

(19)



(11)

EP 3 690 313 A1

(12)

EUROPEAN PATENT APPLICATION

(43) Date of publication:

05.08.2020 Bulletin 2020/32

(51) Int Cl.:

F21V 21/03 (2006.01)

F21S 8/04 (2006.01)

(21) Application number: **20154722.1**

(22) Date of filing: **30.01.2020**

(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: **30.01.2019 CN 201910091626**

23.07.2019 CN 201910666251

• **Xiamen Yankon Energetic Lighting Co., Ltd.**

Xiamen, Fujian 361026 (CN)

• **Zhejiang Yankon Group Co., Ltd.**

Shaoxing, Zhejiang 312300 (CN)

(72) Inventors:

• **CHEN, Gang**

Xiamen, 361026 (CN)

• **ZHENG, Baixian**

Xiamen, 361026 (CN)

• **LIN, Mingjie**

Xiamen, 361026 (CN)

(74) Representative: **Verscht, Thomas Kurt Albert**

Josephsburgstrasse 88 A

81673 München (DE)

(71) Applicants:

- **Xiamen Energetic Lighting Technology Co., Ltd**
- **Xiamen 361026 (CN)**

(54) LAMP MOUNTING STRUCTURE

(57) The present disclosure discloses a lamp mounting structure, comprises a lamp body and a mounting member. The mounting member is disposed with one or more positioning member and one or more marking device. The lamp body is disposed with one or more auxiliary positioning member and one or more marking position. When each of the one or more marking device is

aligned with a corresponding one of the one or more marking position, each of the one or more positioning member and a corresponding one of the one or more auxiliary positioning member are limited by each other, so that the lamp body and the mounting member are fixedly connected.

EP 3 690 313 A1

Description**FIELD OF THE DISCLOSURE**

[0001] The present disclosure relates to the field of illumination, and in particular relates to a lamp mounting structure.

BACKGROUND OF THE DISCLOSURE

[0002] Traditional ceiling or flat lamps with installation structures separated from the lamp body have difficulties in installation. For Embodiment, due to the concealed viewing angle of the installer, the installer cannot see the limiting structure inside the lamp body, resulting in the installation center of the lamp not easy to find; the problem that the installation buckle is difficult to cope with leads to extremely low installation efficiency of the lamp.

BRIEF SUMMARY OF THE DISCLOSURE

[0003] The present disclosure provides a lamp mounting structure, which enables the installer to quickly and accurately find out a position of lamp mounting, and improves an efficiency of the lamp mounting.

[0004] In order to solve the aforementioned technical problems, the present disclosure provides a lamp mounting structure, comprises a lamp body and a mounting member. The mounting member is disposed with one or more positioning member and one or more marking device. The lamp body is disposed with one or more auxiliary positioning member and one or more marking position. When each of the one or more marking device is aligned with a corresponding one of the one or more marking position, each of the one or more positioning member and a corresponding one of the one or more auxiliary positioning member are limited and connected by each other, and the lamp body and the mounting member are fixedly connected.

[0005] The present disclosure also provides a lamp mounting structure, comprises a lamp body and a mounting member. The mounting member is disposed with one or more positioning member and one or more marking device, the lamp body is disposed with one or more auxiliary positioning member and one or more marking area, the mounting member and the lamp body are configured to rotate relative to each other. When each of the one or more marking device reaches a corresponding one of the one or more marking area, each of the one or more positioning member and a corresponding one of the auxiliary positioning member are limited by each other, and the lamp body and the mounting member are fixedly connected.

[0006] In another preferred embodiment, each of the one or more marking area is disposed along a relatively rotational direction of the lamp body and the mounting member.

[0007] In another preferred embodiment, each of the

one or more marking device is a rotating rod, a first end of the rotating rod is rotatably connected to the mounting member. When the rotating rod is rotated to a first angle, a second end of the rotating rod away from the mounting member reaches the corresponding one of the one or more marking area. When the rotating rod is rotated to a second angle, the second end of the rotating rod away from the mounting member leaves the corresponding one of the one or more marking area.

[0008] In another preferred embodiment, each of the one or more marking device is a retractable pole, a retractable direction of the retractable pole is parallel to a plane direction of the mounting member. After the retractable pole reaches the corresponding one of the one or more marking area, the retractable pole is retracted.

[0009] In another preferred embodiment, each of the one or more auxiliary positioning member is a first positioning slot with an opening facing a side of the lamp body.

[0010] In another preferred embodiment, each of the one or more positioning member is inserted into a corresponding one of the first positioning slot, and each of the one or more positioning member and the corresponding one of the first positioning slot are limited by each other in a vertical direction.

[0011] In another preferred embodiment, a first end of each of the first positioning slot is an entrance end, a second end of each of the first positioning slot is a terminal end, the terminal end comprises a stopping wall. Each of the one or more positioning member slides from the corresponding one of the entrance end into the corresponding one of the first positioning slot to the corresponding one of the terminal end and abuts the corresponding one of the stopping wall, each of the one or more positioning member and the corresponding one of the stopping wall are limited by each other at a rotating direction of the mounting member and the lamp body.

[0012] In another preferred embodiment, each of the one or more positioning member is a positioning column, a plurality of said positioning columns are centrally symmetrically disposed on the mounting member, and the lamp body is centrally symmetrically disposed with the one or more first positioning slot.

[0013] In another preferred embodiment, a projection of the mounting member in the vertical direction is within a projection of the lamp body in the vertical direction, the one or more marking area is disposed on the side of the lamp body, each of the one or more retractable pole is in an extended state, a first end of each of the one or more retractable pole is above the side of the lamp body, the lamp body is configured to be rotated relative to the mounting member. When each of the one or more retractable pole is rotated above a first end of the corresponding one of the one or more marking area, the positioning column is slide into the corresponding one of the one or more fist limiting slot from the corresponding one of the entrance end. When each of the one or more retractable pole is rotated above a second end of the corresponding one of the one or more marking area, the

positioning column reaches the terminal end of the corresponding one of the one or more first positioning slot and is limited by the corresponding one of the stopping wall.

[0014] In another preferred embodiment, the mounting member is centrally symmetrically disposed with two retractable poles of the one or more retractable pole, two ends of each of the one or more marking area are respectively marked as a first mark position and a second mark position. When the lamp body is installed, the lamp body is rotated to align the first mark position with the corresponding one of the two retractable poles, the lamp body is continued to be rotated to make each of the two extendable poles gradually approach the corresponding one of the second mark position.

[0015] In another preferred embodiment, the mounting member is disposed on a ceiling, and the lamp body is disposed on a side of the mounting member opposite to the ceiling.

[0016] The present disclosure further provides a lamp mounting structure, comprises a lamp body and a mounting member, the mounting member is disposed with one or more positioning member and one or more marking device, the lamp body is disposed with one or more auxiliary positioning member and one or more marking area, the mounting member is connected to the lamp body. When each of the one or more marking device reaches a corresponding one of the one or more marking area, each of the one or more positioning member and a corresponding one of the one or more auxiliary positioning member are limited by each other, the lamp body and the mounting member are fixedly connected.

[0017] In another preferred embodiment, each of the one or more marking device is a retractable device. Before the mounting member and the lamp body are installed, the retractable device is extended. After the mounting member and the lamp body are installed, the extendable device is retracted.

[0018] In another preferred embodiment, the one or more positioning member is one or more second positioning slot respectively disposed on two sides of the mounting member, the one or more auxiliary positioning member is one or more positioning bar disposed on a side of the lamp body facing the mounting member. When the retractable device is aligned with the corresponding one of the one or more marking area, each of the one or more positioning bar is aligned with a corresponding one of the one or more second limiting slot. When the lamp body is moved along a length direction of the one or more positioning bar to make each of the one or more positioning bar to be inserted to a corresponding one of the one or more second positioning slot, the lamp body and the mounting member are limited by each other in a vertical direction.

[0019] In another preferred embodiment, each of the one or more positioning member is a male buckle, and each of the one or more auxiliary positioning member is a female buckle.

[0020] Compared with existing techniques, the technical solution provided by the present disclosure has the following advantages.

[0021] The present disclosure provides a lamp mounting structure, the one or more retractable pole is disposed on the mounting member, and the one or more marking area is disposed on the lamp body, each of the one or more marking area corresponds to the corresponding one of the one or more first positioning slot. The installer 5 aligns each of the first marking position with the corresponding one of the one or more retractable pole, then rotates the lamp body to move the corresponding one of the one or more retractable pole close to the corresponding one of the second marking position until the corresponding one of the second marking position is reached, which means that the positioning column begins to slide 10 into the corresponding one of the one or more first positioning slot and reaches the corresponding one of the terminal end to abut the corresponding one of the stopping wall, then the positioning column is limited in the vertical direction and the rotating direction, and the mounting member and the lamp body are installed. In addition, a connection of each of the one or more male buckle and the corresponding one of the one or more 15 female buckle and a connection of each of the one or more positioning bar and the corresponding one of the second positioning slot also make installation of the lamp more convenient. Due to the corresponding one of the one or more marking area disposed on the side of the lamp body and a position pointed by the corresponding one of the one or more retractable pole, this type of retractable pole structure allows the installer free to check 20 a positioning structure inside the lamp body and determine whether the positioning column is limited to the corresponding one of the one or more first positioning slot, or whether each of the one or more male buckle and the corresponding one of the one or more female buckle are 25 fixedly connected, or whether each of the one or more positioning bar and the corresponding one of the second positioning slot are limited by each other. In addition, after 30 the positioning column is limited and the corresponding one of the one or more first positioning slot, the one or more retractable pole can be retracted, so that an appearance of the lamp will not be affected. 35 **[0022]** 2. In the present disclosure, the one or more rotating rod is disposed on the mounting member. When the one or more marking device is required to align with the corresponding one of the one or more marking area, each of the one or more rotating rods is rotated to a first 40 angle for installation. When each of the one or more marking device is not required to align with the corresponding one of the one or more marking area, each of the one or more rotating rods can be rotated to a second angle for 45 accommodation, which is convenient for installer to install the lamp, and will not affect an appearance of the lamp. 50 55

BRIEF DESCRIPTION OF THE DRAWING

[0023]

Fig. 1 illustrates a positional schematic view between a mounting member and a lamp body of Embodiment 1 of the present disclosure;
 Fig. 2 illustrates a schematic view between the mounting member and the lamp body of Embodiment 1 of the present disclosure in a use state;
 Fig. 3 illustrates an enlarged schematic view of a portion of the lamp body of Embodiment 1 of the present disclosure;
 Fig. 4 illustrates an enlarged schematic view of a portion of the mounting member of Embodiment 1 of the present disclosure;
 Fig. 5 illustrates a positional schematic view of Embodiment 2 of the present disclosure when a second retractable pole rotates to a first angle;
 Fig. 6 illustrates a positional schematic view of Embodiment 2 of the present disclosure when the second retractable pole rotates to a second angle;
 Fig. 7 illustrates a structural schematic view of a whole lamp according to Embodiment 3 of the present disclosure;
 Fig. 8 illustrates a structural schematic view of a whole lamp according to Embodiment 4 of the present disclosure.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0024] The present disclosure will be further described below with the combination of the accompanying drawings together with the embodiments.

Embodiment 1

[0025] Referring to Figs. 1-4, a lamp mounting structure comprises a lamp body 2 and a mounting member 1. The mounting member 1 is disposed on a ceiling through a connecting member 13, and the lamp body 2 is disposed on a side of the mounting member 1 which is opposite to the ceiling. The mounting member 1 is disposed with one or more positioning member 12 and one or more marking device 10, the lamp body 2 is disposed with one or more auxiliary positioning member 20, and the lamp body 2 is disposed with one or more marking area 30. The mounting member 1 and the lamp body 2 rotate relatively on a horizontal plane. When each of the one or more marking device 10 reaches a corresponding one of the one or more marking area 30, the one or more positioning member 12 and the one or more auxiliary positioning member 20 are limited by each other, and the lamp body 2 is fixedly connected to the mounting member 1. The one or more marking area 30 is disposed along a relatively rotational direction between the lamp body 2 and the mounting member 1.

[0026] Specifically, the one or more marking device 10

is one or more retractable pole 11, a retractable direction of each of the one or more retractable pole 11 is parallel to a plane direction in which the mounting member 1 is disposed. After each of the one or more retractable pole 11 reaches the corresponding one of the one or more marking area 30, each of the one or more retractable pole 11 is retracted. Specifically, the mounting member 1 is disposed with one or more sliding nail 14, and each of the one or more retractable pole 11 is disposed with a sliding groove 111 along its length direction. Each of the one or more sliding nail 14 is slidably connected to a corresponding one of the sliding groove 111. When each of the one or more sliding nail 14 slides to a first end of the corresponding one of the sliding groove 111, the corresponding one of the one or more retractable pole 11 is extended to a longest state, and when each of the one or more sliding nail 14 slides to a second end of the corresponding one of the sliding groove 111, and the corresponding one of the one or more retractable pole 11 is retracted to a shortest state.

[0027] Specifically, the one or more auxiliary positioning member 20 is one or more first positioning slot 21. An opening of each of the one or more first positioning slot 21 faces a side of the lamp body 2. When each of the one or more positioning member 12 is inserted into a corresponding one of the one or more first positioning slot 21, each of the one or more positioning member and the corresponding one of the one or more first positioning slot 21 are limited by each other in a vertical direction. A first end of each of the one or more first positioning slot 21 is an entrance end 211, and a second end of each of the one or more first positioning slot 21 is a terminal end. The terminal end is disposed with a stopping wall 212. When each of the one or more positioning member 12 slides from the corresponding one of the entrance end 211 into the corresponding one of the one or more first positioning slot 21 and slides to the corresponding one of the terminal end to abut the corresponding one of the stopping wall 212, each of the one or more positioning member and the corresponding one of the stopping wall 212 are limited by each other along the relatively rotational direction of the mounting member 1 and the lamp body 2. In this way, each of the one or more positioning member 12 is limited by the corresponding one of the one or more first positioning slot 21 in a horizontal direction and a vertical direction, so that the mounting member 1 and the lamp body 2 are securely installed. Specifically, each of the one or more positioning member 12 is a positioning column 50. A plurality of said positioning columns 50 are centrally symmetrically disposed on the mounting member 1, and the one or more first positioning slot are centrally symmetrically disposed on the lamp body 2. In this embodiment, a number of the plurality of said positioning columns 50 and a number of the one or more first positioning slot 21 are respectively four, and the number of the plurality of said positioning columns 50 and the number of the one or more first positioning slot 21 are positioning slot 21 can be other number. This

is a simple equivalent, the number of the plurality of said positioning columns 50 and the one or more first positioning slot 21 cannot be configured to limit a protection scope of the present disclosure.

[0028] Specifically, a projection of the mounting member 1 in the vertical direction is within a projection of the lamp body 2 in the vertical direction. In this embodiment, the projection of the mounting member 1 in the vertical direction and the projection of the lamp body 2 in the vertical direction are both circular. The one or more marking area 30 is disposed on the side of the lamp body 2. When each of the one or more retractable pole 11 is in an extended state, an end of each of the one or more retractable pole 11 is above the side of the lamp body 2. When the lamp body 2 rotates relatively to the mounting member 1, each of the one or more retractable pole 11 is rotated above a first end of the marked area, that is, the positioning column 50 slides from the corresponding one of the entrance end 211 into the corresponding one of the one or more first positioning slot 21. When each of the one or more retractable pole 11 is rotated above a second end of the corresponding one of the one or more marking area 30, that is, the positioning column 50 reaches the terminal end of the corresponding one of the one or more first positioning slots 21 and is restricted by the corresponding one of the stopping wall 212.

[0029] Two retractable poles of the one or more retractable pole 11 are centrally symmetrically disposed on the mounting member 1. Two ends of each of the one or more marking area 30 are respectively marked as a first marking position 221 and a second marking position 222. When installing the lamp body 2, rotating the lamp body 2 to align each of the first marking position 221 with the corresponding one of the one or more retractable pole 11, then continuing to rotate the lamp body 2 to make the corresponding one of the one or more retractable pole 11 gradually approach the corresponding one of the second marking position 222. In this embodiment, each of the one or more marking area 30 is an arc segment disposed on the side of the lamp body 2, and a center angle of each of the arc segment is a center angle of the corresponding one of the one or more first positioning slot 21.

Embodiment 2

[0030] A difference between this embodiment and Embodiment 1 is that each of the one or more marking device 10 is a rotating rod 15, and a first end of the rotating rod 15 is rotatably connected to the mounting member 1. In this embodiment, the one or more marking device 10 is two rotating rods 15, which are symmetrically disposed. When each of the two rotation rods 15 is rotated to a first angle, the two rotation rods 15 are on a straight line, and a first end of each of the two rotating rods 15 away from the mounting member 1 reaches a corresponding one of the one or more marked area. When each of the two rotating rods 15 is rotated to a second angle, the first end

of each of the two rotating rods 15 away from the mounting member 1 leaves the corresponding one of the one or more marking area 30. As long as the one or more marking device 10 can be accommodated after the lamp body 2 and the mounting member 1 are installed, a method available is not limited to being retracted, it can also be rotated to other angle for accommodation.

[0031] In the present disclosure, the one or more rotating rod 15 is disposed on the mounting member 1. When the one or more marking device 10 is required to align with the corresponding one of the one or more marking area 30, each of the two rotating rods 15 is rotated to a first angle for installation. When each of the one or more marking device 10 is not required to align with the corresponding one of the one or more marking area 30, each of the two rotating rods 15 can be rotated to a second angle for accommodation, which is convenient for installer to install the lamp, and will not affect an appearance of the lamp.

Embodiment 3

[0032] A difference between this embodiment and Embodiment 1 is that the mounting member 1 is connected to the lamp body 2. When each of the one or more marking device 10 reaches the corresponding one of the one or more marking area 30, and each of the one or more positioning member and the corresponding one of the one or more auxiliary positioning member 20 are limited by each other so that the lamp body 2 is fixedly connected to the mounting member 1. The one or more positioning member is a second positioning slot 17 respectively disposed on two sides of the mounting member 1, the one or more auxiliary positioning member 20 is at least one positioning bar 23 disposed on a side of the lamp body 2 facing the mounting member 1. When each of the one or more retractable device is aligned with the corresponding one of the one or more marking area 30, each of the one or more positioning bar 23 is aligned with the corresponding one of the second positioning slot 17, the lamp body 2 is moved along a length direction of the one or more positioning bar 23, so that each of the one or more positioning bar 23 is inserted into the corresponding one of the second positioning slot 17, the lamp body 2 and the mounting member 1 are limited by each other in the vertical direction. The one or more marking device 10 is a second retractable pole 16, a retractable direction of the second retractable pole 16 is parallel to the length direction of the one or more positioning bar 23. After each of the one or more positioning bar 23 and the corresponding one of the second positioning slot 17 are limited, the second retractable pole 26 is retracted so that a projection of the second retractable pole 26 on the lamp body 2 is disposed in the lamp body 2.

Embodiment 4

[0033] A difference between this embodiment and Em-

bodiment 1 is that each of the one or more positioning member is a male buckle 18 and the corresponding one of the one or more auxiliary positioning member 20 is a female buckle 24. A connection between the lamp body 2 and the mounting member 1 is achieved due to a fastening of each of the male buckle 18 and the corresponding one of the female buckle 24. When each of the one or more marking device 10 reaches the corresponding one of the one or more marking area 30, each of the one or more male buckle 18 and the corresponding one of the female buckle 24 are aligned.

[0034] The present disclosure provides a lamp mounting structure, the one or more retractable pole 11 is disposed on the mounting member 1, and the one or more marking area 30 is disposed on the lamp body 2, each of the one or more marking area 30 corresponds to the corresponding one of the one or more first positioning slot 21. The installer aligns each of the first marking position 221 with the corresponding one of the one or more retractable pole 11, then rotates the lamp body 2 to move the corresponding one of the one or more retractable pole 11 close to the corresponding one of the second marking position 222 until the corresponding one of the second marking position 222 is reached, which means that the positioning column 50 begins to slide into the corresponding one of the one or more first positioning slot 21 and reaches the corresponding one of the terminal end to abut the corresponding one of the stopping wall 212, then the positioning column 50 is limited in the vertical direction and the rotating direction, and the mounting member 1 and the lamp body 2 are installed. In addition, a connection of each of the one or more male buckle 18 and the corresponding one of the one or more female buckle 24 and a connection of each of the one or more positioning bar 23 and the corresponding one of the second positioning slot 17 also make installation of the lamp more convenient. Due to the corresponding one of the one or more marking area 30 disposed on the side of the lamp body 2 and a position pointed by the corresponding one of the one or more retractable pole, this type of retractable pole structure allows the installer free to check a positioning structure inside the lamp body 2 and determine whether the positioning column 50 is limited to the corresponding one of the one or more first positioning slot 21, or whether each of the one or more male buckle 18 and the corresponding one of the one or more female buckle 24 are fixedly connected, and whether each of the one or more positioning bars 23 and the corresponding one of the second positioning slot 17 are limited by each other. In addition, after the positioning column 50 is limited and the corresponding one of the one or more first positioning slot 21, the one or more retractable pole 11 can be retracted so that the appearance of the lamp will not be affected.

[0035] The invention may be summarized as follows: The present disclosure discloses a lamp mounting structure, comprises a lamp body and a mounting member. The mounting member is disposed with one or more po-

sitioning member and one or more marking device. The lamp body is disposed with one or more auxiliary positioning member and one or more marking position. When each of the one or more marking device is aligned with a corresponding one of the one or more marking position, each of the one or more positioning member and a corresponding one of the one or more auxiliary positioning member are limited by each other, so that the lamp body and the mounting member are fixedly connected.

[0036] It will be apparent to those skilled in the art that various modifications and variation can be made in the present disclosure without departing from the spirit or scope of the invention. Thus, it is intended that the present disclosure cover the modifications and variations of this invention provided they come within the scope of the appended claims and their equivalents.

Claims

1. A lamp mounting structure, comprising:
a lamp body (2), and
a mounting member (1), **characterized in that:**
the mounting member (1) is disposed with one or more positioning member (12) and one or more marking device (10),
the lamp body (2) is disposed with one or more auxiliary positioning member (20) and one or more marking position (30), and
when each of the one or more marking device (10) is aligned with a corresponding one of the one or more marking position (30),
each of the one or more positioning member (12) and a corresponding one of the one or more auxiliary positioning member (20) are limited and connected by each other, and
the lamp body (2) and the mounting member (1) are fixedly connected.
2. A lamp mounting structure, comprising:
a lamp body (2), and
a mounting member (1), **characterized in that:**
the mounting member (1) is disposed with one or more positioning member (12) and one or more marking device (10),
the lamp body (2) is disposed with one or more auxiliary positioning member (20) and one or more marking area (30),
the mounting member (1) and the lamp body (2) are configured to rotate relative to each other, and

when each of the one or more marking device (10) reaches a corresponding one of the one or more marking area (30),

each of the one or more positioning member (12) and a corresponding one of the auxiliary positioning member (20) are limited by each other, and the lamp body (2) and the mounting member (1) are fixedly connected. 5 10

3. The lamp mounting structure according to claim 2, **characterized in that** each of the one or more marking area (30) is disposed along a relatively rotational direction of the lamp body (2) and the mounting member (1). 15

4. The lamp mounting structure according to claim 3, **characterized in that**: 20

each of the one or more marking device (10) is a rotating rod (15), a first end of the rotating rod (15) is rotatably connected to the mounting member (1), and when the rotating rod (15) is rotated to a first angle, 25 a second end of the rotating rod (15) away from the mounting member (1) reaches the corresponding one of the one or more marking area (30), when the rotating rod (15) is rotated to a second angle, the second end of the rotating rod (15) away from the mounting member (1) leaves the corresponding one of the one or more marking area (30). 30 35

5. The lamp mounting structure according to claim 3, **characterized in that**: 40

each of the one or more marking device (10) is a retractable pole (11), a retractable direction of the retractable pole (11) is parallel to a plane direction of the mounting member (1), and after the retractable pole (11) reaches the corresponding one of the one or more marking area (30), the retractable pole (11) is retracted. 45 50

6. The lamp mounting structure according to any one or more of claims 1 to 5, **characterized in that** each of the one or more auxiliary positioning member (20) is a first positioning slot (21) with an opening facing a side of the lamp body (2). 55

7. The lamp mounting structure according to claim 6, **characterized in that**:

each of the one or more positioning member (12) is inserted into a corresponding one of the first positioning slot (21), and each of the one or more positioning member (12) and the corresponding one of the first positioning slot (21) are limited by each other in a vertical direction.

8. The lamp mounting structure according to claim 6 and/or 7, **characterized in that**: 80

a first end of each of the first positioning slot (21) is an entrance end, a second end of each of the first positioning slot (21) is a terminal end, the terminal end comprises a stopping wall (212), each of the one or more positioning member (12) slides from the corresponding one of the entrance end into the corresponding one of the first positioning slot (21) to the corresponding one of the terminal end and abuts the corresponding one of the stopping wall (212), each of the one or more positioning member (12) and the corresponding one of the stopping wall (212) are limited by each other at a rotating direction of the mounting member (1) and the lamp body (2).

9. The lamp mounting structure according to any one or more of claims 6 to 8, **characterized in that**: 85

each of the one or more positioning member (12) is a positioning column (50), a plurality of said positioning columns (50) are centrally symmetrically disposed on the mounting member (1), and the lamp body (2) is centrally symmetrically disposed with the one or more first positioning slot (21).

10. The lamp mounting structure according to claim 9, **characterized in that**: 90

a projection of the mounting member (1) in the vertical direction is within a projection of the lamp body (2) in the vertical direction, the one or more marking area (30) is disposed on the side of the lamp body (2), each of the one or more retractable pole (11) is in an extended state, a first end of each of the one or more retractable pole (11) is above the side of the lamp body (2), the lamp body (2) is configured to be rotated relative to the mounting member (1), and when each of the one or more retractable pole (11) is rotated above a first end of the corresponding one of the one or more marking area (30).

(30),
the positioning column (50) is slide into the corresponding one of the one or more fist limiting slot (21) from the corresponding one of the entrance end,
when each of the one or more retractable pole (11) is rotated above a second end of the corresponding one of the one or more marking area (30),
the positioning column (50) reaches the terminal end of the corresponding one of the one or more first positioning slot (21) and is limited by the corresponding one of the stopping wall (212). 5

11. The lamp mounting structure according to any one or more of claims 5 to 10, **characterized in that:** 15

the mounting member (1) is centrally symmetrically disposed with two retractable poles (11) of the one or more retractable pole (11);
two ends of each of the one or more marking area (30) are respectively marked as a first mark position (221) and a second mark position (222), when the lamp body (2) is installed, 25

the lamp body (2) is rotated to align the first mark position (221) with the corresponding one of the two retractable poles (11),
the lamp body (2) is continued to be rotated to make each of the two extendable poles (11) gradually approach the corresponding one of the second mark position (222). 30

12. The lamp mounting structure according to any one or more of claims 1 to 11, **characterized in that:** 35

the mounting member (1) is disposed on a ceiling, and
the lamp body (2) is disposed on a side of the mounting member (1) opposite to the ceiling. 40

13. A lamp mounting structure, comprising:
a lamp body (2), and
a mounting member (1), **characterized in that:** 45

the mounting member (1) is disposed with one or more positioning member (12) and one or more marking device (10),
the lamp body (2) is disposed with one or more auxiliary positioning member (20) and one or more marking area (30),
the mounting member (1) is connected to the lamp body (2),
when each of the one or more marking device (10) reaches a corresponding one of the one or more marking area (30), 50

each of the one or more positioning member (12) and a corresponding one of the one or more auxiliary positioning member (20) are limited by each other, the lamp body (2) and the mounting member (1) are fixedly connected. 55

14. The lamp mounting structure according to claim 13, **characterized in that:**

each of the one or more marking device (10) is a retractable device (16), and
before the mounting member (1) and the lamp body (2) are installed,
the retractable device (16) is extended, and
after the mounting member (1) and the lamp body (2) are installed,
the extendable device (16) is retracted. 60

20 15. The lamp mounting structure according to claim 14, **characterized in that:**

the one or more positioning member (12) is one or more second positioning slot (17) respectively disposed on two sides of the mounting member (1),
the one or more auxiliary positioning member (20) is one or more positioning bar (23) disposed on a side of the lamp body (2) facing the mounting member (1), and
when the retractable device (16) is aligned with the corresponding one of the one or more marking area (30),
each of the one or more positioning bar (23) is aligned with a corresponding one of the one or more second limiting slot (17), and
when the lamp body (2) is moved along a length direction of the one or more positioning bar (23) to make each of the one or more positioning bar (23) to be inserted to a corresponding one of the one or more second positioning slot (17),
the lamp body (2) and the mounting member (1) are limited by each other in a vertical direction. 65

16. The lamp mounting structure according to any one or more of claims 13 to 15, **characterized in that:**

each of the one or more positioning member (12) is a male buckle (18), and
each of the one or more auxiliary positioning member (30) is a female buckle (24). 70

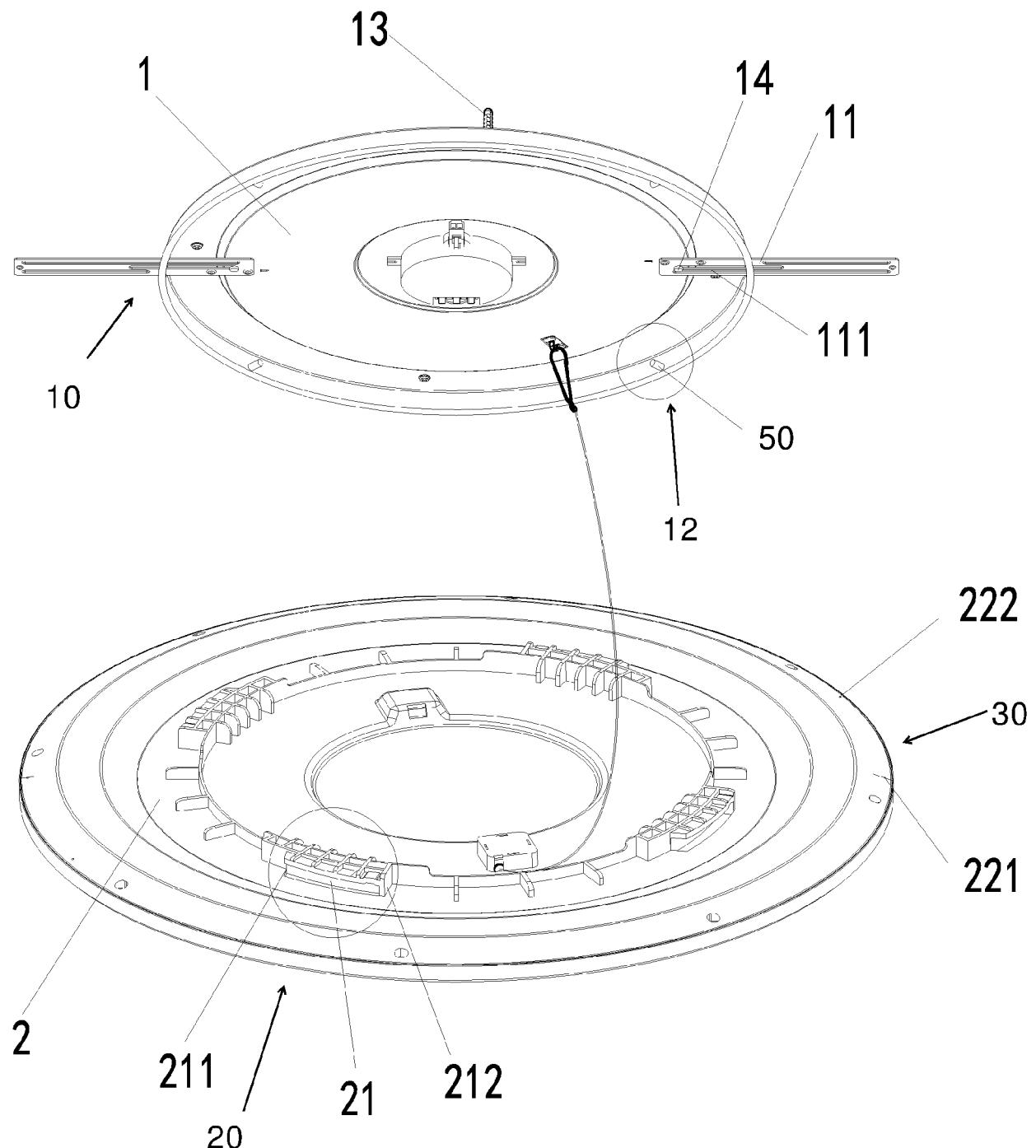


Fig. 1

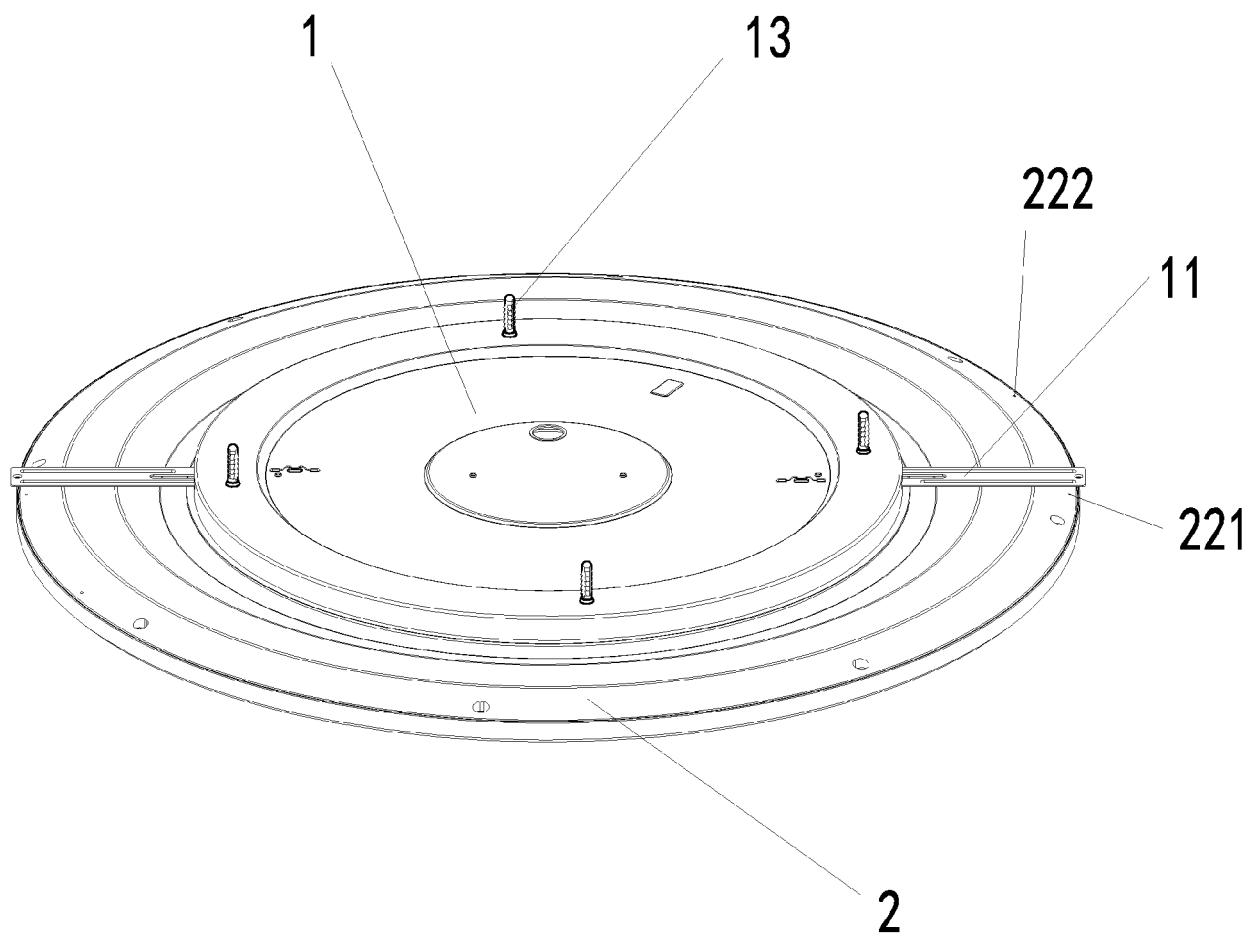


Fig. 2

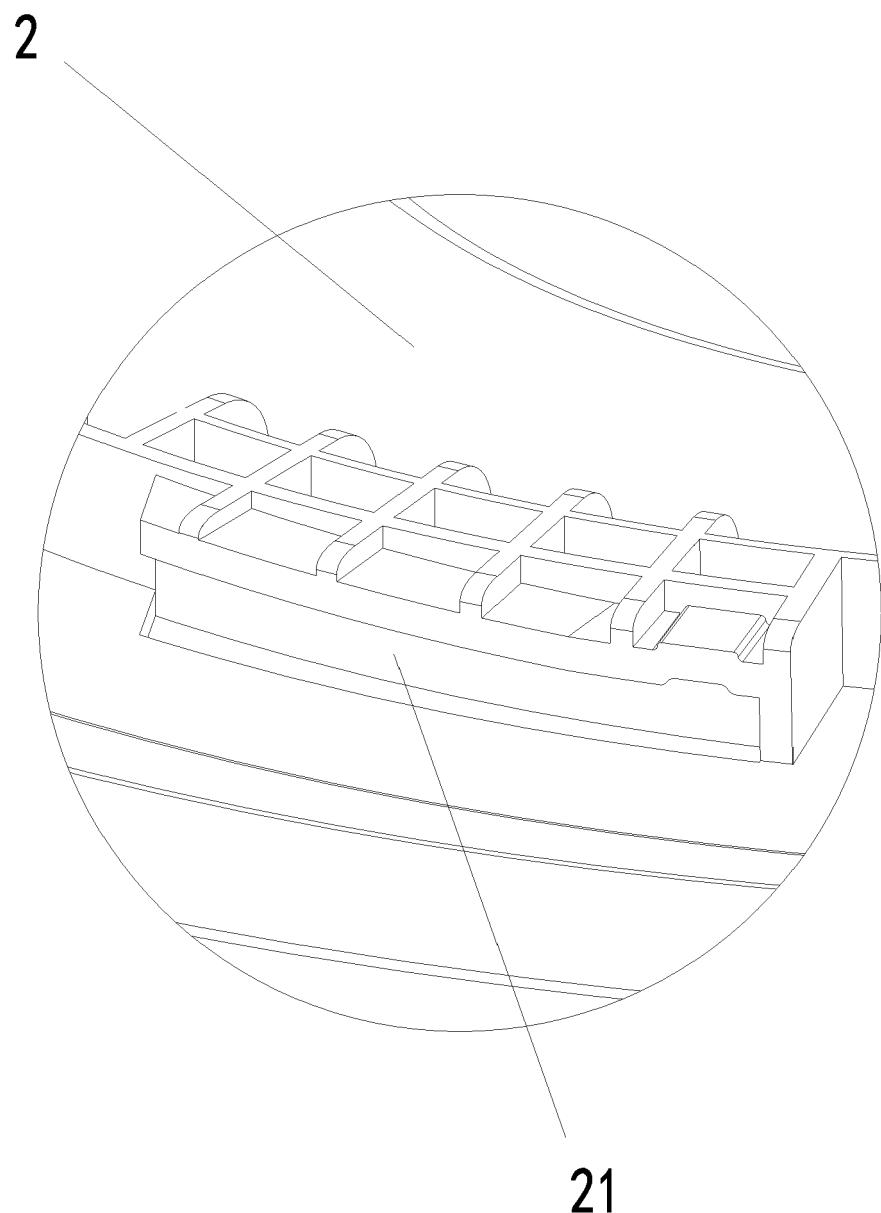


Fig. 3

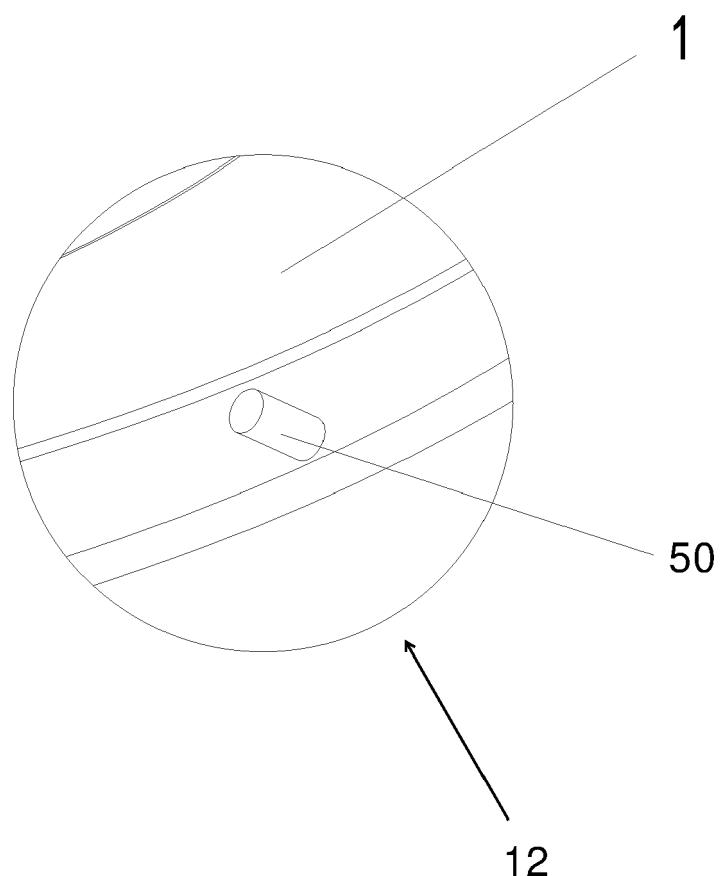


Fig. 4

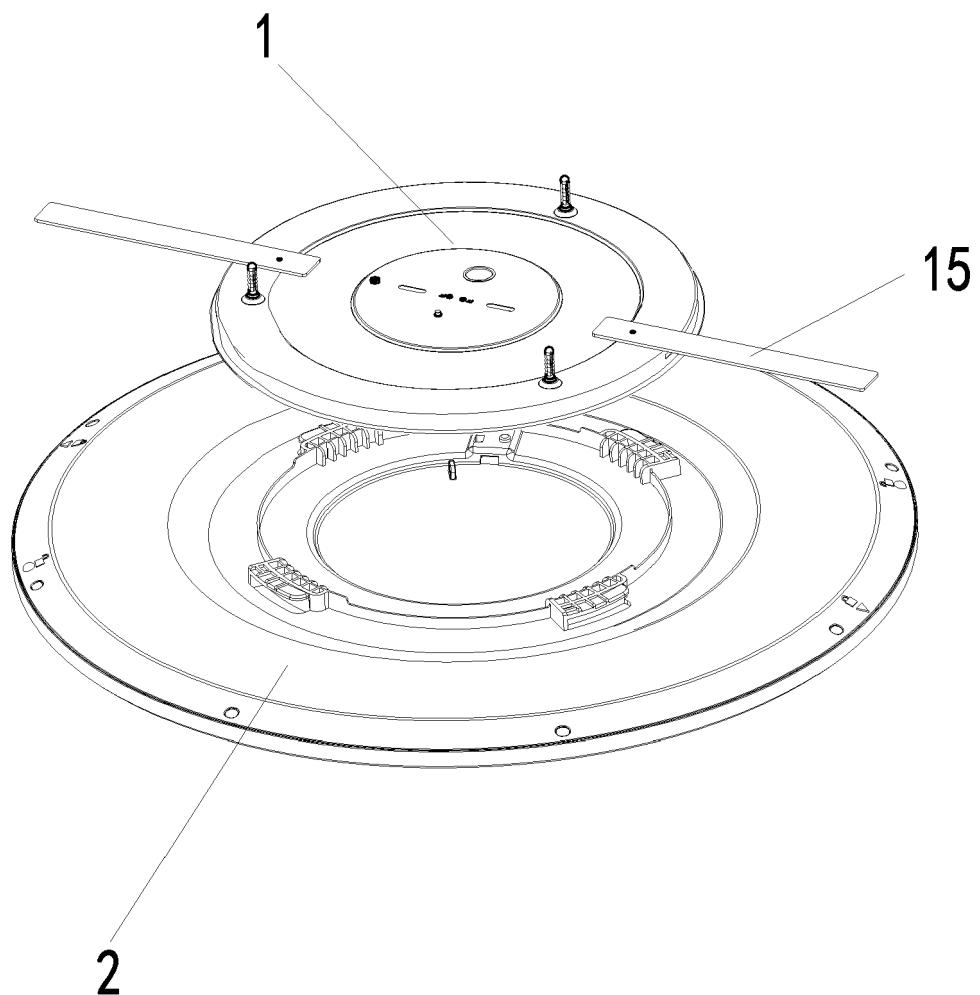


Fig. 5

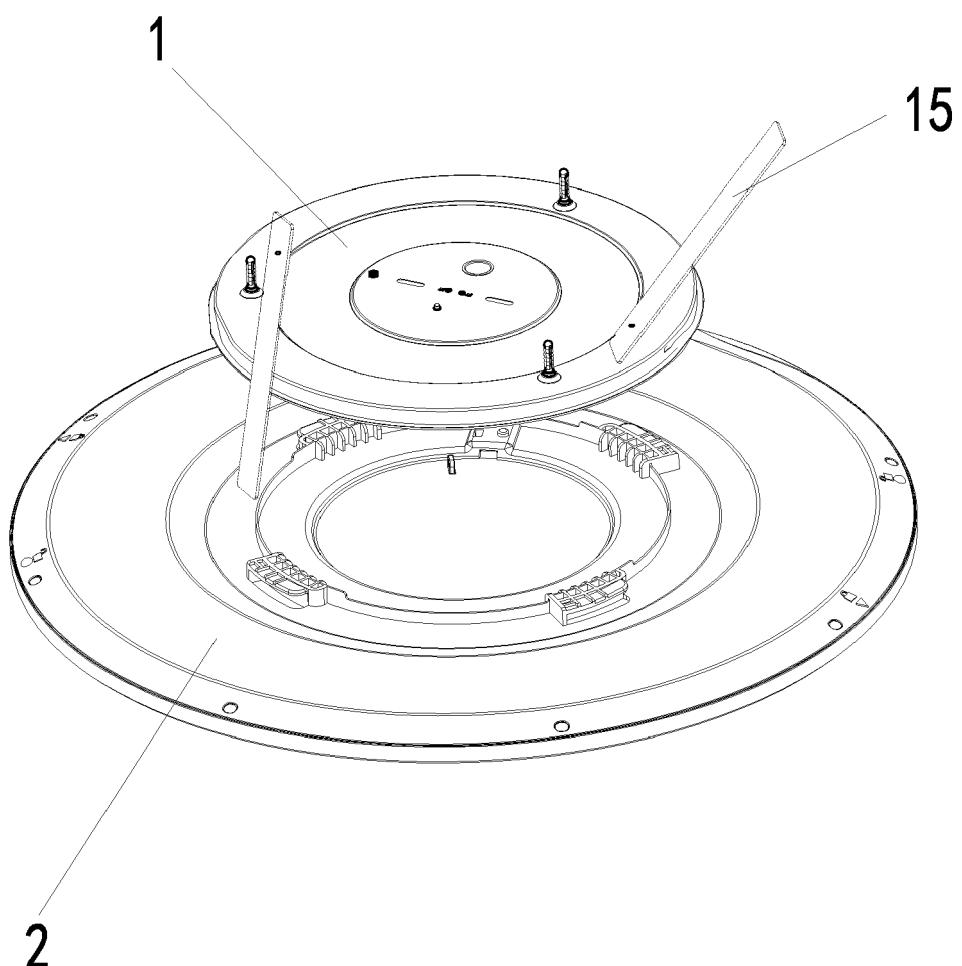


Fig. 6

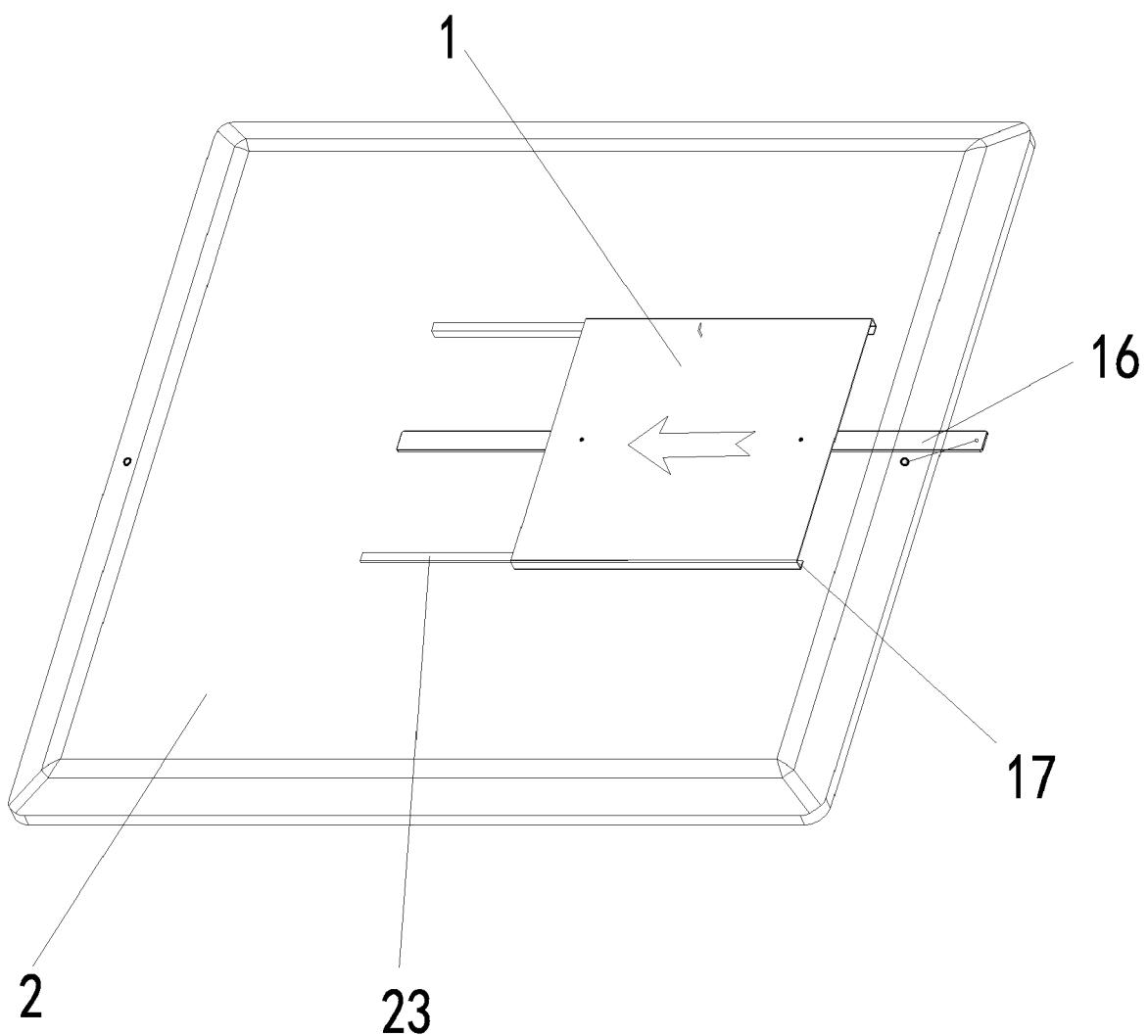


Fig. 7

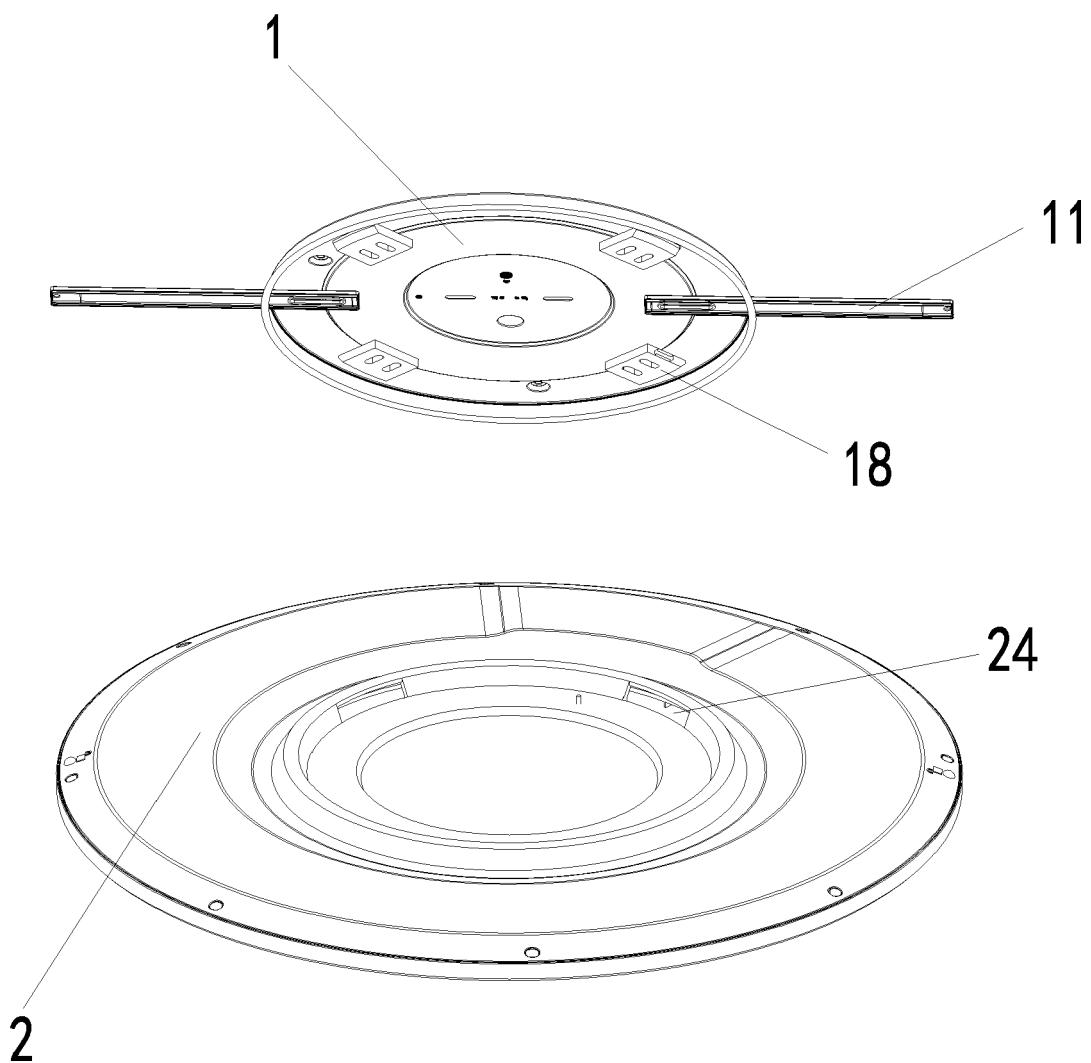


Fig. 8



EUROPEAN SEARCH REPORT

Application Number

EP 20 15 4722

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (IPC)		
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim			
X	JP 2017 045587 A (IRIS OHYAMA INC) 2 March 2017 (2017-03-02) * figures 1,7,8,10,11a,12b, * * paragraph [0029] * ----- US 2017/009962 A1 (FEIT ALAN BARRY [US] ET AL) 12 January 2017 (2017-01-12) * figures 1,3,5,6 * * paragraphs [0042], [0061] * -----	1-3,6-9, 12,13,16 1-3,6-9, 12,13,16	INV. F21V21/03 F21S8/04		
			TECHNICAL FIELDS SEARCHED (IPC)		
			F21V F21S		
The present search report has been drawn up for all claims					
Place of search	Date of completion of the search	Examiner			
The Hague	11 June 2020	Dinkla, Remko			
CATEGORY OF CITED DOCUMENTS					
X : particularly relevant if taken alone	T : theory or principle underlying the invention				
Y : particularly relevant if combined with another document of the same category	E : earlier patent document, but published on, or after the filing date				
A : technological background	D : document cited in the application				
O : non-written disclosure	L : document cited for other reasons				
P : intermediate document & : member of the same patent family, corresponding document				

**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 20 15 4722

5 This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

11-06-2020

10	Patent document cited in search report	Publication date	Patent family member(s)		Publication date
	JP 2017045587 A	02-03-2017	NONE		
15	US 2017009962 A1	12-01-2017	US 2017009962 A1		12-01-2017
			US 2018172248 A1		21-06-2018
			US 2019376672 A1		12-12-2019
20					
25					
30					
35					
40					
45					
50					
55					

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82