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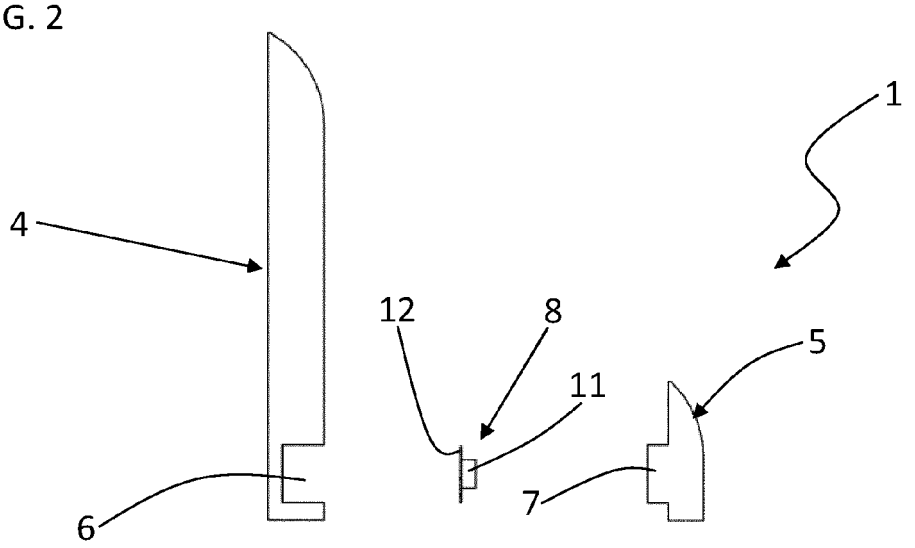
(54) Lighting decor accessory for use as skirting or cornice

(57) Lighting decor accessory (1, 10, 20, 30), particularly used as skirting or cornice or cable duct on a wall (2) or as a ramp or threshold on a floor (3), comprising a series of LEDs (11) inserted in a chamber formed by a first portion (4) and by a second portion (5), which are made from material designed to pass the luminous radiation in such a way that the decor accessory (1) emits light.

FIG. 2



EP 2 458 110 A1

Description

[0001] This invention relates to a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor.

[0002] The skirtings and the joining ramps between two adjacent floors are generally made from wood, metal, alloy or plastic.

[0003] For example, the patent application for utility model no. PD2007U000005 shows a skirting formed by a base profile made from extruded metal and a cover profile made from wood or plastic or metal in such a way as to guarantee visual continuity with the floor.

[0004] Italian patent n. 0001380736 describes and claims a device for the covering of edges of floors formed by a base profile and a cover profile made from extruded metal and by a shim profile made from plastic.

[0005] The decor cornices used on walls, for example as horizontal separators between painted zones and zones covered with wallpaper, or the cornices for delimiting doors are generally made of wood.

[0006] In some cases, both for reasons of achieving an attractive appearance and for safety reasons (considering, for example, the risk of tripping at the passage from one floor to another), there is the need to light up the skirtings, joining ramps, door cornices, etc.

[0007] In this regard, a prior art structure of a wooden skirting has through holes with a diameter of approximately 4 cm designed to house circular LED sources. This solution may be seen on the Orac nv web site (www.oracdecor.com). The LED sources are positioned equidistantly along the skirting at several tens of centimetres, in such a way as to originate light spots separate from each other along the length of the skirting.

[0008] The main disadvantage of the aforementioned solution lies in the fact that the LED sources are uncovered, and therefore vulnerable to impacts and subject to wear. Moreover, since each LED is housed in a through hole, it is necessary to firstly drill the skirting and then insert the LEDs. The time required for these operations, which varies depending on the length of the skirting and the chosen interval between the LEDs, might be quite long and, since it must preferably be performed by a qualified electrician, the installation of the skirting is extremely expensive.

[0009] In addition, each LED originates a luminous spot so, whatever the chosen interval (usually a few tens of centimetres), the visual perception is that of spot lighting, that is, a discrete lighting.

[0010] In this context, the technical purpose which forms the basis of this invention is to propose a decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, which overcomes the aforementioned drawbacks.

[0011] More specifically, the aim of this invention is to provide a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, which is able to resist impacts and wear.

[0012] Another aim of this invention is to propose a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, which may be installed quickly and easily, also by non-skilled users.

[0013] A further aim of this invention is to provide a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, in which the light is diffused in a uniform manner.

[0014] Yet another aim of this invention is to propose a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, which is particularly attractive and with a high decorative impact.

[0015] The technical purpose indicated and the aims specified are substantially achieved by a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, comprising the technical features described in one or more of the appended claims.

[0016] Further features and advantages of this invention are more apparent in the non-limiting description which follows of a preferred non-limiting embodiment of a lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, as shown in the accompanying drawings in which:

- figure 1 is a perspective view of a first embodiment of a lighting decor accessory (skirting) according to this invention;
- figure 2 is an exploded view of the skirting of figure 1;
- figure 3 is a perspective view of a second embodiment of a lighting decor accessory (cornice) according to this invention;
- figure 4 is an exploded view of the cornice of figure 3;
- figure 5 is a perspective view of a third embodiment of a lighting decor accessory (cable duct) according to this invention;
- figure 6 is an exploded view of the cable duct of figure 5;
- figure 7 is a perspective view of a fourth embodiment of a lighting decor accessory (ramp) according to this invention;
- figure 8 is an exploded view of the ramp of figure 7;
- figure 9 is a perspective view of an alternative embodiment of the skirting of figure 1;
- figure 10 is an exploded perspective view of the skirting of figure 9;
- figure 11 is a perspective view of an alternative embodiment of the ramp of figure 7;
- figure 12 is an exploded perspective view of the ramp of figure 11;
- figure 13 is a perspective view of an alternative embodiment of the cornice of figure 3;
- figure 14 is an exploded perspective view of the cor-

nice of figure 13.

[0017] With reference to figures 1, 2, 9 and 10, the numeral 1 denotes a lighting decor accessory consisting in a skirting, that can be positioned between a wall 2 and a floor 3. The skirting 1 has a first portion 4, fixable to the wall 2, and a second portion 5 designed to engage with the first portion 4 in such a way as to adopt a configuration covering the latter. The first portion 4 has a longitudinal extension and has a groove 6 which follows the longitudinal extension. The second portion 5 also has a longitudinal extension and has a protrusion 7 which follows the longitudinal extension. More specifically, the protrusion 7 is insertable in the groove 6 in such a way that the second portion 5 assumes the configuration covering the first portion 4. Basically, the first portion 4 and the second portion 5 extend longitudinally according to the width of the wall 2. For example, the groove 6 has a depth of 6 mm and a height of between 8 mm and 2 cm.

[0018] A light source 8 is housed in the groove 6 and distributed along it. In effect, the protrusion 7 inserts in the groove 6 in such a way as to form a chamber containing the light source 8.

[0019] The second portion 5 is made of material suitable for passing the luminous radiation emitted by the source 8 in such a way as to illuminate the skirting 1. More specifically, the second portion 5 is made of material suitable for diffusing the luminous radiation in such a way as to create uniformity of illumination. For example, materials such as plexiglas or polycarbonate may be used which, as well as the excellent light conductivity, are flexible materials with a high level of resistance to impacts.

[0020] Also the first portion 4 is made of the same material from which the second portion 5 is made, in such a way as to allow the passage of the luminous radiation emitted by the source 8.

[0021] In the embodiment just described, both the first portion 4 and the second portion 5 have a partly rounded external profile. Alternatively, they may have a completely rounded or completely square profile.

[0022] A second embodiment of the lighting decor accessory, illustrated in figures 3 and 4, consists in a cornice 10, fixable on the wall 2. For example, the cornice 10 may delimit a door or may slide horizontally along the wall 2 (wallrail).

[0023] It is also envisaged an alternative embodiment of the cornice 10, illustrated in figures 13 and 14, which can be employed under wall units or shelves. It is an angular cornice since the first portion 4 has an edge S of 90° circa and the groove 6 extends oppositely to said edge S.

[0024] Both the first portion 4 and the second portion 5 have a partly rounded external profile. Alternatively, they may have a completely rounded or completely square profile. Preferably, in the angular cornice 10 the second portion 4 has a semi-cylindrical external profile.

[0025] A third embodiment of the lighting decor accessory, illustrated in figures 5 and 6, consists in a cable duct 20, fixable on the wall 2. Preferably, the first portion 4 has an H-shaped cross-section forming two grooves 6, 9: one for housing the light source 8 and one for the cable ducts.

[0026] In the embodiment just described, the second portion 5 has a completely rounded external profile.

[0027] A fourth embodiment of the lighting decor accessory, illustrated in figures 7, 8, 11 and 12 consists in a joining ramp 30 between two floors, in particular in the case of a difference in level between the floors.

[0028] In the embodiment just described, the second portion 5 has a completely squared external profile, whilst the first portion 4 forms a curved surface 4a designed to gradually join two adjacent floors 3.

[0029] Another embodiment of the lighting decor accessory consists in a joining threshold between two floors. In this case, both the first portion 4 and the second portion 5 are shaped so as to form a squared external profile.

[0030] In the embodiments described and illustrated herein, the light source 8 comprises a plurality of LEDs 11 mounted on a supporting strip 12 extending longitudinally in the groove 6.

[0031] For example, the light source 8 is mounted inside the groove 6 in such a way that its LEDs 11 emit direct light towards the second portion 5 and indirect (i.e. lateral) light towards the first portion 4, as visible for example in figures 1 and 3.

[0032] Alternatively, the light source 8 is mounted inside the groove 6 in such a way that its LEDs 11 emit direct light towards the first portion 4 and indirect (i.e. lateral) light towards the second portion 5, as visibile in figures 9 and 11.

[0033] Preferably, the LEDs 11 are equally spaced and the distance between one and another is comprised between 17 mm and 33 mm in such a way as to ensure uniform diffusion of the light. Preferably, each LED 11 has a power comprised between 24 Watt and 34.2 Watt.

[0034] In alternative embodiments (not illustrated), the light source 8 consists of a light string or guide.

[0035] The LEDs 11 are preferably connected to an external power supply.

[0036] Preferably, the angular cornice 10 of figures 13 and 14 is powered by battery in such a way as to result standalone.

[0037] In another embodiment (not illustrated), there is a sheet filter (for example, coloured) which can be applied to the second portion 5 in such a way as to condition the luminous radiation emitted by the source 8. More specifically, the sheet filter is gluable onto the second portion 5.

[0038] The operation of the lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, according to this invention, is described below, with particular reference to the first embodiment (skirting). The first portion 4 is positioned between the wall 2 and the floor 3 and it

is fixed to the wall 2 with known fixing means. The supporting strip 12, bearing the LEDs 11 in series, is inserted inside the groove 6. The series of LEDs 11 is then connected to an external power supply. The second portion 5 is then positioned to cover the first portion 4 by fixing the protrusion 7 in the groove 6. The luminous radiation emitted by the LEDs 11 passes through the first portion 4 and the second portion 5 and is diffused uniformly by them.

[0039] The features of the lighting decor accessory, particularly used as skirting or cornice or cable duct on a wall or as a ramp or threshold on a floor, according to this invention, are clearly described above, as are the advantages.

[0040] In particular, thanks to the fact that the luminous source is enclosed in the chamber formed by the first and by the second portion, it is protected from any impacts and from wear, contributing to the resistance and reliability of the decor accessory. The use of polycarbonate of plexiglas also contributes to the resistance.

[0041] Moreover, the installation of the decor accessory requires the housing of the strip of LEDs or the light guide in the groove of the first portion, its connection with the power supply and the covering of it all with the second portion, so it may be carried out easily and quickly by the end user.

[0042] In addition, thanks to the fact that both the first and the second portions are made of material designed to diffuse the light, the decor accessory creates a uniform and continuous illumination with a high decorative impact. The selection of the light source used (LEDs in series and close together, or light guide) also contributes to this uniformity.

[0043] Lastly, the lighting decor accessory proposed herein is particularly versatile since, by modifying the external profile (sharp or bevelled edges) and the distances between the LEDs or by inserting filters, the type of lighting may be changed as required (domestic or public areas).

Claims

1. Lighting decor accessory (1, 10, 20, 30), particularly used as skirting or cornice or cable duct on a wall (2) or as a ramp or threshold on a floor (3), comprising:

   a first portion (4) extending longitudinally and fixable to the wall (2) or to the floor (3), said first portion (4) having a groove (6) which follows its longitudinal extension;
   a light source (8) housed in said groove (6) and distributed along it;
   a second portion (5) made of a material suitable for allowing luminous radiation to pass through, said second portion (5) extending longitudinally and having a projection (7) which follows its longitudinal extension and is insertable into said groove (6) in such a way that the second portion (5) assumes a configuration as cover with respect to the first portion (4) so that the luminous radiation emitted by the source (8) passes through the second portion (5), making the decor accessory (1) luminous,
   characterised in that also the first portion (4) is made of the same material from which the second portion (5) is made, in such a way as to ensure the complete lighting of the whole decor accessory (1).

2. Decor accessory (1) according to claim 1, wherein said first portion (4) and said second portion (5) are made of material suitable for diffusing the luminous radiation in such a way as to create uniformity of illumination.

3. Decor accessory (1) according to claim 1 or 2, wherein said first portion (4) and said second portion (5) are made of polycarbonate or plexiglas.

4. Decor accessory (1) according to any one of the preceding claims, wherein said light source (8) comprises a plurality of LEDs (11) mounted on a supporting strip (12) extending longitudinally in the groove (6) of the first portion (4).

5. Decor accessory (1) according to claim 4, wherein the distance between one LED (11) and another along said supporting strip (12) is comprised between 17 mm and 33 mm in such a way as to ensure uniform diffusion of the light.

6. Decor accessory (1) according to claim 4 or 5, wherein each of said LEDs (11) has a power comprised between 24 Watt and 34.2 Watt.

7. Decor accessory (1) according to claims 1 to 3, wherein said light source (8) consists of a light string or guide.

8. Decor accessory (1) according to any one of the preceding claims, comprising furthermore a sheet filter which can be applied to the second portion (5) in such a way as to condition the luminous radiation emitted by the source (8).

9. Decor accessory (1) according to claim 8, wherein said sheet filter is gluable onto said second portion (4).

10. Decor accessory (1) according to any one of the preceding claims, wherein said first portion (4) and said second portion (5) are shaped in such a way that the decor accessory (1) forms a rounded or squared external profile.

FIG. 1

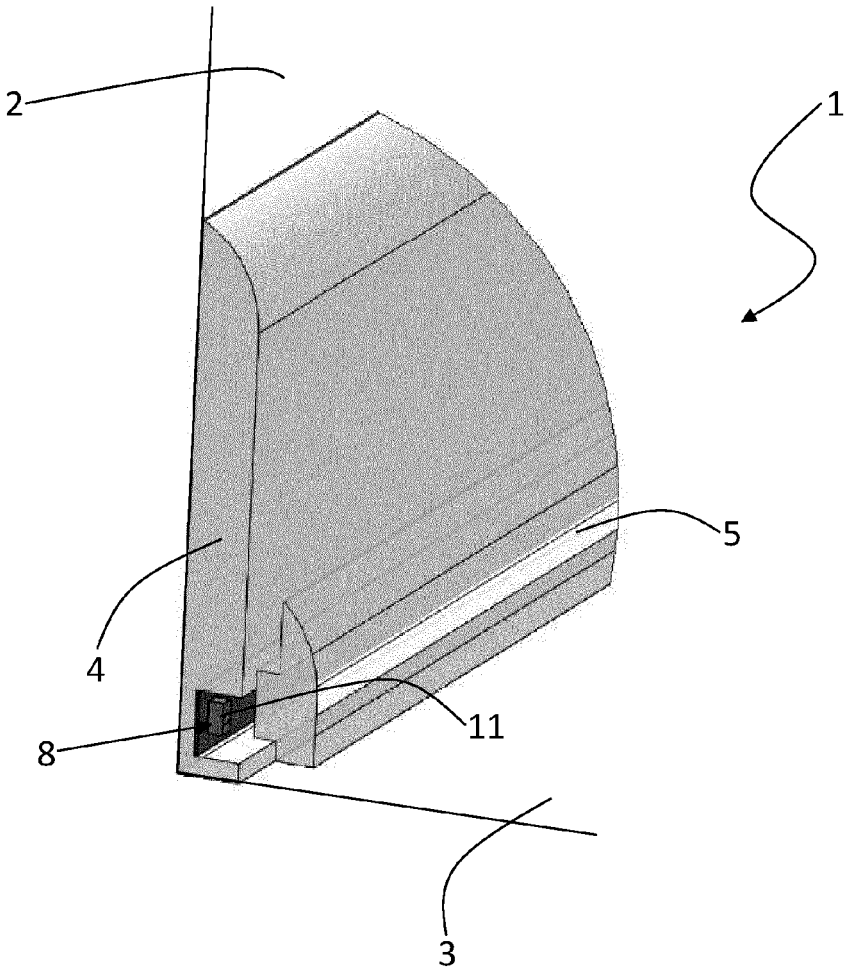


FIG. 2

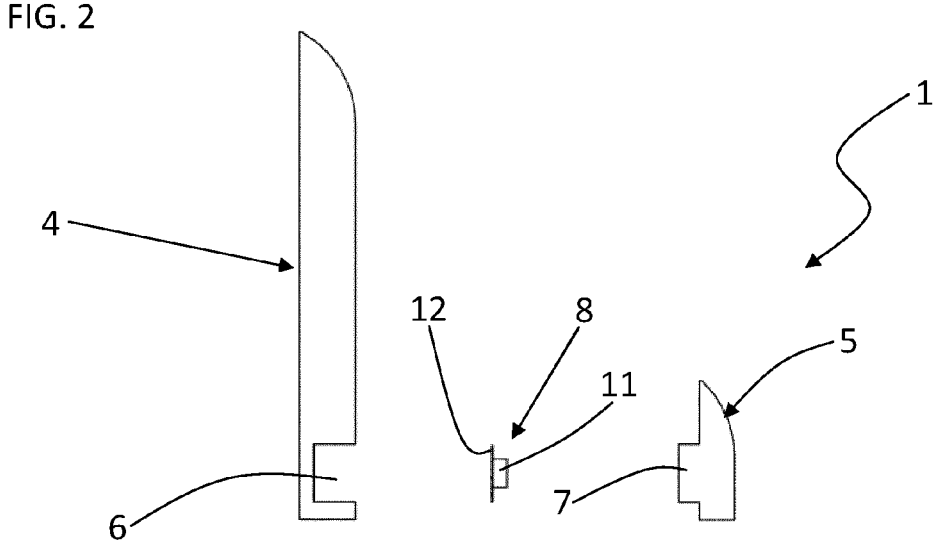


FIG. 3

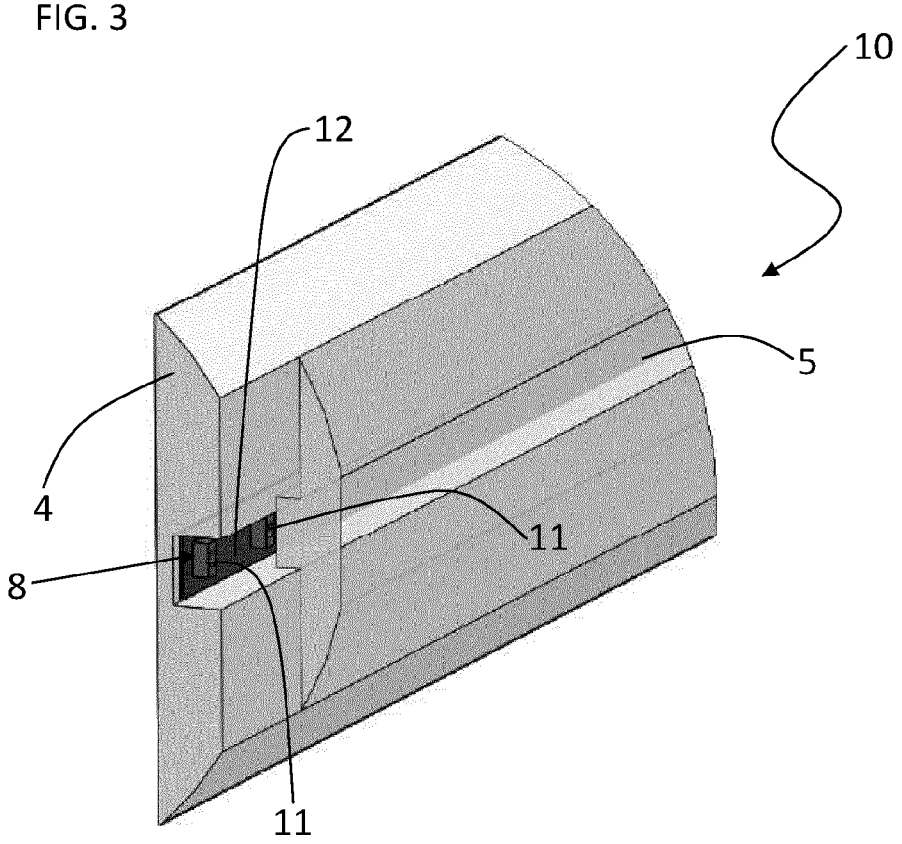


FIG. 4

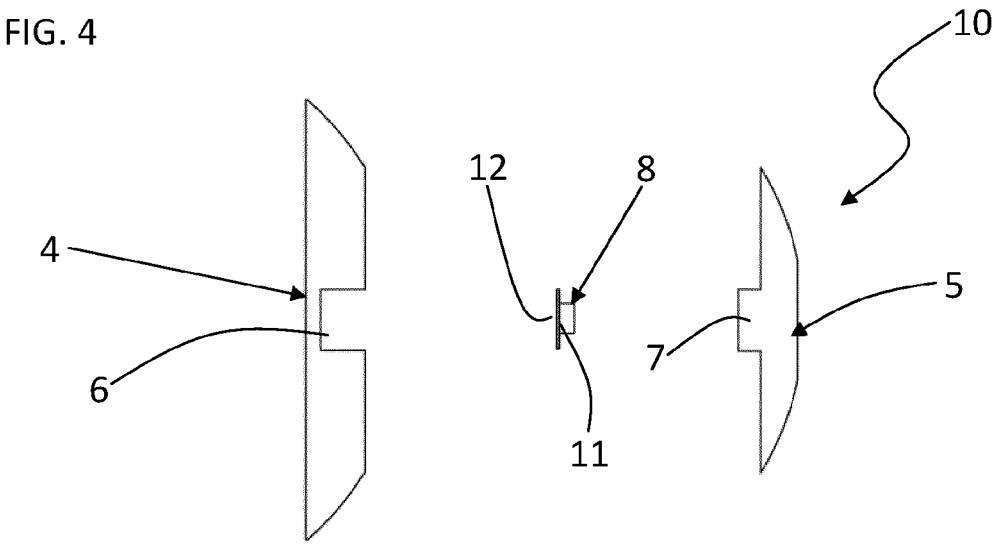


FIG. 5

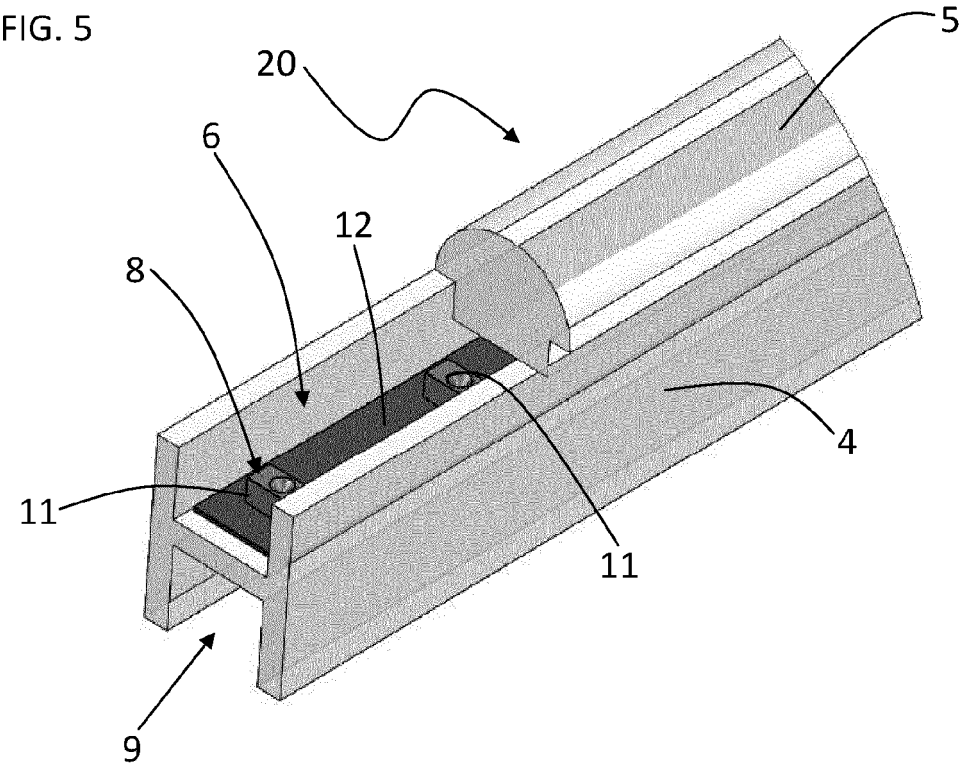


FIG. 6

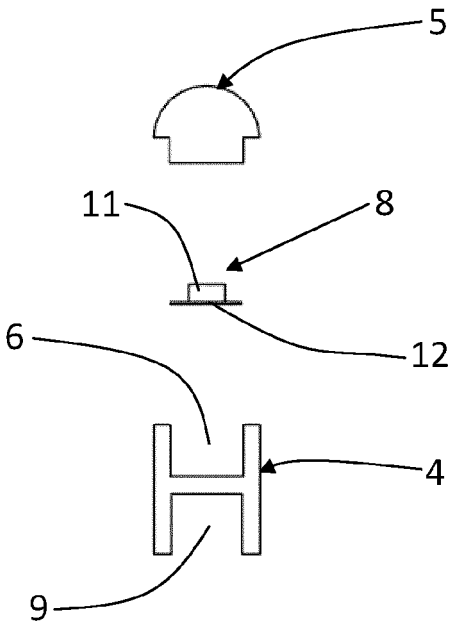


FIG. 7

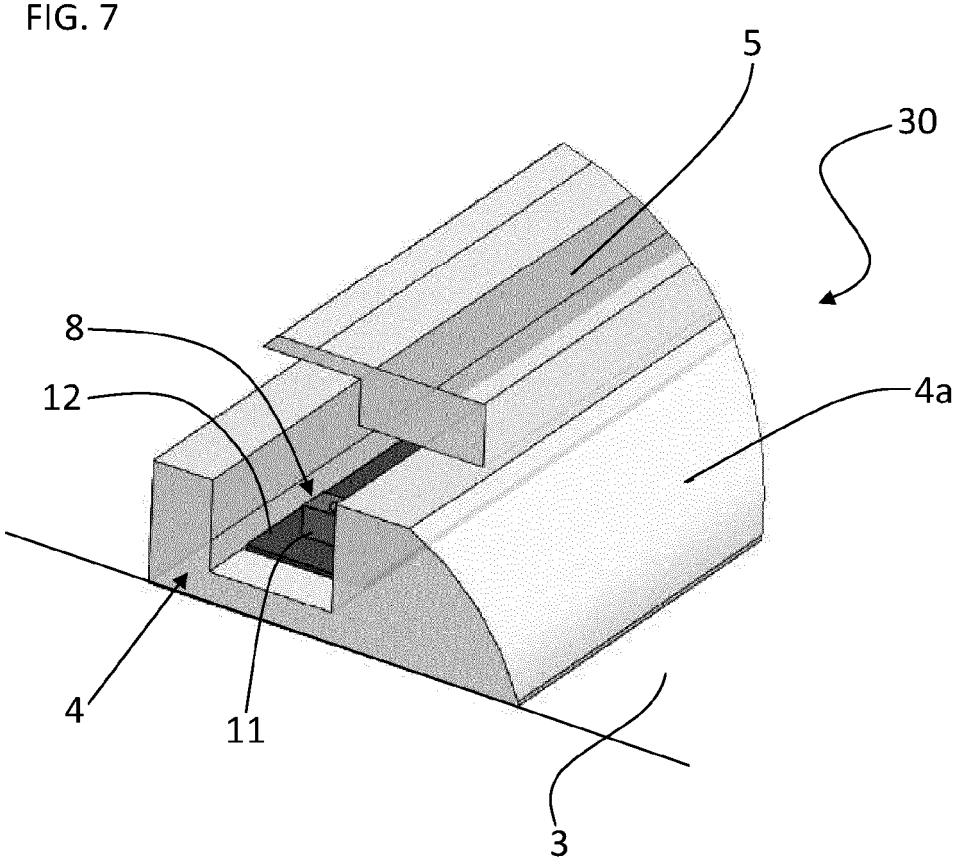


FIG. 8

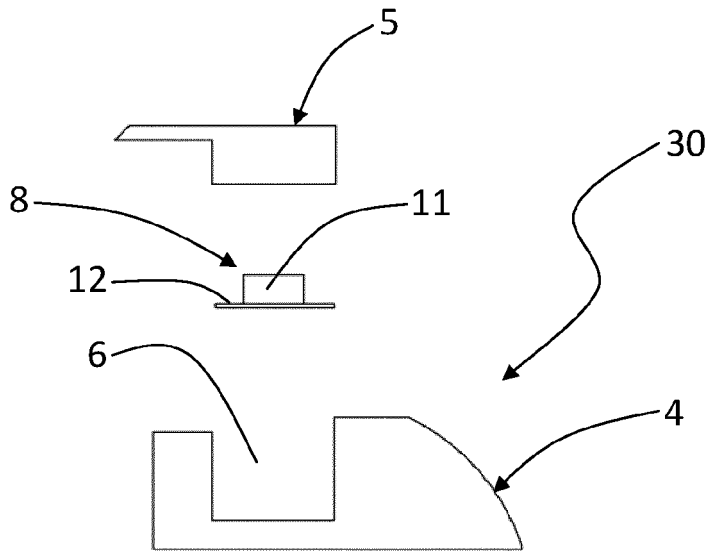


FIG. 9

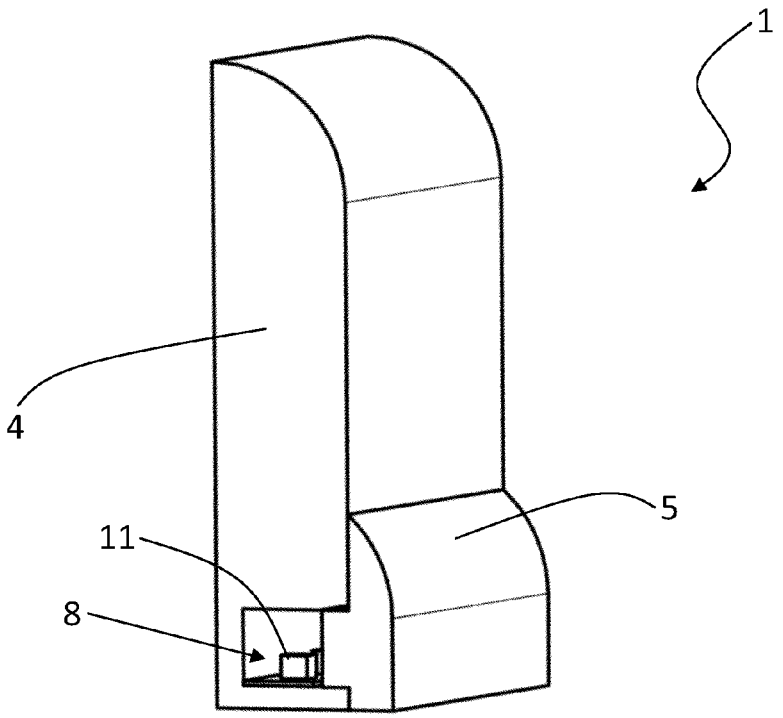


FIG. 10

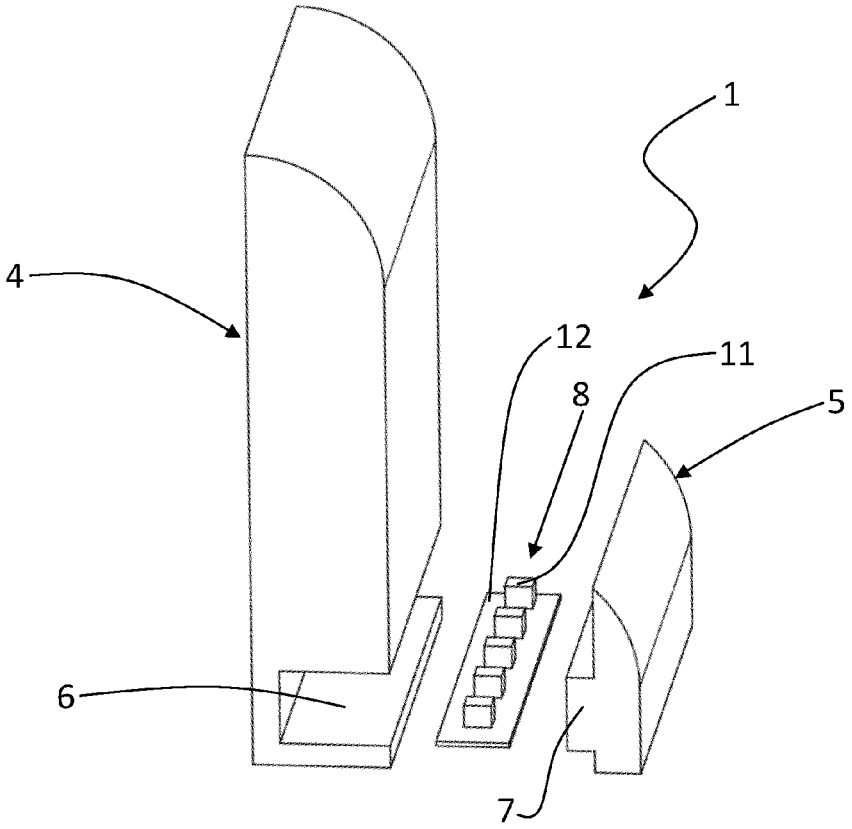


FIG. 11

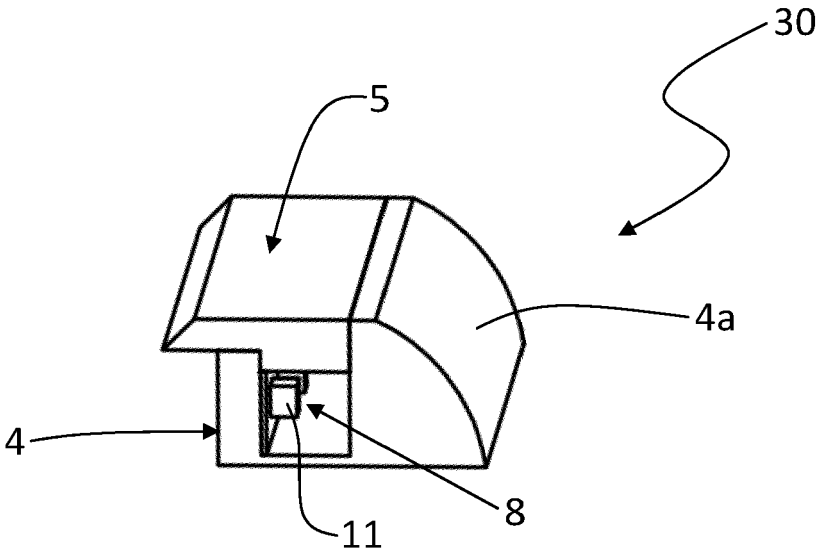


FIG. 12

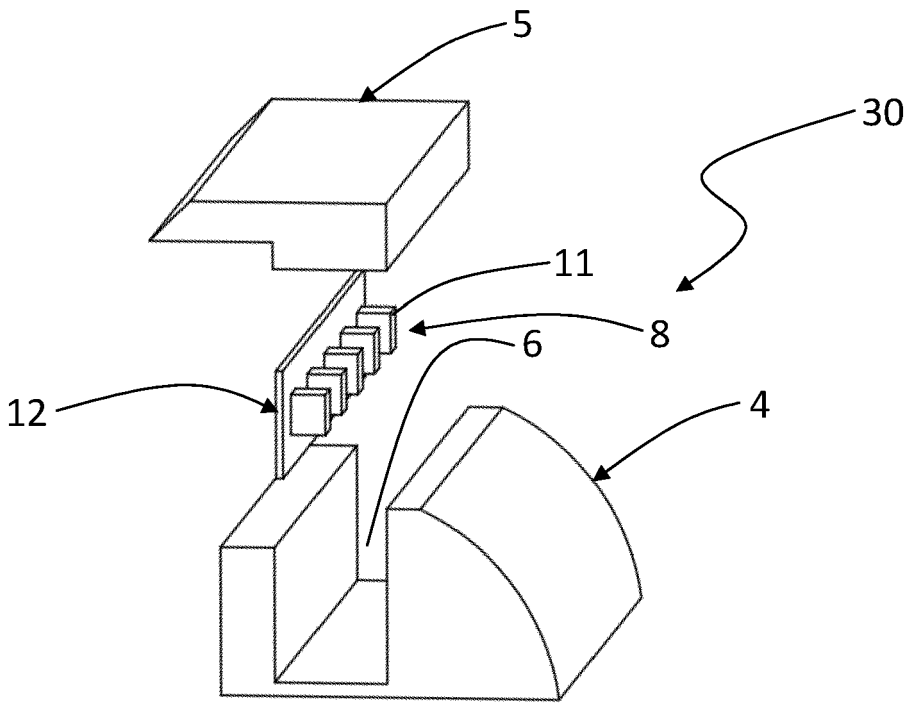


FIG. 13

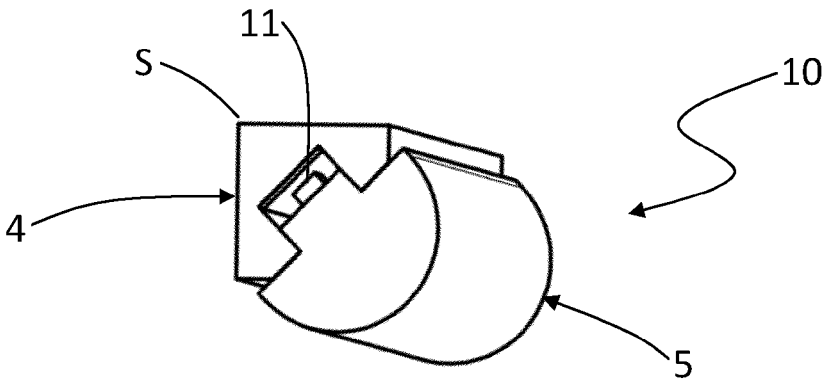
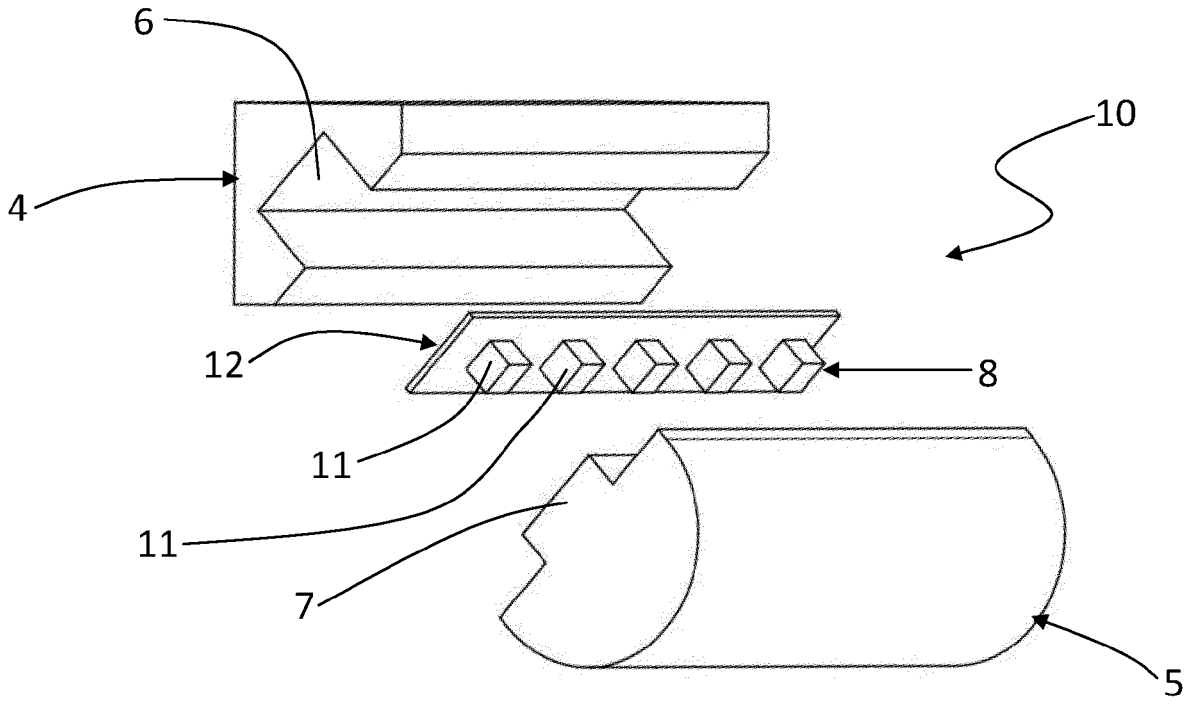


FIG. 14



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EUROPEAN SEARCH REPORT

Application Number
EP 11 19 0978

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	WO 99/06759 A1 (SHOWERS INTERNATIONAL PTY LTD [AU]; SHOWERS DAVID FIELD [AU]; QUANTREL) 11 February 1999 (1999-02-11) * page 8, lines 19 - 25; figure 2 * * page 9, line 18 - line 26 * * page 18, line 4 - line 12; figure 26 * -----	1-10	INV. E04F19/02 F21V33/00 F21S4/00
Y	WO 02/061328 A1 (ILIGHT TECHNOLOGIES INC [US]) 8 August 2002 (2002-08-08) * page 9, line 4 - page 11, line 4; figures 1-4 * * page 14, line 17 - page 16, line 18; figures 7A-7F * -----	1-10	

TECHNICAL FIELDS SEARCHED (IPC)

E04F
F21V
F21S

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
Munich	14 February 2012	Fournier, Thomas

CATEGORY OF CITED DOCUMENTS

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