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(54) Title: A BODY HEAD FOR COVERED PROFILES

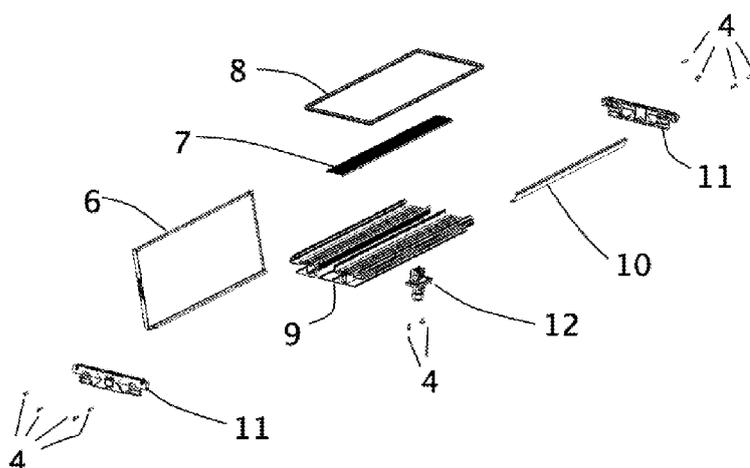


Figure – 4

(57) Abstract: The invention a body head (11) mounted on the side parts of the body profile (9) with mounting screws (4) in a mounting for covered profiles (A) which is containing a body profile (9) that acts as the main body by bearing all units and which provides a simple and fast assembly process for products with a covered structure that can be produced with aluminum profile, without using any hinges or locking elements.



A BODY HEAD FOR COVERED PROFILES

5 Technical Field

The invention relates to a new body head in mounting assemblies used in covered profiles.

10 In particular, the invention relates to the body head positioned to provide a healthier IP protection in the mounting assemblies used in the covered profiles that allow simple and quick assembly without using any additional hinge or locking element in products with a covered structure that can be produced with aluminum profile.

15 Background of the Invention

Aluminum profiles with a covered structure are known as structures that protect the equipment from external factors such as dust, dirt, water. Covered profiles are frequently used, especially in equipment that must have IP properties.

20

In the current technique, a structure that acts as a hinge or hinge is required for the opening and closing of the cover mentioned.

Said hinge should be placed on the body evenly so that it can fully fulfill its functional
25 feature. In addition, additional fasteners such as screws must be used in order to perform the assembly of this hinge part.

In order to keep the said hinge structure fixed in the closed state, an additional locking element is required. Screw etc. in this locking piece. additional fasteners must
30 be used.

In order for this process to be done correctly and properly, both assembly apparatus is required and the assembly process is difficult, causing an increase in the total

product cost by increasing the labor cost. In addition, intervention for problems that may occur later in these structures is very difficult and time consuming.

5 In current applications, it is mandatory to use gaskets for IP protection, apart from the plastic cover used in the head parts of the aluminum profile products. While these two parts are molded separately and the assembly of the product is done, the assembly process is performed by manually placing them inside each other.

10 In this process, the person working in the assembly line must place the gasket properly and install it by screwing properly.

15 In this process, the gasket has to be put the opposite or straight, if it is not properly screwed, the correct screwing process cannot be done and this causes the IP protection value of the product to be lower than the declared value.

In addition, in this system, it is necessary to order two different parts, both head and gasket, for IP protection, and other operations such as keeping stock.

20 In the literature, in the patent application numbered TR 2014 15219, regarding the subject, "The invention subject to application; It is related to an aluminum side cover profile with a tension channel, which has been developed in order to use tensioning tarpaulin fixing mechanisms that allow the internal height of the box to be adjusted by using a single tarpaulin in the tarpaulin trailer type load carrying cases. " statements are included.

25 In said application, a capped aluminum profile having a hinged structure is disclosed.

30 Again, in the literature, in the utility model application numbered TR 2018 07688, regarding the subject, "This invention, public buildings, historical buildings, bridges etc. It is about LED lighting with a functional structure that can be used in the lighting of the exterior facades of buildings. The body containing the protrusion part and the fixing space, the power supply containing the recess part and the fixing holes, the profile cover positioned on the right and left sides of the power supply, the plastic cover positioned on both ends of the body, the leg fixed to fit the lower part of the

body (sliding and adjustable) It consists of a glass part fixed to the right and left sides of the body in such a way that the side lath is fixed to be interlocking, the foot is connected to the bottom and side laths and the plastic cover, which is connected to the top of the foot by the fasteners. statements are included.

5

In the said application, a lighting fixture profile is disclosed that allows the assembly of equipment by means of screws.

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Again in the literature, in the utility model application numbered TR 2018 11794, regarding the subject, "The inventive linear lighting fixture is mounted by sliding on at least one aluminum body, the cooler profile is mounted on the cooler profile by means of a nail, and the decorative slider body mounted on both ends of the aluminum body. and sliding doors. It is a slider body and its feature; the inner size is in accordance with the outer size of the aluminum body and there are sliding channels on both opposite outer side edges. statements are included.

15

In the said application, a lighting fixture profile with a sliding cover structure is disclosed.

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Due to the aforementioned reasons, a new body head was needed in the assembly equipment used in covered profiles.

Purpose of the Invention

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Based on this position of the technique, the purpose of the invention is to introduce a new body head in the mounting assemblies used in covered profiles that eliminate the present disadvantages.

30

Another purpose of the invention is to provide a structure that enables direct manual assembly without using any hand tools such as screw or screwdriver.

Another purpose of the invention is to provide a structure that allows the assembly process to be carried out quickly and prevents the assembled part from being mounted on the body in an offset manner.

Another purpose of the invention is to provide a structure resistant to buckling, pulling and bending.

5 Another purpose of the invention is to provide a structure with more strength than the screw mounting system.

Another purpose of the invention is to provide a structure that allows assembly and disassembly to be performed by only one person.

10

Another purpose of the invention is to present a structure that significantly reduces the labor cost.

15 Another purpose of the invention is to present a structure in which the intervention to the problems that may occur later is made easier.

Another purpose of the invention is to present a structure that solves IP protection more smoothly and precisely than the current application.

20 Another purpose of the invention is to present a structure that allows an easier assembly since only one piece is assembled during manufacture.

Another purpose of the invention is to provide a structure that avoids the problem of determining the opposite plane of the gasket.

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Another purpose of the invention is to provide a structure that minimizes errors in both purchasing and stock by using only one piece.

Explanation of Figures

30

Figure - 1 A perspective disassembled view of the mounting assembly for covered profiles according to the invention.

Figure - 2 Another perspective disassembled view of the mounting assembly for covered profiles according to the invention.

Figure - 3 A perspective view of the mounting assembly for covered profiles according to the invention

Figure - 4 Another perspective disassembled view of the mounting assembly for covered profiles according to the invention.

5 Figure - 5 Another perspective view of the body head from the rear in the mounting assembly for covered profiles according to the invention.

Figure - 6 Another perspective view from the front of the body head in the mounting assembly for covered profiles according to the invention.

10 Figure - 7 A side view of the mounting assembly for covered profiles according to the invention

Figure - 8 Another side view of the mounting assembly for covered profiles according to the invention.

Figure - 9 Another side view of the mounting assembly for covered profiles according to the invention.

15

Reference Numbers

A - Mounting Assembly for Covered Profiles

- 20
1. Hinge Profile
 2. Glass Stick
 3. Frame Profile
 4. Mounting Screw
 5. Glass
 6. Cover

25

 7. Middle Cover
 8. Seal
 9. Body Profile
 10. Lock Profile
 11. Body Head

30

 - 11.1 Injected Seal Rear Slot
 - 11.2 Injected Seal Front Slot
 12. Connector Guideway
 13. Injected Seal

Detailed Description of the Invention

In this detailed description, the innovation subject to the invention is explained only with examples that will not have any limiting effect for a better understanding of the subject.

The invention a body head (11) mounted on the side parts of the body profile (9) with mounting screws (4) in an mounting for covered profiles (A) which is containing a body profile (9) that acts as the main body by bearing all units and which provides a simple and fast assembly process for products with a covered structure that can be produced with aluminum profile, without using any hinges or locking elements, characterized in that comprises; injected seal (13) injected in one piece with said body head (11), which allows the said body head (11) to be mounted on the body profile (9) more easily and to provide a more effective IP protection.

15

Figure - 1 shows a perspective disassembled view of the mounting assembly for covered profiles according to the invention.

Figure - 2 shows another perspective disassembled view of the mounting assembly for covered profiles according to the invention.

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Figure - 3 shows a perspective view of the mounting assembly for covered profiles according to the invention.

Figure - 4 shows another perspective disassembled view of the mounting assembly for covered profiles according to the invention.

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Figure - 5 shows another perspective view of the body head from the rear in the mounting assembly for covered profiles according to the invention.

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Figure - 6 shows another perspective view from the front of the body head in the mounting assembly for covered profiles according to the invention.

Figure - 7 shows a side view of the mounting assembly for covered profiles according to the invention.

5 Figure - 8 shows another side view of the mounting assembly for covered profiles according to the invention.

Figure - 9 shows another side view of the mounting assembly for covered profiles according to the invention.

10 The mounting assembly for the covered profiles (A) subject to the invention consists main parts of; the cover (6) that covers the mounting assembly for the covered profiles (A) and protects against external factors such as dust, dirt, water, the body profile (9) that acts as the main body by accommodating all the units of the mounting assembly for the covered profiles (A), the glass (5) formed in the middle of the said
15 cover (6), the hinge profile (1) is positioned as an aluminum profile piece that functions as a hinge to fulfill the opening and closing function when mounted on the body profile (9) of the said cover (6), and also fulfills the function of terminating a horizontal edge of the said glass (5), glass stick (2) positioned on the right and left sides of the said glass (5) as right and left ending elements, frame profile (3)
20 positioned parallel to the hinge profile (1) on the opposite edge of the hinge profile (1) where the glass (5) ends, as another ending element of the glass (5) as well as positioned as the end of the said cover (6) that fulfills the function of locking, mounting screws (4) enabling the mounting of the mentioned equipment on each other, the middle cover (7) positioned as a cover covering the materials in the middle
25 part of the mounting assembly for covered profiles (A), seal (8) providing the IP protection of the mounting assembly for covered profiles (A), the lock profile (10) that fulfills the locking function by bearing the frame profile (3) by closing the said cover (6) on the body profile (9), the body head (11) positioned as the ending element of said body profile (9), the connector guideway (12) positioned as the part that provides
30 the electrical connection of the mounting assembly for covered profiles (A), injected seal (13) injected in one piece with said body head (11), which allows the said body head (11) to be mounted on the body profile (9) more easily and to provide more effective IP protection, injected seal rear slot (11.1) formed as a slot where said injected seal (13) is injected at the rear of said body head (11) and injected gasket

front slot (11.2) formed as a slot where said injected seal (13) is injected in front of said body head (11).

5 In the practice of the invention, the mounting screws (4) are placed in the mounting slots on the glass stick (2). Then, the frame profile (3) and the hinge profile (1) are placed on the long right and left edges of the glass (5).

10 Afterwards, the glass stick (2) is placed on the short sides of the glass (5) and the assembly of the cover (6) is completed by tightening the mounting screws (4). After the assembly of the mentioned cover (6), the product assembly is started.

15 For this process, firstly, the lock profile (10) is pushed into the channel on the body profile (9). Later, the cover (6) is pushed by sliding into the channel on the body profile (9).

For the next process, the body head (11) is mounted to the body profile (9) with mounting screws (4) from the side of the body profile (9). Later, the other body head (11) is mounted from the other side of the body profile (9) with mounting screws (4).

20 Later, the connector guideway (12) is placed in its slot on the back part of the body profile (9) and mounted to the body profile (9) with mounting screws (4).

25 Subsequently, the middle cover (7) is mounted to the area in the middle of the body profile (9) thanks to its nailed structure. The seal (8) is mounted on the gasket seat on the body profile (9).

30 After this stage, the cover (6) is closed by its seat on the body profile (9). Later, the lock profile (10) functions as a lock thanks to its seat on the body profile (9) and is locked by fitting into its slot on the cover (6). Thanks to this locking, the body falls under the IP protection class.

In order to provide full IP protection, an injected seal rear slot (11.1) is formed on the back of the body head (11) and an injected seal front slot (11.2) is formed on the

front. Injected seal (13) is injected into the said injected seal rear seat (11.1) and injected seal front seat (11.2) and its isolation is provided in one piece.

Thus, during the assembly of the body head (11) on the body profile (9), it is possible
5 to perform direct assembly without placing an additional gasket in between.

CLAIMS

1. The invention a body head (11) mounted on the side parts of the body profile (9) with mounting screws (4) in an mounting for covered profiles (A) which is
5 containing a body profile (9) that acts as the main body by bearing all units and which provides a simple and fast assembly process for products with a covered structure that can be produced with aluminum profile, without using any hinges or locking elements, characterized in that comprises; injected seal (13) injected in one piece with said body head (11), which allows the said body
10 head (11) to be mounted on the body profile (9) more easily and to provide a more effective IP protection.
2. A body head (11) according to claim 1; comprises injected seal rear slot (11.1) formed as a slot where said injected seal (13) is injected at the rear of said
15 body head (11).
3. A body head (11) according to any preceding claims comprises injected gasket front slot (11.2) formed as a slot where said injected seal (13) is injected in front of said body head (11) .
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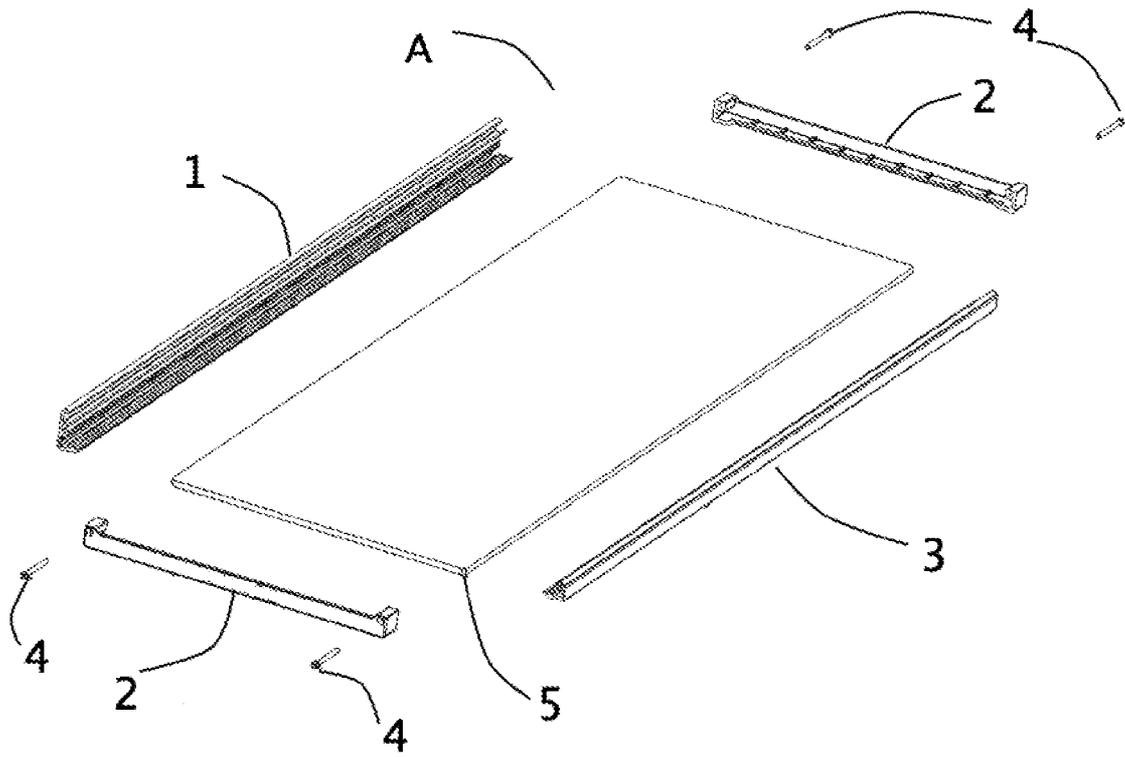


Figure - 1

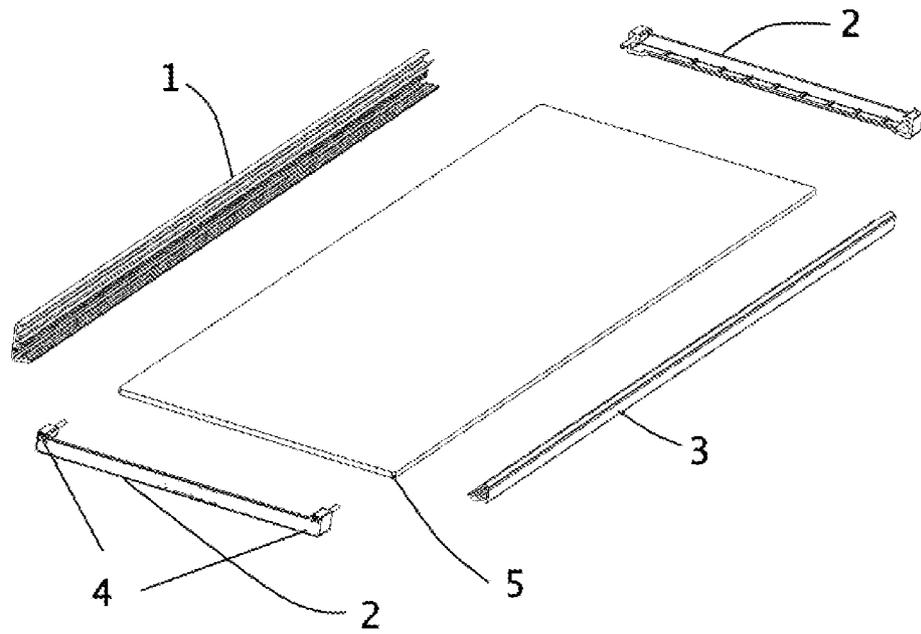


Figure - 2

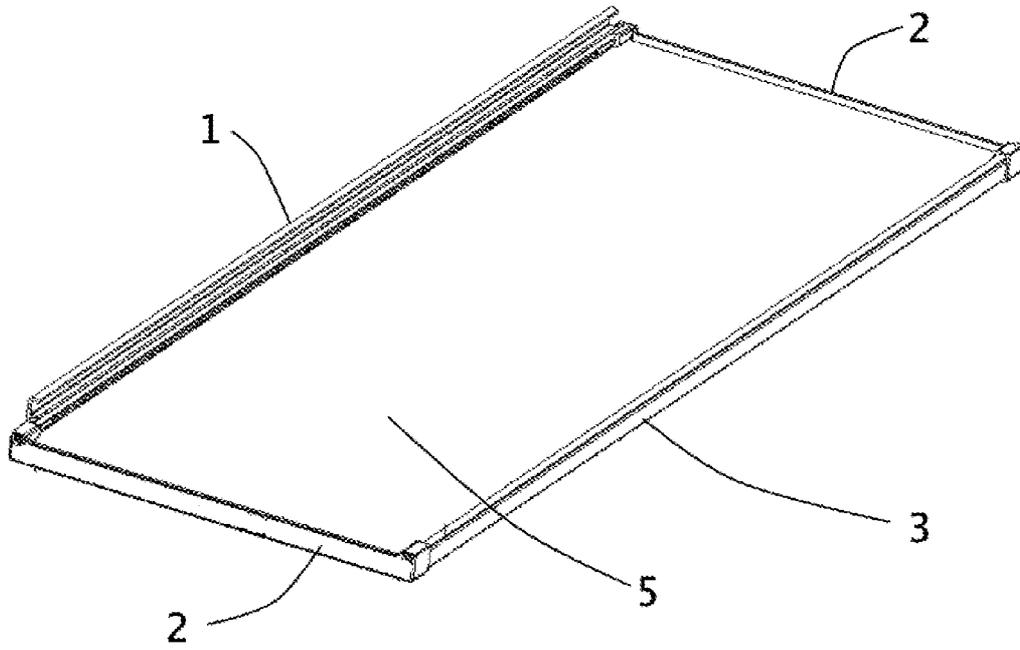


Figure - 3

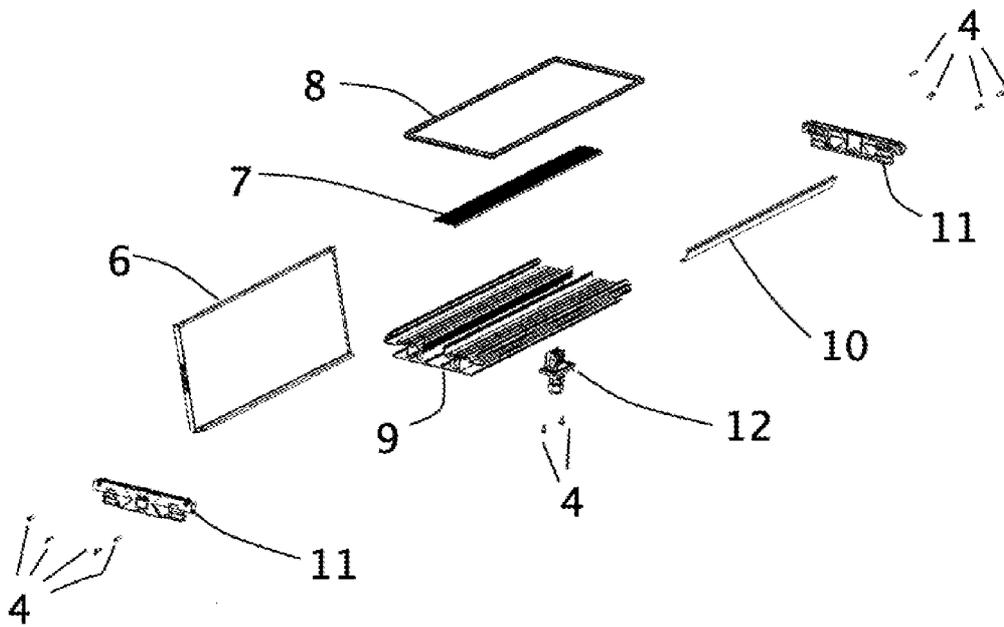


Figure - 4

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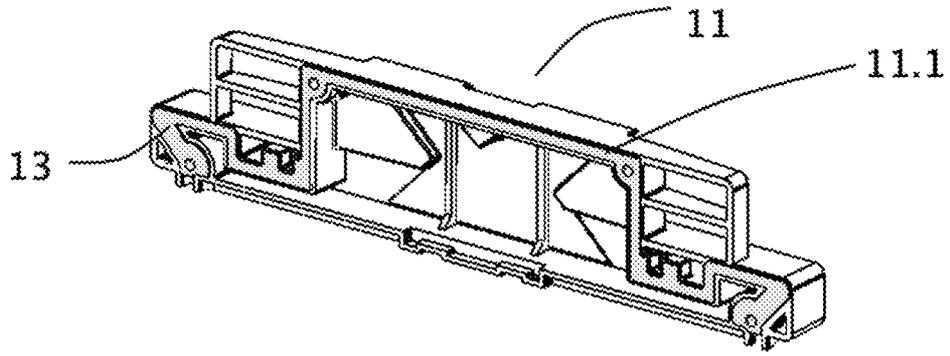


Figure – 5

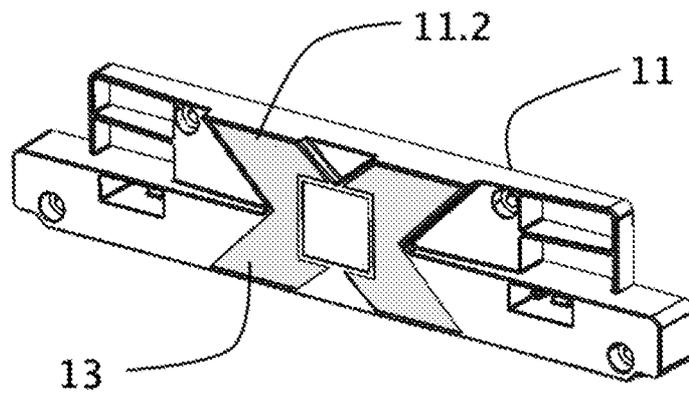


Figure – 6

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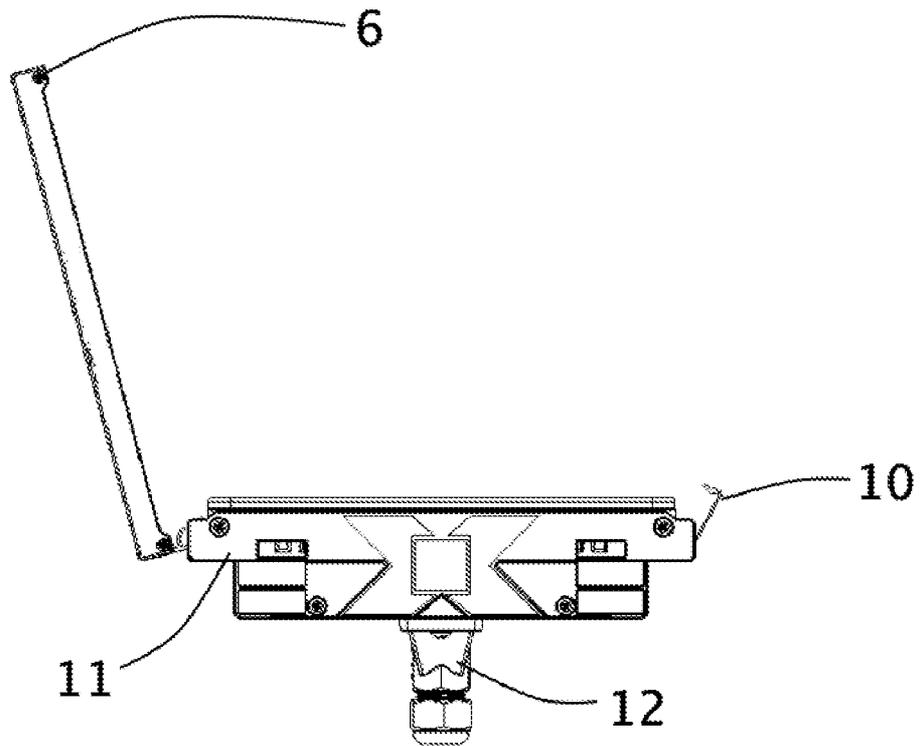


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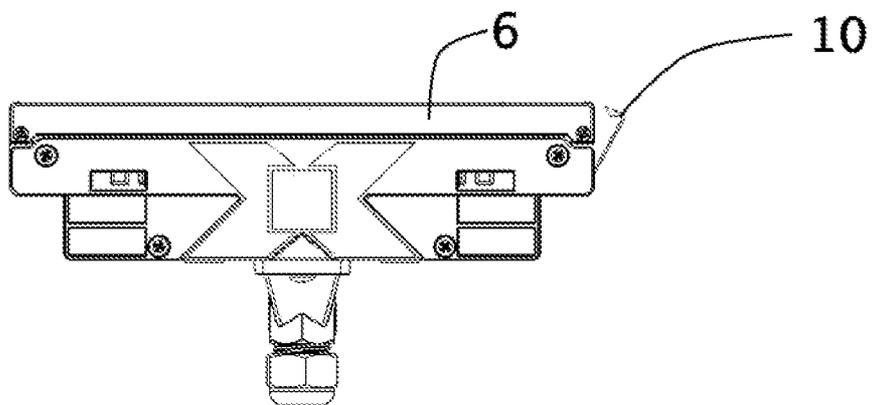


Figure – 8

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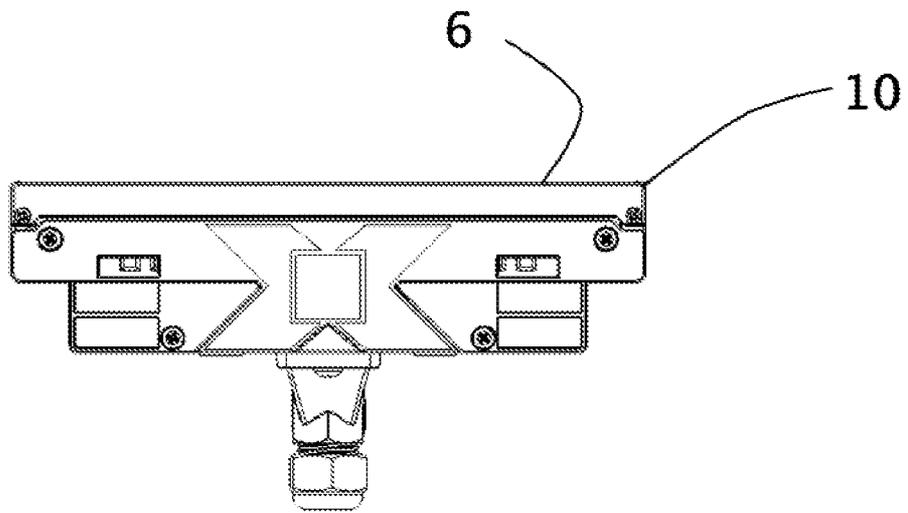


Figure – 9

INTERNATIONAL SEARCH REPORT

International application No.

PCT/TR2021/050134

A. CLASSIFICATION OF SUBJECT MATTER		
F21S 8/00 (2006.01)i; F21V 15/01 (2006.01)i; F21V 31/00 (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) F21S; F21V		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Turkpatent Database		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) EPO Abstract & Full text databases, WPI Database		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	CN 209278950 U (DONGYING ARCHITECTURAL DESIGN AND RES INSTITUTE) 20 August 2019 (2019-08-20) The whole document (machine translation)	1,2 3
Y	CN 209977721 U (SELF ELECTRONICS CO LTD) 21 January 2020 (2020-01-21) The whole document (machine translation)	1-3
Y	CN 204153695 U (PHILIPS CHINA INVEST CO LTD) 11 February 2015 (2015-02-11) The abstract & drawings	1-3
Y	CN 105605452 A (NINGBO HENGJIU LIGHT LAMP CO LTD) 25 May 2016 (2016-05-25) The whole document (machine translation)	1-3
A	CN 203744129 U (CHONGQING ENWEIXI IND DEV CO LTD) 30 July 2014 (2014-07-30) The whole document (machine translation)	1-3
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