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(54) AIR CONDITIONER WITH HUMIDIFYING FUNCTION

KLIMAANLAGE MIT LUFTBEFEUCHTUNG

CONDITIONNEUR D'AIR A FONCTION D'HUMIDIFICATION

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- **PATENT ABSTRACTS OF JAPAN vol. 1999, no. 12, 29 October 1999 (1999-10-29) -& JP 11 182896 A (FUJITSU GENERAL LTD), 6 July 1999 (1999-07-06)**
- **PATENT ABSTRACTS OF JAPAN vol. 2000, no. 02, 29 February 2000 (2000-02-29) -& JP 11 325518 A (FUJITSU GENERAL LTD), 26 November 1999 (1999-11-26)**

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Description

TECHNICAL FIELD

[0001] The present invention relates to an air conditioner having a humidifying function to humidify the inside of a room (See for example JPA-06 257 803).

BACKGROUND ART

[0002] Examples of a conventional air conditioner having a humidifying function include the one wherein water content in a room absorbed into an absorbent in an indoor unit is desorbed from the absorbent and supplied into the room again. However, since the housing space of the absorbent in the indoor unit cannot be made large in the air conditioner having a humidifying function, the amount of the water content accumulated in the absorbent is limited, thereby resulting in insufficient humidifying ability.

[0003] Accordingly, the applicant of the present invention prepared an air conditioner having a humidifying function, which can obtain a sufficient amount of water content from outside air by desorbing absorbed water content from the absorbent and supplying the water content into the room. As shown in Fig. 12, this air conditioner having a humidifying function is equipped with an indoor unit 101, an outdoor unit 102, a humidifying unit 103 disposed on the outdoor unit 102 and a humidifying hose 104 for connecting the indoor unit 101 and the humidifying unit 103. This air conditioner having a humidifying function supplies a humidified air from the humidifying unit 103 to the indoor unit 101 via the humidifying hose 104 to humidify the inside of a room. It is noted that this humidifying device is employed here to explain the present invention in an easily understandable way and is not a particular known or prior art.

[0004] When this air conditioner having a humidifying function is assembled in a factory, the humidifying unit 103 is fixed integrally to the outdoor unit 102 in a state that an electrical equipment box (control unit) of the outdoor unit 102 and electrical equipment of the humidifying unit 103 are connected with wiring.

[0005] However, when the air conditioner having a humidifying function is assembled, the humidifying unit 103 is placed on the outdoor unit 102, and then a worker inserts hands into a hole provided in the side surface of the outdoor unit 102 to connect wires hanging from the bottom portion of the humidifying unit 103 to the electrical equipment box in the outdoor unit 102. This results in poor workability in assembly.

DISCLOSURE OF THE INVENTION

[0006] Accordingly, an object of the present invention is to provide an air conditioner having a humidifying function with which workability can be improved and hence assembly man-hour can be reduced.

[0007] In order to achieve the above object, there is provided an air conditioner having a humidifying function equipped with an outdoor unit and a humidifying unit placed on the outdoor unit, wherein

an opening for connection is provided in a base plate of the humidifying unit; and

an electrical equipment box in the outdoor unit and electrical equipment in the humidifying unit are connected with wiring via the opening for connection.

[0008] According to the air conditioner having a humidifying function of the above constitution, when the electrical equipment box in the outdoor unit and the electrical equipment in the humidifying unit are connected with wiring during assembly, connection work can be performed from the top side of the humidifying unit by routing the wiring through the opening for connection provided in the base plate of the humidifying unit. Therefore, assembly workability can be improved, and hence assembly man-hour can be reduced.

[0009] In one embodiment of the present invention, an upper lid is disposed on the top side of the electrical equipment box in the outdoor unit; and

an opening or recessed portion facing the opening for connection in the base plate of the humidifying unit is provided in the upper lid.

[0010] According to the air conditioner having a humidifying function of the above embodiment, a flame proofing measure can be taken since an upper lid made of, for example, a sheet metal is placed on the top side of the electrical equipment box of the outdoor unit. Furthermore, connection work can be performed from the top side of the humidifying unit since the wiring for connecting the electrical equipment box in the outdoor unit and the electrical equipment in the humidifying unit is routed through an opening (or recessed portion) that is provided in the upper lid and faces the aforementioned opening for connection of the base plate of the humidifying unit.

[0011] In one embodiment of the present invention, holding pawls for holding the wiring are provided in the vicinity of the opening or recessed portion of the upper lid of the outdoor unit.

[0012] According to the air conditioner having a humidifying function of the above embodiment, the wiring can be fixed in a simple constitution since the wiring is held by the holding pawls provided in the vicinity of the opening (or recessed portion) of the upper lid of the outdoor unit.

[0013] In one embodiment of the present invention, a protective cover is provided in the vicinity of the opening or recessed portion of the upper lid of the outdoor unit.

[0014] According to the air conditioner having a humidifying function of the above embodiment, invasion of water droplets is prevented and wiring can be protected against disconnection due to its contact with an edge of the opening (or recessed portion) of the upper lid by the protective cover provided in the vicinity of the opening (or recessed portion) of the upper lid.

[0015] In one embodiment of the present invention, a connector attaching portion, to which an end portion of the wiring from the electrical equipment box is attached,

is disposed in the vicinity of the opening or recessed portion of the upper lid of the outdoor unit.

[0016] According to the air conditioner having a humidifying function of the above embodiment, workability is improved since an end portion of wiring from the electrical equipment box is attached to the connector attaching portion disposed in the vicinity of the opening (or recessed portion) of the upper lid of the outdoor unit while an end portion of wiring from the humidifying unit is connected to this connector attaching portion.

[0017] In one embodiment of the present invention, the connector attaching portion is made of a resin.

[0018] According to the air conditioner having a humidifying function of the above embodiment, since the connector attaching portion is made of a resin, which can easily constitute a three-dimensional structure, for example, the connector attaching portion can be protruded by a predetermined dimension upward from the opening for connection of the base plate of the humidifying unit. Thus, workability of connecting the wiring from the humidifying unit to the connector attaching portion is further improved.

[0019] In one embodiment of the present invention, the connector attaching portion is made of a sheet metal.

[0020] According to the air conditioner having a humidifying function of the above embodiment, costs can be reduced since the connector attaching portion is made of a sheet metal.

BRIEF DESCRIPTION OF THE DRAWINGS

[0021]

Fig. 1 is a perspective view showing a major part of an outdoor unit of an air conditioner having a humidifying function according to a first embodiment of the invention;

Fig. 2 is a perspective view showing a state that an upper lid on the top side of an electrical equipment box of the outdoor unit is removed:

Fig. 3A is a top view of the upper lid, Fig. 3B is a front view of the lid, and Fig. 3C is a right side view of the lid;

Fig. 4 is a perspective view showing a state that the lid shown in Figs. 3A, 3B and 3C is attached to the top side of the electrical equipment box;

Fig. 5 is a perspective view showing a major part of an outdoor unit of an air conditioner having a humidifying function according to a second embodiment of the invention;

Fig. 6A is a top view of a connector attaching portion, Fig. 6B is a side view of the connector attaching portion, and Fig. 6C is a rear view of the connector attaching portion viewed from its rear;

Fig. 7 is a perspective view showing a state that an upper lid on the top side of an electrical equipment box of the outdoor unit is removed;

Fig. 8A is a top view of the upper lid, Fig. 8B is a front view of the lid, and Fig. 8C is a right side view of the lid;

Fig. 9 is a perspective view showing a major part of an outdoor unit of an air conditioner having a humidifying function according to a third embodiment of the invention;

Fig. 10A is a top view of a connector attaching portion, Fig. 10B is a front view of the connector attaching portion, and Fig. 10C is a right side view of the connector attaching portion;

Fig. 11 is a perspective view showing a state that an upper lid on the top side of an electrical equipment box of the outdoor unit is removed; and

Fig. 12 is a schematic block diagram showing a conventional air conditioner having a humidifying function.

BEST MODE FOR CARRYING OUT THE INVENTION

[0022] Hereafter, embodiments of an air conditioner having a humidifying function of the present invention will be described in detail with reference to the accompanying drawings.

(First Embodiment)

[0023] Fig. 1 is a perspective view showing a major part on the side of an outdoor unit of an air conditioner having a humidifying function according to a first embodiment of the invention. Fig. 1 shows a state that a humidifying unit 8 is removed except for a base plate 2. It is noted that this air conditioner having a humidifying function has the same constitution as that of the air conditioner shown in Fig. 12 except for the constitution of a portion where the humidifying unit and the outdoor unit are connected.

[0024] As shown in Fig. 1, a base plate 2 of a humidifying unit 8 is attached on top of an outdoor unit 1. An opening for connection 2a is provided in the vicinity of the right side surface of the base plate 2. In Fig. 1, reference numeral 3 denotes an upper lid made of a sheet metal covering the top of an electrical equipment box (not shown) in the outdoor unit 1, and the upper lid 3 has holding pawls 4, 5 for holding wiring 6. Furthermore, the electrical equipment box (control unit) in the outdoor unit 1 has a control function of the outdoor unit 1 and a control function of the humidifying unit 8. The wiring 6 from the electrical equipment box is connected to the electrical equipment (motor, heater and the like) of the humidifying unit 8 via the opening for connection 2a while held by the holding pawls 4, 5 of the upper lid 3.

[0025] Fig. 2 is a perspective view showing a state that the base plate 2 of the humidifying unit 8 and the upper lid 3 shown in Fig. 1 are removed. An electrical equipment box 11 is disposed at the upper right portion in a casing 10 of the outdoor unit 1. Furthermore, a bell mouth 13 for an outdoor fan (not shown) is disposed on the front surface side in the casing 10 of the outdoor unit 1. An L-

shaped outdoor heat exchanger 12 is disposed on the rear surface side and the left surface side in the casing 10.

[0026] Furthermore, Fig. 3A is a top view of the upper lid 3, Fig. 3B is a front view of the upper lid 3, and Fig. 3C is a right side view of the upper lid 3. As shown in Fig. 3A, this upper lid 3 has a generally rectangular plate portion 3a, an L-shaped recessed portion 3b disposed at a right-side rear corner portion of the plate portion 3a, a bent portion 3c disposed on the rear side of the plate portion 3a and an attaching portion 3e disposed in the vicinity of a right-side front corner portion of the plate portion 3a. Furthermore, the upper lid 3 has a basal portion 3d provided vertically at a rear side edge of the recessed portion 3b. Holding pawls 4, 5 are provided on the basal portion 3d with a predetermined gap therebetween. Furthermore, a buffer material 9 made of fire-resistant polyethylene as a protective cover is attached to the holding pawls 4, 5 so as to cover the holding pawls 4, 5. In Figs. 1 and 4, the buffer material 9 is omitted to make these figures readily understandable.

[0027] Fig. 4 shows a state that the upper lid 3 is attached to the top side of the electrical equipment box 11 (shown in Fig. 2) of the outdoor unit 1. The upper lid 3 is fixed by fixing an attaching portion 3e to the right side portion of the casing 10 with a screw (not shown). A protective cover 7 made of a fire-resistant vinyl chloride sheet is attached to a part of the recessed portion 3b (shown in Fig. 3) of the upper lid 3.

[0028] Thus, when the air conditioner having a humidifying function is assembled, the wiring 6 for connecting the electrical equipment box 11 in the outdoor unit 1 and the electrical equipment in the humidifying unit 8 is routed through the opening for connection 2a provided in the base plate 2 of the humidifying unit 8. Consequently, since connection work can be performed from the top side of the humidifying unit 8, assembly workability can be improved, and hence assembly man-hour can be reduced.

[0029] Furthermore, since an upper lid 3 made of a sheet metal is disposed on the top side of the electrical equipment box 11 in the outdoor unit 1, a flame proofing measure can be taken. At the same time, since the wiring 6 for connecting the electrical equipment box 11 and the electrical equipment in the humidifying unit 8 is routed through a recessed portion 3b provided in the upper lid 3, connection work can be performed from the top side of the humidifying unit 8.

[0030] Furthermore, since the wiring 6 is held by the holding pawls 4, 5 provided in the vicinity of the recessed portion 3b of the upper lid 3, the wiring 6 can be fixed in a simple constitution.

[0031] Furthermore, the wiring 6 held by the holding pawls 4, 5 can be protected by a protective cover 7 so that the wiring 6 should not be disconnected due to its contact with an edge of the recessed portion 3b of the upper lid 3 and that invasion of water droplets should be prevented. Furthermore, the wiring 6 can be similarly protected by a buffer material 9 covering the holding pawls 4, 5.

(Second Embodiment)

[0032] Fig. 5 is a perspective view showing a major part on the outdoor unit side of an air conditioner having a humidifying function according to a second embodiment of the invention. Fig. 5 shows a state that a humidifying unit 8 is removed except for a base plate 2. It is noted that the air conditioner having a humidifying function of the second embodiment has the same constitution as that of the air conditioner of the first embodiment except for the connector attaching portion and the upper lid.

[0033] As shown in Fig. 5, a connector attaching portion 20 made of a resin is disposed in an outdoor unit 1 so as to face an opening for connection 2a provided in the base plate 2 of the humidifying unit 8. An end portion (connector) of wiring from an electrical equipment box (not shown) is attached to the connector attaching portion 20.

[0034] Fig. 6A is a top view of the connector attaching portion 20, Fig. 6B is a side view of the connector attaching portion 20, and Fig. 6C is a rear view of the connector attaching portion 20 viewed from its rear. As shown in Fig. 6A, this connector attaching portion 20 has a connector portion 21, a plate portion 22 provided at the bottom portion of the connector portion 21 and a fixed portion 23 in front of the bottom portion of the connector portion 21. The connector portion 21 is provided with connector attaching holes 21a-21d. The fixed portion 23 is fixed to the electrical equipment box 11.

[0035] Fig. 7 is a perspective view showing a state that the base plate 2 of the humidifying unit 8 shown in Fig. 5 and the upper lid are removed. An electrical equipment box 11 is disposed in a casing 10 of the outdoor unit 1.

[0036] During assembly, first, the connector attaching portion 20, to which an end portion (connector) of one wiring from the electrical equipment box 11 is attached, is attached in the casing 10 so as to face the opening for connection 2a of the base plate 2 (shown in Fig. 5).

[0037] Subsequently, the upper lid 25 shown in Figs. 8A, 8B and 8C is attached to the top side of the electrical equipment box 11, and the attaching portion 25e of the upper lid 25 is fixed to the right side portion of the casing 10 with a screw (not shown).

[0038] Subsequently, as shown in Fig. 5, the base plate 2 of the humidifying unit 8 is placed on the casing 10, and the other wiring connected to electrical equipment (motor, heater and the like) of the humidifying unit 8 is routed through the opening for connection 2a. An end portion (connector) of the other wiring is connected to a corresponding connector in the connector attaching portion 20.

[0039] Subsequently, the humidifying unit 8 is integrally fixed to the outdoor unit 1.

[0040] Fig. 8A is a top view of the upper lid 25 of the electrical equipment box, Fig. 8B is a front view of the upper lid 25, and Fig. 8C is a right side view of the upper

lid 25. As shown in Fig. 8A, this upper lid 25 has a generally rectangular plate portion 25a, a recessed portion 25b provided at a right-side rear corner portion of the plate portion 25a, a recessed portion 25c provided on the right rear side of the plate portion 25a, a bent portion 25d provided on the rear side of the plate portion 25a and an attaching portion 25e provided in the vicinity of the right-side front corner portion of the plate portion 25a. When the upper lid 25 is attached, the connector attaching portion 20 shown in Fig. 7 is positioned at the recessed portion 25c.

[0041] The air conditioner having a humidifying function of the second embodiment has the same effect as that of the air conditioner having a humidifying function of the first embodiment.

[0042] Furthermore, workability is further improved since an end portion of one wiring from the electrical equipment box 11 is attached to the connector attaching portion 20 disposed in the vicinity of the recessed portion 25c of the upper lid 25 of the outdoor unit 1 while an end portion of the other wiring from the humidifying unit 8 is connected to this connector attaching portion 20.

[0043] Furthermore, since the connector attaching portion 20 is made of a resin, which can easily constitute a three-dimensional structure, the connector attaching portion 20 can be placed close to an opening surface of the opening for connection 2a in the base plate 2 of the humidifying unit 8, and hence connection workability is further improved. Furthermore, for example, the connector attaching portion may be protruded by a predetermined dimension from the opening for connection in the base plate of the humidifying unit. In this case, workability is even further improved.

(Third Embodiment)

[0044] Fig. 9 is a perspective view showing a major part on the side of an outdoor unit of an air conditioner having a humidifying function according to a third embodiment of the invention. Fig. 9 shows a state that a humidifying unit 8 is removed except for a base plate 2. It is noted that the air conditioner having a humidifying function of the third embodiment has the same constitution as that of the air conditioner of the first embodiment except for the connector attaching portion and the upper lid.

[0045] As shown in Fig. 9, a connector attaching portion 30 made of a sheet metal is disposed in an outdoor unit 1 so as to face an opening for connection 2a provided in the base plate 2 of the humidifying unit 8. An end portion (connector) of wiring from an electrical equipment box (not shown) is attached to the connector attaching portion 30.

[0046] Fig. 10A is a top view of the connector attaching portion 30, Fig. 10B is a front view of the connector attaching portion 30, and Fig. 10C is a right side view of the connector attaching portion 30. This connector attaching portion 30 has a generally rectangular plate portion 31, a bent portion 32 provided on the rear side of the plate portion 31 and bent portions 33, 34 on the right side of the plate portion 31 with a predetermined gap therebetween. The plate portion 31 is provided with connector attaching holes 31a-31d.

[0047] Fig. 11 is a perspective view showing a state that the base plate 2 of the humidifying unit 8 shown in Fig. 9 and the upper lid are removed. An electrical equipment box 11 is disposed in a casing 10 of the outdoor unit 1.

[0048] During assembly, first, a connector attaching portion 30, to which an end portion (connector) of one wiring from the electrical equipment box 11 is attached, is attached in the casing 10 so as to face the opening for connection 2a of the base plate 2 (shown in Fig. 9).

[0049] Subsequently, the upper lid 25 shown in Figs. 8A, 8B and 8C is attached to the top side of the electrical equipment box 11, and the attaching portion 25e of the upper lid 25 is fixed to the right side portion of the casing 10 with a screw (not shown).

[0050] Subsequently, as shown in Fig. 9, the base plate 2 of the humidifying unit 8 is placed on the casing 10, and the other wiring connected to electrical equipment (motor, heater and the like) of the humidifying unit 8 is routed through the opening for connection 2a. An end portion (connector) of the other wiring is connected to a corresponding connector in the connector attaching portion 30.

[0051] Subsequently, the humidifying unit 8 is integrally fixed to the outdoor unit 1.

[0052] The air conditioner having a humidifying function of the third embodiment has the same effect as that of the air conditioner having a humidifying function of the first embodiment.

[0053] Furthermore, workability is further improved since an end portion of one wiring from the electrical equipment box 11 is attached to the connector attaching portion 30 disposed in the vicinity of the recessed portion 25c of the upper lid 25 of the outdoor unit 1 while an end portion of the other wiring from the humidifying unit 8 is connected to the connector attaching portion 30.

[0054] Furthermore, costs can be reduced since the connector attaching portion 30 is made of a sheet metal.

Claims

1. An air conditioner having a humidifying function equipped with an outdoor unit (1) and a humidifying unit (8) placed on the outdoor unit (1), **characterized in that**
   an opening for connection (2a) is provided in a base plate (2) of the humidifying unit (8); and
   an electrical equipment box (11) in the outdoor unit (1) and electrical equipment in the humidifying unit (8) are connected with wiring (6) via the opening for connection (2a).

2. The air conditioner having a humidifying function according to Claim 1, wherein
an upper lid (3, 25) is disposed on the top side of the electrical equipment box (11) in the outdoor unit (1); and
an opening or recessed portion (3b, 25c) facing the opening for connection (2a) in the base plate (2) of the humidifying unit (8) is provided in the upper lid (3, 25).

3. The air conditioner having a humidifying function according to Claim 2, wherein
holding pawls (4, 5) for holding the wiring (6) are provided in the vicinity of the opening or recessed portion (3b) of the upper lid (3) of the outdoor unit (1).

4. The air conditioner having a humidifying function according to Claim 3, wherein
a protective cover (7, 9) is provided in the vicinity of the opening or recessed portion (3b) of the upper lid (3) of the outdoor unit (1).

5. The air conditioner having a humidifying function according to any one of Claims 2 to 4, wherein
a connector attaching portion (20, 30), to which an end portion of the wiring from the electrical equipment box (11) is attached, is disposed in the vicinity of the opening or recessed portion (25c) of the upper lid (25) of the outdoor unit (1).

6. The air conditioner having a humidifying function according to Claim 5, wherein
the connector attaching portion (20) is made of a resin.

7. The air conditioner having a humidifying function according to Claim 5, wherein
the connector attaching portion (30) is made of a sheet metal.

Patentansprüche

1. Klimaanlage mit einer Befeuchtungsfunktion, die mit einer Außeneinheit (1) und einer Befeuchtungseinheit (8), die in der Außeneinheit (1) platziert ist, ausgerüstet ist,
dadurch gekennzeichnet, dass
ein Verbindungsausschnitt (2a) in einer Basisplatte (2) der Befeuchtungseinheit (8) vorgesehen ist; und ein Gehäuse für elektrische Ausstattung (11) in der Außeneinheit (1) und elektrische Ausstattung in der Befeuchtungseinheit (8) über den Verbindungsausschnitt (2a) mit Verdrahtung (6) verbunden sind.

2. Klimaanlage mit einer Befeuchtungsfunktion nach Anspruch 1, in der
ein oberer Deckel (3, 25) auf der oberen Seite des Gehäuses für elektrische Ausstattung (11) in der Außeneinheit (1) angeordnet ist; und
eine Ausschnitts- oder Ausnehmungsbereich (3b, 25c), der zum Verbindungsausschnitt (2a) in der Basisplatte (2) der Befeuchtungseinheit (8) gerichtet ist, ist in dem oberen Deckel (3, 25) vorgesehen ist.

3. Klimaanlage mit einer Befeuchtungsfunktion nach Anspruch 2, in der
Haltesperren (4, 5) zum Halten der Verdrahtung (6) in der Umgebung des Ausschnitts- oder Ausnehmungsbereichs (3b, 25c) des oberen Deckels (3, 25) der Außeneinheit (1) vorgesehen sind.

4. Klimaanlage mit einer Befeuchtungsfunktion nach Anspruch 3, in der
eine Schutzabdeckung (7, 9) in der Umgebung des Ausschnitts- oder Ausnehmungsbereichs (3b) des oberen Deckels (3) der Außeneinheit (1) vorgesehen ist.

5. Klimaanlage mit einer Befeuchtungsfunktion nach einem der Ansprüche 2 bis 4, in der
ein Verbindungsanbringungsabschnitt (20, 30), an den ein Endabschnitt der Verdrahtung des Gehäuses für die elektrische Ausstattung (11) angebracht ist, in der Umgebung des Ausschnitts- oder Ausnehmungsbereichs (25c) des oberen Deckels (3) der Außeneinheit (1) angeordnet ist.

6. Klimaanlage mit einer Befeuchtungsfunktion nach Anspruch 5, in der der Verbindungsanbringungsabschnitt (20) aus Harz hergestellt ist.

7. Klimaanlage mit einer Befeuchtungsfunktion nach Anspruch 5, in der der Verbindungsanbringungsabschnitt (30) aus Blech hergestellt ist.

Revendications

1. Climatiseur présentant une fonction d'humidification équipée d'une unité extérieure (1) et d'une unité d'humidification (8) placée sur l'unité extérieure (1),
caractérisé en ce que
une ouverture pour la connexion (2a) est prévue dans une plaque de base (2) de l'unité d'humidification (8) ; et
un boîtier d'équipement électrique (11) dans l'unité extérieure (1) et un équipement électrique dans l'unité d'humidification (8) sont connectés à des fils électriques (6) via l'ouverture pour la connexion (2a).

2. Climatiseur présentant une fonction d'humidification selon la revendication 1, dans lequel
un couvercle supérieur (3, 25) est disposé sur le côté supérieur du boîtier d'équipement électrique (11) dans l'unité extérieure (1) ; et

une ouverture ou partie évidée (3b, 25c) tournée vers l'ouverture pour la connexion (2a) dans la plaque de base (2) de l'unité d'humidification (8) est prévue dans le couvercle supérieur (3, 25).

3. Climatiseur présentant une fonction d'humidification selon la revendication 2, dans lequel
des cliquets de maintien (4, 5) destinés à maintenir les fils électriques (6) sont prévus au voisinage de l'ouverture ou de la partie évidée (3b) du couvercle supérieur (3) de l'unité extérieure (1).

4. Climatiseur présentant une fonction d'humidification selon la revendication 3, dans lequel
un couvercle protecteur (7, 9) est prévu au voisinage de l'ouverture ou de la partie évidée (3b) du couvercle supérieur (3) de l'unité extérieure (1).

5. Climatiseur présentant une fonction d'humidification selon l'une quelconque des revendications 2 à 4, dans lequel
une partie de fixation de connecteur (20, 30), à laquelle une partie d'extrémité des fils électriques provenant du boîtier d'équipement électrique (11) est fixée, est disposée au voisinage de l'ouverture ou de la partie évidée (25c) du couvercle supérieur (25) de l'unité extérieure (1).

6. Climatiseur présentant une fonction d'humidification selon la revendication 5, dans lequel
la partie de fixation de connecteur (20) est fabriquée en résine.

7. Climatiseur présentant une fonction d'humidification selon la revendication 5, dans lequel
la partie de fixation de connecteur (30) est fabriquée à partir d'une tôle.

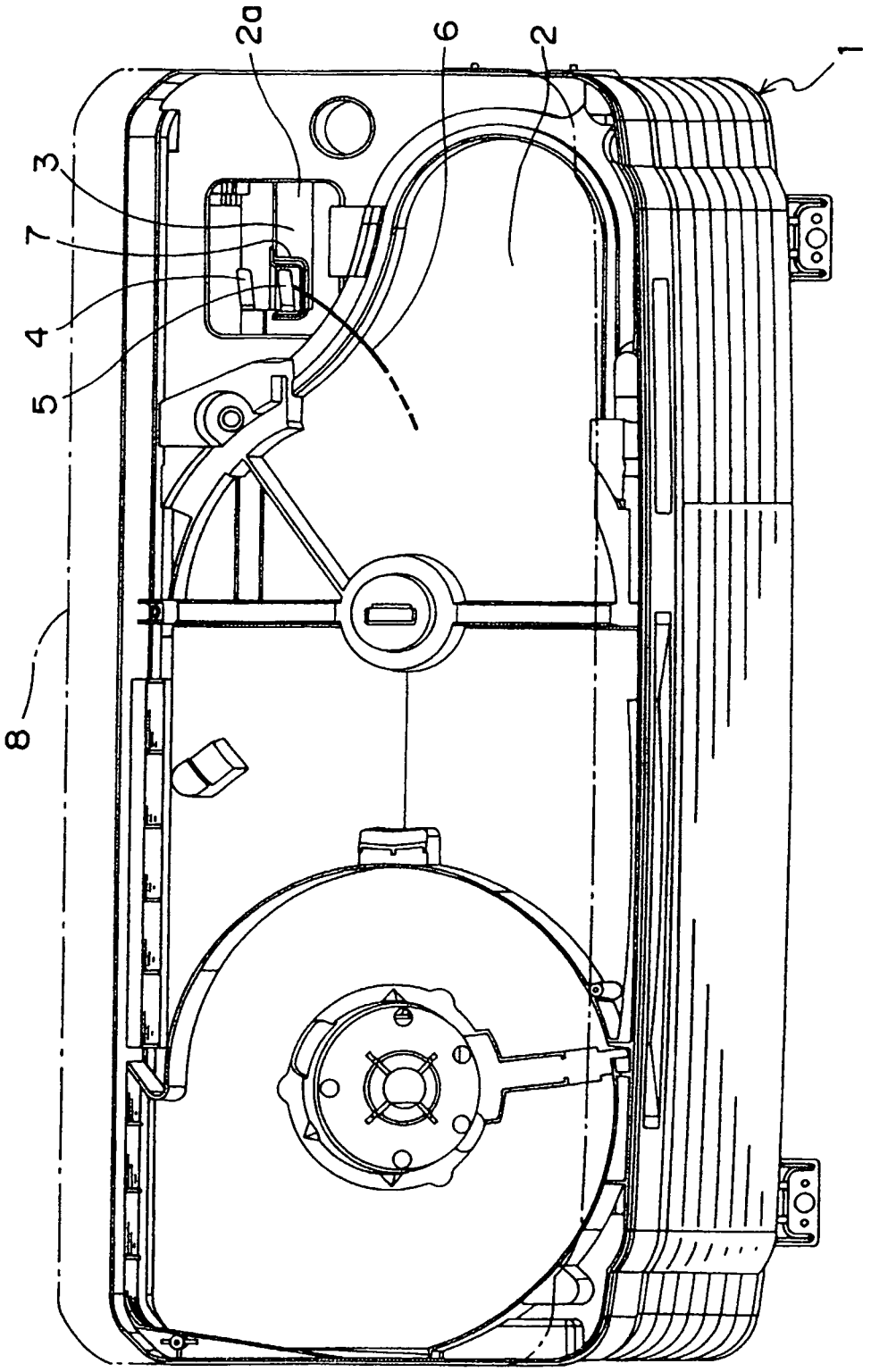


Fig.1

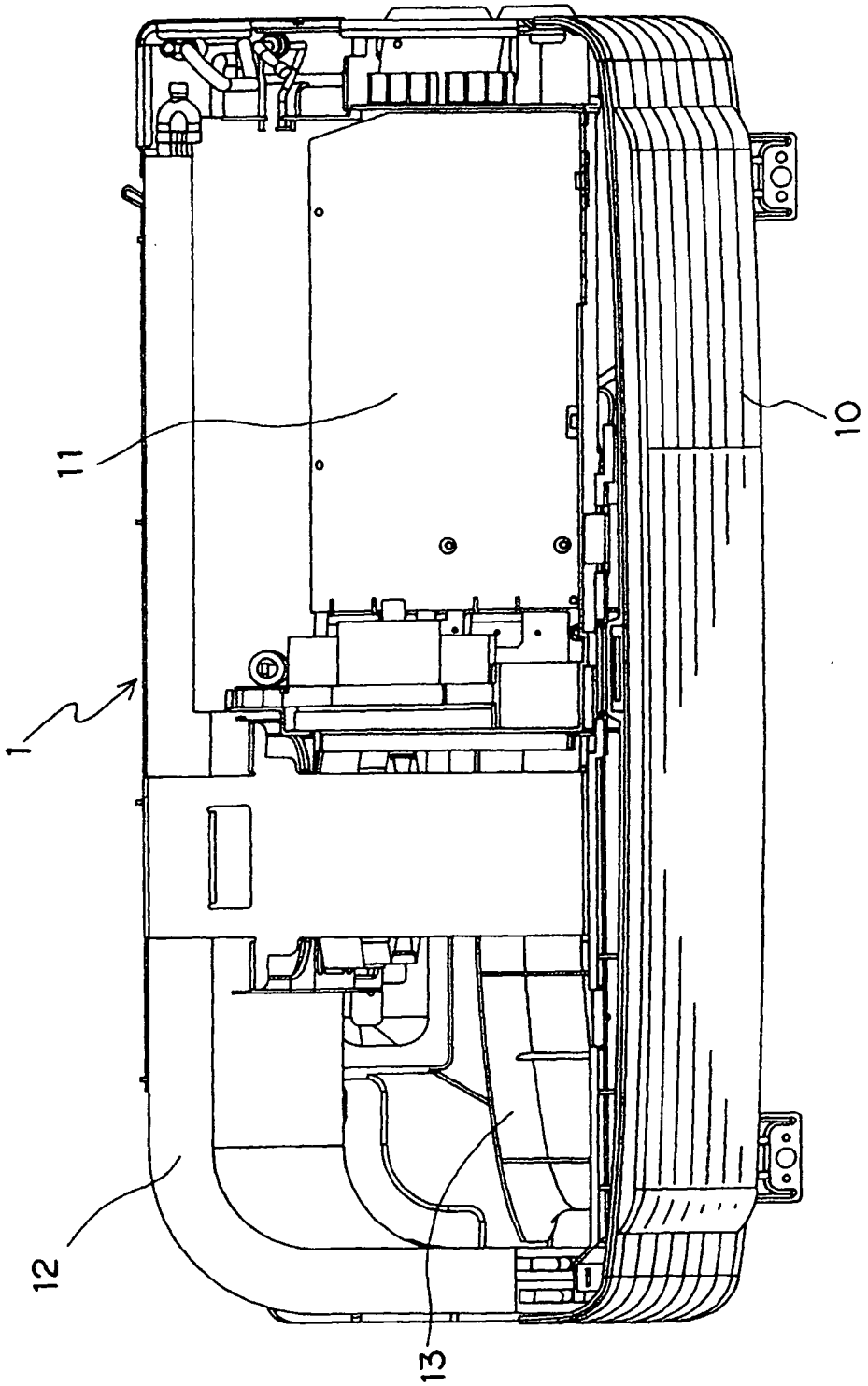


Fig.2

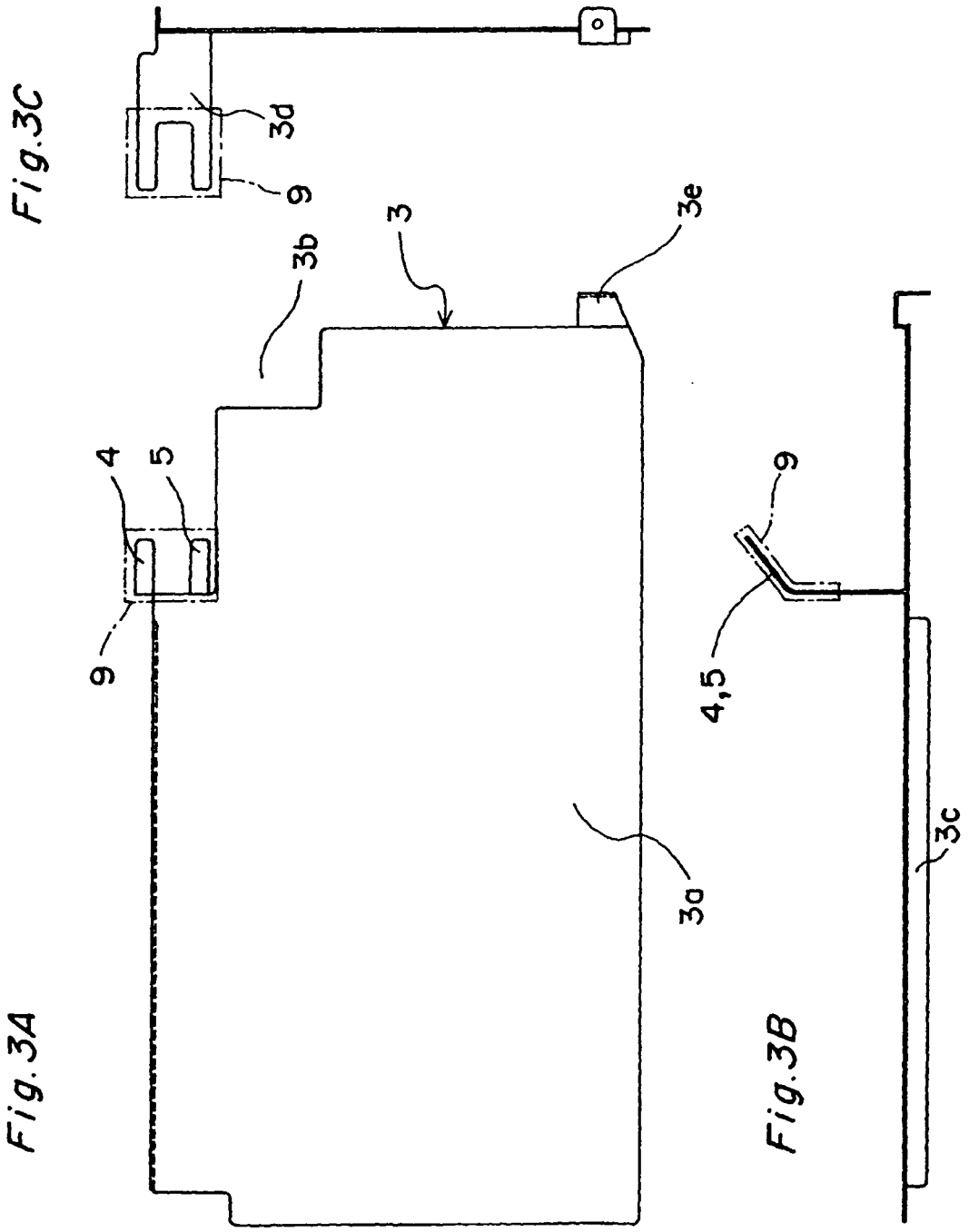


Fig.3C

Fig.3A

Fig.3B

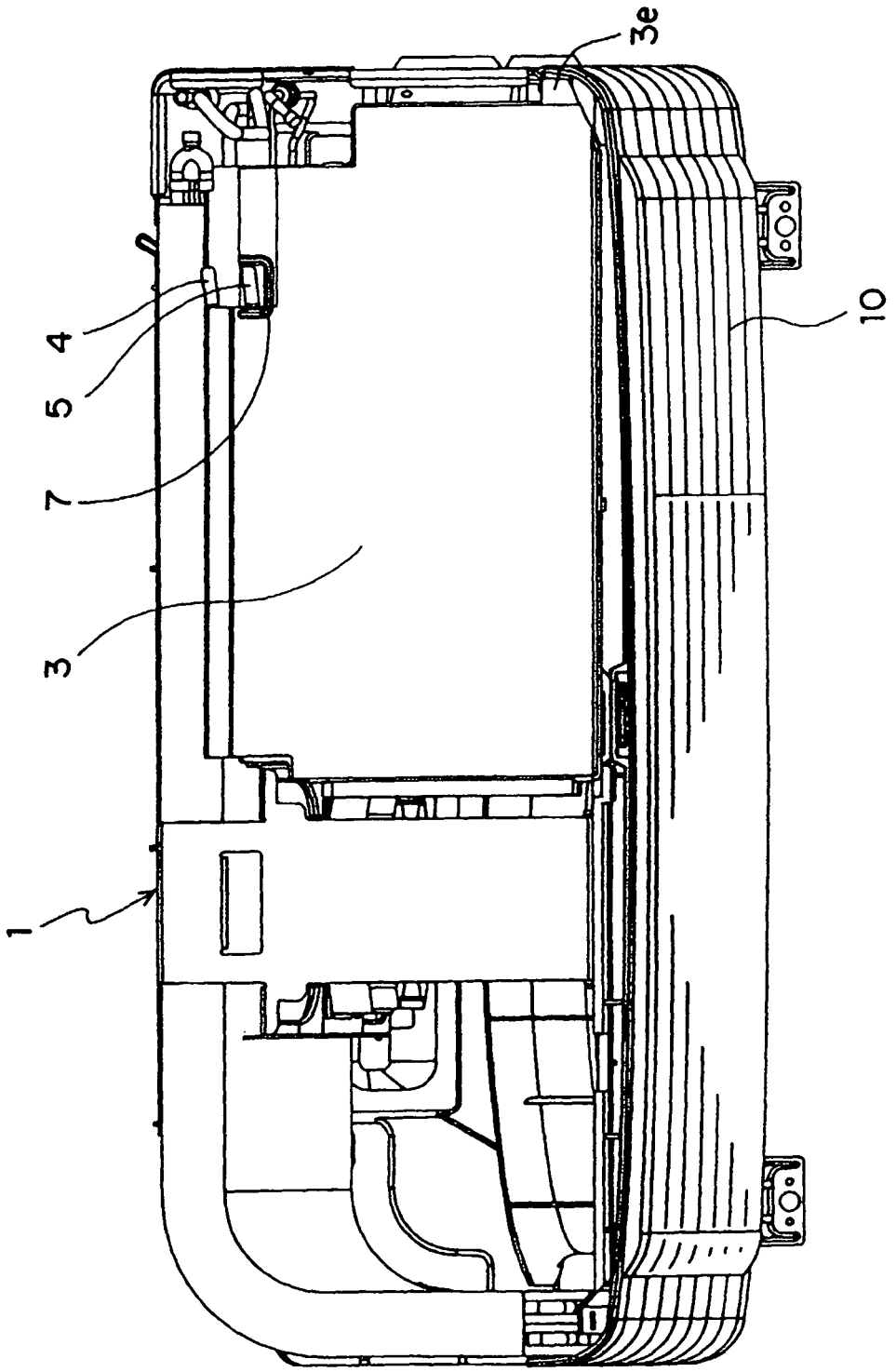


Fig.4

Fig.5

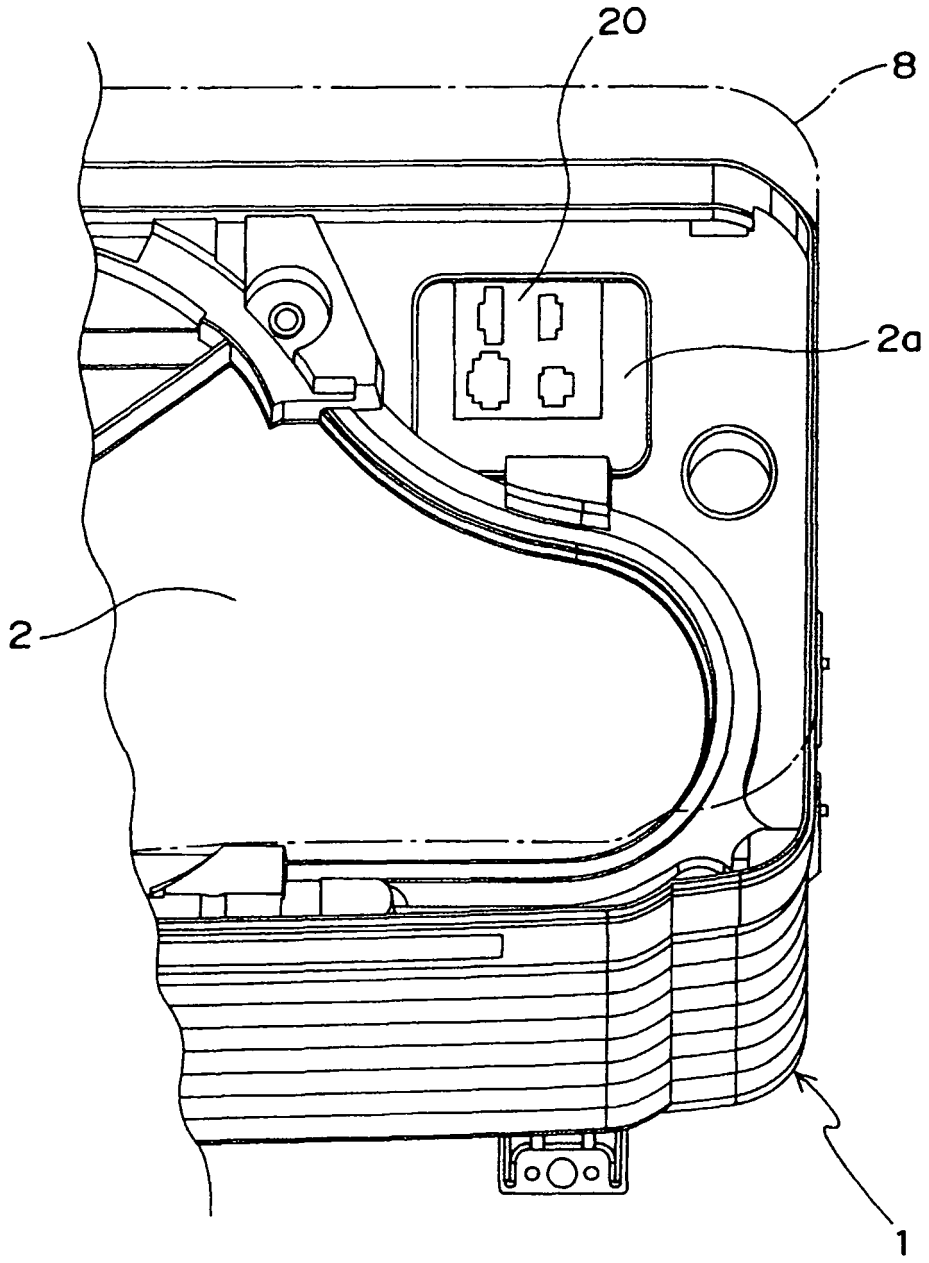


Fig.6A

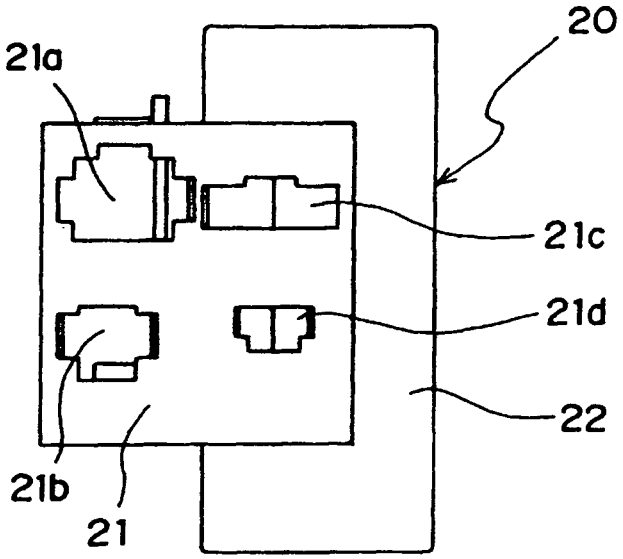


Fig.6B

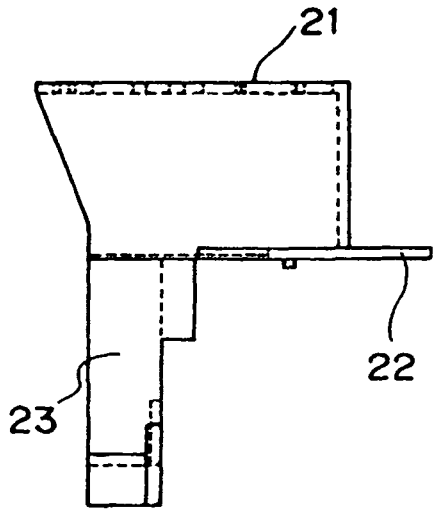


Fig.6C

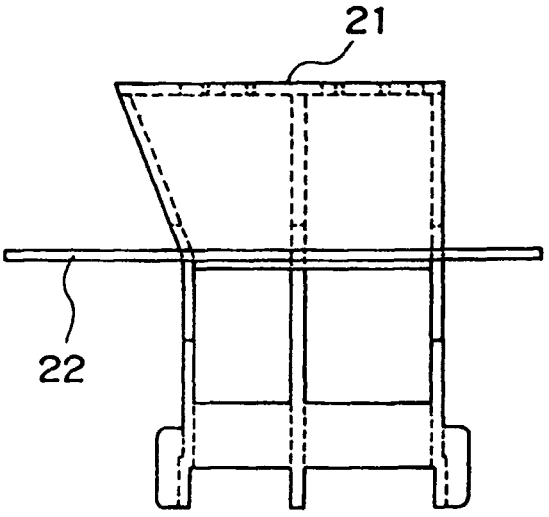
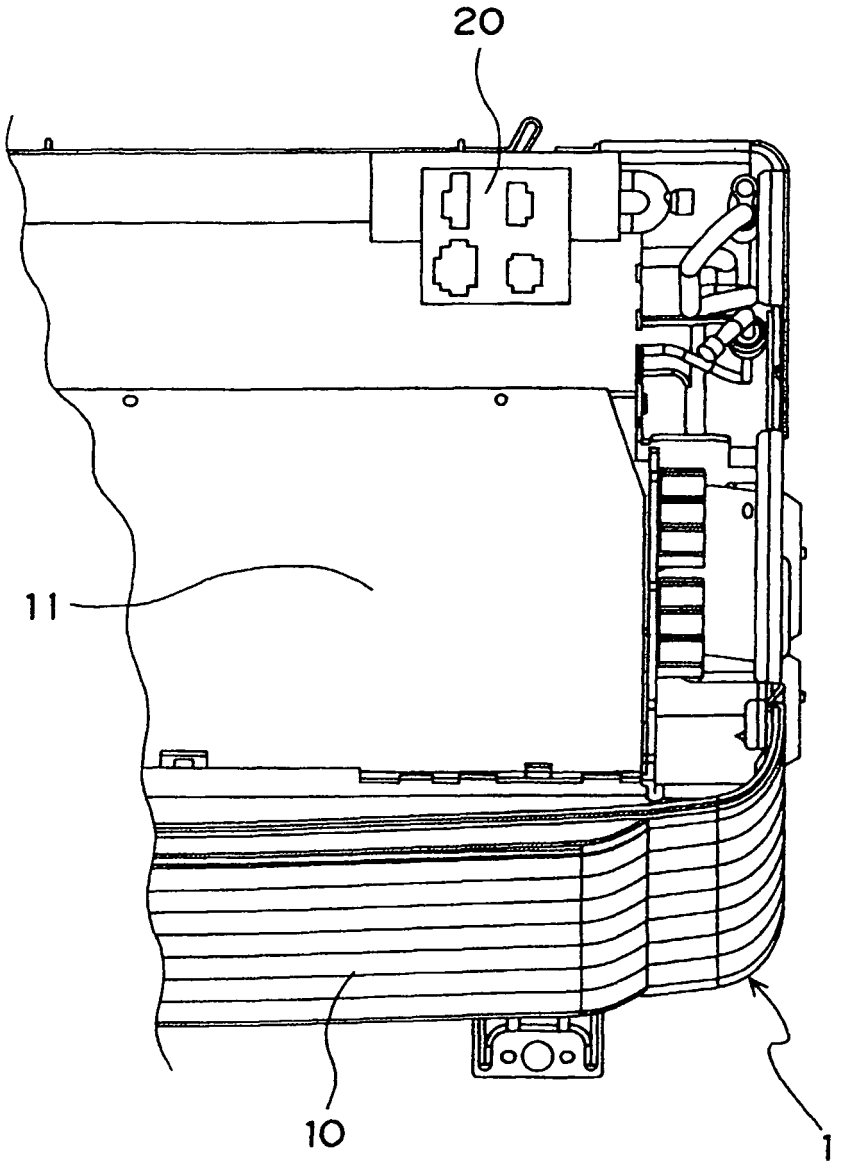


Fig.7



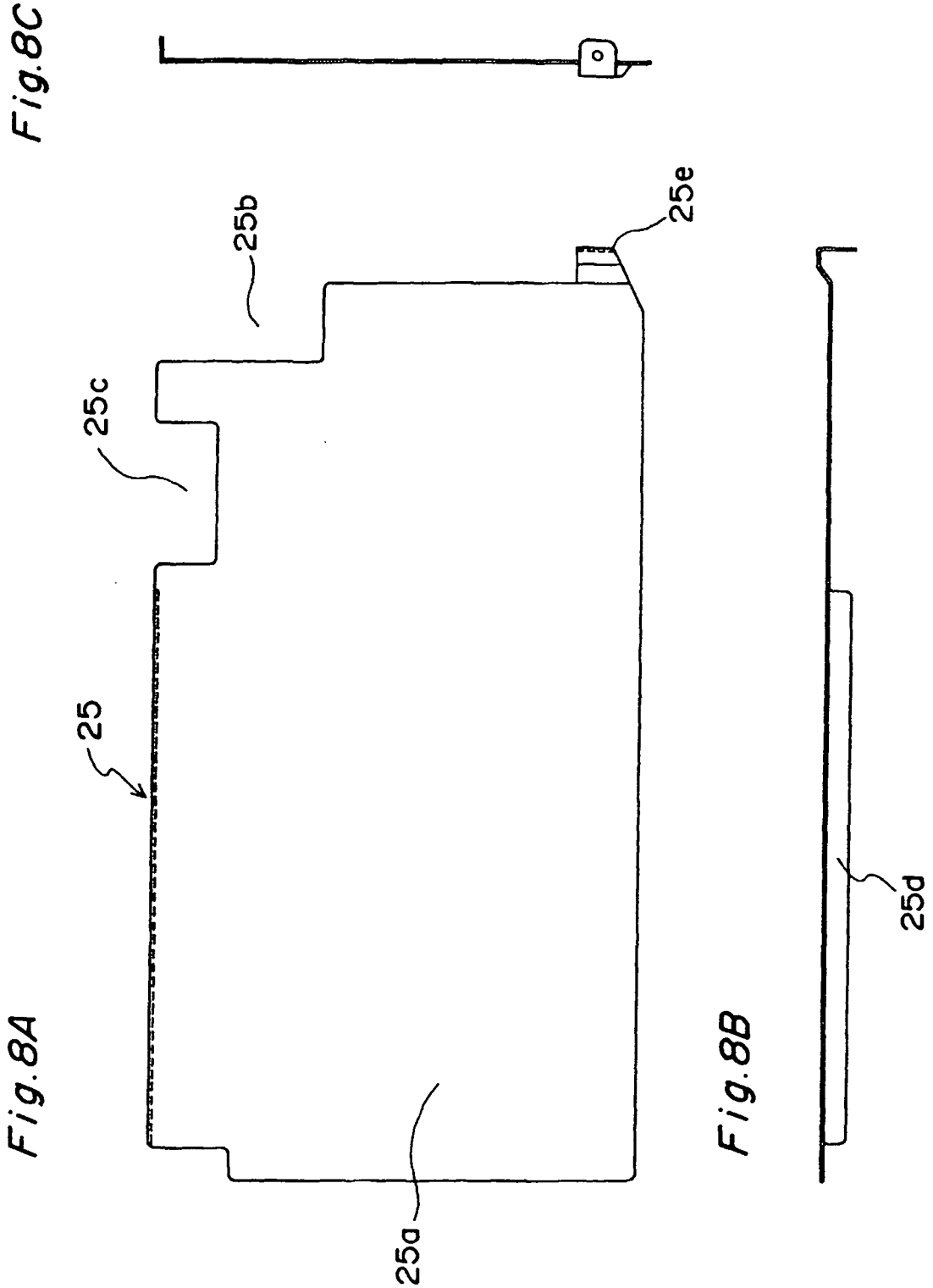

Fig.8C
25b
25e
25c
25
25a
Fig.8A
Fig.8B
25d

Fig.9

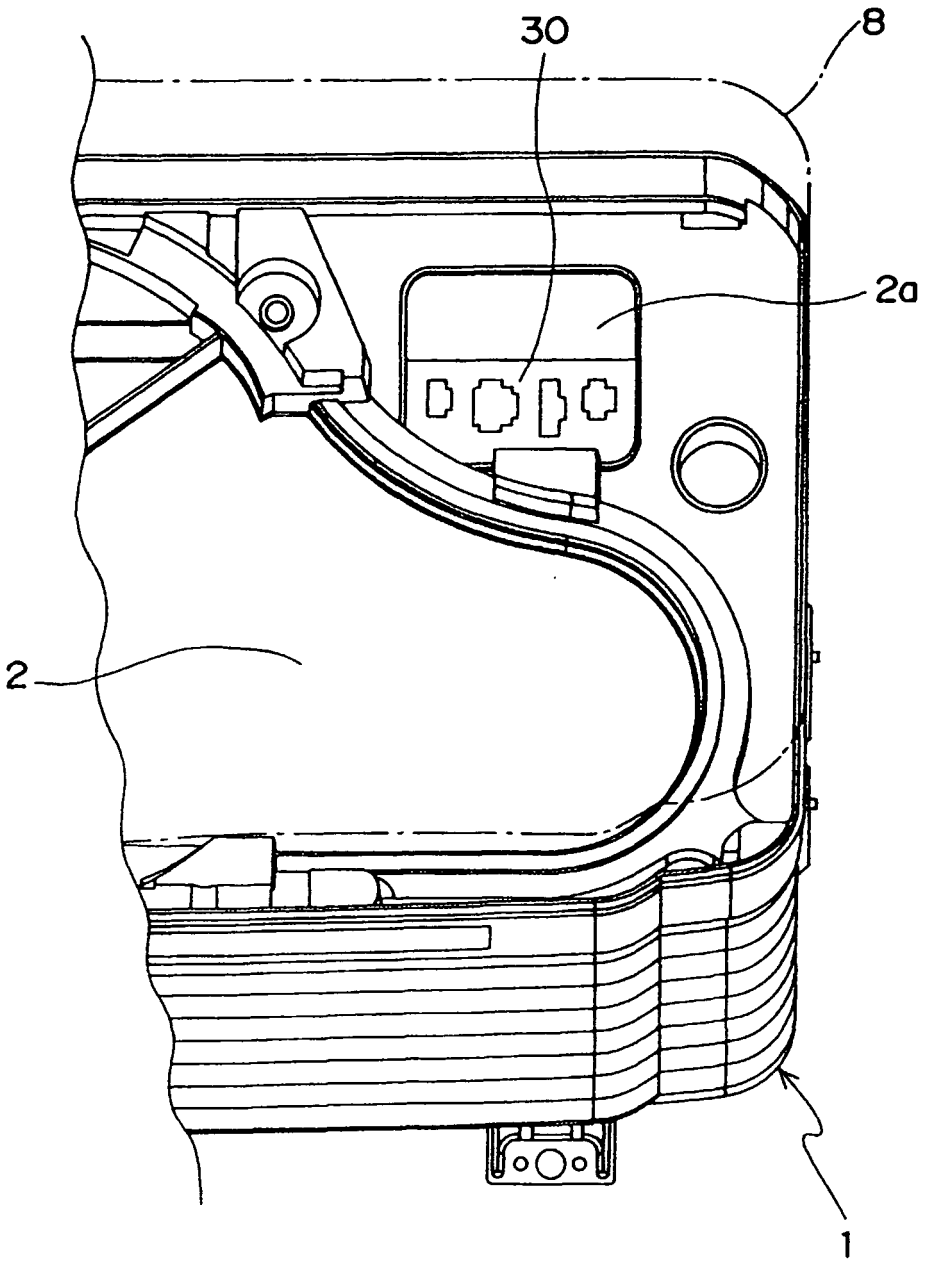


Fig.10A

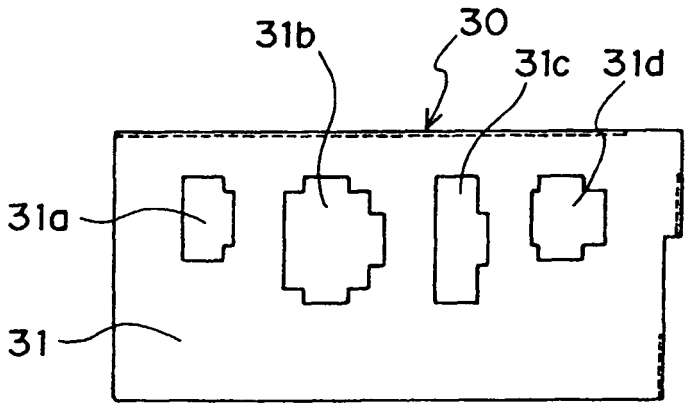


Fig.10C

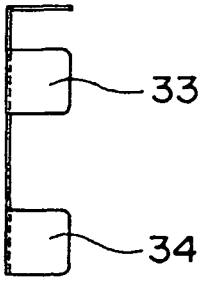


Fig.10B

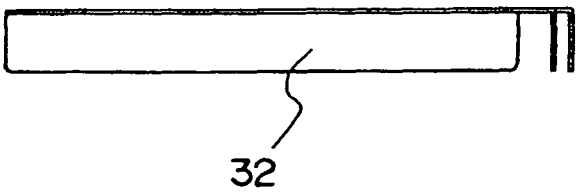


Fig.11

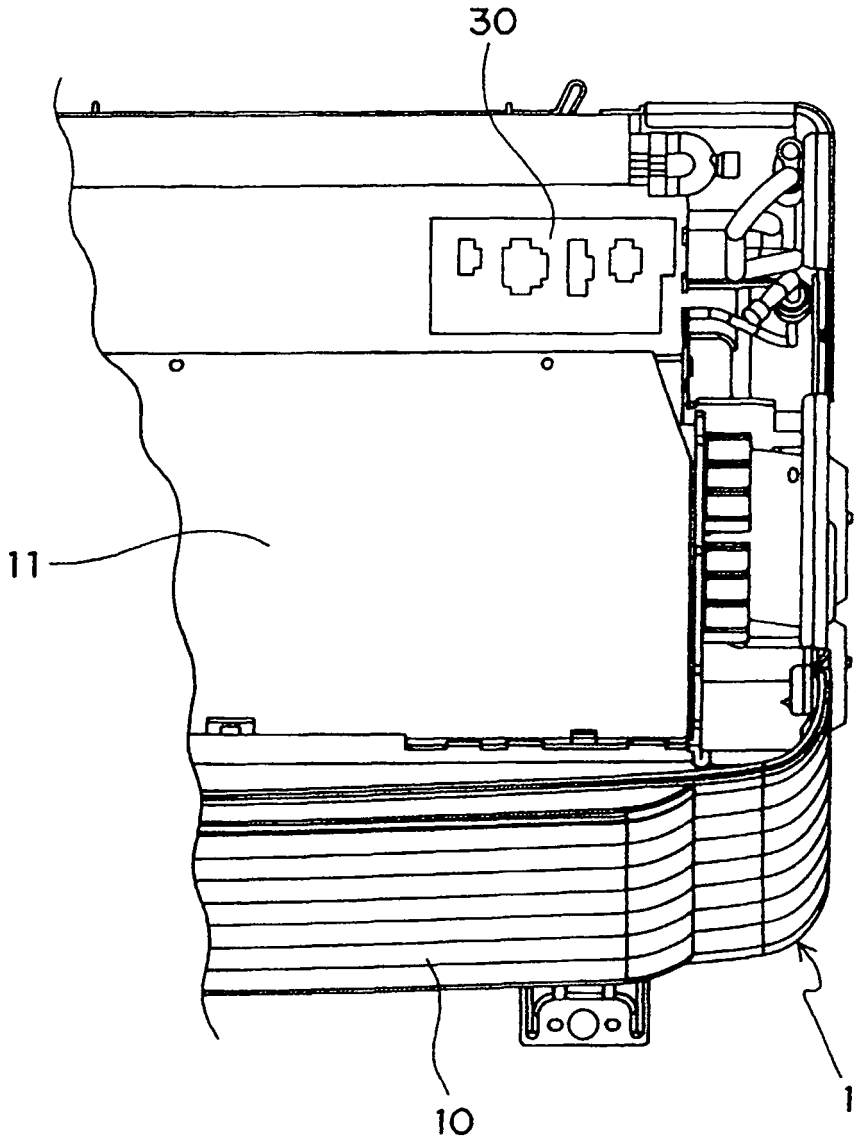


Fig.12

