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(54) **BASE ASSEMBLY FOR CLOTHES DRYER, AND CLOTHES DRYER HAVING SAME**
BASISANORDNUNG FÜR WÄSCHETROCKNER UND WÄSCHETROCKNER DAMIT
ENSEMBLE BASE POUR SÉCHOIR À LINGE ET SÉCHOIR À LINGE LE COMPRENANT

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Description

FIELD

[0001] The present disclosure 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] Generally, a base assembly of a dryer is an integrally molded piece, and thus an overall weight of the base assembly is relatively large, the technological structure is relatively complicated, and the disassembly, assembly and maintenance are inconvenient.

[0003] For this reason, an air duct shell and a base are designed as separate pieces in the related art. However, a connection structure between the air duct shell and the base in the separate piece design is complicated, the assembly is difficult, and the assembly efficiency is low. JP2014030469A relates generally to a heat pump type air conditioner used in a clothes dryer. KR20140100227A relates generally to a laundry treatment apparatus. US2019048514A1 relates generally to a laundry appliance having a heat pump system that includes a heat exchanger. CN102493161A relates generally to a heat pump clothes drying device. CN111005193A relates generally to a mounting seat and clothes treatment device. US2010107703A1 relates generally to a drum-type washer/dryer provided with a heat pump for drying laundry. CN101581025A relates generally to a washing and drying machine having a heat pump for drying clothes.

SUMMARY

[0004] 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 invention proposes a base assembly for a dryer, which is beneficial to reduce assembly difficulty and improve assembly efficiency. Through a modular design of a bottom plate and an air duct shell, the bottom plate and the air duct shell are respectively independently formed structures, so that the forming process of the base assembly can be simplified, and the bottom plate and the air duct shell can be replaced respectively during maintenance and installation. Further, the bottom plate can be made of a different material from the air duct shell, which is beneficial to reduce an overall weight of the base

assembly.

[0005] The present invention further proposes a dryer having the base assembly for the dryer as described above.

5 [0006] A base assembly for a dryer according to an embodiment of the present invention includes: a bottom plate; an air duct shell disposed on the bottom plate and having a cavity where a heat exchanger is mounted; and at least one connection member detachably connected to the bottom plate and/or the air duct shell to fix the air duct shell on the bottom plate.

10 [0007] According to the base assembly for the dryer according to an embodiment of the present invention, by detachably connecting the connection member to the bottom plate and/or the air duct shell to fix the air duct shell on the bottom plate, it is beneficial to reduce assembly difficulty, and improve assembly efficiency. Further, through a modular design of the bottom plate and the air duct shell, the bottom plate and the air duct shell are independently formed structures, respectively, so that a forming process of the base assembly can be simplified, and the bottom plate and the air duct shell can be replaced during maintenance and installation, respectively. Furthermore, the bottom plate can be made of different material from the air duct shell, which is beneficial to reduce an overall weight of the base assembly.

20 [0008] In some examples relating to the present disclosure, but not forming part of the claimed invention, the at least one connection member is a threaded fastener, and the air duct shell and the bottom plate are connected to each other by the threaded fastener.

25 [0009] At least one connection member is detachably connected to the bottom plate, and the at least one connection member is at least partially pressed against the air duct shell to fix the air duct shell on the bottom plate.

30 [0010] In some embodiments of the present invention, the at least one connection member matches with an outer contour of the air duct shell.

35 [0011] According to the present invention, the at least one connection member includes a first connection member having two ends detachably connected to the bottom plate, and at least a part of the air duct shell is located between a middle part of the first connection member and the bottom plate.

40 [0012] In some embodiments of the present invention, the first connection member includes:

a first abutting segment located above the bottom plate and spaced apart from the bottom plate; a first vertical segment having one end connected to the bottom plate; and a second vertical segment having one end connected to the bottom plate. The first abutting segment has two ends connected to another end of the first vertical segment and another end of the second vertical segment, respectively. The first abutting segment is engaged with a top wall of the air duct shell. The first vertical segment and/or the second vertical segment is engaged with a side wall of the air duct shell.

45 [0013] In some examples relating to the present inven-

tion, the first connection member has one end in a snapping connection with the bottom plate, and another end connected to the bottom plate by a threaded fastener.

[0014] In some embodiments of the present invention, the at least one connection member includes a plurality of the first connection members arranged at intervals in a length direction of the air duct shell.

[0015] In some embodiments of the present invention, the air duct shell includes a first air duct shell, and a second air duct shell in communication with the first air duct shell. The first air duct shell is at least partially fixed on the bottom plate by the first connection member. The at least one connection member also includes a second connection member. The second connection member has one end connected to the first connection member and another end detachably connected to the bottom plate. The second air duct shell is at least partially fixed on the bottom plate by the second connection member.

[0016] In some embodiments of the present invention, the second connection member includes a second abutting segment located above the bottom plate and spaced apart from the bottom plate, and a third vertical segment having one end connected to the bottom plate and another end connected to the second abutting segment. The second abutting segment is engaged with a top wall of the second air duct shell, and the third vertical segment is engaged with a side wall of the second air duct shell.

[0017] In some embodiments of the present invention, the one end of the second connection member is in a snapping-connection with the first connection member, and the other end of the second connection member is detachably connected to the bottom plate.

[0018] In some embodiments of the present invention, the connection member also includes a third connection member spaced apart from the second connection member in a length direction of the second air duct shell. The third connection member has one end detachably connected to the bottom plate and another end connected to an external structure.

[0019] In some embodiments of the present invention, the third connection member includes a third abutting segment located above the bottom plate and spaced apart from the bottom plate, and a fourth vertical segment having one end connected to the bottom plate and another end connected to the third abutting segment. The third abutting segment is engaged with a top wall of the second air duct shell, and the fourth vertical segment is engaged with a side wall of the second air duct shell.

[0020] In some embodiments of the present invention, a length direction of the first air duct shell is perpendicular to a length direction of the second air duct shell.

[0021] In some embodiments of the present invention, the air duct shell is configured as a thermal insulation member formed separately from the bottom plate.

[0022] In some embodiments of the present invention, the base assembly also includes a connection base detachably disposed on the bottom plate and located at a

side of the air duct shell. The connection base has a channel in communication with the cavity of the air duct shell.

[0023] 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.

[0024] A dryer according to an embodiment of the present invention includes the base assembly for the dryer as described above.

[0025] According to the dryer of the embodiment of the present invention, by providing the base assembly for the dryer as described above, it is beneficial to reduce assembly difficulty, and improve assembly efficiency. Further, through a modular design of the bottom plate and the air duct shell, the bottom plate and the air duct shell are independently formed structures, respectively, so that a forming process of the base assembly can be simplified, and the bottom plate and the air duct shell can be replaced during maintenance and installation, respectively. Furthermore, the bottom plate can be made of different material from the air duct shell, which is beneficial to reduce an overall weight of the base assembly.

[0026] 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

[0027] The above and/or additional aspects and advantages of the present invention 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 invention.

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 invention.

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 invention.

FIG. 14 is a schematic structural view of a second connection member according to an embodiment of the present invention.

FIG. 15 is a schematic structural view of a third connection member according to an embodiment of the present invention.

FIG. 16 is a partial structural schematic view of a base assembly for a dryer according to another embodiment of the present invention.

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.

Reference Signs:

[0028]

base assembly 100;
air duct shell 1; cavity 1a; sealing rib 1b; positioning groove 1c; first air duct shell 11; second air duct shell 112;
upper air duct shell 13; lower air duct shell 114;
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 segment 61;
second snapping hole 611; first vertical segment 62;
first snapping portion 621; second vertical segment 63;
first connection hole 631;
second connection member 7; second abutting segment 71; second snapping hook 711; third vertical segment 72; second snapping portion 721; second connection hole 722;
third connection member 8; third abutting segment 81; third snapping hook 811; fourth vertical segment 82; third connection hole 821;
liquid drainage separator 9; liquid drainage channel 91;
evaporator 200;
condenser 300.

DESCRIPTION OF EMBODIMENTS

[0029] 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 exem-

plary and are only used to explain the present disclosure, rather than being as a limitation on the present disclosure.

[0030] 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.

[0031] 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.

[0032] Referring to FIGS. 1 and 2, the base assembly 100 for the dryer according to an embodiment of the present invention includes an air duct shell 1, a connection base 2, a bottom plate 3, a support member 4 and a connection member 5.

[0033] Referring to FIG. 3, the air duct shell 1 is disposed on the bottom plate 3 and has a cavity 1a where a heat exchanger is mounted. For example, the heat exchanger may be an evaporator 200 and a condenser 300. At least one connection member 5 is detachably connected to the bottom plate 3 and/or the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3.

[0034] Here, "at least one connection member 5 being detachably connected to the bottom plate 3 and/or the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3" may be understood as the at least one connection member 5 being detachably connected to both the bottom plate 3 and the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3. For example, as shown in FIG. 17, the connection member 5 may be a threaded fastener, and the bottom plate 3 and the air duct shell 1 are connected to each other by the threaded fastener to fix the air duct shell 1 on the bottom plate 3. In some embodiments, the at least one connection member 5 may be detachably connected to the bottom plate 3 or the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3. For example, as shown in FIG. 1, the connection member 5 is detachably connected to the bottom plate 3, and the connection member 5 is partially pressed against the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3.

[0035] It should be noted that "at least one" should be understood as one or more than one. For example, the at least one connection member 5 may include one, two, three, four, five, six, seven or eight connection members, etc.

[0036] Therefore, by detachably connecting the connection member 5 to the bottom plate 3 and/or the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3, it is beneficial to reduce assembly difficulty and improve assembly efficiency. Further, through a modular design of the bottom plate 3 and the air duct shell 1, the bottom plate 3 and the air duct shell 1 are of independently formed structures, respectively, so that a forming process of the base assembly 100 can be simplified, and the bottom plate 3 and the air duct shell 1 can be replaced respectively during maintenance and installation. Furthermore, the bottom plate 3 can be made of a different material from the air duct shell 1, which is beneficial to reduce an overall weight of the base assembly 100.

[0037] According to the base assembly 100 for the dryer according to the embodiment of the present invention, by detachably connecting the connection member 5 to the bottom plate 3 and/or the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3, it is beneficial to reduce the assembly difficulty and improve the assembly efficiency. Further, through the modular design of the bottom plate 3 and the air duct shell 1, the bottom plate 3 and the air duct shell 1 are of independently formed structures, respectively, so that the forming process of the base assembly 100 can be simplified, and the bottom plate 3 and the air duct shell 1 can be replaced respectively during maintenance and installation. Furthermore, the bottom plate 3 can be made of the different material from the air duct shell 1, which is beneficial to reduce the overall weight of the base assembly 100.

[0038] 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, and is partially pressed against the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3. It should be understood that, by detachably connecting the connection member 5 to the bottom plate, the connection member is partially pressed against the air duct shell 1 to fix the air duct shell 1 on the bottom plate 3, which is beneficial to reduce the assembly difficulty and improve the assembly efficiency. Further, during the assembly process, the connection member 5 would not damage a structure of the air duct shell 1, which is beneficial to ensure an airtightness of the air duct shell 1, thereby improving a drying efficiency of the dryer.

[0039] In some embodiments of the present disclosure, as shown in FIG. 1, the connection member 5 matches with an outer contour of the air duct shell 1. Therefore, it is beneficial to increase an engagement area between the connection member 5 and the air duct shell 1, which further realizes a reliable fixing of the air duct shell 1.

[0040] According to the present invention, as shown in FIG. 1, the connection member 5 includes a first connection member 6 having two ends detachably connected to the bottom plate 3, respectively. The air duct shell 1 is partially located between a middle part of the first connection member 6 and the bottom plate 3. Therefore, it

is beneficial to realize the reliable fixing of the air duct shell 1 and reduce damage to the air duct shell 1 while reducing the assembly difficulty.

[0041] Further, as shown in FIG. 13, the first connection member 6 includes a first abutting segment 61, a first vertical segment 62, and a second vertical segment 63. The first abutting segment 61 is located above the bottom plate 3 and is space apart from the bottom plate 3. The bottom plate 3 is connected to one end of the first vertical segment 62 and one end of the second vertical segment 63, respectively, and two ends of the first abutting segment 61 are connected to the other end of the first vertical segment 62 and the other end of the second vertical segment 63, respectively.

[0042] Here, the first abutting segment 61 is engaged with a top wall of the air duct shell 1, and the first vertical segment 62 and/or the second vertical segment 63 is engaged with a side wall of the air duct shell 1. In other words, one of the first vertical segment 62 and the second vertical segment 63 may be engaged with a side wall of the air duct shell 1, or the first vertical segment 62 and the second vertical segment 63 may be engaged with opposite side walls of the air duct shell 1, respectively. Therefore, it is beneficial to increase the engagement area between the connection member 5 and the air duct shell 1, thereby further realizing the reliable fixing of the air duct shell 1. In this way, the first connection member 6 has a simple structure and low cost.

[0043] In some embodiments of the present disclosure, as shown in FIGS. 1 and 13, the first connection member 6 is engaged with the bottom plate 3 at one end thereof and is connected to the bottom plate 3 by the threaded fastener at the other end thereof. For example, a first snapping portion 621 is disposed on the free end of the first vertical segment 62. A first snapping hole 32 (refer to FIG. 10) adapted to be engaged with the first snapping portion 621 is disposed on the bottom plate 3. A first connection hole 631 adapted for the threaded fastener to pass therethrough is defined on one end of the second vertical segment 63. It should be understood that, when the air duct shell 1 is fixed on the bottom plate 3 by the connection member 5, one end of the connection member 5 can be fixed on the bottom plate 3 first, and then the other end of the 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 reliability of fixing the air duct shell 1.

[0044] 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 a length direction of the air duct shell 1. Therefore, it is beneficial to further realize the reliable fixing of the air duct shell 1. For example, a plurality of first connection members 6 is provided and arranged at intervals in a length direction of the first air duct shell 11 described below.

[0045] In some optional 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. The first air duct shell 11 is at least partially fixed on the bottom plate 3 by the first connection member 6. The connection member 5 also includes a second connection member 7. The second connection member 7 is connected to the first connection member 6 at one end thereof. The second connection member 7 is detachably connected to the bottom plate 3 at the other end thereof. The second air duct shell 12 is at least partially fixed on the bottom plate 3 by the second connection member 7.

[0046] Therefore, the first air duct shell 11 can be fixed by the first connection member 6, and the second air duct shell 12 can be fixed by the second connection member 7, which is beneficial to further improve the fixing effect of the air duct shell 1. Meanwhile, the second connector 7 is connected to the first connector 6 at one end thereof, the connection member 5 is detachably connected to the bottom plate 3 at the other end thereof, and the second air duct shell 12 is at least partially fixed on the bottom plate 3 by the second connection member 7, which is beneficial to simplify a structure of the second connection member 7 and facilitate the fixing of the second connection member 7.

[0047] Further, as shown in FIG. 1 and FIG. 14, the second connection member 7 includes a second abutting segment 71 and a third vertical segment 72. The second abutting segment 71 is located above the bottom plate 3 and is spaced apart from the bottom plate 3. The third vertical segment 72 is connected to the bottom plate 3 at one end thereof and is connected to the second abutting segment 71 at the other end thereof. The second abutting segment 71 is engaged with a top wall of the second air duct shell 12, and the third vertical segment 72 is engaged with a side wall of the second air duct shell 12.

[0048] Therefore, it is beneficial to increase an engagement area between the second connection member 7 and the second air duct shell 12, thereby further realizing a reliable fixing of the air duct shell 1. In this way, the second connection member 7 has a simple structure and low cost.

[0049] In some optional embodiments of the present disclosure, as shown in FIG. 1 and FIG. 6, the second connection member 7 is a snapping connection to the first connection member 6 at one end thereof and is detachably connected to the bottom plate 3 at the other end thereof. For example, as shown in FIG. 6, a second snapping hook 711 is disposed on one end of the second connection member 7, and a second snapping hole adapted to be engaged with the second snapping hook 711 is disposed on the first connection member 6. The second connection member 7 is connected to the bottom plate 3 at the other end thereof by means of snapping connection or screws. Therefore, the structure is simple, and an installation and disassembly of the second connection member 7 are facilitated. Further, the fixing of the second

connection member 7 to the second air duct shell 12 is reliable.

[0050] In some embodiments, as shown in FIG. 14, a second snapping portion 721 is disposed on a free end of the third vertical segment 72, and a second snapping hole 33 (as shown in FIG. 9) adapted to be engaged with the second snapping portion 721 is disposed on the bottom plate 3. A second connection hole 722 is further defined on the third vertical segment 72 of the second connection member 7. A threaded fastener passes through the second connection hole 722 to be connected to a housing of the dryer to fix the third vertical segment 72 to the housing of the dryer. Thus, it is beneficial to further improve the fixing effect of the second connection member 7 on the second air duct shell 12.

[0051] In some embodiments of the present disclosure, as shown in FIG. 1 and FIG. 15, the 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 is detachably connected to the bottom plate 3 at one end thereof and is connected to an external structure at the other end thereof. For example, the external structure may be the housing of the dryer. A third connection hole 821 is defined on one end of the third connection member 8, and a threaded fastener passes through the third connection hole 821 to fix one end of the third connection member 8 to the bottom plate 3. The third connection member 8 is detachably connected to the housing of the dryer at the other end thereof.

[0052] Therefore, by providing the second connection member 7 and the third connection member 8, the second air duct shell 12 has good fixing effect, which is beneficial to ensure a reliable operation of the air duct shell 1.

[0053] In some embodiments of the present disclosure, as shown in FIG. 15, the third connection member 8 includes a third abutting segment 81 and a fourth vertical segment 82. The third abutting segment 81 is located above the bottom plate 3 and is spaced apart from the bottom plate 3. The fourth vertical segment 82 is connected to the bottom plate 3 at one end thereof and is connected to the third abutting segment 81 at the other end thereof. The third abutting segment 81 is engaged with the top wall of the second air duct shell 12, and the fourth vertical segment 82 is engaged with the side wall of the second air duct shell 12. For example, a third snapping hook 811 is disposed on a free end of the third abutting segment 81, and the housing of the dryer is engaged with the third snapping hook 811. Therefore, it is beneficial to increase an engagement area between the third connection member 8 and the second air duct shell 12, thereby further realizing the reliable fixing of the air duct shell 1. In this way, the third connection member 8 has a simple structure and low cost, and the connection is reliable.

[0054] In some embodiments of the present disclosure, as shown in FIG. 1, a length direction of the first air

duct shell 11 is perpendicular to a 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 a 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.

[0055] 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.

[0056] In some embodiments of the present disclosure, 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 made of plastic. For example, the air duct shell 1 may be a foamed piece such as foamed plastic or a foamed rubber. Therefore, it is beneficial to improve a thermal insulation effect of the air duct shell 1 while reducing a weight of the air duct shell 1.

[0057] In some examples, as shown in FIG. 3, the connection base 2 is disposed at one side (the front side as shown in FIG. 1) of the air duct shell 1, and has a channel 2a in communication with the cavity 1a. Here, 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, 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.

[0058] 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, thereby improving an assembling efficiency of the base assembly 100.

[0059] 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 2a 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 2a 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 2a.

[0060] 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 2a. In some embodiments, 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 2a.

[0061] 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 2a, 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.

[0062] 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 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 the assembly difficulty between the connection base 2 and the air duct shell 1.

[0063] 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.

[0064] 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.

[0065] It should be understood that, by forming the positioning groove 1c adapted for an insertion of 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.

[0066] 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.

[0067] 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.

[0068] 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 second positioning portions 31 in a one-to-one correspondence to position the connection base 2.

[0069] 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.

[0070] 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.

[0071] 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 disposed 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 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.

[0072] 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.

[0073] 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.

[0074] In some embodiments of the present disclosure, as shown in FIGS. 1 and 7, 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.

[0075] In some embodiments of the present disclosure, as shown in 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 connection base 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.

[0076] 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, 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.

[0077] 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.

[0078] 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.

[0079] In the dryer according to the embodiments of the present disclosure, by providing the base assembly 100 for the dryer according to the embodiments of the present disclosure as described above, it is beneficial to reduce the assembly difficulty and improve the assembly efficiency. Further, through the modular design of the bottom plate 3 and the air duct shell 1, the bottom plate 3 and the air duct shell 1 are independently formed structures, respectively, so that the forming process of the base assembly 100 can be simplified, and the bottom plate 3 and the air duct shell 1 can be replaced during maintenance and installation, respectively. Furthermore, the bottom plate 3 can be made of the different material from the air duct shell 1, which is beneficial to reduce an overall weight of the base assembly 100.

[0080] 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.

[0081] 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..

[0082] 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 significance 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.

[0083] 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.

[0084] 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, provided such combinations fall within the scope of the invention, which is defined by the appended claims.

Claims

1. A base assembly (100) for a dryer, the base assembly (100) comprising: a bottom plate (3); an air duct shell (1) disposed on the bottom plate (3) and having a cavity (1a), wherein a heat exchanger is mounted within the cavity (1a); and at least one connection member (5) detachably connected to the bottom plate (3) and/or the air duct shell (1) to fix the air duct shell (1) on the bottom plate (3);

wherein: the at least one connection member (5) is detachably connected to the bottom plate (3); and the at least one connection member (5) is at least partially pressed against the air duct shell (1) to fix the air duct shell (1) on the bottom

plate (3);

preferably, wherein the at least one connection member (5) matches with an outer contour of the air duct shell (1), and **characterised in that** the at least one connection member (5) comprises a first connection member (6) having two ends detachably connected to the bottom plate (3); and 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).

2. The base assembly (100) for the dryer of claim 1, wherein the first connection member (6) comprises: a first abutting segment (61) located above the bottom plate (3) and spaced apart from the bottom plate (3); a first vertical segment (62) having an end connected to the bottom plate (3); and a second vertical segment (63) having an end connected to the bottom plate (3), wherein: the first abutting segment (61) has two ends connected to another end of the first vertical segment (62) and another end of the second vertical segment (63), respectively; the first abutting segment (61) is engaged with a top wall of the air duct shell (1); and the first vertical segment (62) and/or the second vertical segment (63) is engaged with a side wall of the air duct shell (1).
3. The base assembly (100) for the dryer according to claim 1, wherein: the first connection member (6) has one end in a snapping connection with the bottom plate (3), and another end connected to the bottom plate (3) by a threaded fastener; or the at least one connection member (5) comprises a plurality of the first connection members (6) arranged at intervals in a length direction of the air duct shell (1).
4. The base assembly (100) for the dryer according to any one of claims 1 to 3, wherein: the air duct shell (1) comprises a first air duct shell (11), and a second air duct shell (112) in communication with the first air duct shell (11); 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) further comprises a second connection member (7), the second connection member (7) having one end connected to the first connection member (6) and another end detachably connected to the bottom plate (3); and the second air duct shell (112) is at least partially fixed on the bottom plate (3) by the second connection member (7).
5. The base assembly (100) for the dryer according to claim 4, wherein the second connection member (7) comprises: a second abutting segment (71) located above the bottom plate (3) and spaced apart from the bottom plate (3), the second abutting segment

- (71) being engaged with a top wall of the second air duct shell (112); and a third vertical segment (72) having one end connected to the bottom plate (3) and another end connected to the second abutting segment (71), the third vertical segment (72) being engaged with a side wall of the second air duct shell (112).
6. The base assembly (100) for the dryer according to claim 4, wherein the one end of the second connection member (7) is in a snapping-connection with the first connection member (6).
7. The base assembly (100) for the dryer according to claim 4, wherein the at least one connection member (5) further comprises a third connection member (8) spaced apart from the second connection member (7) in a length direction of the second air duct shell (112), the third connection member (8) having one end detachably connected to the bottom plate (3) and another end connected to an external structure.
8. The base assembly (100) for the dryer according to claim 7, wherein the third connection member (8) comprises: a third abutting segment (81) located above the bottom plate (3) and spaced apart from the bottom plate (3), the third abutting segment (81) being engaged with a top wall of the second air duct shell (112); and a fourth vertical segment (82) having one end connected to the bottom plate (3) and another end connected to the third abutting segment (81), the fourth vertical segment (82) being engaged with a side wall of the second air duct shell (112).
9. The base assembly (100) for the dryer according to any one of claims 4 to 8, wherein a length direction of the first air duct shell (11) is perpendicular to a length direction of the second air duct shell (112).
10. The base assembly (100) for the dryer according to any one of claims 1 to 9, wherein the air duct shell (1) is configured as a thermal insulation member formed separately from the bottom plate (3).
11. The base assembly (100) for the dryer according to any one of claims 1 to 10, further comprising a connection base detachably disposed on the bottom plate (3) and located at a side of the air duct shell (1), the connection base having a channel in communication with the cavity (1a) of the air duct shell (1); preferably, the bottom plate (3) is a metal piece, and the connection base is configured as a plastic piece formed separately from the bottom plate (3).
12. A dryer, comprising the base assembly (100) for the dryer according to any one of claims 1 to 11.

Patentansprüche

1. Sockelanordnung (100) für einen Trockner, wobei die Sockelanordnung (100) Folgendes umfasst: eine Bodenplatte (3); ein Luftschachtgehäuse (1), das auf der Bodenplatte (3) angeordnet ist und einen Hohlraum (1a) aufweist, wobei ein Wärmetauscher in dem Hohlraum (1a) angebracht ist; und mindestens ein Verbindungselement (5), das abtrennbar mit der Bodenplatte (3) und/oder dem Luftschachtgehäuse (1) verbunden ist, um das Luftschachtgehäuse (1) an der Bodenplatte (3) zu fixieren;

wobei: das mindestens eine Verbindungselement (5) abtrennbar mit der Bodenplatte (3) verbunden ist; und das mindestens eine Verbindungselement (5) mindestens teilweise an das Luftschachtgehäuse (1) gepresst ist, um das Luftschachtgehäuse (1) an der Bodenplatte (3) zu fixieren;

wobei vorzugsweise das mindestens eine Verbindungselement (5) mit einem Außenumriss des Luftschachtgehäuses (1) zusammenpasst, und **dadurch gekennzeichnet, dass** das mindestens eine Verbindungselement (5) ein erstes Verbindungselement (6) umfasst, das zwei abtrennbar mit der Bodenplatte (3) verbundene Enden aufweist; und sich mindestens ein Teil des Luftschachtgehäuses (1) zwischen einem mittleren Teil des ersten Verbindungselements (6) und der Bodenplatte (3) befindet.
2. Sockelanordnung (100) für den Trockner nach Anspruch 1, wobei das erste Verbindungselement (6) Folgendes umfasst: ein erstes Anlagesegment (61), das sich über der Bodenplatte (3) befindet und von der Bodenplatte (3) beabstandet ist; ein erstes vertikales Segment (62), das ein mit der Bodenplatte (3) verbundenes Ende aufweist; und ein zweites vertikales Segment (63), das ein mit der Bodenplatte (3) verbundenes Ende aufweist, wobei: das erste Anlagesegment (61) zwei Enden aufweist, die mit einem anderen Ende des ersten vertikalen Segments (62) bzw. einem anderen Ende des zweiten vertikalen Segments (63) verbunden sind; sich das erste Anlagesegment (61) mit einer Deckwand des Luftschachtgehäuses (1) im Eingriff befindet; und sich das erste vertikale Segment (62) und/oder das zweite vertikale Segment (63) mit einer Seitenwand des Luftschachtgehäuses (1) im Eingriff befinden.
3. Sockelanordnung (100) für den Trockner nach Anspruch 1, wobei: das erste Verbindungselement (6) ein Ende in einer Schnappverbindung mit der Bodenplatte (3) und ein anderes Ende, das durch ein Gewindefestigungselement mit der Bodenplatte (3) verbunden ist, aufweist; oder das mindestens eine Verbindungselement (5) eine

Vielzahl der ersten Verbindungselemente (6) umfasst, die in Abständen in einer Längenrichtung des Luftschachtgehäuses (1) angeordnet sind.

4. Sockelanordnung (100) für den Trockner nach einem der Ansprüche 1 bis 3, wobei:
das Luftschachtgehäuse (1) ein erstes Luftschachtgehäuse (11) und ein zweites Luftschachtgehäuse (112) in Verbindung mit dem ersten Luftschachtgehäuse (11) umfasst; das erste Luftschachtgehäuse (11) mindestens teilweise durch das erste Verbindungselement (6) an der Bodenplatte (3) fixiert ist; das mindestens eine Verbindungselement (5) ferner ein zweites Verbindungselement (7) umfasst, das zweite Verbindungselement (7) ein mit dem ersten Verbindungselement (6) verbundenes Ende und ein abtrennbar mit der Bodenplatte (3) verbundenes anderes Ende aufweist; und das zweite Luftschachtgehäuse (112) mindestens teilweise durch das zweite Verbindungselement (7) an der Bodenplatte (3) fixiert ist. 5 10 15 20
5. Sockelanordnung (100) für den Trockner nach Anspruch 4, wobei das zweite Verbindungselement (7) Folgendes umfasst: ein zweites Anlagesegment (71), das sich über der Bodenplatte (3) befindet und von der Bodenplatte (3) beabstandet ist, wobei sich das zweite Anlagesegment (71) mit einer Deckwand des zweiten Luftschachtgehäuses (112) im Eingriff befindet; und ein drittes vertikales Segment (72), das ein mit der Bodenplatte (3) verbundenes Ende und ein mit dem zweiten Anlagesegment (71) verbundenes anderes Ende aufweist, wobei sich das dritte vertikale Segment (72) mit einer Seitenwand des zweiten Luftschachtgehäuses (112) im Eingriff befindet. 25 30 35
6. Sockelanordnung (100) für den Trockner nach Anspruch 4, wobei sich das eine Ende des zweiten Verbindungselements (7) in einer Schnappverbindung mit dem ersten Verbindungselement (6) befindet. 40
7. Sockelanordnung (100) für den Trockner nach Anspruch 4, wobei das mindestens eine Verbindungselement (5) ferner ein drittes Verbindungselement (8) umfasst, das in einer Längenrichtung des zweiten Luftschachtgehäuses (112) von dem zweiten Verbindungselement (7) beabstandet ist, wobei das dritte Verbindungselement (8) ein abtrennbar mit der Bodenplatte (3) verbundenes Ende und ein mit einer externen Struktur verbundenes anderes Ende aufweist. 45 50
8. Sockelanordnung (100) für den Trockner nach Anspruch 7, wobei das dritte Verbindungselement (8) Folgendes umfasst: ein drittes Anlagesegment (81), das sich über der Bodenplatte (3) befindet und von der Bodenplatte (3) beabstandet ist, wobei sich das 55

dritte Anlagesegment (81) mit einer Deckwand des zweiten Luftschachtgehäuses (112) im Eingriff befindet; und ein viertes vertikales Segment (82), das ein mit der Bodenplatte (3) verbundenes Ende und ein mit dem dritten Anlagesegment (81) verbundenes anderes Ende aufweist, wobei sich das vierte vertikale Segment (82) mit einer Seitenwand des zweiten Luftschachtgehäuses (112) im Eingriff befindet.

9. Sockelanordnung (100) für den Trockner nach einem der Ansprüche 4 bis 8, wobei eine Längenrichtung des ersten Luftschachtgehäuses (11) senkrecht zu einer Längenrichtung des zweiten Luftschachtgehäuses (112) ist.
10. Sockelanordnung (100) für den Trockner nach einem der Ansprüche 1 bis 9, wobei das Luftschachtgehäuse (1) als Wärmedämmelement konfiguriert ist, das separat von der Bodenplatte (3) gebildet ist.
11. Sockelanordnung (100) für den Trockner nach einem der Ansprüche 1 bis 10, ferner umfassend eine Verbindungssockel, die abtrennbar auf der Bodenplatte (3) angeordnet ist und sich an einer Seite des Luftschachtgehäuses (1) befindet, wobei die Verbindungssockel einen Kanal in Verbindung mit dem Hohlraum (1a) des Luftschachtgehäuses (1) aufweist; wobei es sich bei der Bodenplatte (3) vorzugsweise um ein Metallteil handelt und die Verbindungssockel als Kunststoffteil konfiguriert ist, das separat von der Bodenplatte (3) gebildet ist.
12. Trockner, umfassend die Sockelanordnung (100) für den Trockner nach einem der Ansprüche 1 bis 11.

Revendications

1. Ensemble formant base (100) pour un sèche-linge, l'ensemble formant base (100) comportant : une plaque inférieure (3) ; une coque de conduit d'air (1) disposée sur la plaque inférieure (3) et ayant une cavité (1a), dans lequel un échangeur de chaleur est monté à l'intérieur de la cavité (1a) ; et au moins un élément de raccordement (5) raccordé de manière détachable à la plaque inférieure (3) et/ou à la coque de conduit d'air (1) pour fixer la coque de conduit d'air (1) sur la plaque inférieure (3) ;

dans lequel : ledit au moins un élément de raccordement (5) est raccordé de manière détachable à la plaque inférieure (3) ; et ledit au moins un élément de raccordement (5) est au moins partiellement comprimé contre la coque de conduit d'air (1) pour fixer la coque de conduit d'air (1) sur la plaque inférieure (3) ;

- de préférence, dans lequel ledit au moins un élément de raccordement (5) correspond à un contour extérieur de la coque de conduit d'air (1), et **caractérisé en ce que** ledit au moins un élément de raccordement (5) comporte un premier élément de raccordement (6) ayant deux extrémités raccordées de manière détachable à la plaque inférieure (3) ; et au moins une partie de la coque de conduit d'air (1) est située entre une partie médiane du premier élément de raccordement (6) et la plaque inférieure (3).
2. Ensemble formant base (100) pour le sèche-linge selon la revendication 1, dans lequel le premier élément de raccordement (6) comporte : un premier segment de butée (61) situé au-dessus de la plaque inférieure (3) et espacé de la plaque inférieure (3) ; un premier segment vertical (62) ayant une extrémité raccordée à la plaque inférieure (3) ; et un deuxième segment vertical (63) ayant une extrémité raccordée à la plaque inférieure (3), dans lequel : le premier segment de butée (61) a deux extrémités raccordées à une autre extrémité du premier segment vertical (62) et à une autre extrémité du deuxième segment vertical (63), respectivement ; le premier segment de butée (61) est mis en prise avec une paroi supérieure de la coque de conduit d'air (1) ; et le premier segment vertical (62) et/ou le deuxième segment vertical (63) est mis en prise avec une paroi latérale de la coque de conduit d'air (1).
 3. Ensemble formant base (100) pour le sèche-linge selon la revendication 1, dans lequel : le premier élément de raccordement (6) a une extrémité se trouvant en un raccordement par encliquetage avec la plaque inférieure (3), et une autre extrémité raccordée à la plaque inférieure (3) par un élément de fixation fileté ; ou ledit au moins un élément de raccordement (5) comporte une pluralité des premiers éléments de raccordement (6) agencés selon des intervalles dans une direction allant dans le sens de la longueur 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, dans lequel : la coque de conduit d'air (1) comporte une première coque de conduit d'air (11), et une deuxième coque de conduit d'air (112) en communication avec la première coque de conduit d'air (11) ; la première coque de conduit d'air (11) est au moins partiellement fixée sur la plaque inférieure (3) par le premier élément de raccordement (6) ; ledit au moins un élément de raccordement (5) comporte par ailleurs un deuxième élément de raccordement (7), le deuxième élément de raccordement (7) ayant une extrémité raccordée au premier élément de raccordement (6) et une autre extrémité raccordée de manière détachable à la plaque inférieure (3) ; et la deuxième coque de conduit d'air (112) est au moins partiellement fixée sur la plaque inférieure (3) par le deuxième élément de raccordement (7).
 5. Ensemble formant base (100) pour le sèche-linge selon la revendication 4, dans lequel le deuxième élément de raccordement (7) comporte : un deuxième segment de butée (71) situé au-dessus de la plaque inférieure (3) et espacé de la plaque inférieure (3), le deuxième segment de butée (71) étant mis en prise avec une paroi supérieure de la deuxième coque de conduit d'air (112) ; et un troisième segment vertical (72) ayant une extrémité raccordée à la plaque inférieure (3) et une autre extrémité raccordée au deuxième segment de butée (71), le troisième segment vertical (72) étant mis en prise avec une paroi latérale de la deuxième coque de conduit d'air (112).
 6. Ensemble formant base (100) pour le sèche-linge selon la revendication 4, dans lequel ladite une extrémité du deuxième élément de raccordement (7) est raccordée par encliquetage avec le premier élément de raccordement (6).
 7. Ensemble formant base (100) pour le sèche-linge selon la revendication 4, dans lequel ledit au moins un élément de raccordement (5) comporte par ailleurs un troisième élément de raccordement (8) espacé du deuxième élément de raccordement (7) dans une direction allant dans le sens de la longueur de la deuxième coque de conduit d'air (112), le troisième élément de raccordement (8) ayant une extrémité raccordée de manière détachable à la plaque inférieure (3) et une autre extrémité raccordée à une structure externe.
 8. Ensemble formant base (100) pour le sèche-linge selon la revendication 7, dans lequel le troisième élément de raccordement (8) comporte : un troisième segment de butée (81) situé au-dessus de la plaque inférieure (3) et espacé de la plaque inférieure (3), le troisième segment de butée (81) étant mis en prise avec une paroi supérieure de la deuxième coque de conduit d'air (112) ; et un quatrième segment vertical (82) ayant une extrémité raccordée à la plaque inférieure (3) et une autre extrémité raccordée au troisième segment de butée (81), le quatrième segment vertical (82) étant mis en prise avec une paroi latérale de la deuxième coque de conduit d'air (112).
 9. Ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 4 à 8, dans lequel une direction allant dans le sens de la longueur de la première coque de conduit d'air (11) est perpendiculaire à une direction allant dans le

sens de la longueur de la deuxième coque de conduit d'air (112).

10. Ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 1 à 9, dans lequel la coque de conduit d'air (1) est configurée comme étant un élément d'isolation thermique formé séparément de la plaque inférieure (3). 5

11. Ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 1 à 10, comportant par ailleurs une base de raccordement disposée de manière détachable sur la plaque inférieure (3) et située sur un côté de la coque de conduit d'air (1), la base de raccordement ayant un canal en communication avec la cavité (1a) de la coque de conduit d'air (1) ; 10
de préférence, la plaque inférieure (3) est une pièce métallique et la base de raccordement est configurée comme étant une pièce en plastique formée séparément de la plaque inférieure (3). 15
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12. Sèche-linge, comprenant l'ensemble formant base (100) pour le sèche-linge selon l'une quelconque des revendications 1 à 11. 25

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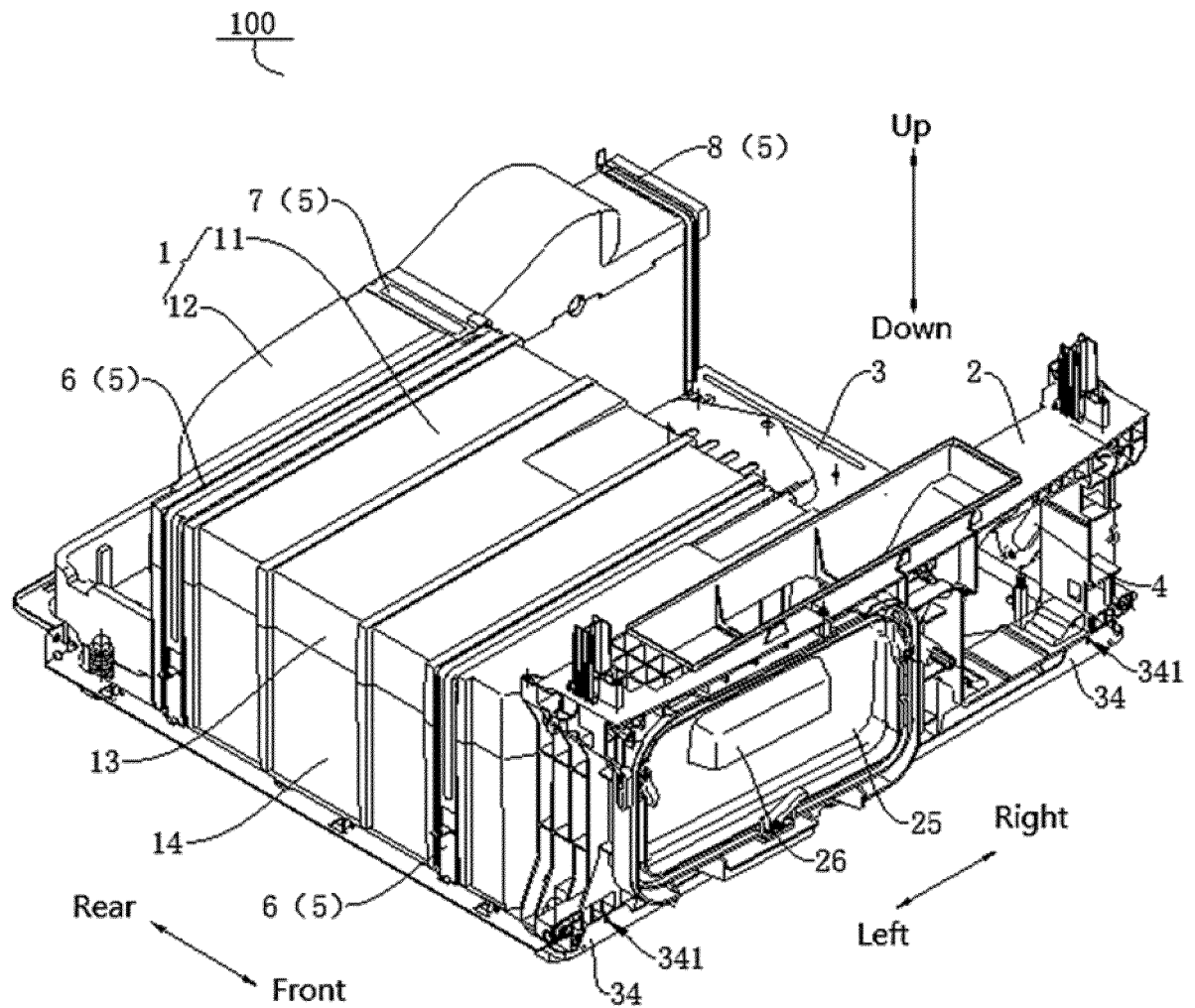


FIG. 1

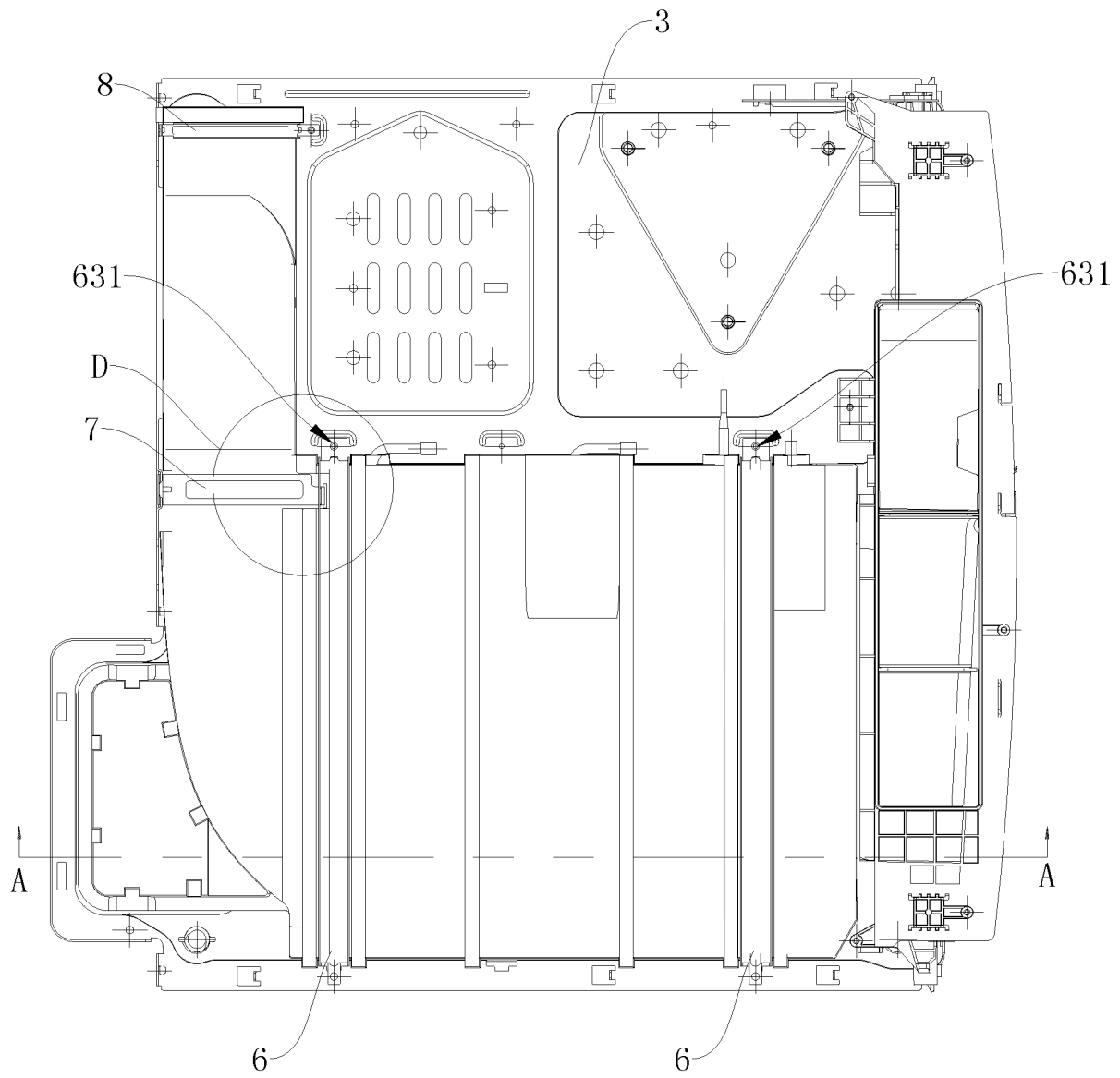


FIG. 2

A-A

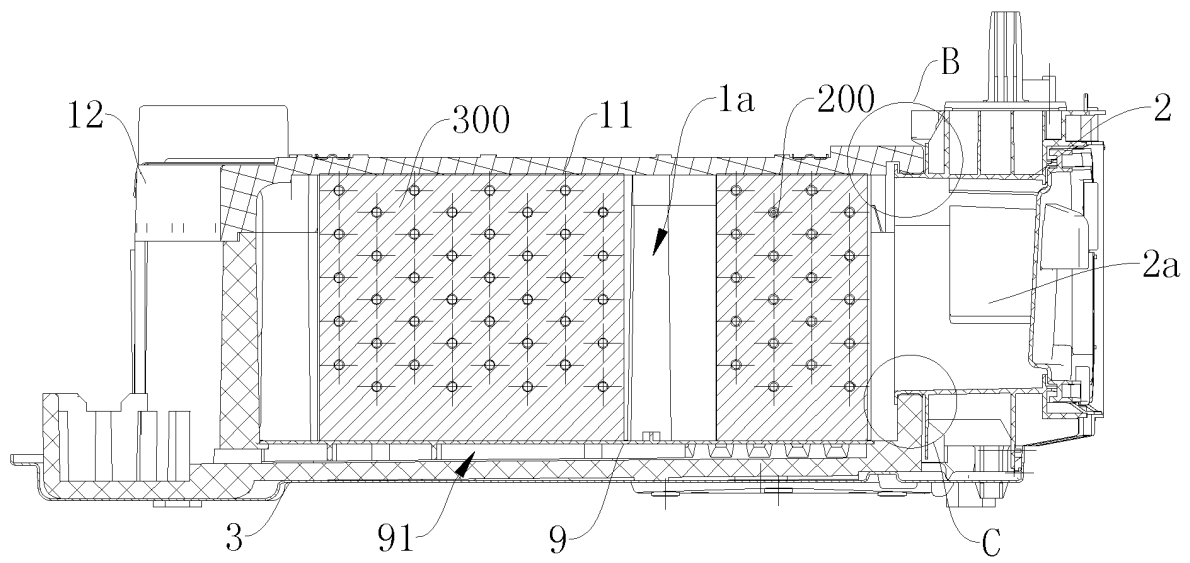


FIG. 3

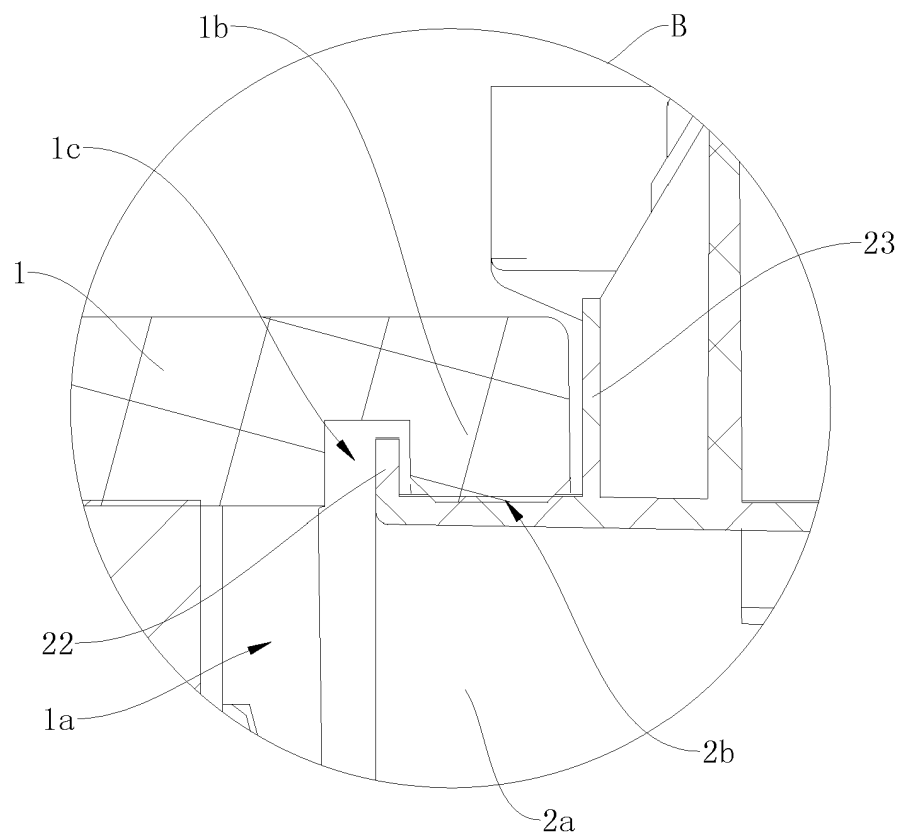


FIG. 4

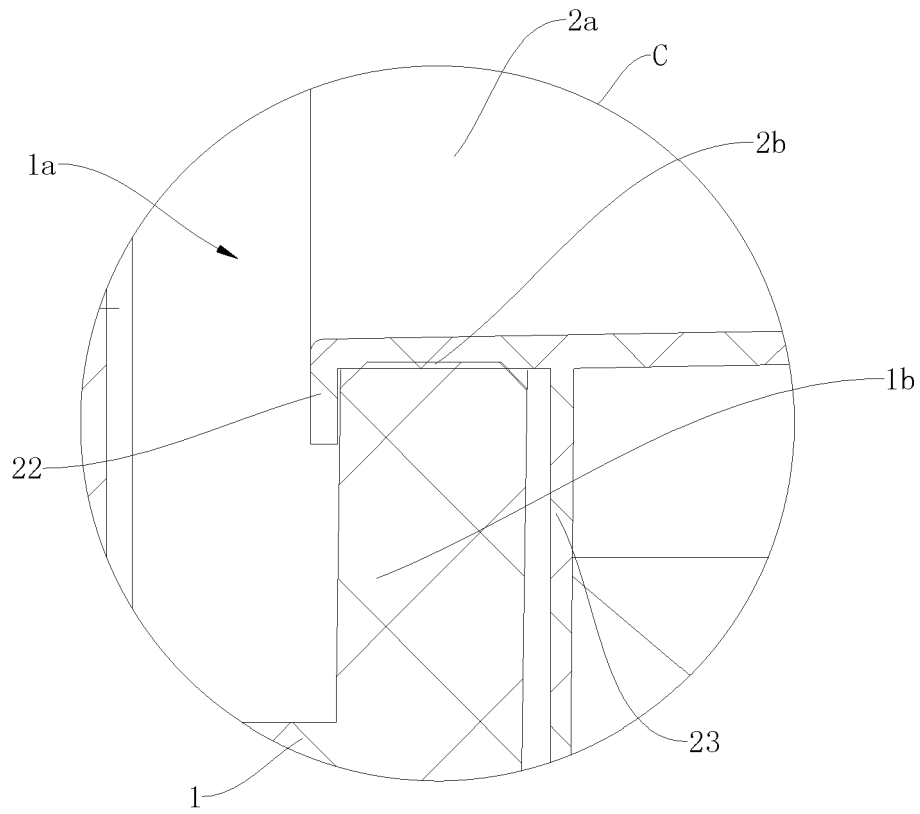


FIG. 5

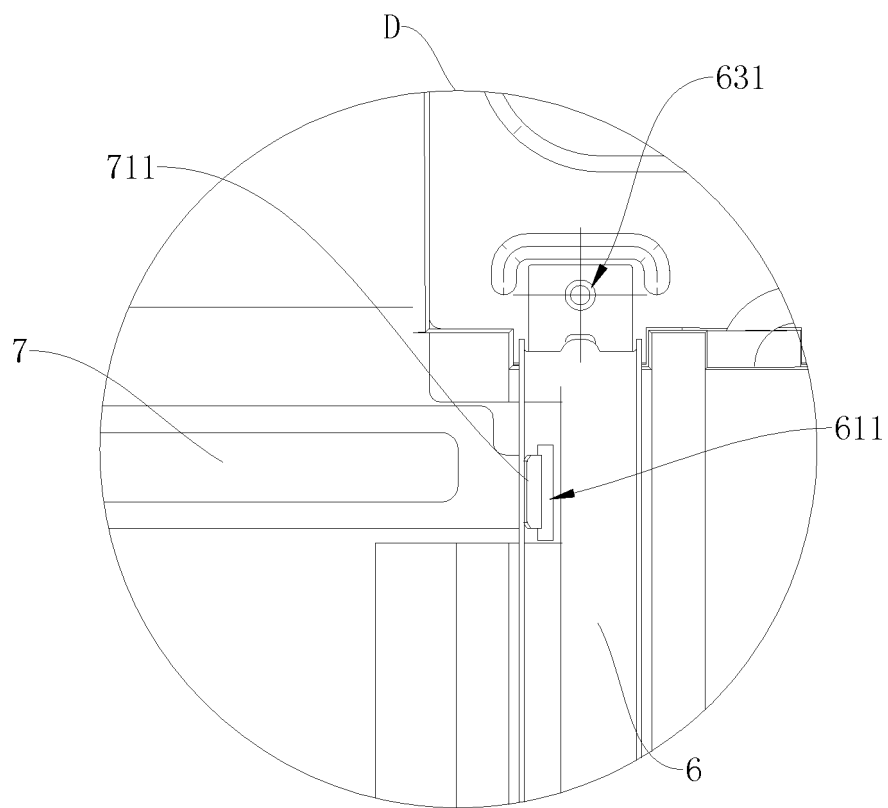


FIG. 6

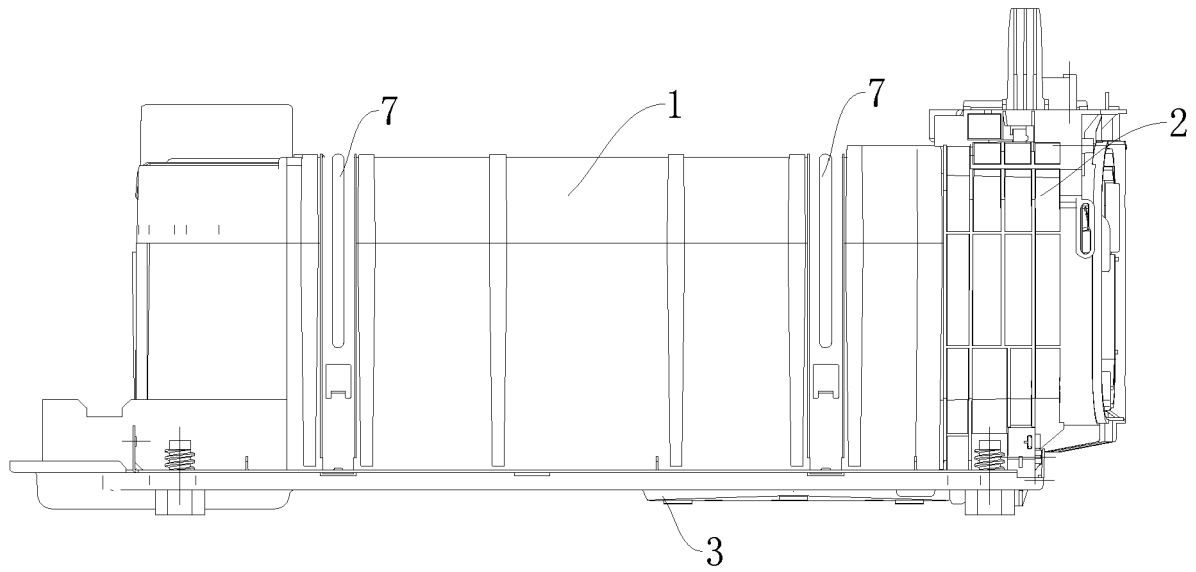


FIG. 7

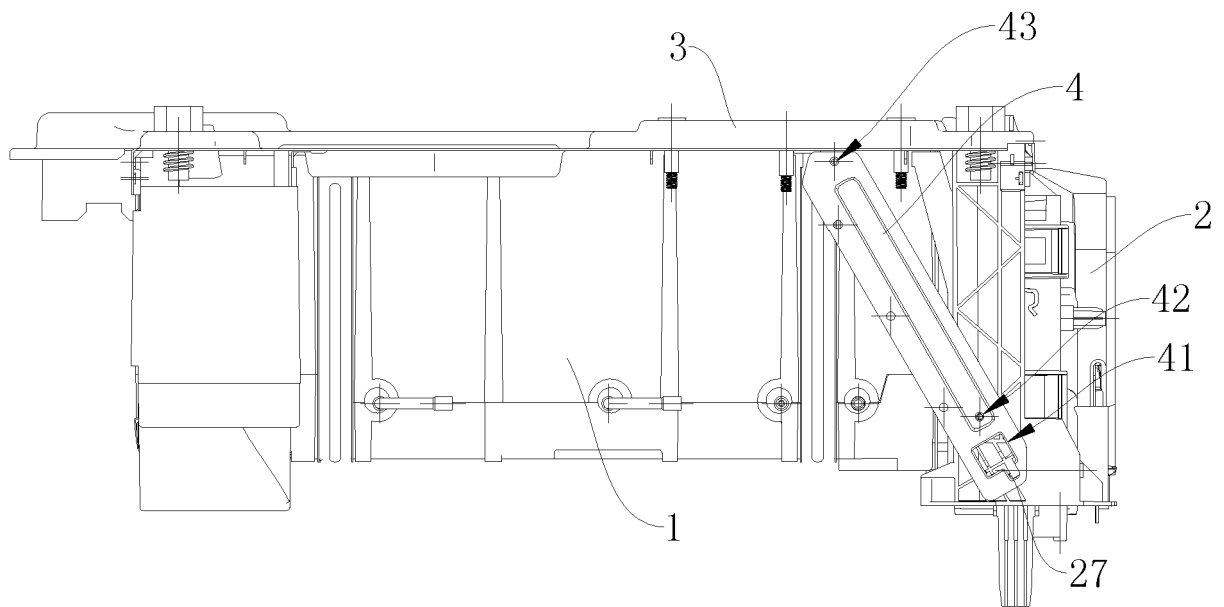


FIG. 8

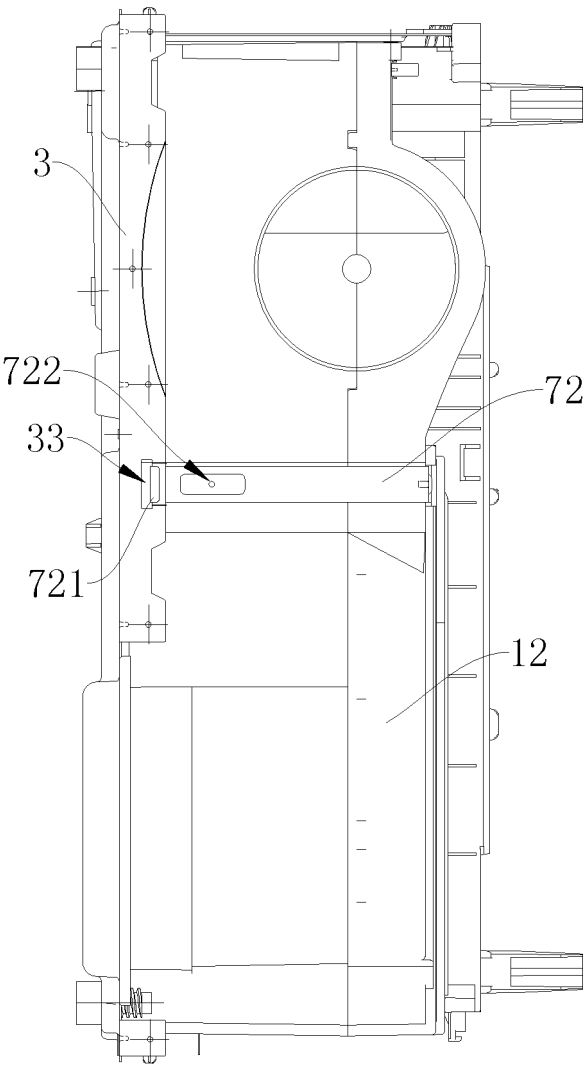


FIG. 9

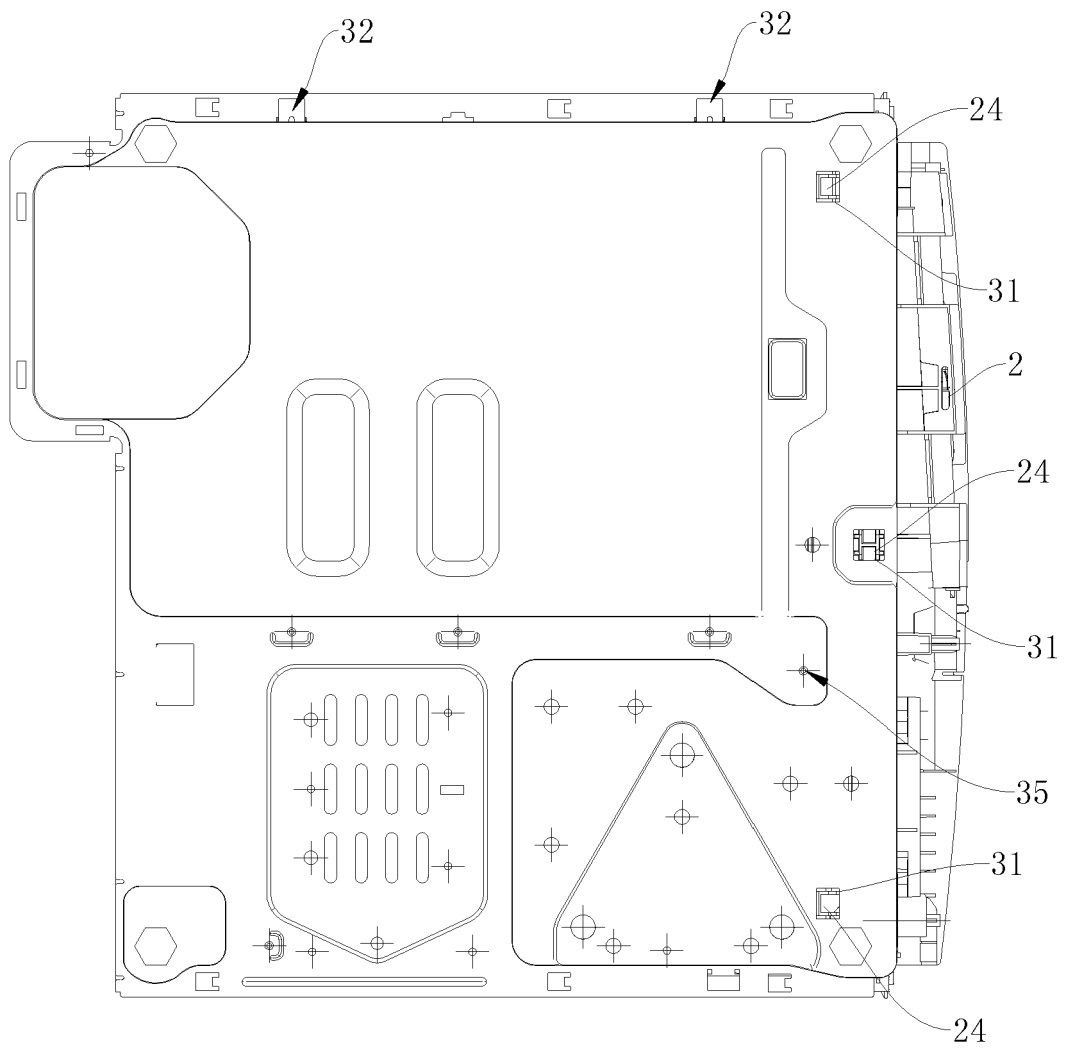


FIG. 10

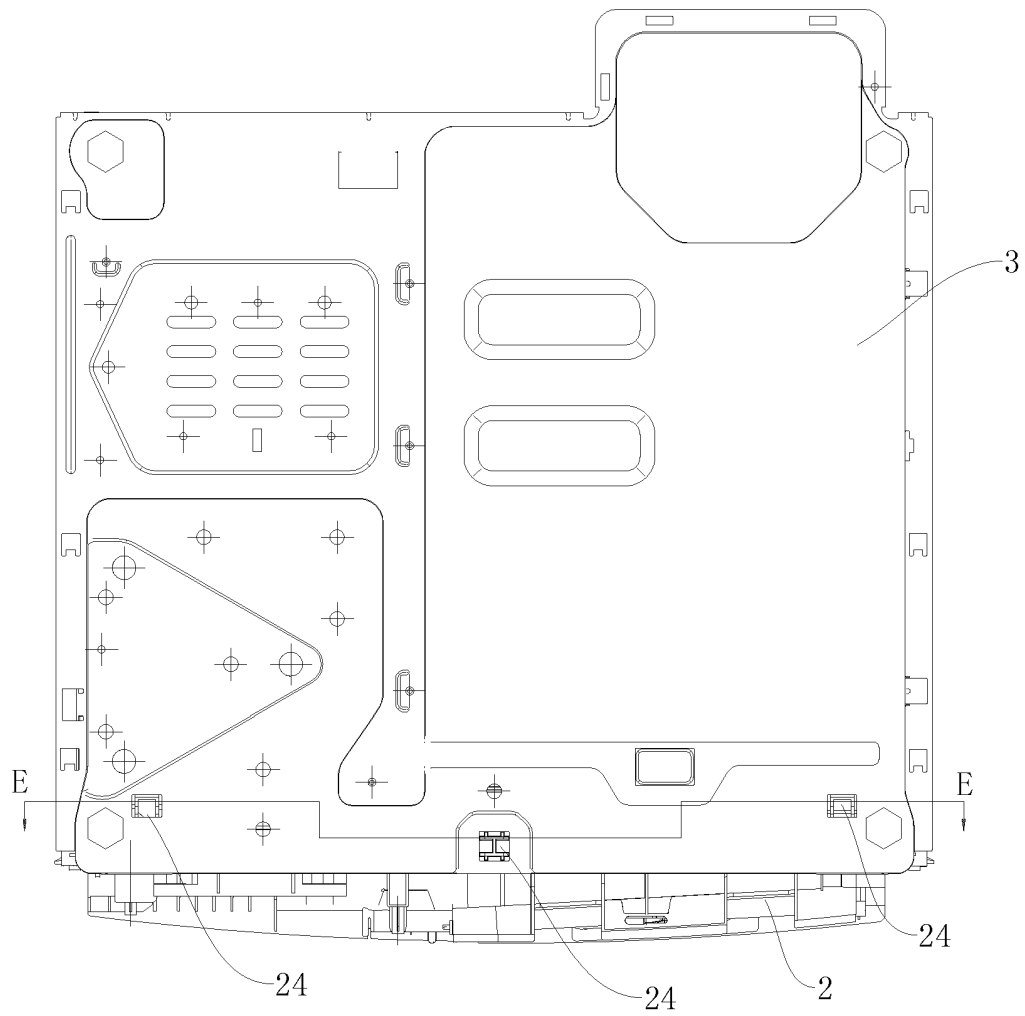


FIG. 11

E-E

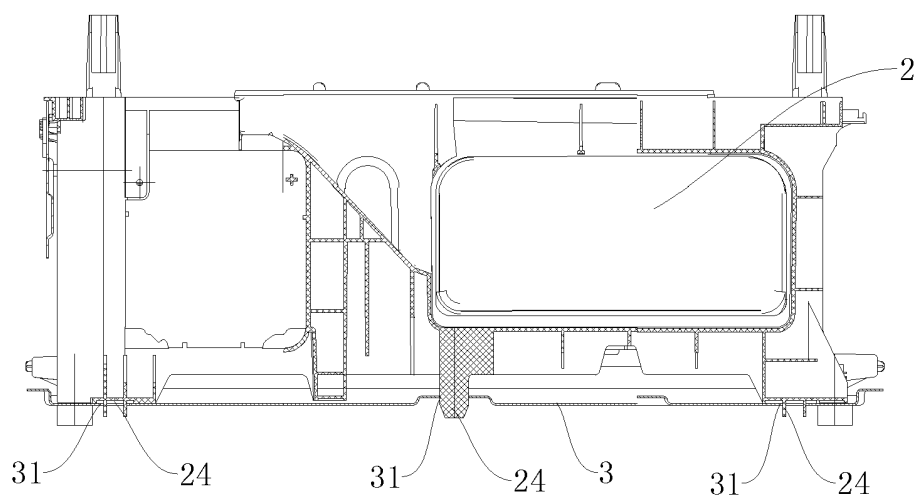


FIG. 12

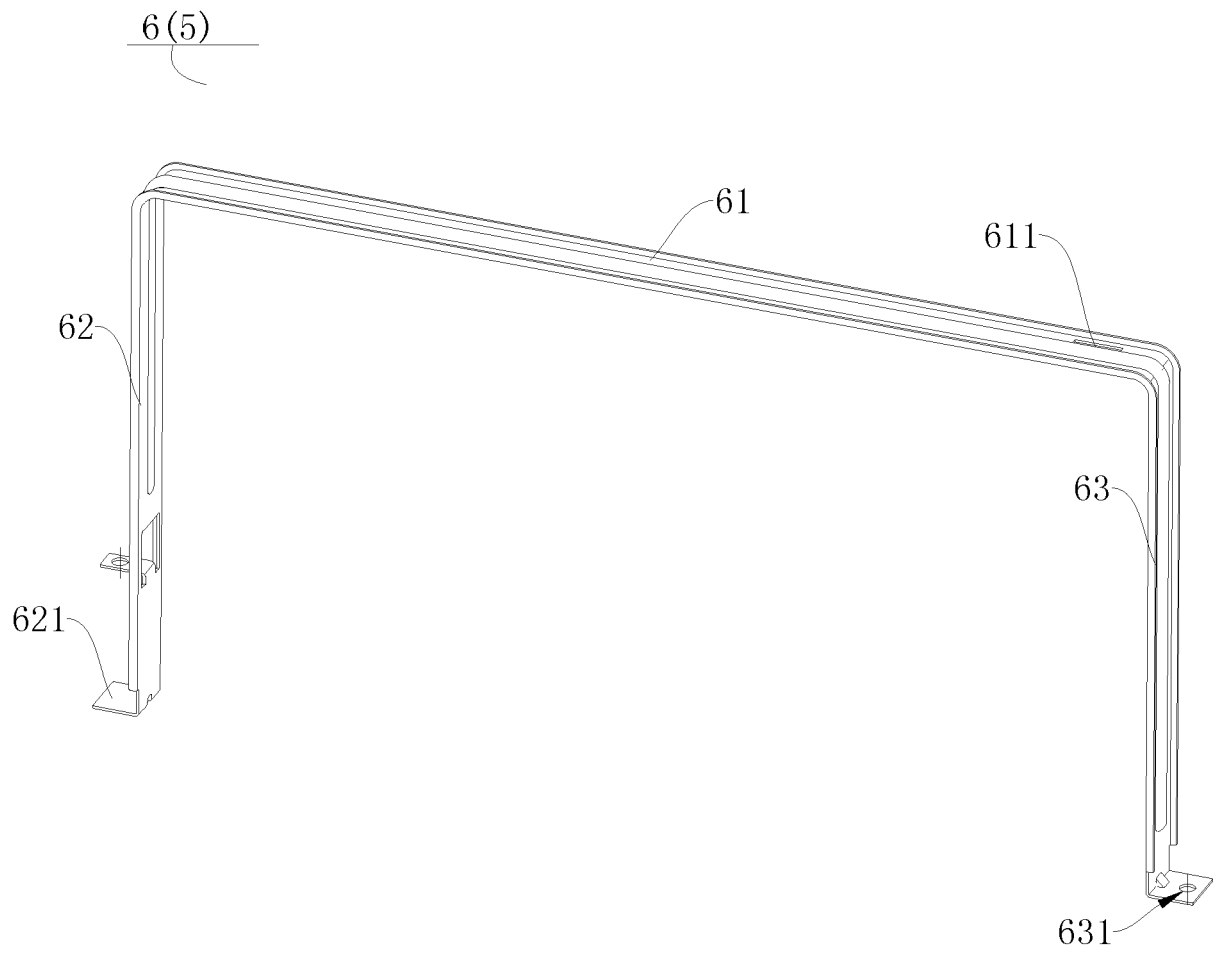


FIG. 13

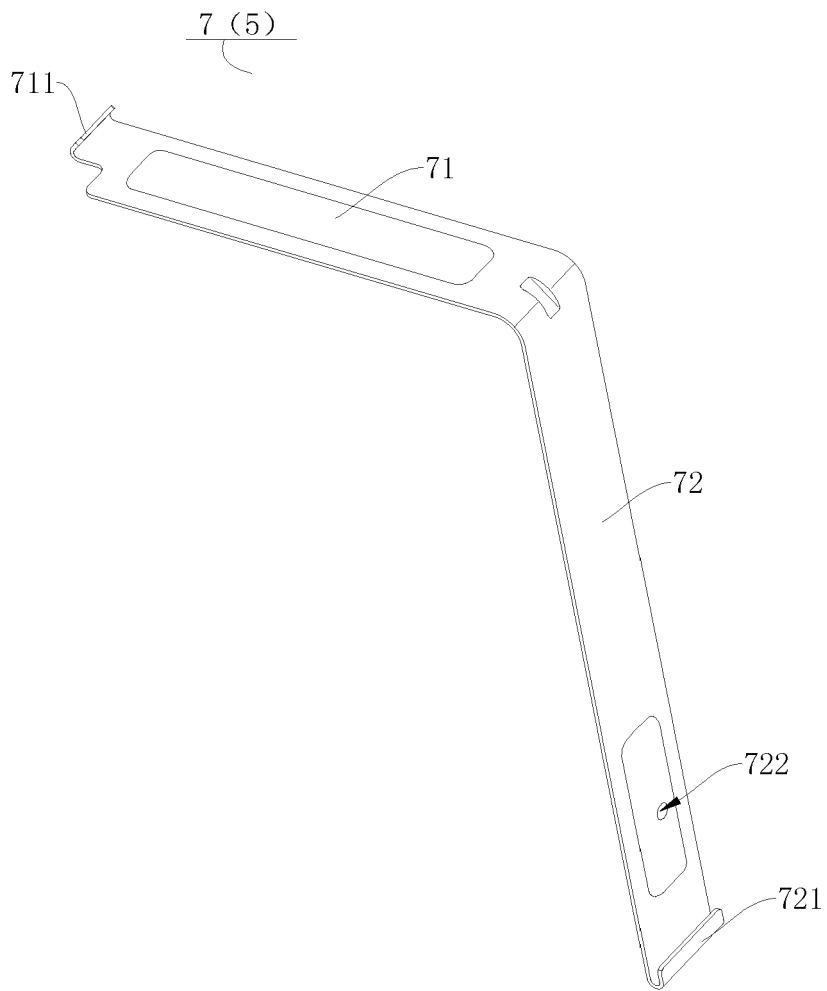


FIG. 14

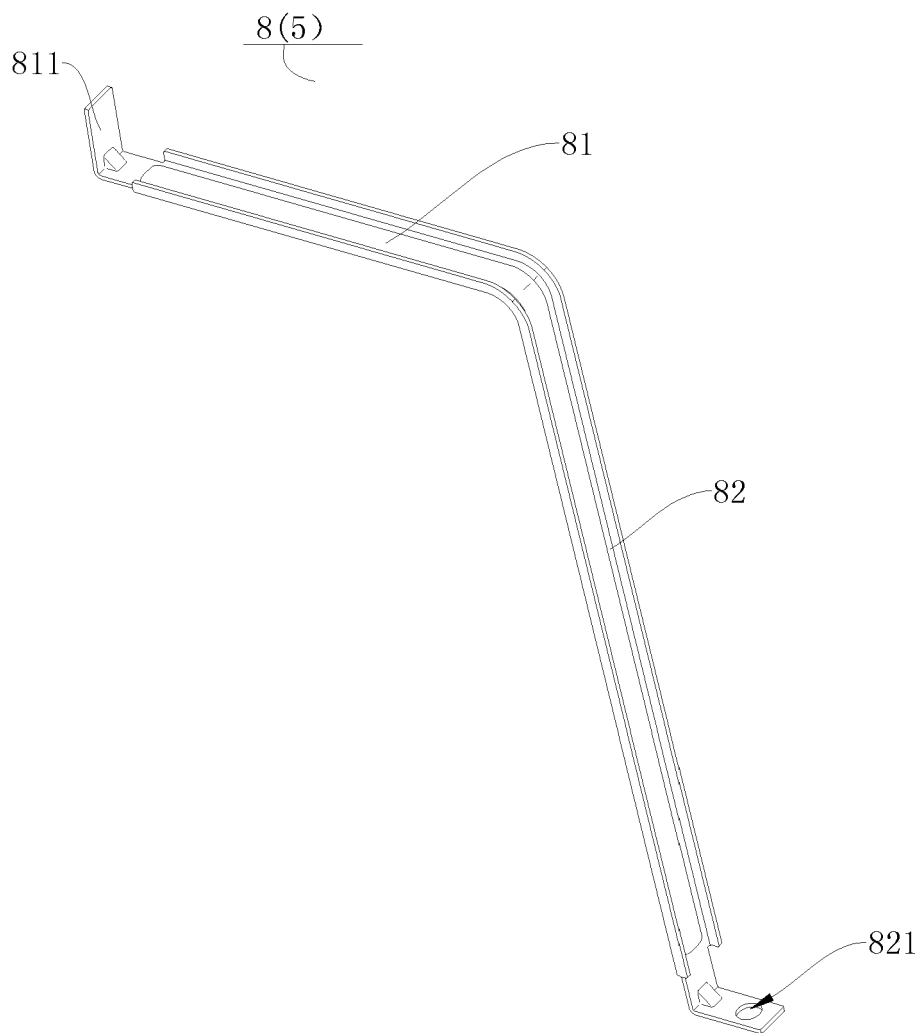
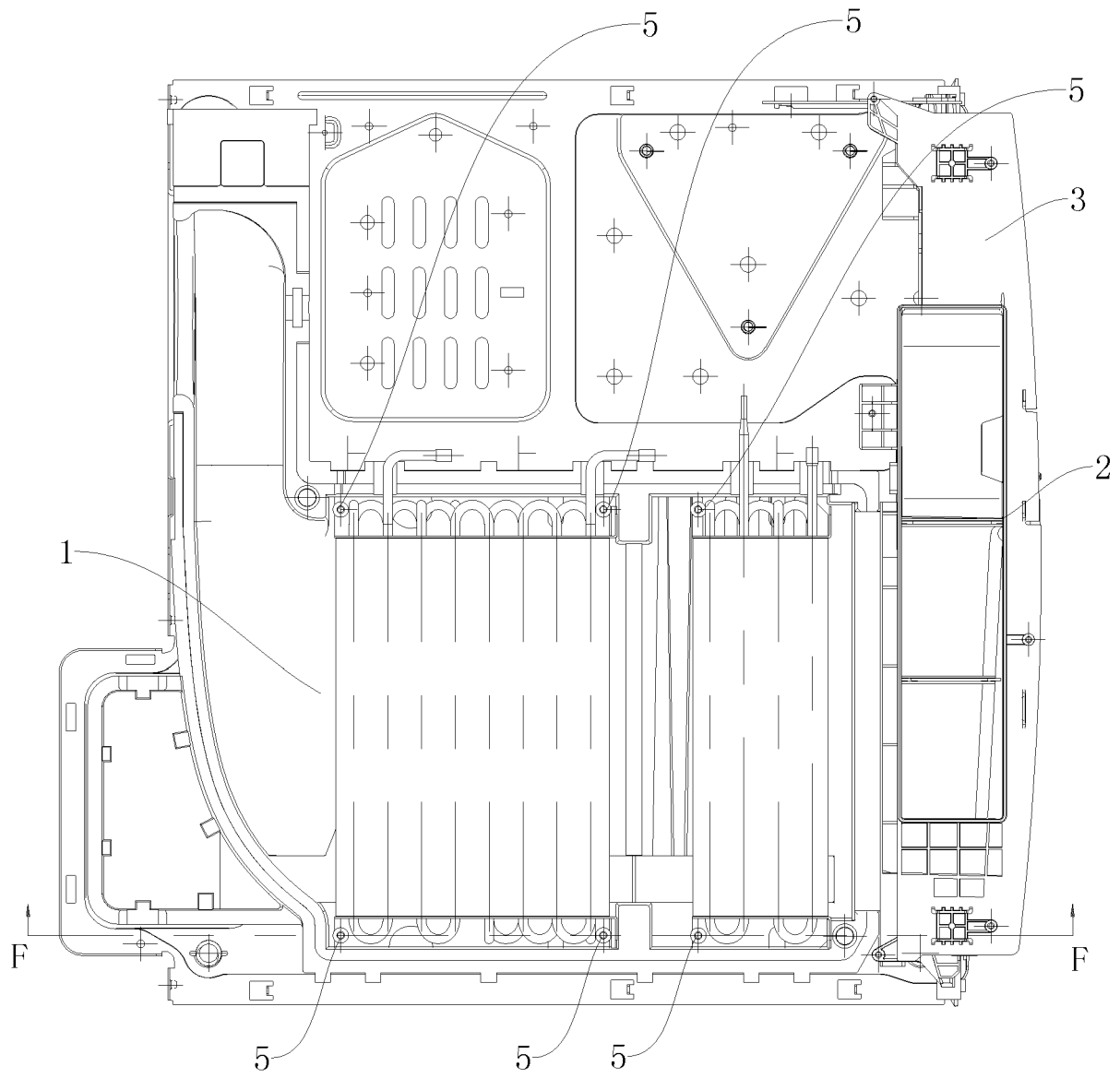


FIG. 15



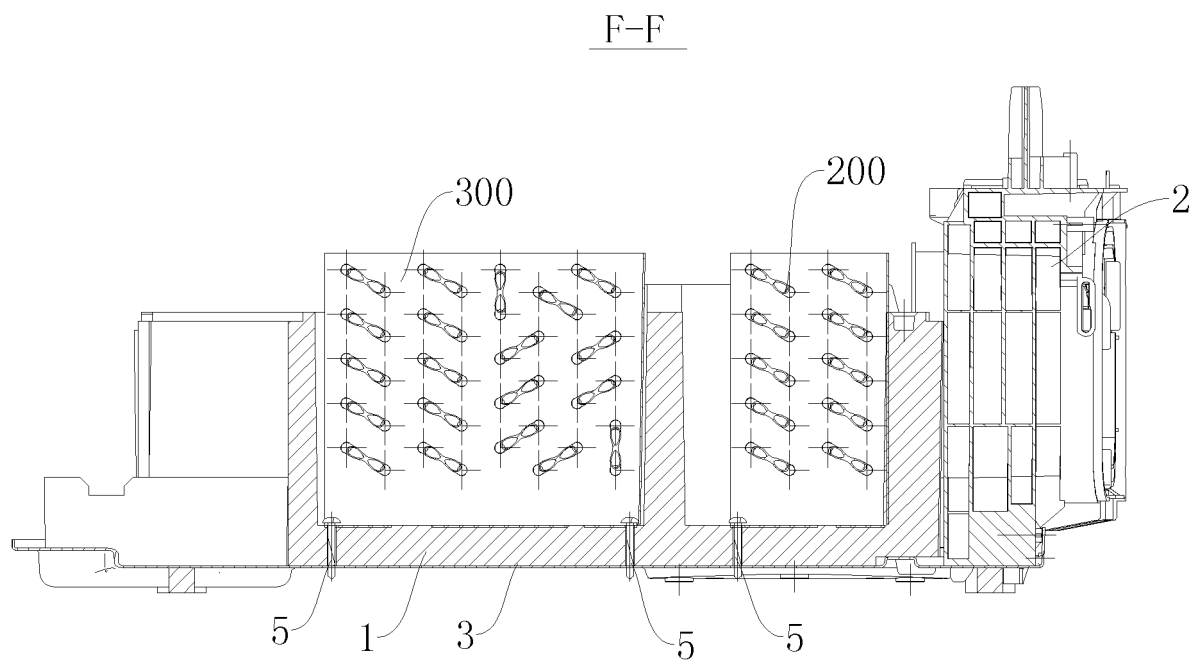


FIG. 17

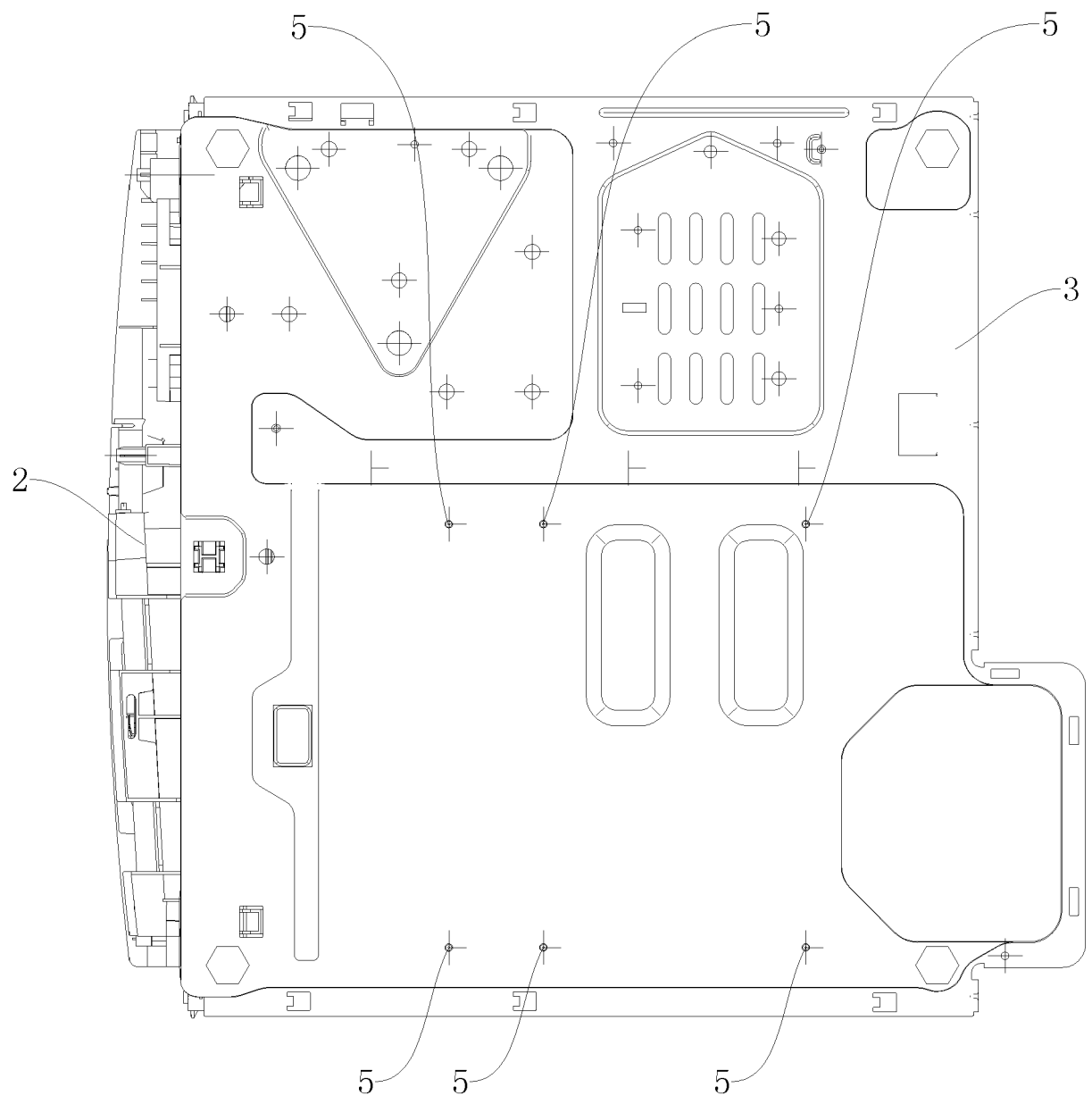


FIG. 18

REFERENCES CITED IN THE DESCRIPTION

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