(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) **EP 3 792 558 A1**

(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 153(4) EPC

(43) Date of publication:
17.03.2021 Bulletin 2021/11

(21) Application number: **18926004.5**

(22) Date of filing: **07.12.2018**

(51) Int Cl.:
F24F 1/00 *(2019.01)* ***F24F 13/20*** *(2006.01)*

(86) International application number:
PCT/CN2018/119860

(87) International publication number:
WO 2020/010790 (16.01.2020 Gazette 2020/03)

(84) Designated Contracting States:
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR
Designated Extension States:
BA ME
Designated Validation States:
KH MA MD TN

(30) Priority: **13.07.2018 CN 201810771611**

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(54) PANEL STRUCTURE, AND AIR CONDITIONER HAVING SAME

(57) The invention discloses a panel body structure, including: a panel body (10); and a storage portion (20), the storage portion (20) is disposed on a surface of the panel body (10), and the storage portion (20) is used for storing bolts for installing an air conditioner. In addition, the invention further discloses an air conditioner with the panel body structure.

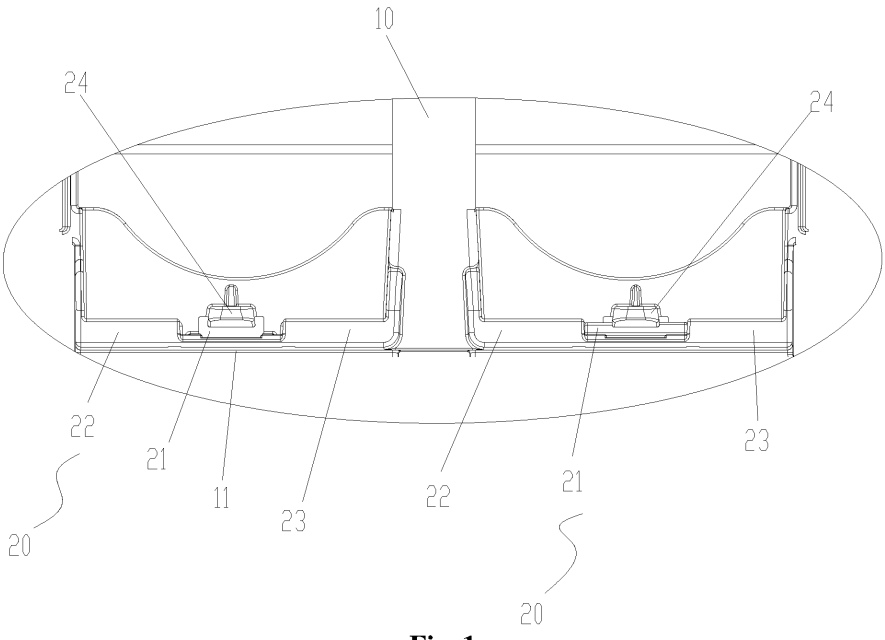

Fig. 1

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Description

Technical Field

[0001] The invention relates to a technical field of air conditioner equipment, and in particular to a panel body structure and an air conditioner with the panel body structure.

Background

[0002] An air conditioner is widely used as a household product, and the air conditioner changes an indoor environment temperature through cooling or heating for a longer time. After the air conditioner is used for a long time, there is a lot of dust, if it is not cleaned regularly, the air conditioner will become a potential source of pollution in the home, and a health of a consumer is endangered, however, in a process of disassembling or assembling the air conditioner, there is no place for placing bolts for installing the air conditioner, it is easy to cause a problem that the bolts are easily lost in a process of disassembling or assembling.

Summary

[0003] Some embodiments of the invention provide a panel body structure and an air conditioner with the panel body structure, as to solve a problem in a technology known to inventors that bolts for installing the air conditioner are easily lost because there is no place for placing.

[0004] In some embodiments of the invention, a panel body structure is provided, including: a panel body; a storage portion, the storage portion is disposed on a surface of the panel body, and the storage portion is used for storing bolts for installing an air conditioner.

[0005] In some embodiments, the storage portion includes: a magnetic adsorption element, the magnetic adsorption element is connected with the surface of the panel body, and the magnetic adsorption element is used for adsorbing the bolts.

[0006] In some embodiments, an outer surface of the panel body is provided with an installing platform, the storage portion includes: a limiting element, the limiting element is provided opposite to the installing platform so as to form a limiting space, and the magnetic adsorption element is installed in the limiting space.

[0007] In some embodiments, the panel body structure includes: a first limiting rib, a part of the first limiting rib is connected with the installing platform and the panel body and positioned at a first side of the limiting element; and a second limiting rib, a part of the second limiting rib is connected with the installing platform and the panel body and positioned at a second side, opposite to the first side, of the limiting element, the first limiting rib, the second limiting rib, the installing platform and the limiting element are enclosed to form the limiting space.

[0008] In some embodiments, the panel body structure further includes: a third limiting rib, the third limiting rib is disposed on the installing platform and positioned between the first limiting rib and the second limiting rib, the magnetic adsorption element is abutted against the third limiting rib.

[0009] In some embodiments, there are a plurality of t third limiting ribs, the plurality of t third limiting ribs are spaced from each other, or the plurality of t third limiting ribs are disposed in a staggered manner.

[0010] In some embodiments, the storage portion further includes: a first enclosing plate, the first enclosing plate is connected with a first end of the installing platform; and a second enclosing plate, the second enclosing plate is connected with a second end of the installing platform, the first enclosing plate and the second enclosing plate are oppositely disposed, the first enclosing plate, the second enclosing plate and the installing platform are enclosed to form an accommodate space, and the limiting element is positioned in the accommodate space.

[0011] In some embodiments, the first enclosing plate and the second enclosing plate are connected in a middle of an outer edge of the installing platform, a connection place of the first enclosing plate and the second enclosing plate is provided with a gap for installing the magnetic adsorption element.

[0012] In some embodiments, there are a plurality of storage portions, the plurality of storage portions are spaced from each other along a length direction of the panel body.

[0013] In some embodiments of the invention, an air conditioner is provided, including a panel body structure, the panel body structure is the above panel body structure.

[0014] A technical solution of the invention is applied, through providing the storage portion on the panel body structure so as to store the bolts for installing the air conditioner, the bolts to be used are placed in the storage portion in a process of detaching and cleaning or assembling the air conditioner, in this way, the bolts are conveniently picked up by an operator, at the same time, the bolts to be used can also be conveniently placed in the assembling process, and the bolts are prevented from being lost.

Brief Description of the Drawings

[0015] The accompanying drawings, which constitute a part of the present application, are used to provide a further understanding of the invention, and the exemplary embodiments of the invention and the description thereof are used to explain the invention, but do not constitute improper limitations to the invention. In the drawings:

Fig. 1 illustrates a structure schematic diagram of a first embodiment of a panel structure according to the invention;

Fig. 2 illustrates a structure schematic diagram of a

second embodiment of the panel structure according to the invention;

Fig. 3 illustrates a structure schematic diagram of a third embodiment of the panel structure according to the invention;

Fig. 4 illustrates a structure schematic diagram of a fourth embodiment of the panel structure according to the invention; and

Fig. 5 illustrates a structure schematic diagram of an embodiment of an air conditioner according to the invention.

[0016] Herein, the above drawings include the following drawing reference signs:

10. Panel body; 11. Installing platform;
20, Storage portion; 21, Magnetic adsorption element; 22, First enclosing plate; 23, Second enclosing plate; 24, Limiting element;
31, First limiting rib;
32, Second limiting rib;
33, Third Limiting rib; and
40, Bolt.

Detailed Description of the Embodiments

[0017] It should be noted that the embodiments in the present application and the features in the embodiments may be combined with each other without conflict. The invention will be described in detail below with reference to the accompanying drawings and in conjunction with the embodiments.

[0018] It should be noted that terms used here are only used for describing specific implementation modes, and are not intended to limit the exemplary implementation modes according to the present application. As used herein, unless clearly specified otherwise in the context, a singular form is also intended to include a plural form. In addition, it should also be understood that when the terms "comprising" and/or "including" are used in the description, it is indicated that there are features, steps, operations, devices, components and/or combinations thereof.

[0019] It should be noted that the terms "first", "second", and the like in the specification and claims of the present application and in the above drawings are used to distinguish similar objects and are not necessarily used to describe a specific sequence or order. It will be appreciated that the data used in this way may be interchanged where appropriate, so that the implementation manners of the present application described herein can be implemented, for example, in an order other than those illustrated or described herein. In addition, the terms "include" and "have" and any variations thereof are intended to cover non-exclusive inclusions. For example, a process, method, system, product, or equipment that comprises a series of steps or units need not be limited to those steps or units that are explicitly listed, and may instead include other steps or units that are not explicitly listed or inherent to these processes, methods, products or equipment.

[0020] For ease of description, spatially relative terms such as "on", "over", "on an upper surface", "above", etc. may be used herein to describe a spatial position relationship between one device or feature as shown in the figures and other devices or features. It will be appreciated that the spatially relative terms are intended to comprise different orientations of the device in use or operation in addition to the orientation of the device described in the figures. For example, if the device in the figures is turned upside down, the device described as "over other devices or configurations" or "on other devices or configurations" will be positioned "below other devices or configurations" or "under other devices or configurations". Thus, the exemplary term "over" may include both "above" and "below". The device may also be positioned in other different manners (rotated for 90 degrees or at other orientations), and the spatially relative descriptors used herein are interpreted accordingly.

[0021] Now, the exemplary implementation modes according to the present application are described in more detail with reference to the drawings. However, these exemplary implementation modes may be implemented in multiple different forms, and should not be interpreted to be limited to the implementation modes described here. It should be understood that these implementation modes are provided to make the invention of the present application thorough and complete, and adequately convey concepts of these exemplary implementation modes to those of ordinary skill in the art, in the drawings, for clarity, thicknesses of layers and regions may be enlarged, and the same reference sign is used to show the same device, therefore the description of them may be omitted.

[0022] As shown in Fig. 1 to Fig. 5, according to an embodiment of the invention, a panel body structure is provided.

[0023] Specifically, as shown in Fig. 1, the panel body structure includes a panel body 10 and a storage portion 20. The storage portion 20 is disposed on a surface of the panel body 10, and the storage portion 20 is used for storing bolts for installing an air conditioner.

[0024] In the present embodiment, through providing the storage portion on the panel body structure so as to store the bolts for installing the air conditioner, the bolts to be used are placed in the storage portion in a process of detaching and cleaning or assembling the air conditioner, in this way, the bolts are conveniently picked up by an operator, at the same time, the bolts to be used can also be conveniently placed in the assembling process, and the bolts are effectively prevented from being lost.

[0025] In some embodiments, the storage portion 20 includes a magnetic adsorption element 21. The magnetic adsorption element 21 is connected with the surface of the panel body 10, and the magnetic adsorption ele-

ment 21 is used for adsorbing the bolts 40. Such a configuration is capable of enabling the bolts not to be slid from the panel body, in some embodiments, the magnetic adsorption element 21 is a block-shaped magnet structure.

[0026] In order to further conveniently place the bolts and the magnetic adsorption element 21, an outer surface of the panel body 10 is provided with an installing platform 11. In some embodiments, the storage portion 20 includes a limiting element 24. The limiting element 24 is provided opposite to the installing platform 11 so as to form a limiting space, and the magnetic adsorption element 21 is installed in the limiting space. Such a configuration is capable of effectively improving installing stability of the magnetic adsorption element 21.

[0027] In some embodiments, as shown in Fig. 2, the panel body structure includes a first limiting rib 31 and a second limiting rib 32. A part of the first limiting rib 31 is connected with the installing platform 11 and the panel body 10 and positioned at a first side of the limiting element 24. A part of the second limiting rib 32 is connected with the installing platform 11 and the panel body 10 and positioned at a second side, opposite to the first side, of the limiting element 24, the first limiting rib 31, the second limiting rib 32, the installing platform 11 and the limiting element 24 are enclosed to form the limiting space. Such a configuration is capable of effectively preventing the magnetic adsorption element 21 from being leftwards and rightwards shaken on the panel body.

[0028] In order to further enable the magnetic adsorption element 21 to be locked in the limiting space, the panel body structure is further provided with a third limiting rib 33. The third limiting rib 33 is disposed on the installing platform 11 and positioned between the first limiting rib 31 and the second limiting rib 32, the magnetic adsorption element 21 is abutted against the third limiting rib 33.

[0029] In some embodiments, as shown in Fig. 2, there are a plurality of third limiting ribs 33, the plurality of third limiting ribs 33 are spaced from each other, or the plurality of third limiting ribs 33 are staggered, namely intersected in pairs, such a configuration is capable of improving the installing stability of the magnetic adsorption element 21.

[0030] In order to prevent the bolts from being fallen from the panel body, in some embodiments, the storage portion 20 is further provided with a first enclosing plate 22 and a second enclosing plate 23. The first enclosing plate 22 is connected with a first end of the installing platform 11. The second enclosing plate 23 is connected with a second end of the installing platform 11, the first enclosing plate 22 and the second enclosing plate 23 are oppositely provided, the first enclosing plate 22, the second enclosing plate 23 and the installing platform 11 are enclosed to form an accommodate space, and the limiting element 24 is positioned in the accommodate space.

[0031] As shown in Fig. 3, in some embodiments, the first enclosing plate 22 and the second enclosing plate 23 are connected in a middle of an outer edge of the installing platform 11, a connection place of the first enclosing plate 22 and the second enclosing plate 23 is provided with a gap for installing the magnetic adsorption element 21.

[0032] In some embodiments, there are a plurality of storage portions 20, the plurality of storage portions 20 are spaced from each other along a length direction of the panel body 10. Such a configuration is capable of enabling the storage portions 20 to place the more bolts.

[0033] The panel body structure in the above embodiment can also be used in the technical field of air conditioner equipment, namely according to another aspect of the invention, an air conditioner is provided, including a panel body structure. The panel body structure is the panel body structure in the above embodiment.

[0034] In some embodiments, the panel body structure in the present invention is used, the panel body structure is provided with the panel body for placing the detached bolts, through designing such a structure, a situation that the bolts are easily lost when the air conditioner is disassembled by a user is solved, and user experience in the process of detaching the air conditioner is improved. When the air conditioner is disassembled by the user, the disassembled bolts may be concentrated to be stored.

[0035] Through enabling a magnet to be assembled on the panel body, and through a magnetic property of the magnet, the bolts detached in a detaching process of an air conditioner indoor unit are placed in an appointed position on the panel body, in this way, the detached bolts are easily placed and are not easily lost when the air conditioner indoor unit is disassembled by the user.

[0036] In the middle of the panel body, an installing platform is provided, and similar to a box. Through enabling the magnet to be assembled in the limiting space, and through a magnetic force of the magnet, the detached bolts are adsorbed, so the bolts are not more easily shaken and fallen in this way. The bolts detached by the user are placed in a middle position of the panel body, namely a bolt placing structure. As shown in Fig. 4, the magnetic adsorption element, namely the magnet, is assembled in the limiting space according to a direction of an arrow shown in the figure, and a magnet fixing structure is provided with 4 ribs, such a configuration is capable of avoiding the magnet from being shaken.

[0037] In addition to the above, it should be noted that "one embodiment", "another embodiment", "embodiment" and the like mentioned in the description refer that specific features, structures or characteristics described in combination with the embodiment are included in at least one embodiment generally described in the present application. The same expression occurring in multiple places in the description does not necessarily refer to the same embodiment. Furthermore, when one specific feature, structure or characteristic is described in combination with any one embodiment, it is claimed that such feature, structure or characteristic achieved in combination with other embodiments also falls within a scope of

the invention.

[0038] In the above embodiments, the description of each embodiment has own emphasis, and a part that is not described in detail in a certain embodiment may reference to related descriptions of other embodiments.

[0039] The foregoing descriptions are merely some embodiments of the invention and are not intended to limit the invention. For those skilled in the art, the invention may have various changes and modifications. Any modifications, equivalent replacements and improvements made within the spirit and principle of the invention shall fall within the protection scope of the invention.

[0040] It should be noted that the embodiments in the present application and the features in the embodiments may be combined with each other without conflict. The invention will be described in detail below with reference to the accompanying drawings and in conjunction with the embodiments.

[0041] It should be noted that terms used here are only used for describing specific implementation modes, and are not intended to limit the exemplary implementation modes according to the present application. As used herein, unless clearly specified otherwise in the context, a singular form is also intended to include a plural form. In addition, it should also be understood that when the terms "comprising" and/or "including" are used in the description, it is indicated that there are features, steps, operations, devices, components and/or combinations thereof.

[0042] It should be noted that the terms "first", "second", and the like in the specification and claims of the present application and in the above drawings are used to distinguish similar objects and are not necessarily used to describe a specific sequence or order. It will be appreciated that the data used in this way may be interchanged where appropriate, so that the implementation manners of the present application described herein can be implemented, for example, in an order other than those illustrated or described herein. In addition, the terms "include" and "have" and any variations thereof are intended to cover non-exclusive inclusions. For example, a process, method, system, product, or equipment that comprises a series of steps or units need not be limited to those steps or units that are explicitly listed, and may instead include other steps or units that are not explicitly listed or inherent to these processes, methods, products or equipment.

[0043] For ease of description, spatially relative terms such as "on", "over", "on an upper surface", "above", etc. may be used herein to describe a spatial position relationship between one device or feature as shown in the figures and other devices or features. It will be appreciated that the spatially relative terms are intended to comprise different orientations of the device in use or operation in addition to the orientation of the device described in the figures. For example, if the device in the figures is turned upside down, the device described as "over other devices or configurations" or "on other devices or configurations" will be positioned "below other devices or configurations" or "under other devices or configurations". Thus, the exemplary term "over" may include both "above" and "below". The device may also be positioned in other different manners (rotated for 90 degrees or at other orientations), and the spatially relative descriptors used herein are interpreted accordingly.

[0044] Now, the exemplary implementation modes according to the present application are described in more detail with reference to the drawings. However, these exemplary implementation modes may be implemented in multiple different forms, and should not be interpreted to be limited to the implementation modes described here. It should be understood that these implementation modes are provided to make the invention of the present application thorough and complete, and adequately convey concepts of these exemplary implementation modes to those of ordinary skill in the art, in the drawings, for clarity, thicknesses of layers and regions may be enlarged, and the same reference sign is used to show the same device, therefore the description of them may be omitted.

[0045] As shown in Fig. 1 to Fig. 5, according to an embodiment of the invention, a panel body structure is provided.

[0046] In some embodiments, as shown in Fig. 1, the panel body structure includes a panel body 10 and a storage portion 20. The storage portion 20 is disposed on a surface of the panel body 10, and the storage portion 20 is used for storing bolts for installing the air conditioner.

[0047] In the embodiments, through configuring the storage portion on the panel body structure so as to store the bolts for installing the air conditioner, the bolts to be used can be placed in the storage portion in a process of detaching and cleaning or assembling the air conditioner, in this way, the bolts can be conveniently picked up by an operator, at the same time, the bolts to be used can also be conveniently placed in the assembling process, and the bolts are effectively prevented from being lost.

[0048] Herein, the storage portion 20 includes a magnetic adsorption element 21. The magnetic adsorption element 21 is connected with the surface of the panel body 10, and the magnetic adsorption element 21 is used for adsorbing the bolts 40. Such a configuration is capable of enabling the bolts not to be slid from the panel body, in some embodiments, the magnetic adsorption element 21 is a block-shaped magnet structure.

[0049] In order to further conveniently place the bolts and the magnetic adsorption element 21, in some embodiments, an outer surface of the panel body 10 is provided with an installing platform 11. Herein, the storage portion 20 includes a limiting element 24. The limiting element 24 is configured opposite to the installing platform 11 so as to form a limiting space, and the magnetic adsorption element 21 is installed in the limiting space. Such a configuration is capable of effectively improving installing stability of the magnetic adsorption element 21.

[0050] Further, as shown in Fig. 2, in some embodiments, the panel body structure includes a first limiting rib 31 and a second limiting rib 32. A part of the first limiting rib 31 is connected with both of the installing platform 11 and the panel body 10 and positioned at a first side of the limiting element 24. A part of the second limiting rib 32 is connected with the installing platform 11 and the panel body 10 and positioned at a second side, opposite to the first side, of the limiting element 24, the first limiting rib 31, the second limiting rib 32, the installing platform 11 and the limiting element 24 are enclosed to form the limiting space. Such a configuration is capable of effectively preventing the magnetic adsorption element 21 from being leftwards and rightwards shaken on the panel body.

[0051] In order to further enable the magnetic adsorption element 21 to be locked in the limiting space, in some embodiments, the panel body structure is further provided with a third limiting rib 33. The third limiting rib 33 is disposed on the installing platform 11 and positioned between the first limiting rib 31 and the second limiting rib 32, the magnetic adsorption element 21 is abutted against the third limiting rib 33.

[0052] In some embodiments, as shown in Fig. 2, there are a plurality of third limiting ribs 33, the plurality of third limiting ribs 33 are spaced from each other, or the plurality of third limiting ribs 33 are alternately disposed, namely intersected in pairs, such a configuration is capable of improving the installing stability of the magnetic adsorption element 21.

[0053] In order to prevent the bolts from being fallen from the panel body, in some embodiments, the storage portion 20 further includes a first enclosing plate 22 and a second enclosing plate 23. The first enclosing plate 22 is connected with a first end of the installing platform 11. The second enclosing plate 23 is connected with a second end of the installing platform 11, the first enclosing plate 22 and the second enclosing plate 23 are oppositely disposed, the first enclosing plate 22, the second enclosing plate 23 and the installing platform 11 are enclosed to form a accommodate space, and the limiting element 24 is positioned in the accommodate space.

[0054] As shown in Fig. 3, in some embodiments, the first enclosing plate 22 and the second enclosing plate 23 are connected in a middle of an outer edge of the installing platform 11, a connection place of the first enclosing plate 22 and the second enclosing plate 23 is provided with a gap for installing the magnetic adsorption element 21.

[0055] In some embodiments, there are a plurality of storage portions 20, the plurality of storage portions 20 are disposed at intervals along a length direction of the panel body 10. Such a configuration is capable of enabling the storage portions 20 to place the more bolts.

[0056] The panel body structure in the above embodiment can also be used in the technical field of air conditioner equipment, namely according to another aspect of the invention, an air conditioner is provided, including a panel body structure. The panel body structure is the panel body structure in the above embodiment.

[0057] In some embodiments, the panel body structure in the present invention is used, the panel body structure is provided with the panel body for placing the detached bolts, through designing such a structure, a situation that the bolts are easily lost when the air conditioner is disassembled by a user is solved, and user experience in the process of detaching the air conditioner is improved. When the air conditioner is disassembled by the user, the detached bolts are concentrated to be stored.

[0058] Through enabling a magnet to be assembled on the panel body, and through a magnetic property of the magnet, the bolts detached in a detaching process of an air conditioner indoor unit are placed in an appointed position on the panel body, in this way, the detached bolts are easily placed and are not easily lost when the air conditioner indoor unit is disassembled by the user.

[0059] In the middle of the panel body, an installing platform is disposed, and similar to a box. Through enabling the magnet to be assembled in the limiting space, and through a magnetic force of the magnet, the detached bolts are adsorbed, so the bolts are not more easily shaken and fallen in this way. The bolts detached by the user are placed in a middle position of the panel body, namely a bolt placing structure. As shown in Fig. 4, the magnetic adsorption element, namely the magnet, is assembled in the limiting space according to a direction of an arrow shown in the figure, and a magnet fixing structure is provided with 4 ribs, such a configuration is capable of avoiding the magnet from being shaken.

[0060] In addition to the above, it should be noted that "one embodiment", "another embodiment", "embodiment" and the like mentioned in the description refer that specific features, structures or characteristics described in combination with the embodiment are included in at least one embodiment generally described in the present application. The same expression occurring in multiple places in the description does not necessarily refer to the same embodiment. Furthermore, when one specific feature, structure or characteristic is described in combination with any one embodiment, it is claimed that such feature, structure or characteristic achieved in combination with other embodiments also falls within a scope of the invention.

[0061] In the above embodiments, the description of each embodiment has own emphasis, and a part that is not described in detail in a certain embodiment may reference to related descriptions of other embodiments.

[0062] The foregoing descriptions are merely some embodiments of the invention and are not intended to limit the invention. For those skilled in the art, the invention may have various changes and modifications. Any modifications, equivalent replacements and improvements made within the spirit and principle of the invention shall fall within the protection scope of the invention.

Claims

1. A panel body structure, comprising:

   a panel body (10); and
   a storage portion (20), the storage portion (20) is disposed on a surface of the panel body (10), and the storage portion (20) is used for storing bolts for installing an air conditioner.

2. The panel body structure as claimed in claim 1, wherein the storage portion (20) comprises:
   a magnetic adsorption element (21), the magnetic adsorption element (21) is connected with the surface of the panel body (10), and the magnetic adsorption element (21) is used for adsorbing the bolts.

3. The panel body structure as claimed in claim 2, wherein an outer surface of the panel body (10) is provided with an installing platform (11), the storage portion (20) comprises:
   a limiting element (24), the limiting element (24) is provided opposite to the installing platform (11) so as to form a limiting space, and the magnetic adsorption element (21) is installed in the limiting space.

4. The panel body structure as claimed in claim 3, wherein the panel body structure comprises:

   a first limiting rib (31), a part of the first limiting rib (31) is connected with the installing platform (11) and the panel body (10) and positioned at a first side of the limiting element (24); and
   a second limiting rib (32), a part of the second limiting rib (32) is connected with the installing platform (11) and the panel body (10) and positioned at a second side, opposite to the first side, of the limiting element (24), the first limiting rib (31), the second limiting rib (32), the installing platform (11) and the limiting element (24) are enclosed to form the limiting space.

5. The panel body structure as claimed in claim 4, wherein the panel body structure further comprises:
   a third limiting rib (33), the third limiting rib (33) is disposed on the installing platform (11) and positioned between the first limiting rib (31) and the second limiting rib (32), the magnetic adsorption element (21) is abutted against the third limiting rib (33).

6. The panel body structure as claimed in claim 5, wherein there are a plurality of third limiting ribs (33), the plurality of third limiting ribs (33) are spaced from each other, or the plurality of third limiting ribs (33) are staggered.

7. The panel body structure as claimed in claim 3, wherein the storage portion (20) further comprises:

   a first enclosing plate (22), the first enclosing plate (22) is connected with a first end of the installing platform (11); and
   a second enclosing plate (23), the second enclosing plate (23) is connected with a second end of the installing platform (11), the first enclosing plate (22) and the second enclosing plate (23) are oppositely disposed, the first enclosing plate (22), the second enclosing plate (23) and the installing platform (11) are enclosed to form an accommodate space, and the limiting element (24) is positioned in the accommodate space.

8. The panel body structure as claimed in claim 7, wherein the first enclosing plate (22) and the second enclosing plate (23) are connected in a middle of an outer edge of the installing platform (11), a connection place of the first enclosing plate (22) and the second enclosing plate (23) is provided with a gap for installing the magnetic adsorption element (21).

9. The panel body structure as claimed in claim 1, wherein there are a plurality of storage portions (20), the plurality of storage portions (20) are spaced from each other along a length direction of the panel body (10).

10. An air conditioner, comprising the panel body structure as claimed in any one of claims 1 to 9.

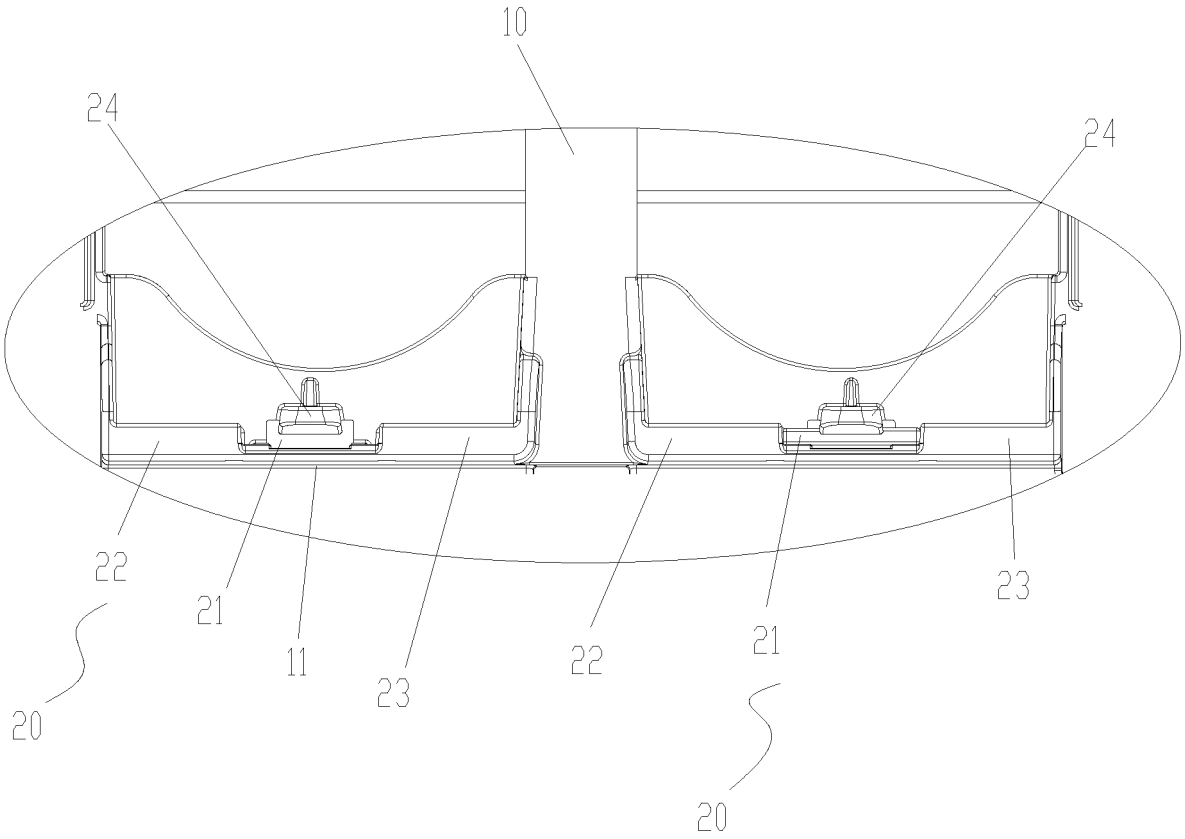

Fig. 1

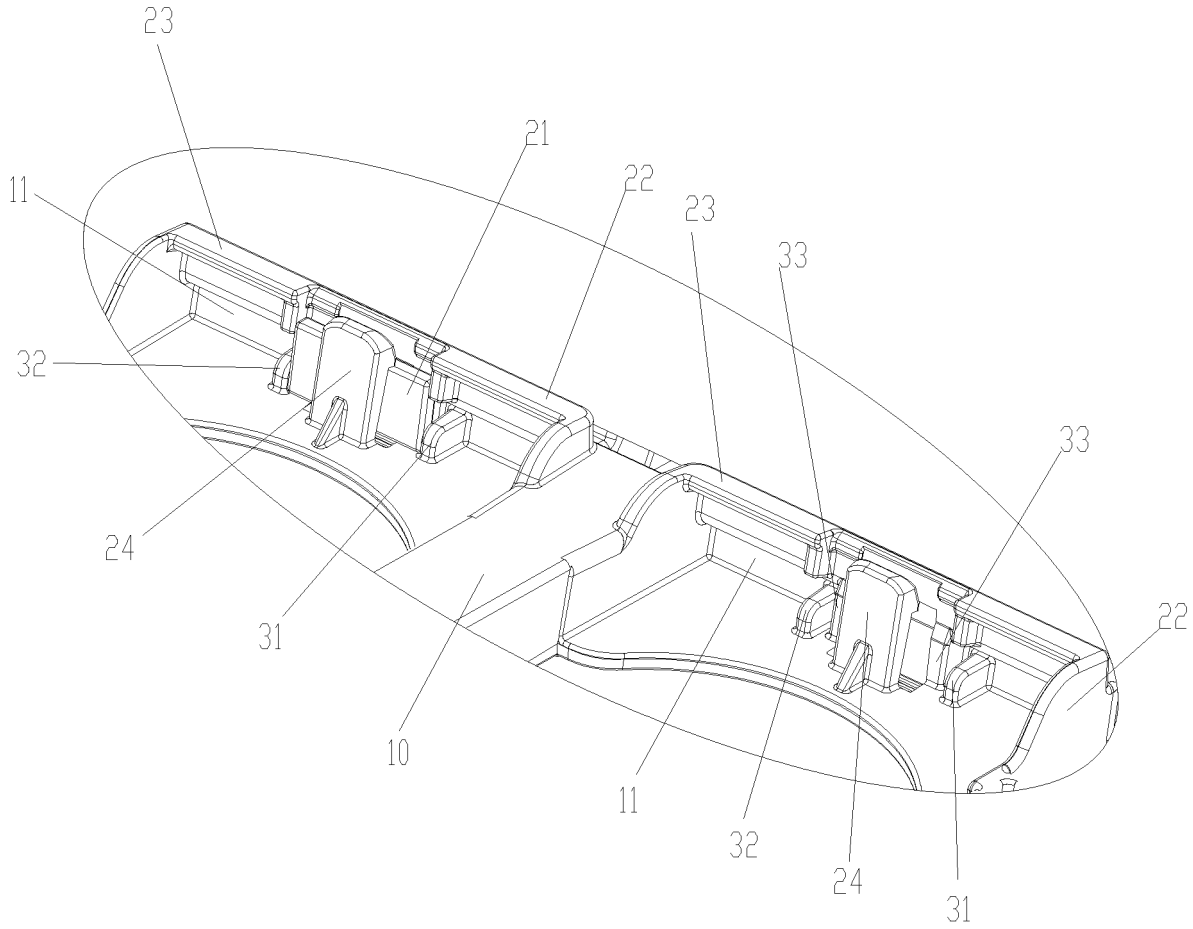

Fig. 2

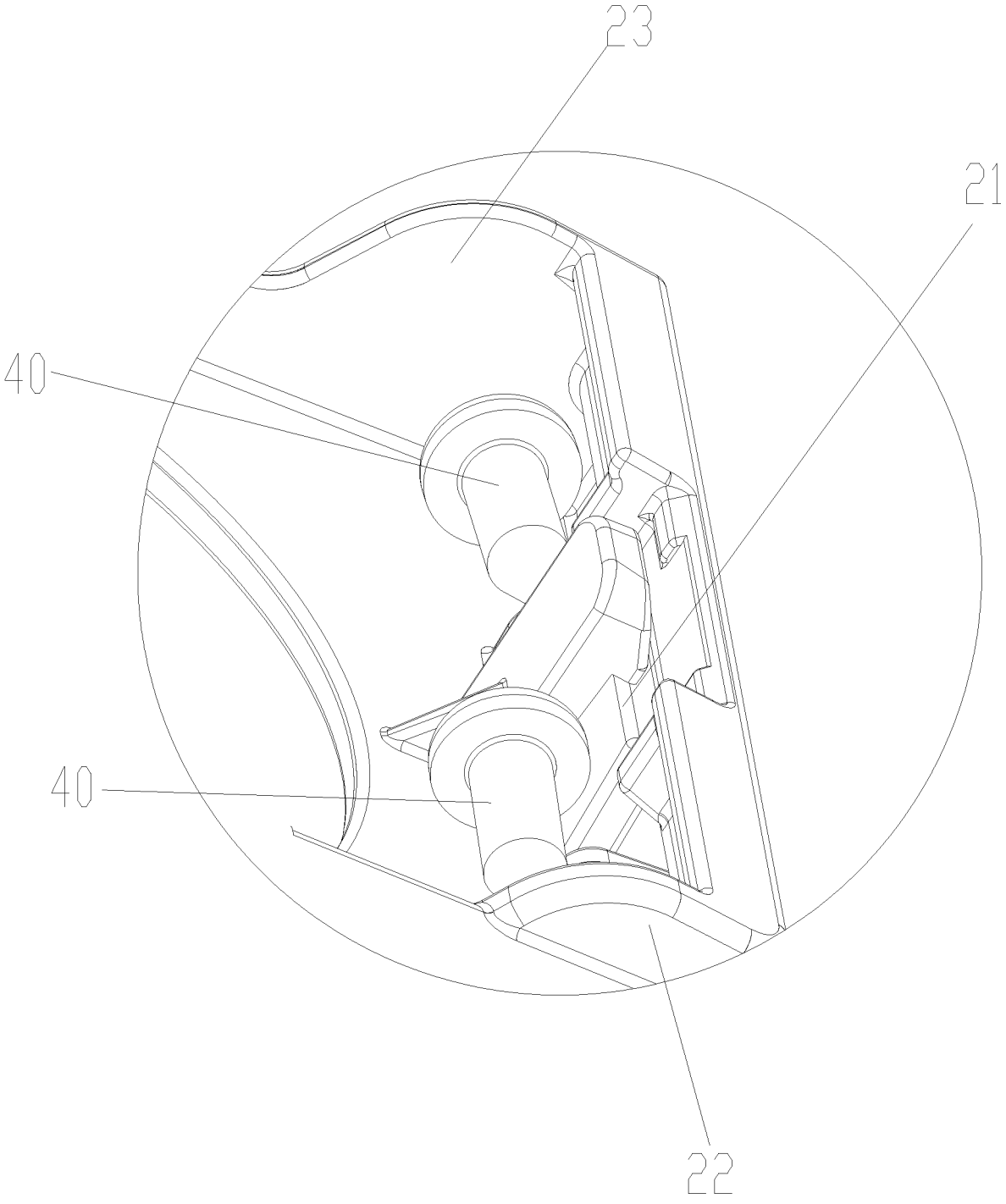

Fig. 3

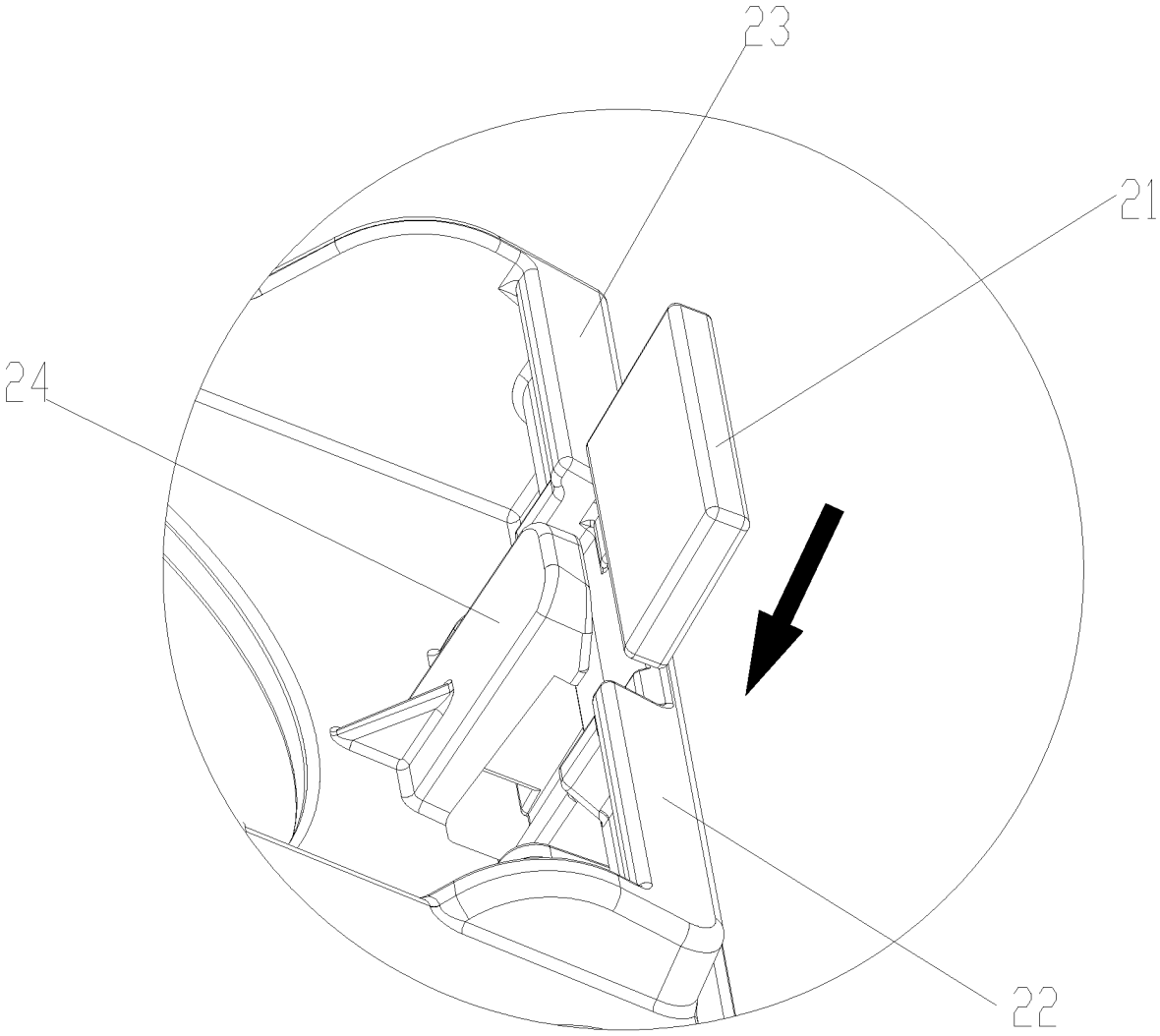

Fig. 4

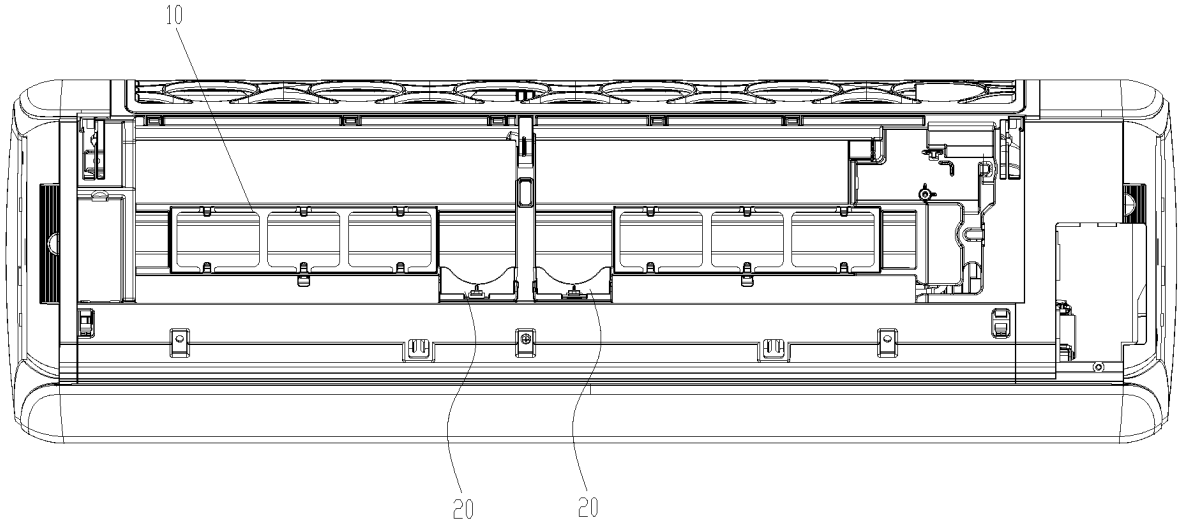

Fig. 5

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CN2018/119860

A. CLASSIFICATION OF SUBJECT MATTER

F24F 1/00(2019.01)i; F24F 13/20(2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

F24F

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

CNABS, CNKI, DWPI, VEN: 空调, 面板, 螺钉, 收纳, 磁铁, 丢失, air conditioner, panel, screw, storage, magnet, lose

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	CN 107160336 A (LI, HUI ET AL.) 15 September 2017 (2017-09-15) description, paragraphs [0019]-[0021], and figure 1	1-10
PX	CN 108644908 A (GREE ELECTRIC APPLIANCES INC. OF ZHUHAI) 12 October 2018 (2018-10-12) claims 1-10	1-10
E	CN 208442947 U (GREE ELECTRIC APPLIANCES INC. OF ZHUHAI) 29 January 2019 (2019-01-29) claims 1-10	1-10
A	CN 202491236 U (TIANJIN RUITEHENG HARDWARE TOOL CO., LTD.) 17 October 2012 (2012-10-17) entire document	1-10

☐ Further documents are listed in the continuation of Box C. ☑ See patent family annex.

* Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
01 April 2019	**09 April 2019**

Name and mailing address of the ISA/CN	Authorized officer
National Intellectual Property Administration, PRC (ISA/CN) **No. 6, Xitucheng Road, Jimenqiao Haidian District, Beijing 100088** **China**	
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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.
PCT/CN2018/119860

Patent document cited in search report	Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
CN 107160336 A	15 September 2017	None	
CN 108644908 A	12 October 2018	None	
CN 208442947 U	29 January 2019	None	
CN 202491236 U	17 October 2012	None	

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