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(54) **System and method for connecting a plate to an upstand**

System und verfahren zur Verbindung einer Platte und eines Randes

Système et procédé pour connecter une plaque à un rebord

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Description

[0001] The present invention relates to a system for connecting an end edge of one or more plates to an upstand, to a barrel vault skylight comprising such a system, to an assembly for use in such a system and to a method for connecting an end edge of one or more plates to an upstand.

[0002] Such systems are generally known and are described for instance in the Belgian patent application BE 2006/0252 in the name of applicant. Such systems make use of metal profiles which are mounted on the upstand and in which the end edge of the plate is fixable. These systems generally have quite a low U-value as a result of the use of metal profiles in which the end edges of the plates are received.

[0003] It is further known to combine such profiles with insulation elements, see for instance DE 202010000069, DE 20208000958 and DE 10044950. The known systems are however generally complex, expensive and not easy to fit.

[0004] DE 2905315 A1 discloses a system according to the preamble of claim 1.

[0005] The present invention has for its object to provide a system, barrel vault skylight, assembly and method of the type stated in the preamble which allow an improved thermal insulation and/or an improved sealing to be obtained in a simple and robust manner.

[0006] The system according to the invention comprises for this purpose at least one profile element in which, on an inner side thereof, an end edge of at least one plate is received. The system further comprises an insulating band which is manufactured from a plastic material and which has a first longitudinal edge arranged between the upstand and the at least one profile element, and a second longitudinal edge which makes contact with an upper side of the at least one plate. The insulating band is arranged such that the at least one profile element is wholly enclosed by the insulating band on an outer side thereof exposed to the outdoor environment.

[0007] Such an insulating band can be arranged easily around the outer side of the at least one profile element and makes it possible to considerably improve the U-value of the system. In addition, the watertightness, dusttightness and airtightness are also improved.

[0008] The insulating band is preferably arranged such that the at least one profile element is enclosed with clearance such that a hollow space is formed between the insulating band and the at least one profile element. Insulation material can then be arranged in this hollow space in order to further improve the U-value.

[0009] According to a possible embodiment, the insulating band is provided on a side facing toward the at least one profile element with a first coupling part, and the at least one profile element is provided with a second coupling part. These first and second coupling parts can be coupled to each other in order to connect the insulating band to the at least one profile element. The first and second coupling parts are preferably formed and positioned such that the coupling thereof results in the second longitudinal edge of the insulating band being pressed against the upper side of the at least one plate. The first and second coupling parts can for instance be embodied as a dovetail connection. The second coupling part can for instance comprise a receiving cavity in which the first coupling part can be received.

[0010] According to a possible embodiment, the first longitudinal edge of the insulating band is attached adheringly to the upstand and/or to the underside of the at least one profile element. The first longitudinal edge can for instance be attached using a glue layer to the upstand and/or against the underside of the at least one profile element. The second longitudinal edge can optionally also be attached adheringly, but then against the upper side of the at least one plate.

[0011] The insulating band is preferably manufactured from a rubber material, for instance a foamed ethylene propylene diene monomer (EPDM). The profile elements are preferably manufactured from metal, for instance aluminium.

[0012] According to a possible embodiment, the at least one profile element comprises a lower profile element and an upper profile element which are connected to each other by means of a bracket. The lower profile is then configured to receive an end edge of a lower plate, while the upper profile element is configured to receive an end edge of an upper plate.

[0013] The invention further relates to a barrel vault skylight with a first upstand and a second upstand and at least one plate extending between the first and the second upstand. The connection between a first end edge of the at least one plate and the first upstand, just as the connection between a second end edge of the at least one plate and the second upstand, can then be embodied making use of an above described embodiment of the system according to the invention.

[0014] The invention also relates to an assembly for use in an embodiment of a system as described above. The assembly comprises at least one profile element configured to receive on an inner side thereof an end edge of at least one plate, and an insulating band manufactured from a plastic material. The insulating band has a first longitudinal edge which is arrangeable between an upstand and the at least one profile element and a second longitudinal edge configured to make contact with an upper side of the at least one plate, wherein the insulating band is further formed and dimensioned such that it can enclose at least one profile element on an outer side thereof from the upstand to an upper side of the at least one plate.

[0015] The invention finally relates to a method for connecting at least one plate to an upstand. The method comprises of arranging an end edge of each plate in the at least one profile element on an inner side thereof; arranging an insulating band around an outer side of the at least one profile element between the upstand and an

upper side of the at least one plate such that a first longitudinal edge of the insulating band makes contact with the upstand and a second longitudinal edge thereof makes contact with the upper side of the at least one plate.

[0016] The outer side of the at least one profile element exposed to the outdoor environment is in this way fully enclosed by the insulating band, and the U-value of the system will be improved.

[0017] According to an advantageous embodiment of the method, the insulating band is arranged with some clearance around the outer side of the at least one profile element such that a hollow space is formed between the insulating band and the at least one profile element in which insulation material can optionally be arranged.

[0018] It is further recommended to arrange the first longitudinal edge between the upstand and an underside of the at least one profile element.

[0019] The insulating band preferably has a thickness of between 1 and 3 mm, still more preferably of between 1.5 and 2.5 mm.

[0020] The present invention will be further elucidated on the basis of a number of by no means limitative preferred embodiments of the system, the assembly and the method according to the invention with reference to the accompanying drawings, in which:

Figure 1 shows a schematic section of a first embodiment of a system according to the invention;
Figure 2 shows an embodiment of a barrel vault skylight according to the invention in which the system of figure 1 is used;
Figure 3 shows a schematic section of a second embodiment of a system according to the invention; and
Figure 4 shows a schematic section of a third embodiment of a system according to the invention.

[0021] In the embodiment of figure 1 it is the intention to connect two plates arranged one above the other, i.e. a lower plate 101 and an upper plate 102, to an upstand 103. Lower plate 101 can here be for instance a relatively stiff, self-supporting plate and the upper plate for instance a flexible plate 102 resting directly on lower plate 101. An assembly 110 of two profiles 121, 122 and a bracket 113 for connecting these profiles is used for this purpose. First profile 111 has a lower wall 115 and a side wall 116 and is intended for the purpose of supporting an outer end of lower plate 101. Second profile 112 has a lower wall 117 and an upper wall 118 and is intended for the purpose of receiving an end edge of upper plate 102 therebetween. First profile 111 and second profile 112 are typically manufactured from aluminium. A metal bracket 113 is used to connect first profile 111 to second profile 112. Bracket 113 has a first U-shaped part engaging around a complementary part of first profile 111 and an upright leg protruding into second profile 112.

[0022] Arranged around the thus formed assembly 110 of profiles 111, 112 is an insulating band 120. The insulating band is typically manufactured from a rubber material, for instance a foamed ethylene propylene diene monomer. Insulating band 120 has a first lower longitudinal edge 121 arranged between upstand 103 and first profile 111. Insulating band 120 further has a second upper longitudinal edge 122 which, in the mounted position of insulating band 120, makes contact with upper plate 102. The metal profiles 111, 112 and bracket 113 are in this way wholly thermally insulated from the outdoor environment O. Such an insulating band thus reduces the thermal conductivity between the outdoor environment 0 and a space R on the inner side of upstand 103, and provides for a U-value similar to that of a classical profile which is truly thermally interrupted and used in windows and doors. In addition, the insulating band also guarantees a good watertightness, dust-tightness and airtightness of the system.

[0023] Insulating band 120 encloses profile elements 111, 112 with some clearance such that a hollow space 140 is present between insulating band 120 and profile elements 111, 112. Insulation material can further be arranged in this hollow space 140, for instance in the form of one or more insulating strips which can for instance be manufactured from foam polyethylene (PE), polyurethane (PU), expanded polystyrene (EPS), extruded polystyrene (XPS) and so on. In this way the U-value of the system is further improved.

[0024] For attachment of the insulating band 120 a glue layer can be provided between upstand 103 and the lower longitudinal edge 121 of insulating band 120. It is noted that it is possible to provide an adhesive film beforehand on the insulating band, close to the lower longitudinal edge 121. According to an alternative, the lower longitudinal edge 121 can be connected adheringly to the first profile. According to yet another alternative, the lower longitudinal edge 121 can be received clampingly between first profile 111 and upstand 103, or a mechanical coupling can be provided between first profile 111 and insulating band 120, see also the embodiments of figures 3 and 4 discussed below. In order to ensure that the upper longitudinal edge 122 makes contact with upper plate 2, the insulating band is provided with a mechanical coupling between the inner side of insulating band 120 and the second upper profile 112. Insulating band 120 is provided on its inner side with an arrow-shaped longitudinal rib 123 which can be received in a channel-like recess 114 of the second profile element 112. The second longitudinal edge 122 is pressed against upper plate 102 by arranging the arrow-shaped rib 123 in the channel-like recess 140. According to an alternative, it is possible to connect the upper longitudinal edge 122 adheringly to the upper plate. A glue layer can be provided for this purpose on the inner side of the insulating band close to the second longitudinal edge. The skilled person will further appreciate that coupling elements 123, 114 can also be formed in other manner.

[0025] Figure 2 illustrates a barrel vault skylight in which two systems as described in figure 1 are used to

connect the outer ends of a lower plate 101 and an upper plate 102 to respectively a first and a second upstand 103.

[0026] Figure 3 illustrates a second embodiment of a system according to the invention in which an outer end of a plate 201 is connected to an upstand 203. The system comprises a profile element 210 in which a longitudinal edge of plate 201 can be received. An insulating band 220 typically manufactured from rubber is arranged such that it fully encloses the outer side of profile 210 exposed to the outdoor environment O. A first lower longitudinal edge 221 of insulating band 220 is arranged for this purpose between profile 210 and upstand 203. Note that this longitudinal edge 221 can extend beyond the inner outer end of profile 210 but can also, as illustrated, extend over only a part of the underside of profile 210, with the proviso that the lower longitudinal edge 221 makes contact with upstand 203. Insulating band 220 further has an upper longitudinal edge 222 which makes contact with plate 201. In the illustrated variant a first set of coupling means 223, 214 and a second set of coupling means 224, 215 are provided for the purpose of connecting insulating band 220 to profile 210. The skilled person will once again appreciate that these coupling means can also take another form and that more or fewer than two coupling means can be used, optionally in combination with other connecting means such as an adhesive layer, in particular a glue layer. Insulating band 220 extends at a distance from a side wall 216 of profile 210. A hollow space 240 is in this way formed. An insulation material 230 can be arranged in this hollow space in order to further improve the U-value of the system.

[0027] Figure 4 illustrates yet another embodiment in which a profile element 310 is used in which end edges of a lower plate 301 and an upper plate 302 can be received. Also provided here is an insulating band 320 which extends between upstand 303 and upper plate 302 and fully encloses the outer side of profile 310 exposed to the outdoor environment. In this embodiment profile element 310 is provided at the top with an arrow-shaped rib 314 which can be received in a channel-like chamber 323 provided on the inner side of insulating band 320. The insulating band is in this way connectable at the top to profile element 310 and a contact can be realized in simple manner between an upper longitudinal edge 322 of insulating band 320 and upper plate 302. Insulating band 320 is also situated a distance from side wall 316 of profile element 310, whereby a hollow space 340 is formed in which insulation material 330 can be received.

[0028] It is noted that insulating band 120, 220, 320 is preferably manufactured as one whole, wherein optional coupling means are formed integrally on the inner side of insulating band 120, 220, 320. The described embodiments further show that one or more profile elements can be used for the purpose of receiving the end edges of one or more plates. The skilled person will appreciate that the invention can be applied equally well to systems with more than two plates.

[0029] Although the invention has been described above on the basis of a number of exemplary embodiments, the skilled person will appreciate that many modifications and variants can be envisaged within the context of the invention, the scope of protection of which is defined solely by the following claims.

Claims

1. System for connecting at least one plate (101, 102; 201; 301, 302) to an upstand (103; 203; 303), comprising;

   - an upstand,
   - at least one plate,
   - at least one profile element (110; 210; 310) in which, on an inner side thereof, an end edge of the at least one plate is received, **characterised in that** said system further comprises
   - an insulating band (120; 220; 320) which is manufactured from a plastic material, which insulating band has a first longitudinal edge (121; 221; 321) arranged between the upstand and the at least one profile element, and a second longitudinal edge (122; 222; 322) which makes contact with an upper side of the at least one plate;

   this such that the insulating band encloses the at least one profile element on an outer side thereof between the upstand and the upper side of the at least one plate.

2. System as claimed in claim 1, **characterized in that** the insulating band encloses the at least one profile element with clearance such that a hollow space (140; 240; 340) is formed between the insulating band and the at least one profile element.

3. System as claimed in claim 2, **characterized in that** insulation material (230; 330) is arranged in the hollow space.

4. System as claimed in any of the foregoing claims, **characterized in that** the insulating band is formed on a side facing toward the at least one profile element with a first coupling part (123; 223; 323), and that the at least one profile element is provided with a second coupling part (114; 214; 314), which first and second coupling parts are connectable to each other.

5. System as claimed in claim 4, **characterized in that** the first and the second coupling part are formed and positioned such that the coupling thereof results in the second longitudinal edge being pressed against the upper side of the at least one plate.

6. System as claimed in claim 4 or 5, **characterized in that** the first and the second coupling part are embodied as a dovetail connection.

7. System as claimed in any of the claims 4-6, **characterized in that** the second coupling part comprises a receiving cavity in which the first coupling part can be received.

8. System as claimed in any of the foregoing claims, **characterized in that** the first longitudinal edge of the insulating band is attached adheringly to the upstand and/or to an underside of the at least one profile element.

9. System as claimed in claim 8, **characterized in that** the first longitudinal edge is attached using a glue layer to the upstand and/or against an underside of the at least one profile element.

10. System as claimed in any of the foregoing claims, **characterized in that** the second longitudinal edge is attached adheringly against the upper side of the at least one plate.

11. System as claimed in any of the foregoing claims, **characterized in that** the insulating band is manufactured from rubber; and/or that each profile element is manufactured from metal, for instance aluminium.

12. System as claimed in any of the foregoing claims, **characterized in that** the at least one profile element comprises a lower and an upper profile element (111, 112), which lower profile element is connected to the upper profile element by means of a bracket (113).

13. Barrel vault skylight, comprising a first upstand (103) and a second upstand (103) and at least one plate (101, 102) extending between the first and the second upstand, and a first system according to any of the foregoing claims for connecting the at least one plate to the first upstand, and a second system according to any the foregoing claims for connecting the at least one plate to the second upstand.

14. Assembly for use in a system as claimed in any of the claims 1-12, comprising at least one profile element configured to receive on an inner side thereof an end edge of at least one plate, and an insulating band manufactured from a plastic material, which insulating band has a first longitudinal edge which is arrangeable between an upstand and the at least one profile element and a second longitudinal edge configured to make contact with an upper side of the at least one plate, this such that the insulating band can enclose the at least one profile element on an outer side thereof between the upstand and the upper side of the at least one plate.

15. Method for connecting at least one plate to an upstand, comprising of:

arranging an end edge of the at least one plate in at least one profile element on an inner side thereof;
arranging an insulating band around an outer side of the at least one profile element between the upstand and the upper side of the at least one plate such that a first longitudinal edge thereof makes contact with the upstand and a second longitudinal edge thereof makes contact with the upper side of the at least one plate.

Patentansprüche

1. System zur Verbindung wenigstens einer Platte (101, 102; 201; 301, 302) mit einer Aufkantung (103; 203; 303), das umfasst:

- eine Aufkantung,
- wenigstens eine Platte
- wenigstens ein Profilelement (110; 210; 310), in dem auf seiner Innenseite ein Endrand der wenigstens einen Platte aufgenommen ist,
- ein Isolierband (120; 220; 320), das aus einem Kunststoffmaterial hergestellt ist, wobei das Isolierband einen ersten Längsrand (121; 221; 321), der zwischen der Aufkantung und dem wenigstens einen Profilelement angeordnet ist, und einen zweiten Längsrand (121; 221; 321), der den Kontakt mit einer Oberseite der wenigstens einen Platte herstellt, hat;

derart, dass das Isolierband das wenigstens eine Profilelement auf seiner Außenseite zwischen der Aufkantung und der Oberseite der wenigstens einen Platte umschließt.

2. System nach Anspruch 1, **dadurch gekennzeichnet, dass** das Isolierband das wenigstens eine Profilelement mit einem Spielraum umschließt, so dass ein Hohlraum (140; 240; 340) zwischen dem Isolierband und dem wenigstens einen Profilelement gebildet wird.

3. System nach Anspruch 2, **dadurch gekennzeichnet, dass** das Isoliermaterial (230; 330) in dem Hohlraum angeordnet ist.

4. System nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** das Isolierband auf einer Seite, die in Richtung des wenigstens einen Profilelements gewandt ist, mit einem ersten Kopp-

lungsteil (123; 223; 323) ausgebildet ist, und dass das wenigstens eine Profilelement mit einem zweiten Kopplungsteil (114; 214; 314) versehen ist, wobei die ersten und zweiten Kopplungsteile miteinander verbindbar sind.

5. System nach Anspruch 4, **dadurch gekennzeichnet, dass** der erste und zweite Kopplungsteil derart ausgebildet und positioniert sind, dass ihre Kopplung dazu führt, dass der zweite Längsrand gegen die Oberseite der wenigstens einen Platte gepresst wird.

6. System nach Anspruch 4 oder 5, **dadurch gekennzeichnet, dass** der erste und zweite Kopplungsteil als eine Schwalbenschwanzverbindung ausgeführt sind.

7. System nach einem der Ansprüche 4 - 6, **dadurch gekennzeichnet, dass** der zweite Kopplungsteil eine aufnehmende Kavität aufweist, in welcher der erste Kopplungsteil aufgenommen werden kann.

8. System nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** der erste Längsrand des Isolierbands haftend an der Aufkantung und/oder an einer Unterseite des wenigstens einen Profilelements befestigt ist.

9. System nach Anspruch 8, **dadurch gekennzeichnet, dass** der erste Längsrand unter Verwendung einer Leimschicht an der Aufkantung und/oder an einer Unterseite des wenigstens einen Profilelements befestigt ist.

10. System nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** der zweite Längsrand haftend an der Oberseite des wenigstens einen Platte befestigt ist.

11. System nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** das Isolierband aus Gummi hergestellt ist, und/oder dass jedes Profilelement aus Metall, zum Beispiel Aluminium, hergestellt ist.

12. System nach einem der vorangehenden Ansprüche, **dadurch gekennzeichnet, dass** das wenigstens eine Profilelement ein unteres und ein oberes Profilelement (111, 112) aufweist, wobei das untere Profilelement mittels einer Klammer (113) mit dem oberen Profilelement verbunden ist.

13. Tonnengewölbtes Oberlicht, das eine erste Aufkantung (103) und eine zweite Aufkantung (103) und wenigstens eine Platte (101, 102), die sich zwischen der ersten und der zweiten Aufkantung erstreckt, und ein erstes System nach einem der vorangehenden Ansprüche zum Verbinden der wenigstens einen Platte mit der ersten Aufkantung und ein zweites System nach einem der vorangehenden Ansprüche zum Verbinden mit der wenigstens einen Platte mit der zweiten Aufkantung aufweist.

14. Anordnung für die Verwendung in einem System nach einem der Ansprüche 1

- 12, die wenigstens ein Profilelement, das aufgebaut ist, um auf seiner Innenseite einen Endrand der wenigstens einen Platte aufzunehmen, und ein Isolierband, das aus einem Kunststoffmaterial hergestellt ist, aufweist, wobei das Isoliermaterial einen ersten Längsrand, der zwischen einer Aufkantung und dem wenigstens einen Profilelement einrichtbar ist, und einen zweiten Längsrand, der aufgebaut ist, um den Kontakt mit einer Oberseite der wenigstens einen Platte herzustellen, hat, derart, dass das Isolierband das wenigstens eine Profilelement auf seiner Außenseite zwischen der Aufkantung und der Oberseite der wenigstens einen Platte umschließen kann.

15. Verfahren zum Verbinden wenigstens einer Platte mit einer Aufkantung, das aufweist:

Anordnen eines Endrands der wenigstens einen Platte in wenigstens einem Profilelement auf seiner Innenseite;
Anordnen eines Isolierbands um eine Außenseite des wenigstens einen Profilelements zwischen der Aufkantung und der Oberseite der wenigstens einen Platte herum, so dass ihr erster Längsrand den Kontakt mit der Aufkantung herstellt und ihr zweiter Längsrand den Kontakt mit der Oberseite der wenigstens einen Platte herstellt.

Revendications

1. Système destiné à relier au moins une plaque (101, 102 ; 201 ; 301, 302) à un rebord (103 ; 203 ; 303), comprenant ;

- un rebord ;
- au moins une plaque ;
- au moins un élément profilé (110 ; 210 ; 310) dans lequel est reçu, sur un côté intérieur de celui-ci, un bord d'extrémité de la ou des plaques, **caractérisé en ce que** ledit système comprend en outre :
- une bande isolante (120 ; 220 ; 320) qui est réalisée à partir d'un matériau de matière plastique, laquelle bande isolante présente un premier bord longitudinal (121 ; 221 ; 321) agencé

entre le rebord et le ou les éléments profilés, et un second bord longitudinal (122 ; 222 ; 322) qui établit un contact avec un côté supérieur de la ou des plaques ;

ceci de telle sorte que la bande isolante enferme le ou les éléments profilés sur un côté extérieur de ceux-ci entre le rebord et le côté supérieur de la ou des plaques.

2. Système selon la revendication 1, **caractérisé en ce que** la bande isolante enferme le ou les éléments profilés avec un jeu de telle sorte qu'un espace creux (140 ; 240 ; 340) soit formé entre la bande isolante et le ou les éléments profilés.

3. Système selon la revendication 2, **caractérisé en ce qu'**un matériau isolant (230 ; 330) est agencé dans l'espace creux.

4. Système selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la bande isolante est formée sur un côté qui fait face à l'élément profilé ou aux éléments profilés avec une première partie accouplement (123 ; 223 ; 323), et **en ce que** le ou les éléments profilés sont dotés d'une seconde partie accouplement (114 ; 214 ; 314), lesquelles première et seconde parties accouplement peuvent être reliées l'une à l'autre.

5. Système selon la revendication 4, **caractérisé en ce que** les première et seconde parties accouplement sont formées et positionnées de telle sorte que leur accouplement se traduise par un second bord longitudinal pressé contre le côté supérieur de la ou des plaques.

6. Système selon la revendication 4 ou la revendication 5, **caractérisé en ce que** les première et seconde parties accouplement sont incorporées en tant que liaison en queue d'aronde.

7. Système selon l'une quelconque des revendications 4 à 6, **caractérisé en ce que** la seconde partie accouplement comprend une cavité de réception dans laquelle peut être reçue la première partie accouplement.

8. Système selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le premier bord longitudinal de la bande isolante est fixé de manière adhésive au rebord et/ou à un dessous du ou des éléments profilés.

9. Système selon la revendication 8, **caractérisé en ce que** le premier bord longitudinal est fixé en utilisant une couche de colle sur le rebord et/ou contre un dessous du ou des éléments profilés.

10. Système selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le second bord longitudinal est fixé de manière adhésive contre le côté supérieur de la ou des plaques.

11. Système selon l'une quelconque des revendications précédentes, **caractérisé en ce que** la bande isolante est réalisée à partir de caoutchouc ; et/ou **en ce que** chaque élément profilé est réalisé en métal, par exemple en aluminium.

12. Système selon l'une quelconque des revendications précédentes, **caractérisé en ce que** le ou les éléments profilés comprennent un élément profilé inférieur et un élément profilé supérieur (111, 112), lequel élément profilé inférieur est relié à l'élément profilé supérieur à l'aide d'un support (113).

13. Lanterneau à voute en berceau, comprenant un premier rebord (103) et un second rebord (103) et une plaque (101, 102) au moins qui s'étend entre les premier et second rebords, et un premier système selon l'une quelconque des revendications précédentes destiné à relier la ou les plaques au premier rebord, et un second système selon l'une quelconque des revendications précédentes destiné à relier la ou les plaques au second rebord.

14. Ensemble destiné à être utilisé dans un système selon l'une quelconque des revendications 1 à 12, comprenant un élément profilé au moins configuré de façon à recevoir sur un côté intérieur de celui-ci un bord d'extrémité d'une plaque au moins, et une bande de isolante réalisée dans un matériau de matière plastique, laquelle bande isolante présente un premier bord longitudinal qui peut être agencé entre un rebord et le ou les éléments profilés, et un second bord longitudinal configuré de façon à établir un contact avec un côté supérieur de la ou des plaques, ceci de telle sorte que la bande isolante puisse enfermer le ou les éléments profilés sur un côté extérieur de ceux-ci entre le rebord et le côté supérieur de la ou des plaques.

15. Procédé destiné à relier une plaque au moins à un rebord, comprenant les étapes consistant à :

agencer un bord d'extrémité de la ou des plaques dans un élément profilé au moins sur un côté intérieur de celui-ci ;
agencer une bande isolante autour d'un côté extérieur du ou des éléments profilés entre le rebord et le côté supérieur de la ou des plaques de telle sorte qu'un premier bord longitudinal établisse un contact avec le rebord, et qu'un second bord longitudinal établisse un contact avec le côté supérieur de la ou des plaques.

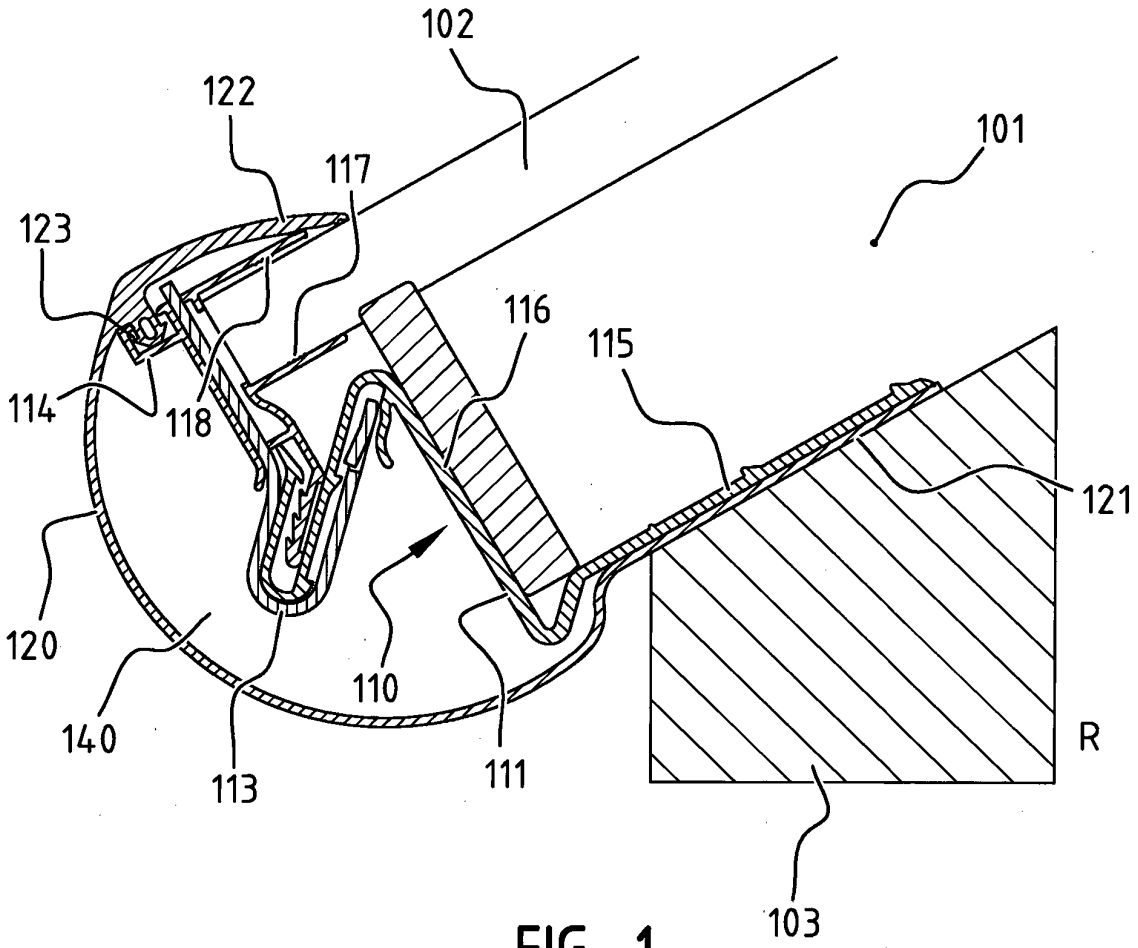


FIG. 1

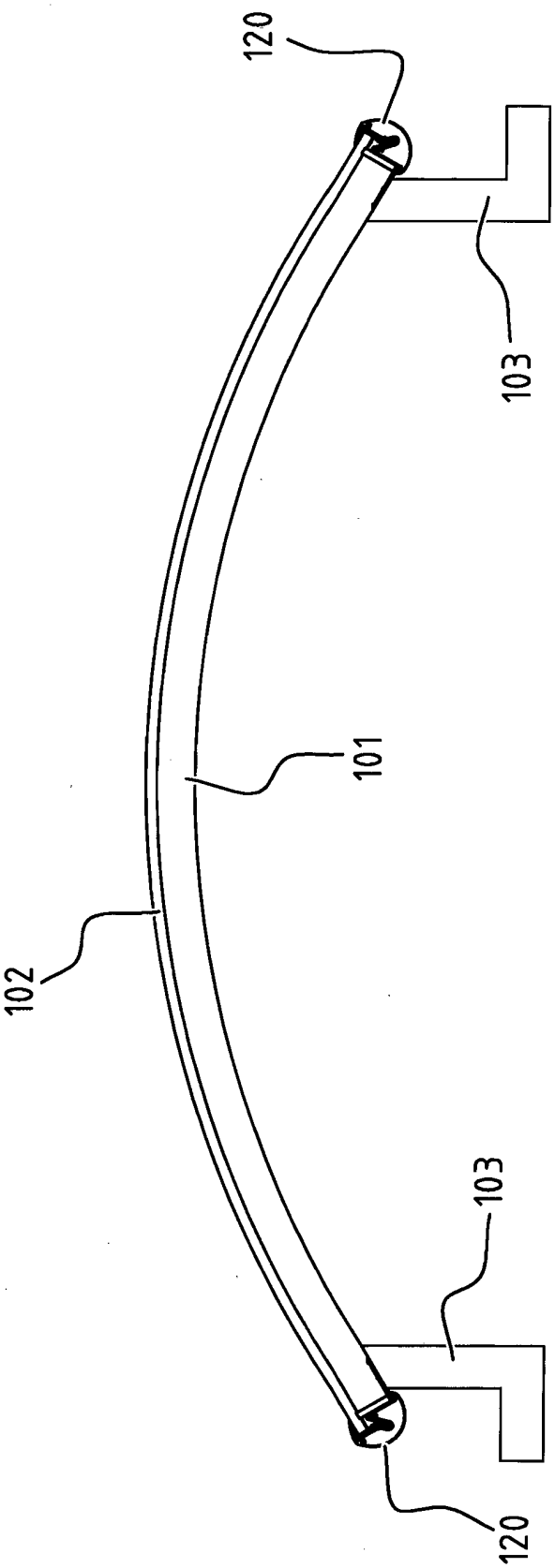


FIG. 2

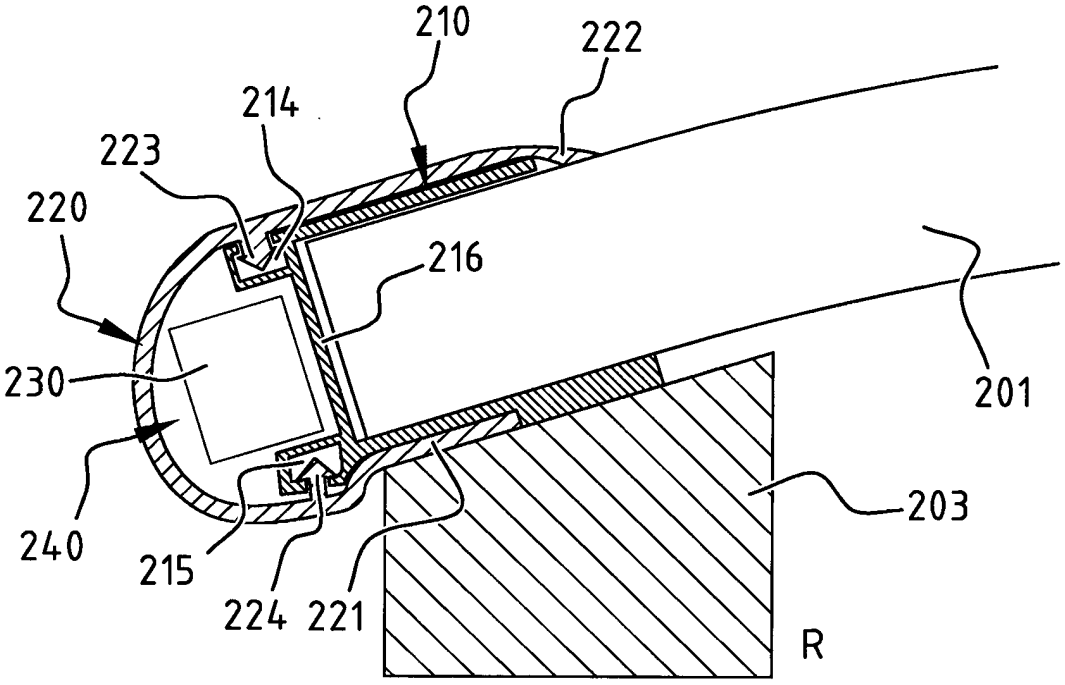

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FIG. 3

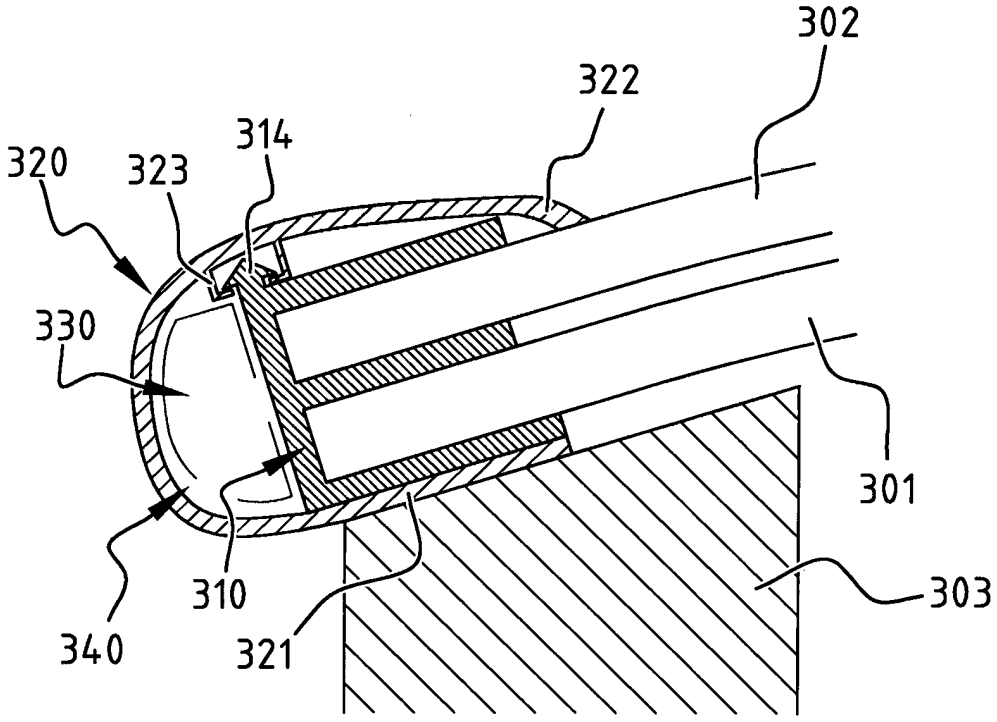

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FIG. 4

REFERENCES CITED IN THE DESCRIPTION

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