehen ist, der nach oben gebogen ist, und eine Seite des Verbindungssockels (2) über ein Befestigungselement mit dem Befestigungsflansch (34) verbunden ist.

7. Sockelbaugruppe (100) für den Trockner nach Anspruch 4, wobei:
die Sockelbaugruppe (100) ferner ein Halteelement (4) umfasst, dessen eines Ende mit dem Verbindungssockel (2) und dessen anderes Ende mit der Bodenplatte (3) verbunden ist, oder es sich bei der Bodenplatte (3) um ein Metallteil handelt und der Verbindungssockel (2) als Kunststoffteil ausgelegt ist, das von der Bodenplatte (3) getrennt ausgebildet ist.

8. Sockelbaugruppe (100) für den Trockner nach einem der Ansprüche 4 bis 7, wobei der Luftkanalmantel über mindestens ein Verbindungselement (5) fest an der Bodenplatte (3) montiert ist.

9. Sockelbaugruppe (100) für den Trockner nach Anspruch 8, wobei: zwei Enden des mindestens einen Verbindungselements (5) jeweils lösbar mit der Bodenplatte (3) verbunden sind und sich zumindest ein Teil des Luftkanalmantels (1) zwischen einem Mittelteil des mindestens einen Verbindungselements (5) und der Bodenplatte (3) befindet.

10. Sockelbaugruppe (100) für den Trockner nach Anspruch 9, wobei:

das mindestens eine Verbindungselement zu einer äußeren Kontur des Luftkanalmantels (1) passt oder
das mindestens eine Verbindungselement (5) Folgendes umfasst: einen ersten anliegenden Teilabschnitt (61), der sich über der Bodenplatte (3) befindet und von der Bodenplatte (3) beabstandet ist, einen ersten und einen zweiten vertikalen Teilabschnitt, wobei: die Bodenplatte (3) jeweils mit einem Ende des ersten vertikalen Teilabschnitts und einem Ende des zweiten vertikalen Teilabschnitts verbunden ist, der erste anliegende Teilabschnitt (61) jeweils mit einem weiteren Ende des ersten vertikalen Teilabschnitts und einem weiteren Ende des zweiten vertikalen Teilabschnitts verbunden ist, der erste anliegende Teilabschnitt (61) in eine obere Wand des Luftkanalmantels (1) und der erste und/oder der zweite vertikale Teilabschnitt in eine Seitenwand des Luftkanalmantels (1) eingreift oder
ein Ende des mindestens einen Verbindungselements (5) in die Bodenplatte (3) einschnappt und das andere Ende über ein mit Gewinde versehenes Befestigungselement mit der Bodenplatte (3) verbunden ist.

11. Sockelbaugruppe (100) für den Trockner nach einem der Ansprüche 8 bis 10, wobei das mindestens eine Verbindungselement (5) mehrere Verbindungselemente umfasst, die in Abständen in Längsrichtung des Luftkanalmantels (1) angeordnet sind.

12. Trockner, der die Sockelbaugruppe (100) für den Trockner nach einem der Ansprüche 1 bis 11 umfasst.

Revendications

1. Ensemble formant base (100) pour un sèche-linge, l'ensemble formant base comportant : une coque de conduit d'air (1) ayant une cavité (1a), dans lequel la cavité (1a) est adaptée pour recevoir un échangeur de chaleur ; et une base de raccordement (2) ayant un canal (2a) en communication avec la cavité (1a), la base de raccordement (2) étant disposée de manière amovible au niveau d'un côté de la coque de conduit d'air (1),

caractérisé en ce que l'une parmi la base de raccordement (2) et la coque de conduit d'air (1) a une rainure d'étanchéité (2b), et l'autre parmi la base de raccordement (2) et la coque de conduit d'air (1) a une nervure d'étanchéité (1b) mise en prise dans la rainure d'étanchéité (2b) pour sceller un raccordement entre la coque de conduit d'air (1) et la base de raccordement (2) ; dans lequel l'une parmi la base de raccordement (2) et la coque de conduit d'air (1) a une première nervure faisant saillie (22) et une deuxième nervure faisant saillie (23) qui sont espacées l'une de l'autre dans une direction d'agencement de la coque de conduit d'air (1) et de la base de raccordement (2) ; et la rainure d'étanchéité (2b) est située entre la première nervure faisant saillie (22) et la deuxième nervure faisant saillie (23) ; et
dans lequel l'autre élément parmi la base de raccordement (2) et la coque de conduit d'air (1) a une rainure de positionnement (1c) proche de la nervure d'étanchéité (1b) ; et l'une parmi la première nervure faisant saillie (22) et la deuxiè-

me nervure faisant saillie (23) est insérée dans la rainure de positionnement (1c).

2. Ensemble formant base (100) pour le sèche-linge selon la revendication 1, dans lequel : la coque de conduit d'air (1) a une ouverture de conduit d'air délimitée sur un côté de celle-ci à l'opposé de la base de raccordement (2) et en communication avec la cavité (1a) ; la base de raccordement (2) a une ouverture de canal délimitée sur un côté de celle-ci à l'opposé de la coque de conduit d'air (1) et en communication avec le canal (2a) ; et l'une parmi la rainure d'étanchéité (2b) et la nervure d'étanchéité (1b) s'étend dans une direction circonférentielle de l'ouverture du conduit d'air, et l'autre parmi la rainure d'étanchéité (2b) et la nervure d'étanchéité (1b) s'étend dans une direction circonférentielle de l'ouverture du canal.

3. Ensemble formant base (100) pour le sèche-linge selon la revendication 1, dans lequel : la rainure d'étanchéité (2b) est située sur une surface de paroi extérieure de la base de raccordement (2) ; et la nervure d'étanchéité (1b) est située sur une surface de paroi intérieure de la coque de conduit d'air (1).

4. Ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 1 à 3, comportant par ailleurs une plaque inférieure (3), dans lequel la base de raccordement (2) et la coque de conduit d'air (1) sont disposées de manière amovible sur la plaque inférieure (3), respectivement.

5. Ensemble formant base (100) pour le sèche-linge selon la revendication 4, dans lequel : la base de raccordement (2) a une première partie de positionnement (24) mise en oeuvre sur une partie inférieure de celle-ci ; et la plaque inférieure (3) a une deuxième partie de positionnement (31) mise en oeuvre sur celle-ci, la première partie de positionnement (24) étant encliquetée avec la deuxième partie de positionnement (31) pour positionner la base de raccordement (2).

6. Ensemble formant base (100) pour le sèche-linge selon la revendication 4, dans lequel : la plaque inférieure (3) a une bride de fixation (34) mise en oeuvre sur un bord de celle-ci et recourbée vers le haut ; et un côté de la base de raccordement (2) est raccordé à la bride de fixation (34) par un élément de fixation.

7. Ensemble formant base (100) pour le sèche-linge selon la revendication 4, dans lequel :

l'ensemble formant base (100) comporte par ailleurs un élément de support (4) ayant une extrémité raccordée à la base de raccordement (2) et une autre extrémité raccordée à la plaque inférieure (3) ; ou
la plaque inférieure (3) est une pièce métallique et la base de raccordement (2) est configurée sous la forme d'une pièce en plastique formée séparément de la plaque inférieure (3).

8. Ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 4 à 7, dans lequel la coque de conduit d'air est montée de manière fixe sur la plaque inférieure (3) par au moins un élément de raccordement (5).

9. Ensemble formant base (100) pour le sèche-linge selon la revendication 8, dans lequel : ledit au moins un élément de raccordement (5) a deux extrémités raccordées de manière amovible à la plaque inférieure (3), respectivement ; et au moins une partie de la coque de conduit d'air (1) est située entre une partie intermédiaire dudit au moins un élément de raccordement (5) et la plaque inférieure (3).

10. Ensemble formant base (100) pour le sèche-linge selon la revendication 9, dans lequel :

ledit au moins un élément de raccordement correspond à un contour extérieur de la coque de conduit d'air (1) ; ou
ledit au moins un élément de raccordement (5) comporte : un premier segment de butée (61) situé au-dessus de la plaque inférieure (3) et espacé de la plaque inférieure (3) ; une première section verticale ; et une deuxième section verticale, dans lequel : la plaque inférieure (3) est raccordée à une extrémité de la première section verticale et à une extrémité de la deuxième section verticale, respectivement ; la première section de butée (61) est raccordée à une autre extrémité de la première section verticale et à une autre extrémité de la deuxième section verticale, respectivement ; la première section de butée (61) est mise en prise avec une paroi supérieure de la coque de conduit d'air (1) ; et la première section verticale et/ou la deuxième section verticale est mise en prise avec une paroi latérale de la coque de conduit d'air (1) ; ou
ledit au moins un élément de raccordement (5) a une extrémité encliquetée avec la plaque inférieure (3), et une autre extrémité raccordée à la plaque inférieure (3) par un élément de fixation fileté.

11. Ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 8 à 10, dans lequel ledit au moins un élément de raccordement (5) comporte une pluralité d'éléments de raccordement agencés selon des intervalles dans une direction allant dans le sens de la longueur de la

coque de conduit d'air (1).

12. Sèche-linge, comportant l'ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 1 à 11.

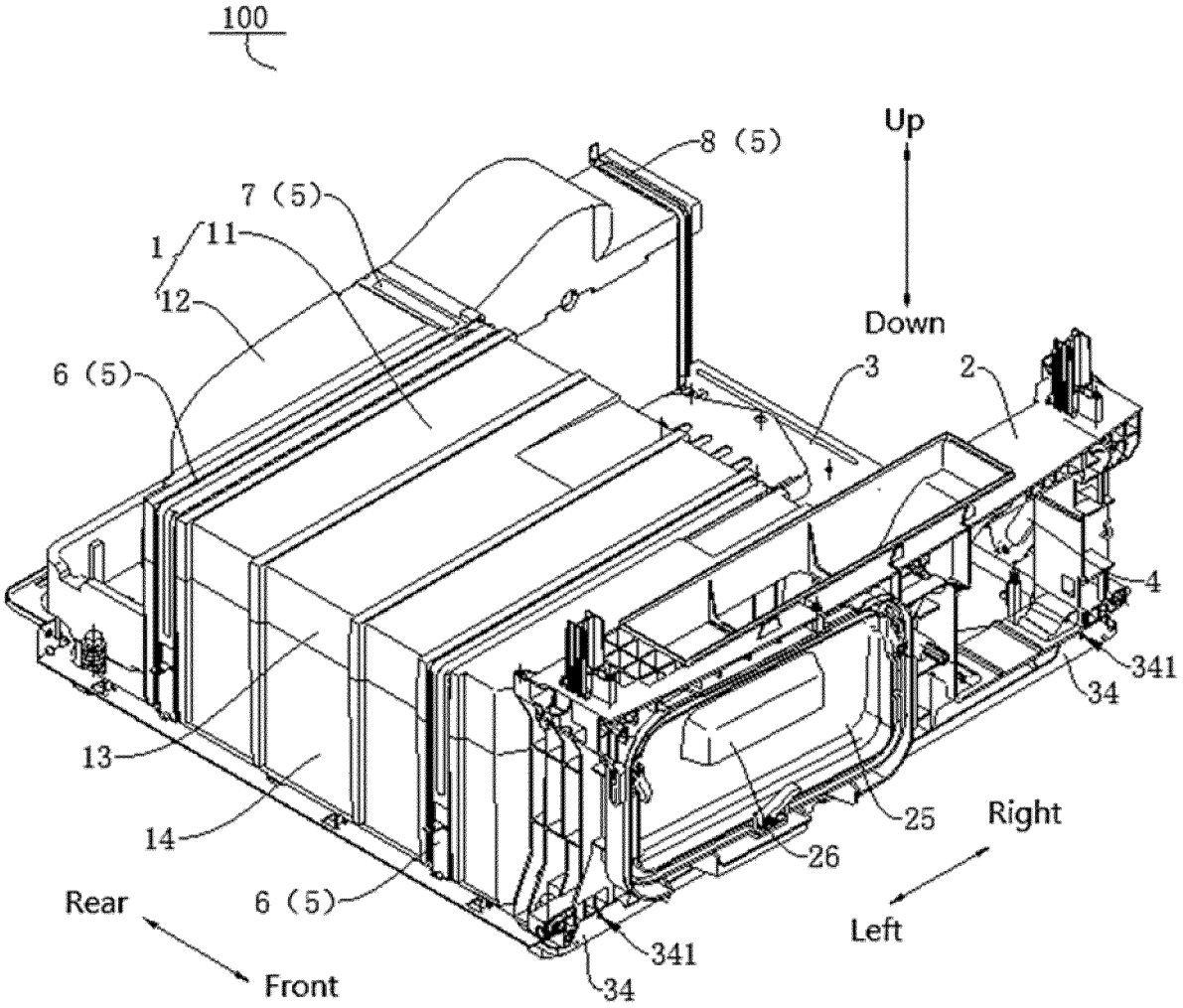
100
8 (5)
Up
7 (5)
1
11
12
Down
6 (5)
3
2
4
341
34
13
14
25
Right
26
Rear
6 (5)
341
Left
34
Front

FIG. 1

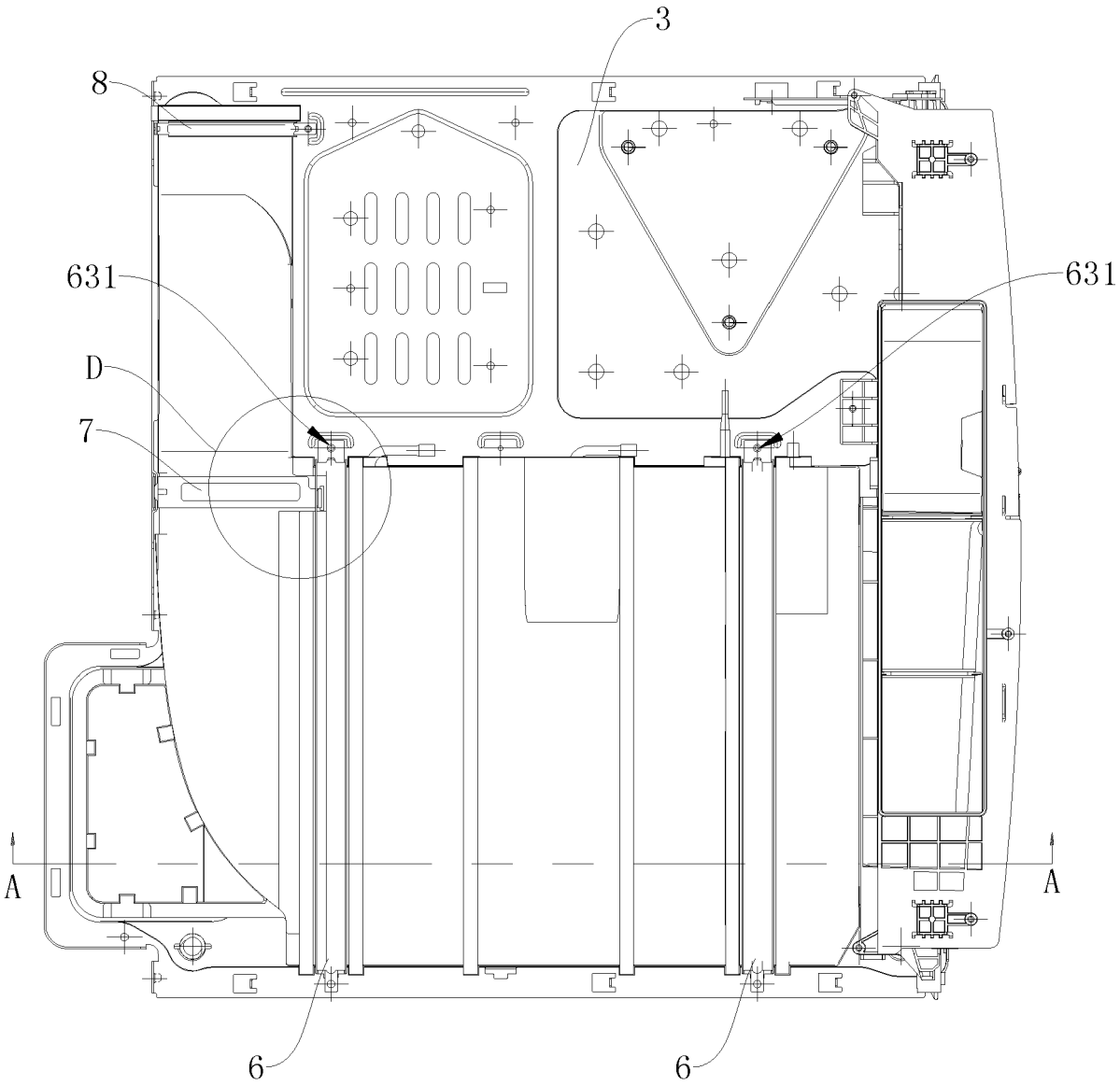

FIG. 2

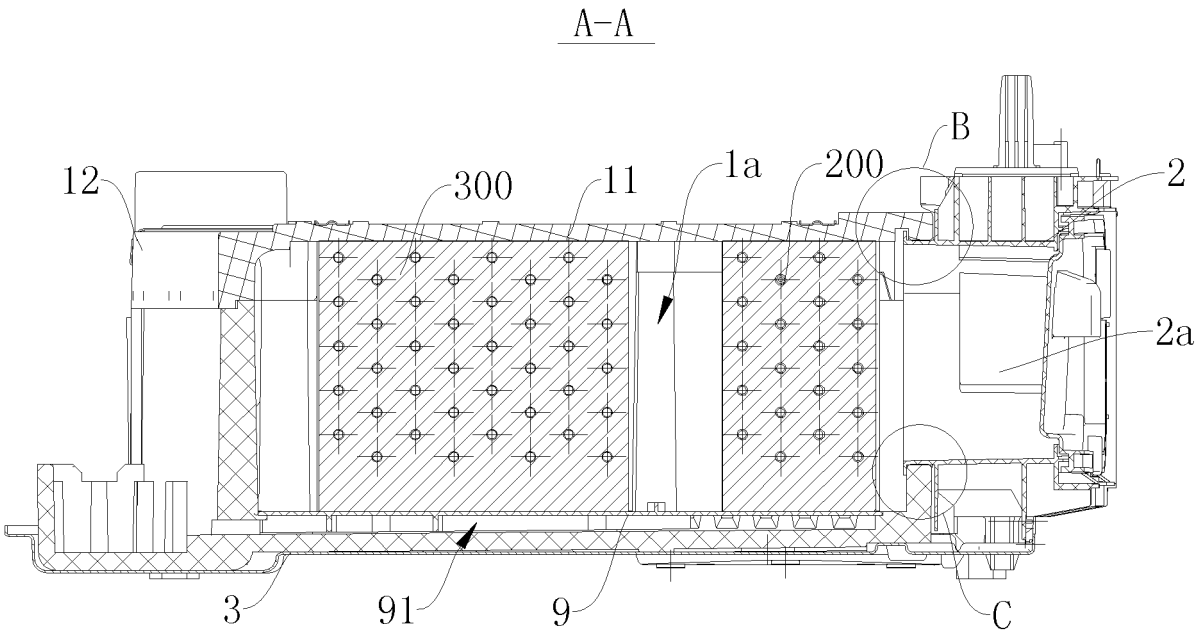

FIG. 3

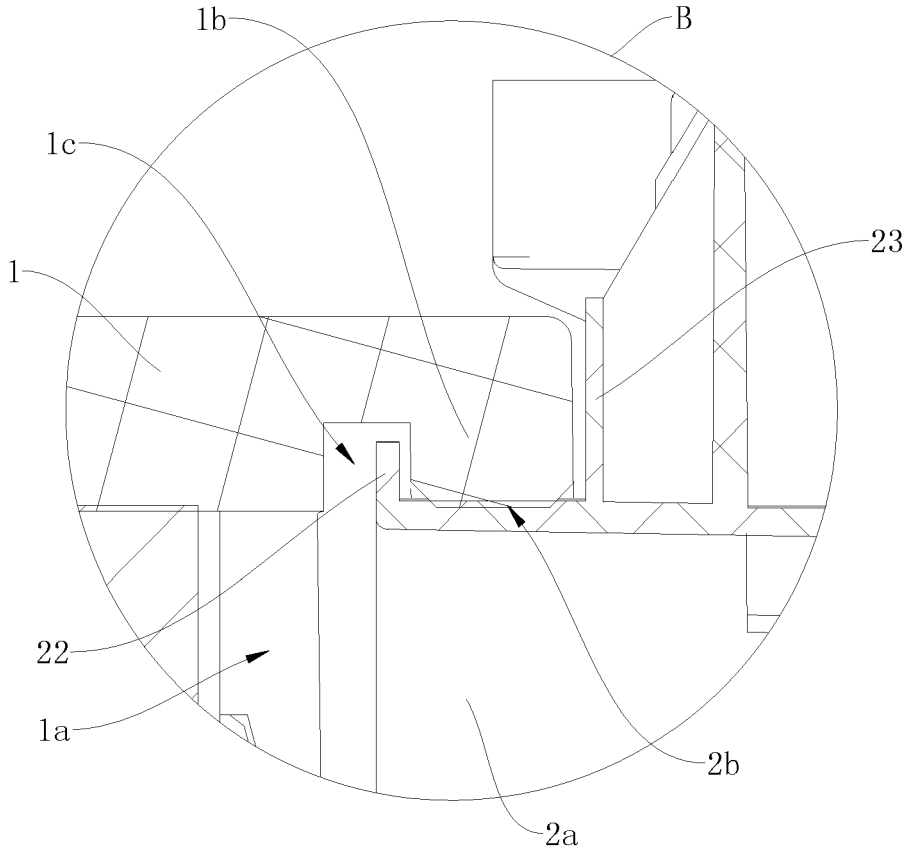

FIG. 4

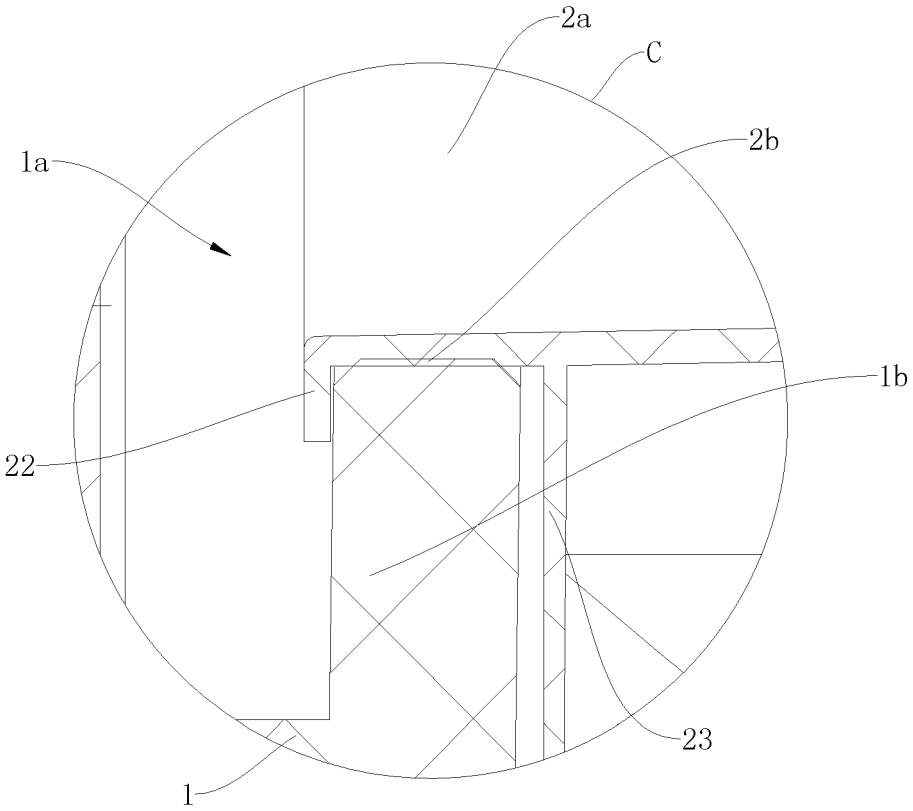

FIG. 5

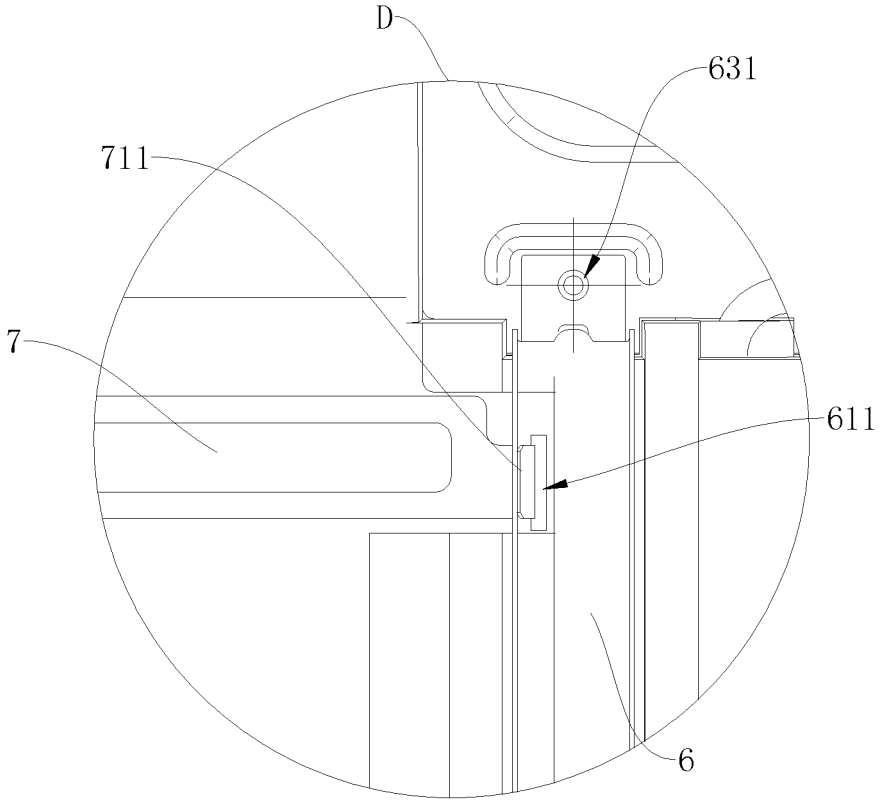

FIG. 6

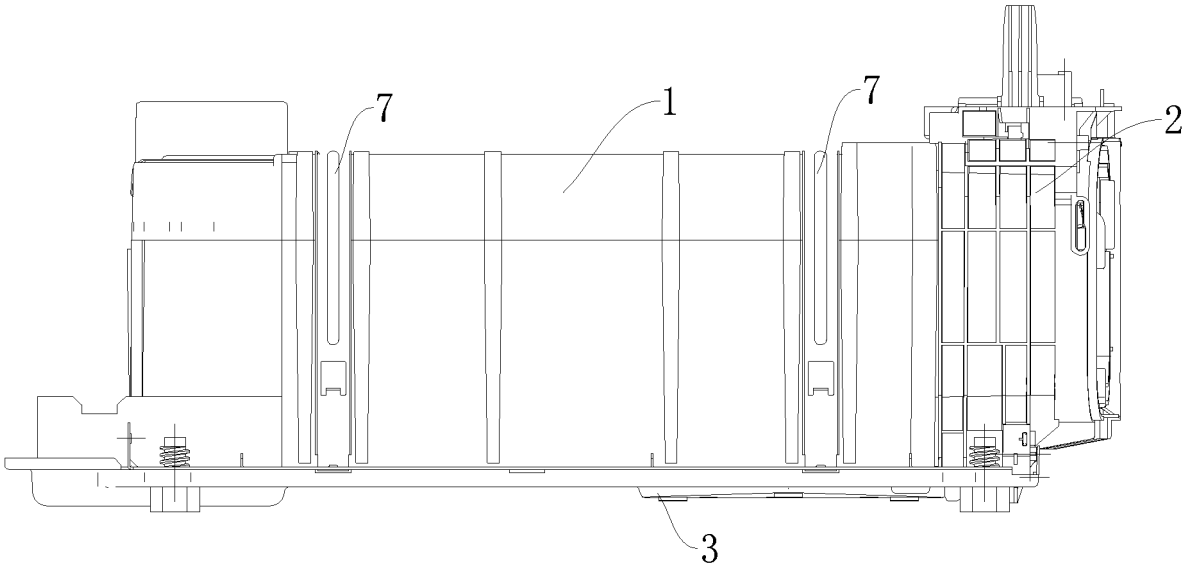

FIG. 7

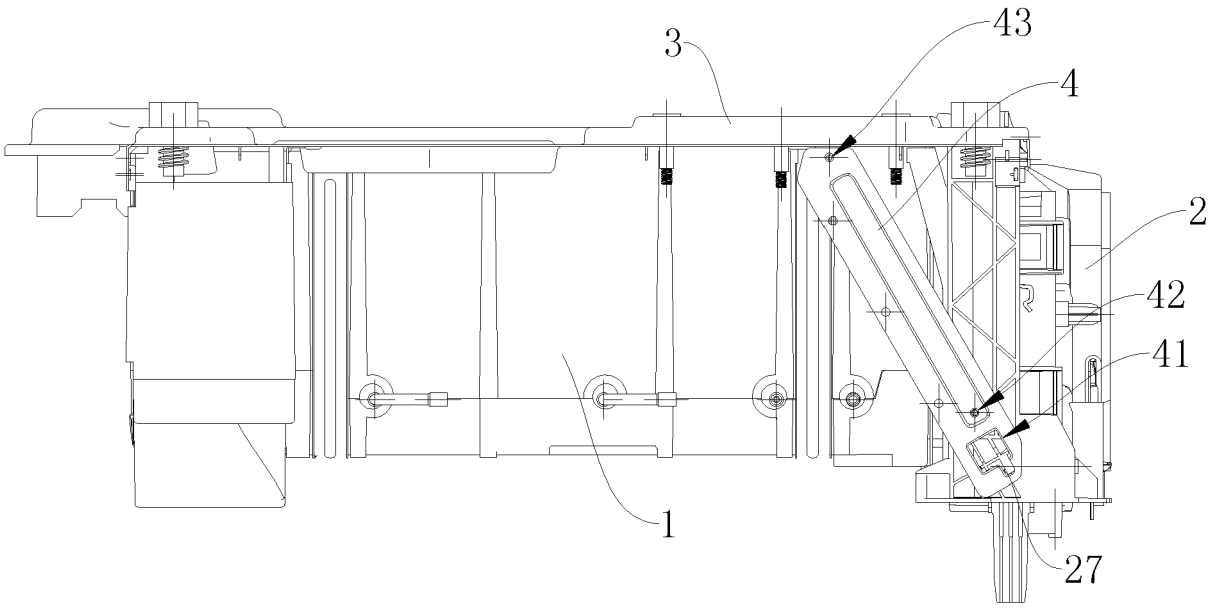

FIG. 8

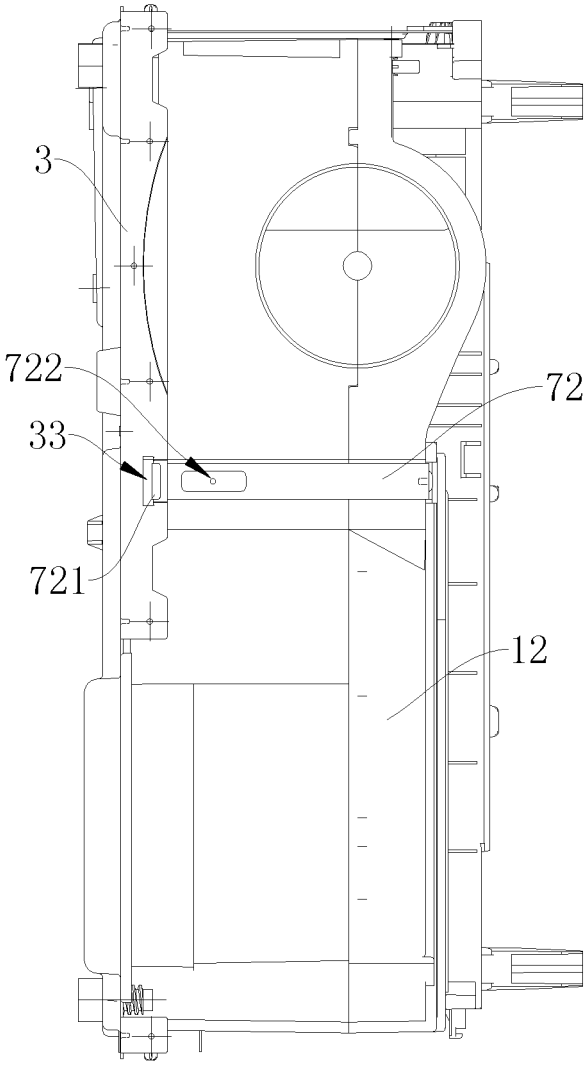

FIG. 9

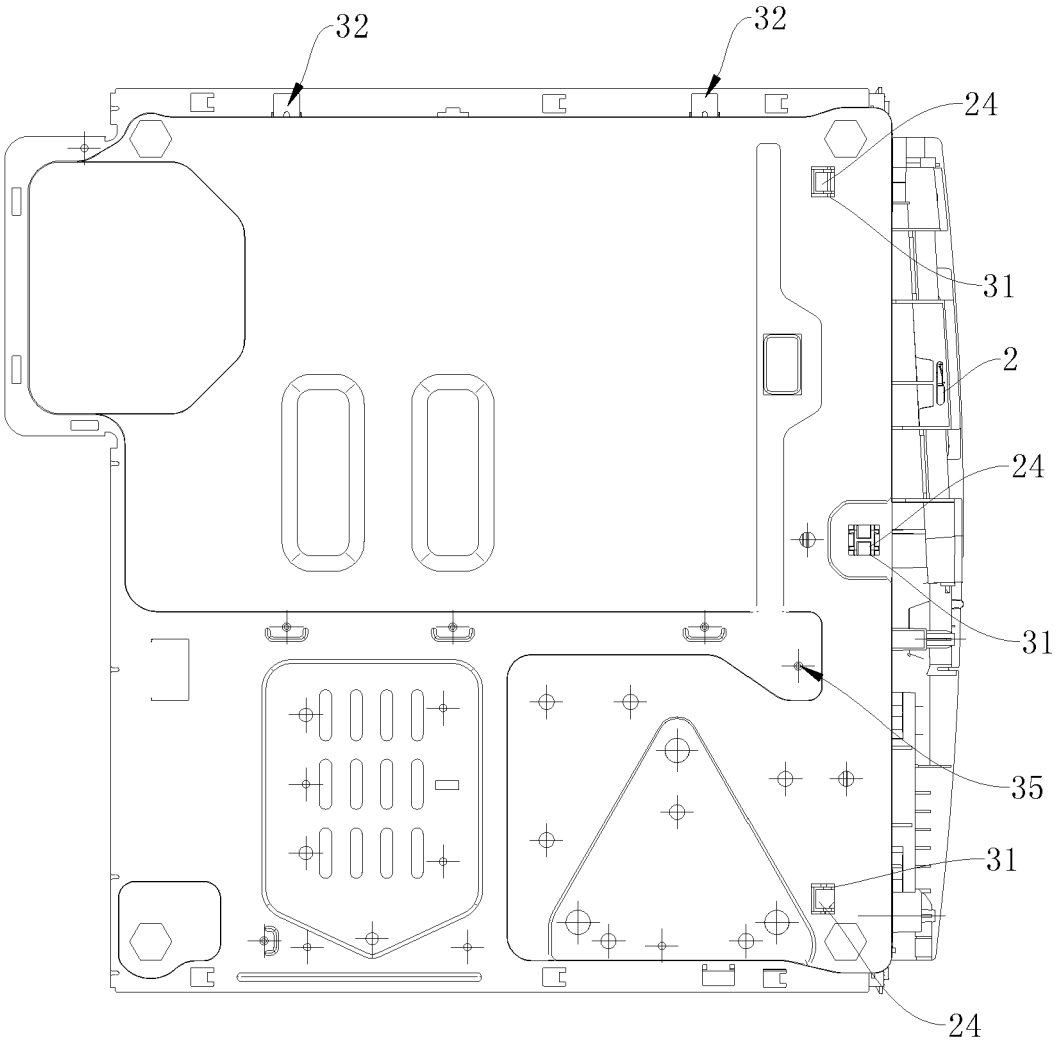

FIG. 10

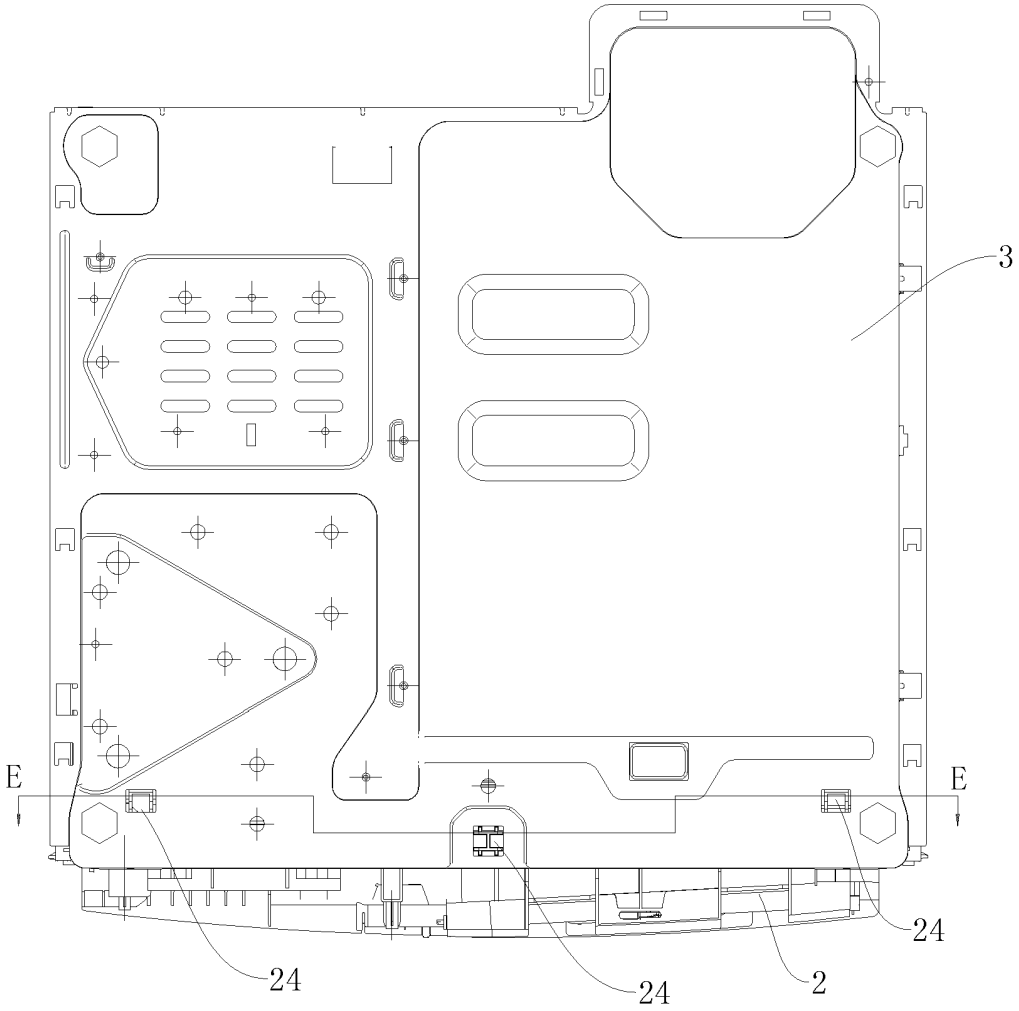

FIG. 11

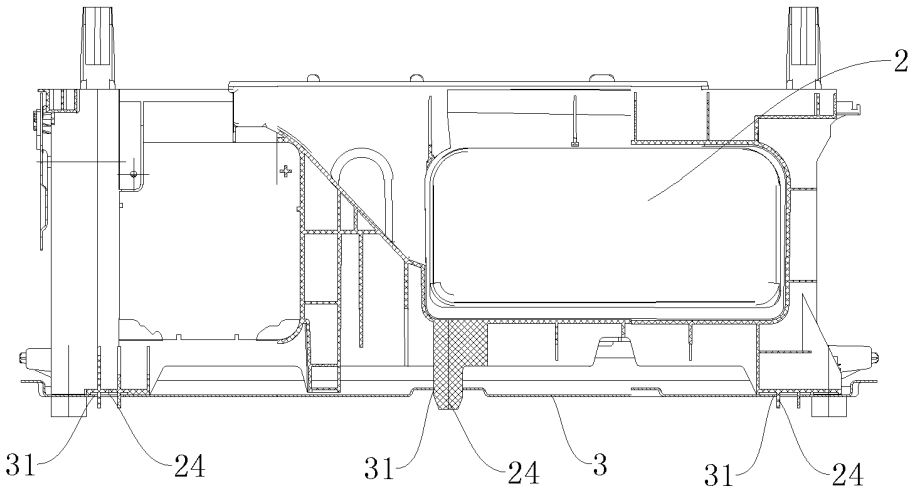

FIG. 12

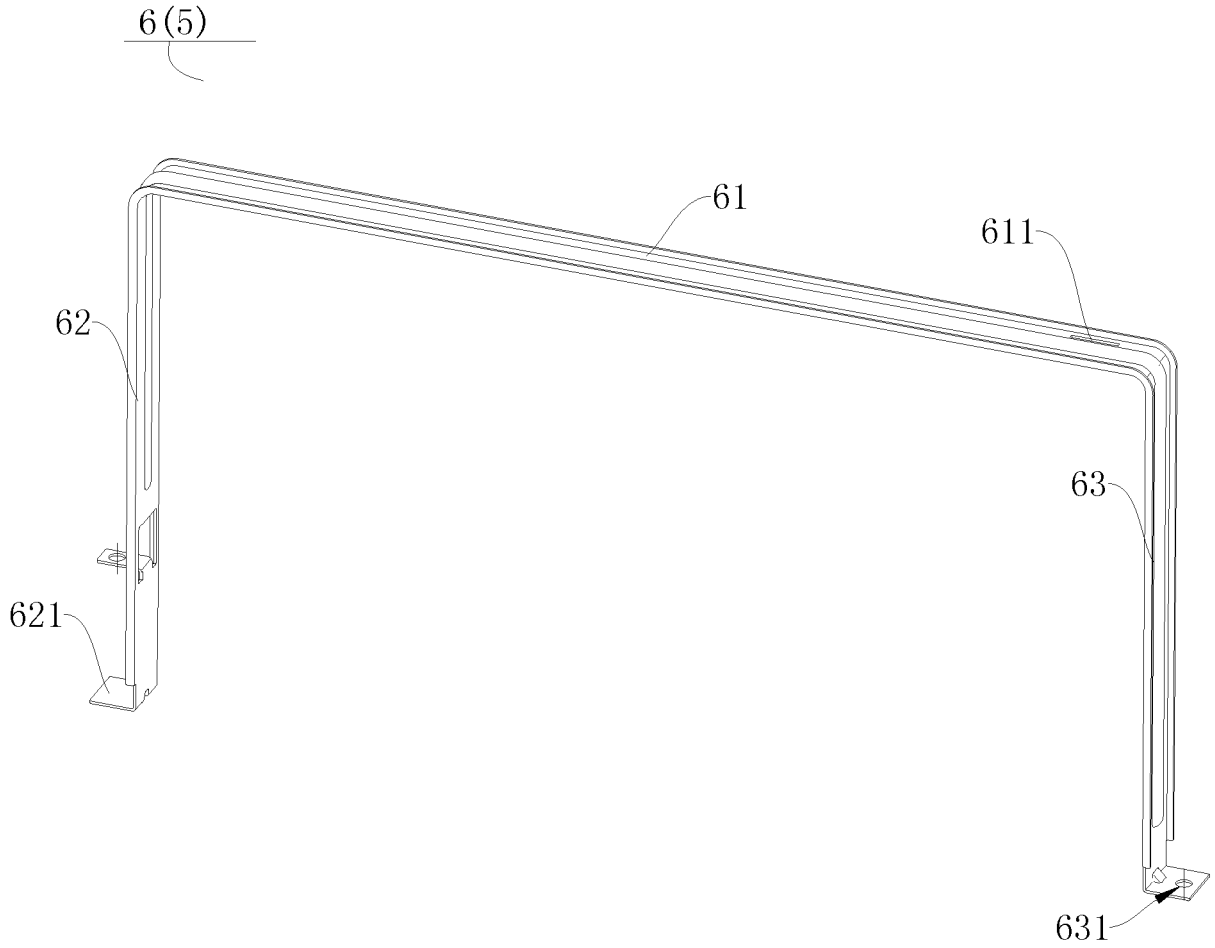

FIG. 13

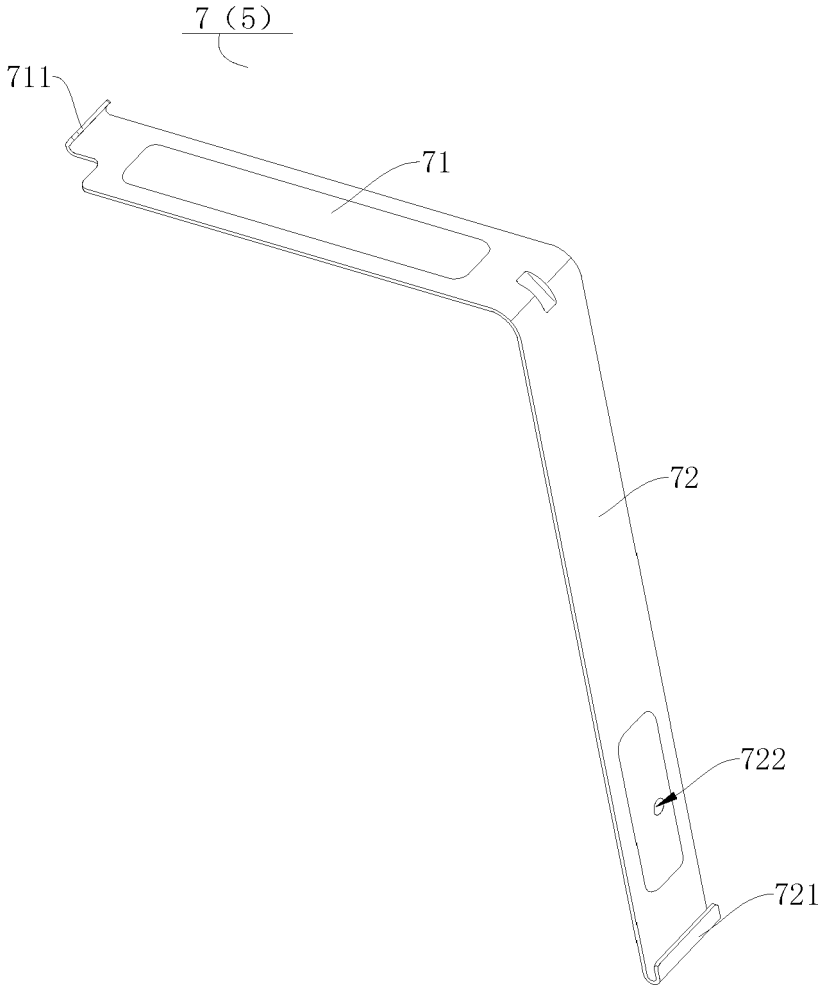

FIG. 14

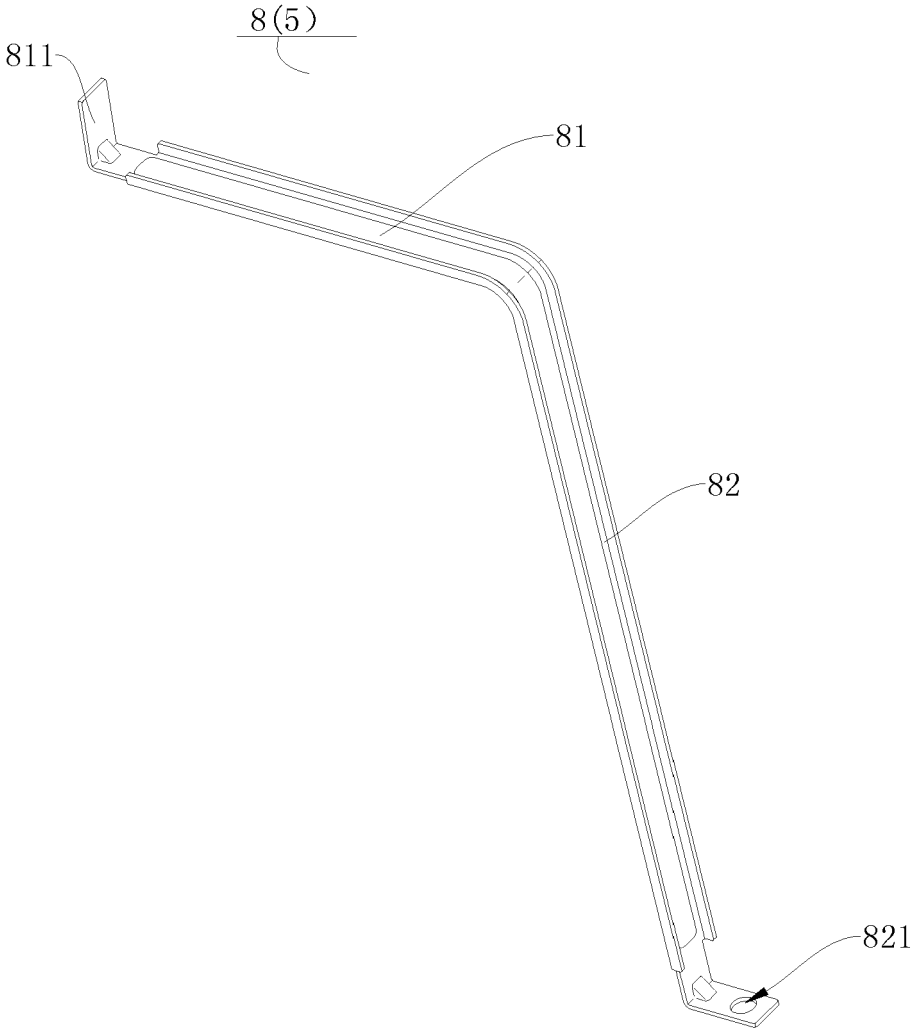

FIG. 15

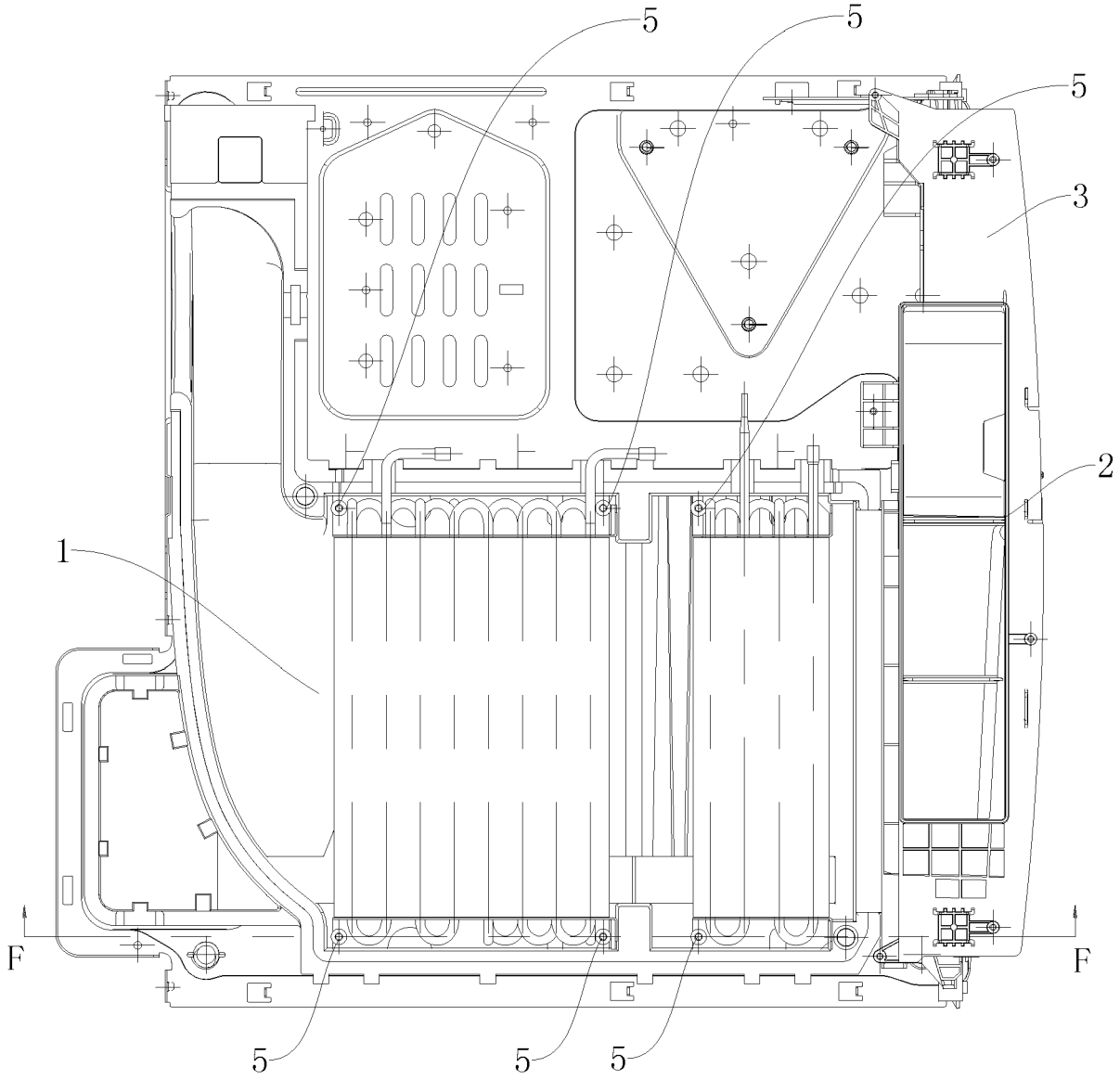

FIG. 16

F–F

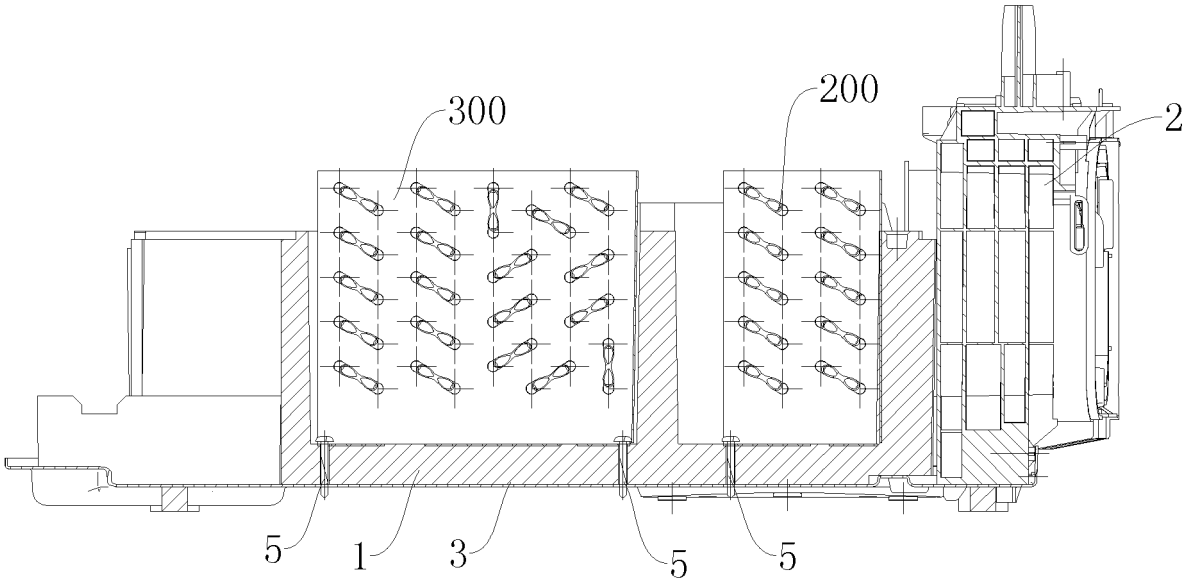

FIG. 17

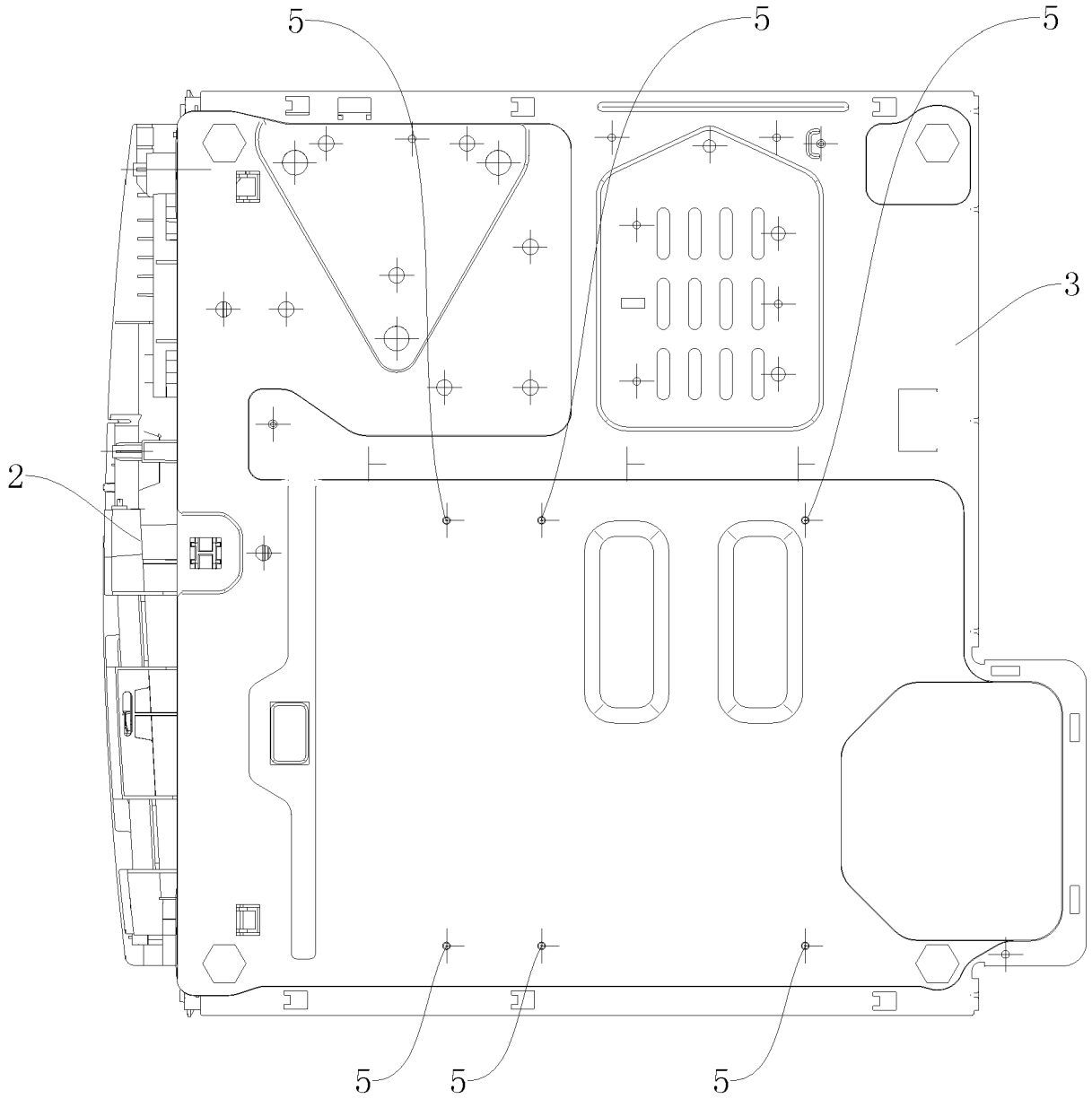

FIG. 18

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

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