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(54) **Luminaire with elastic shielding**

(57) The present invention discloses a light fitting of the type comprising:

- a light generator (3);
- joining means for joining to a surface (1); and
- an anti-glare element (6);

the light generator element. Said anti-glare element is disposed enveloping, at least partially, said light generator (3) and, to resolve the problem of the devices of the prior art of being difficult to handle for their installation or maintenance it is, substantially, of an elastic material so that it can be deformed to perform its installation and, later, returns to its natural form once installed.

wherein the anti-glare element is an element which avoids users from being dazzled when they look towards

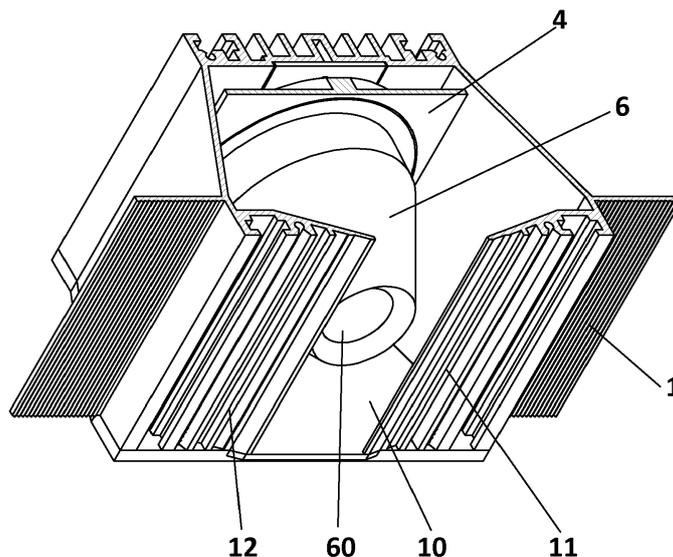


FIG. 2

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Description

OBJECT OF THE INVENTION

[0001] The present invention relates to light fittings with an anti-glare screen said screen being of an elastic material. In particular, it relates to light fittings disposed in spaces difficult to access for an operator wherein the installation of rigid screens is unfeasible.

BACKGROUND OF THE INVENTION

[0002] Various types of light fittings are known in the state of the art for their disposal, preferably in ceilings and, in particular, light fittings are known which have an anti-glare element to avoid the user from being dazzled by its intensity when directly observing the light. One of the possible solutions to these possible glares is the disposal of the light fittings in holes disposed in the ceiling so that the user, on looking from a certain angle, does not observe the light fitting directly but can observe the light emanating from it.

[0003] Therefore, to have said light fittings with said anti-glare elements it is necessary to make holes in the ceiling, with these holes being of a sufficient size in order for them to be accessed to perform the corresponding maintenance and change the light fittings when one of them fails.

[0004] These holes are not particularly attractive but their functionality is necessary.

[0005] Another type of anti-glare elements are another type of barriers, with a typically truncated cone shape, which cover the light fitting radially and through said truncation of the cone allow the passage of the light. This type of barriers focus the light towards a certain point and their shape more efficiently avoids glare.

[0006] However, to be able to perform the maintenance of this type of light fittings there is less space and the introduction of the light fitting with this anti-glare element in existing holes is usually complex.

[0007] Therefore, there is the need for a light fitting with anti-glare elements which can be disposed through existing holes with ease of installation and access thereto to be able to perform a suitable maintenance.

DESCRIPTION OF THE INVENTION

[0008] In order to resolve the existing problems in light fittings of the prior art, the present invention discloses a light fitting of the type comprising:

- a light generator;
- joining means for joining to a surface; and
- an anti-glare element;

wherein said light generator is joined to the surface by the joining means and enveloping, at least partially said light generator, the anti-glare element is disposed said

anti-glare element, substantially, being of an elastic material. More preferably, the element is comprised of at least 70% of an elastic material. In this way, the installation of said anti-glare element can be performed by deforming the element so that it can pass through the hole where the light fitting is and later be released in order for it to take on its typical form of use.

[0009] Preferably, the light fitting of the present invention has second joining means between the light generator and the anti-glare element and said second joining means can be magnetic means.

[0010] If the second joining means are magnetic means, the present invention contemplates that said second joining means comprise a magnet joined to the light generator and a metal element embedded between the elastic material of the anti-glare element. Another possible configuration may be a metal element joined to the light generator and a magnet embedded between the elastic material of the anti-glare element.

[0011] In a particular embodiment, the anti-glare element is, substantially, of rubber. More in particular, said element is comprised by at least 70% rubber.

[0012] Especially preferably, the anti-glare element has a truncated cone shape. Furthermore, the end with greatest diameter of the truncated cone can be disposed joined to the light generator, in this way the light exits through the end with smallest diameter of said truncated cone.

DESCRIPTION OF THE DRAWINGS

[0013] To complement the description being made and in order to aid towards a better understanding of the characteristics of the invention, in accordance with a preferred example of practical embodiment thereof, a set of drawings is attached as an integral part of said description wherein, with illustrative and non-limiting character, the following has been represented:

Figure 1.- Shows a mechanical exploded view of an embodiment of a light fitting comprising multiple light generators according to the present invention.

Figure 2.- Shows a perspective view of an example of light fitting according to the present invention.

Figure 3.- Shows perspective sectional view of an example of light fitting according to the present invention.

PREFERRED EMBODIMENT OF THE INVENTION

[0014] Figure 1 shows a mechanical exploded view of an embodiment according to the present invention. In this figure, by way of example, two light generators (3) are disposed in a base (1) which is fastened to a surface, particularly, a ceiling.

[0015] An electronic plate is disposed (2) to provide energy to the light generators (3) containing the necessary controllers to supply the energy required by the light

generators (3). Additionally, said light generators (3) are fastened to the ceiling by a support (4) which fastens to the light generator and which also provides it with a protection, for example, against bumps since it totally surrounds it.

[0016] Additionally, the light fitting of figure 1 comprises an anti-glare element (6) which is disposed on the light generator (2) to avoid a user from being dazzled on looking towards the light fitting performing a barrier effect.

[0017] The joint between the anti-glare element (6) and the light generator (3) is performed by the ring (5) which is a metal ring. This metal ring is designed to come into contact with magnets disposed on the support (4) of the light generator (3) and be joined by these magnetic means.

[0018] Alternatively, the present invention contemplates that the ring (5) is formed from a material with magnetic properties, such as a magnet and that the support (4) has at least one metal section designed to come into contact with said ring (5)

[0019] On the other hand, the present invention contemplates that the anti-glare element (6) is manufactured in a substantially elastic material so that it allows its deformation to be able to introduce it in reduced spaces such as, for example, in the base (1), although this characteristic is observed in greater detail making reference to figure 2.

[0020] Figure 2 shows the light fitting installed in its entirety in the base (1). As can be observed in figure 2, the base (1) has a first recess (11) and a second recess (12) which mean that the space (10) is reduced and that a rigid cone does not pass through said space (10) so that, in light fittings with multiple generators, as is the case of figure 1, the anti-glare elements (6) of the adjacent light generators (3) must be dismantled by the sides of the base (1) or manipulated by applying force which may cause damages to the integrity of the different devices that form the light fitting.

[0021] In the case of the present invention, the anti-glare element (6) can be deformed do that it passes through the space (10) and, later, it could be joined to the light generator (3) or, particularly, to the support (4), for example, by magnetic means. The disposal of the magnetic means joining the support (4) and the anti-glare element (6) has the advantage that, furthermore, it does not require any other manipulation.

[0022] Furthermore, in this figure 2 it is observed that the anti-glare element (6) has a substantially truncated cone shape wherein, the base of the cone (i.e. the end of the cone with greatest diameter) is disposed on the light generator (3) and the truncated end (60) of said cone is disposed furthest from said light generator (3).

[0023] Figure 3 shows a longitudinal section of a light fitting according to the present invention. In this figure 3, the internal elements of an example of light fitting according to the present invention can be observed in greater detail.

[0024] In this figure 3, the disposal of the magnetic

means joining the anti-glare element (6) and the support (5) is particularly relevant, although other types of joints can be used between said parts such as adhesives, screws, mechanical sockets, etc.

[0025] As can be observed making reference to figure 3, the ring (5) has at least one point (40) wherein they coincide with a magnetic element. Since said ring (5) is a metal element a joint occurs between both elements. In the embodiment of figure 3, it is observed that the ring (5) is embedded in the anti-glare element (6) although in the embodiments of the present invention they are joined by, for example, adhesives or any other joining means known in the state of the art.

[0026] Particular embodiments of the present invention contemplate that the ring (5) is not a continuous ring but it has certain metal or magnetic elements throughout the base of the anti-glare element (6) and have a complementary element (a magnet in the case of the magnetic element or a magnetic element in the case of magnets) in the support (4).

[0027] Furthermore, the present invention contemplates that it has a channel whereon the base of the anti-glare element (6) is disposed to have an additional mechanical socket that eases its assembly and gives it greater stability.

[0028] The present invention contemplates that the anti-glare element (6) also has other forms such as, for example, cylindrical, hexagonal, etc. without affecting the scope of protection of the present invention which will be defined by the following claims.

Claims

1. Light fitting of the type comprising:
 - a light generator (3);
 - joining means for joining to a surface (1); and
 - an anti-glare element (6);

wherein said light generator (3) is joined to the surface (1) by the joining means and enveloping, at least partially, said light generator (3) the anti-glare element (6), **characterized in that** said anti-glare element (6) is, substantially, of an elastic material.

2. Light fitting, according to claim 1, comprising second joining means between the light generator and the anti-glare element.
3. Light fitting, according to claim 2, wherein said second joining means are magnetic means.
4. Light fitting, according to claim 3, wherein said second joining means comprise a magnet joined to the light generator (3) and a metal element embedded between the elastic material of the anti-glare element (6).

5. Light fitting, according to claim 3, wherein said second joining means comprise a metal element joined to the light generator (3) and a magnet embedded between the elastic material of the anti-glare element (6). 5
6. Light fitting, according to claim 1, wherein the anti-glare element (6) is, substantially, of rubber.
7. Light fitting, according to claim 1, wherein the anti-glare element (6) has a truncated cone shape. 10
8. Light fitting, according to claim 7, wherein the end with greatest diameter of the truncated cone is disposed joined to the light generator (3). 15

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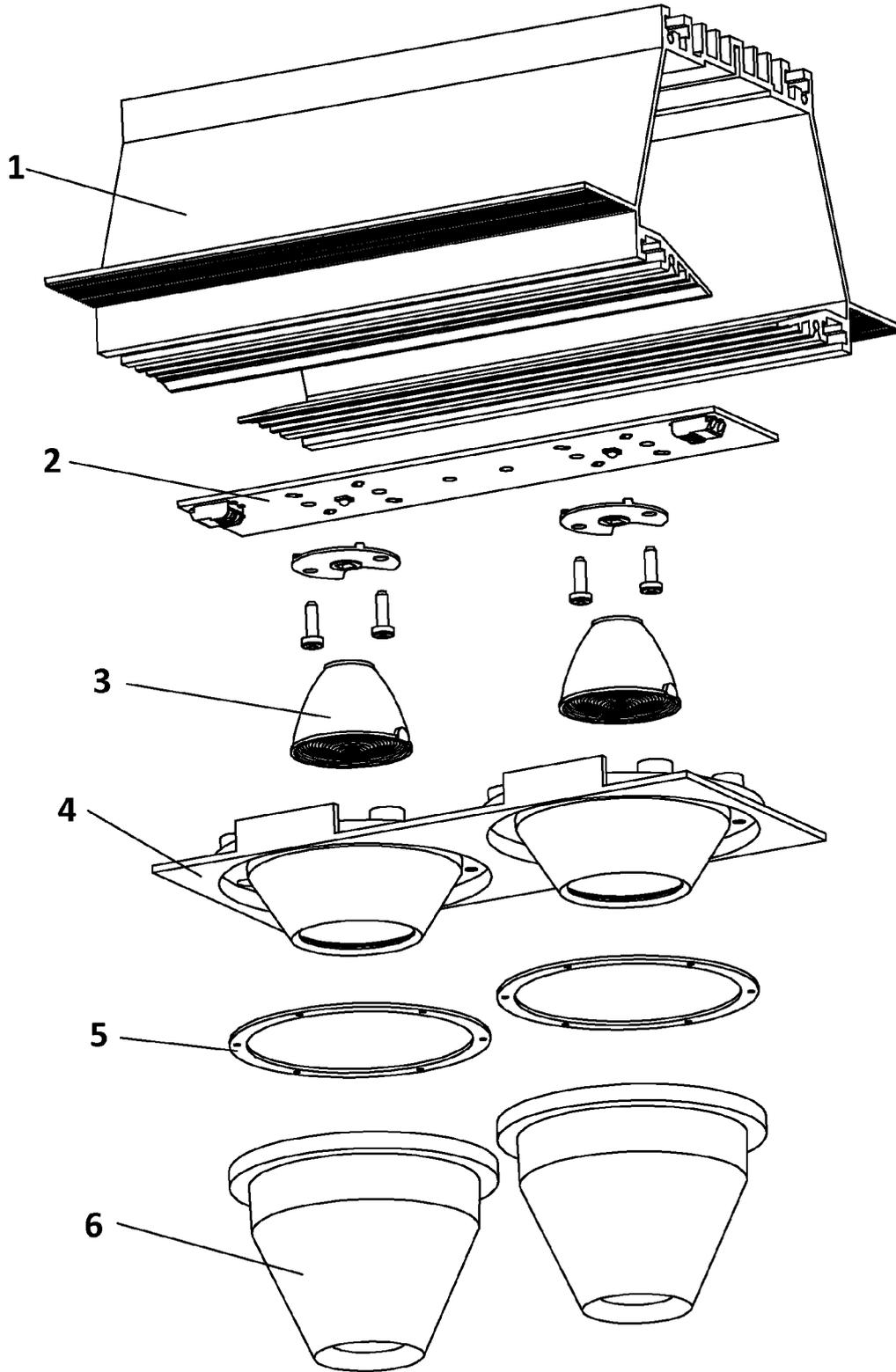


FIG. 1

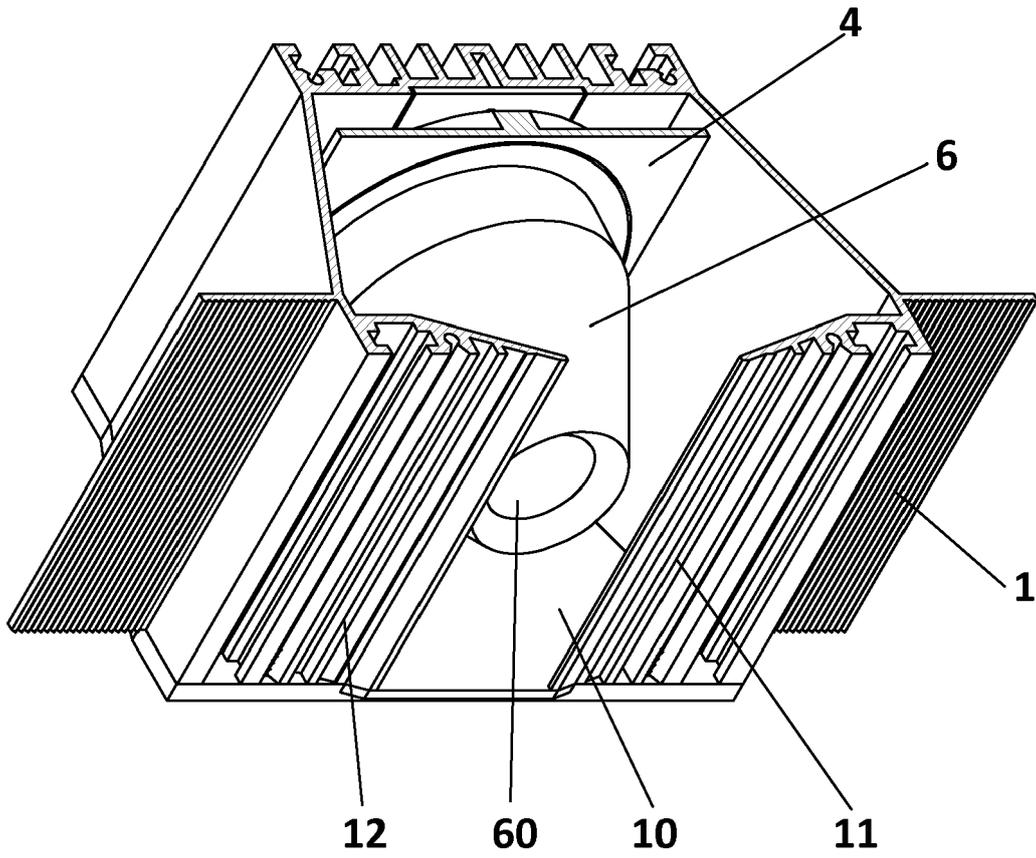


FIG. 2

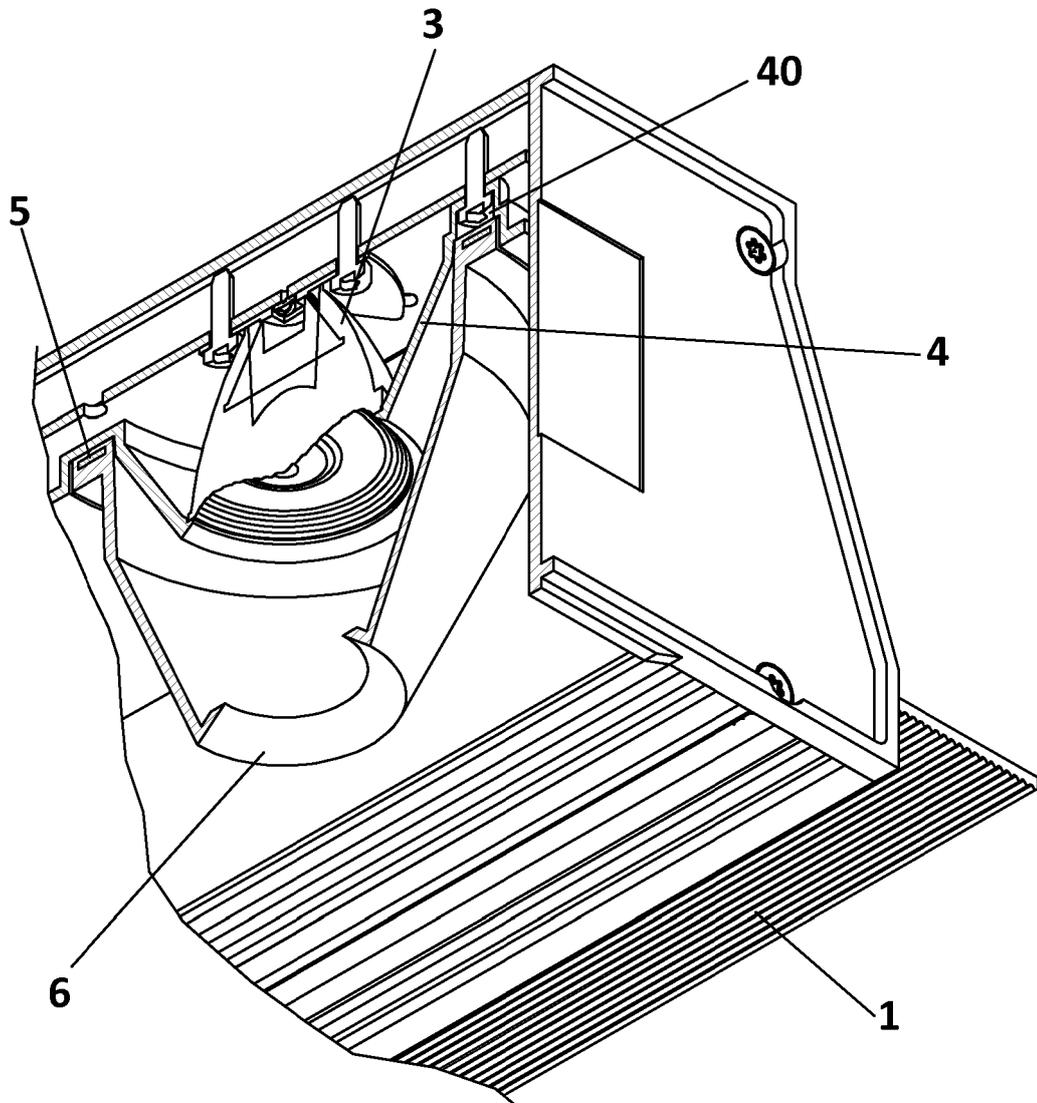


FIG. 3



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Application Number
EP 14 38 2115

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 10 June 2014	Examiner Demirel, Mehmet
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