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(54) Luminaire

(57) The luminaire has a housing (1) which has a light-emission window (2) in which a louver (10) having lamellae (11) is present. The housing has a light window (12) opposite the light-emission window (2). A lamp holder (3) and remote therefrom a support (5) for a single-ended capped lamp are present in the housing. The support is carried by a lamella (11') of the louver (10).

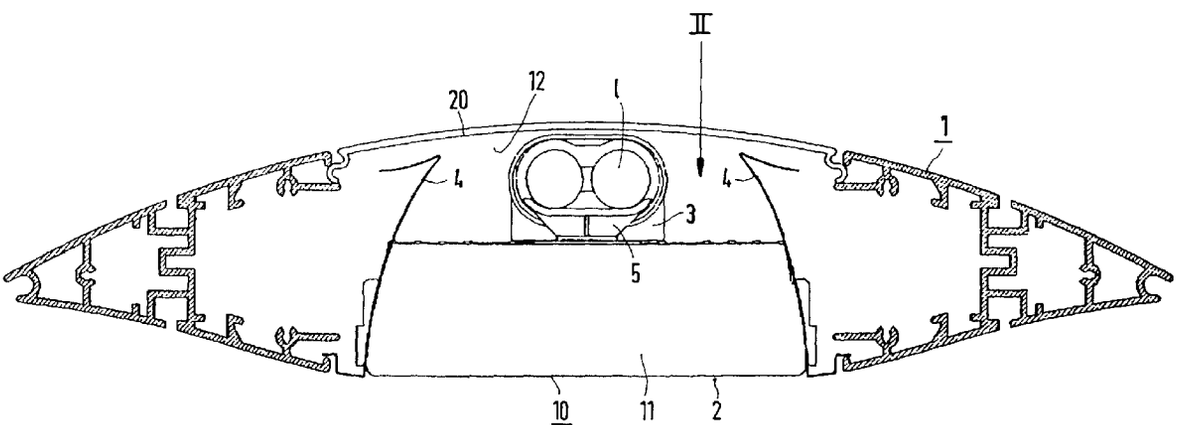

FIG.1

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Description

The invention relates to a luminaire provided with:

a housing with a light emission window;
a lampholder in the housing for accommodating a tubular, single-ended electric lamp alongside the light emission window;
reflecting means in the housing for directing generated light towards the light emission window;
a support in the housing for supporting a lamp to be accommodated in the lampholder in a point remote from said lampholder.

Such a luminaire is known from DE-GM-91 12 691.

The support in the known luminaire is mounted opposite the light emission window and is a metal bracket which grips around the lamp.

It is a disadvantage of the known luminaire that the light generated by an accommodated lamp may easily be dazzling when the luminaire is mounted to a ceiling and may give an unpleasant reflection on picture screens. Another disadvantage is that the luminaire thus mounted leaves the ceiling comparatively dark, so that the light emission window has a much higher brightness than the ceiling. A further disadvantage is that the support intercepts light.

It is an object of the invention to provide a luminaire of the kind described in the opening paragraph in which the risk of dazzling, the brightness contrast, and the interception of light by the support are counteracted.

According to the invention, this object is achieved in that a louver with several parallel lamellae directed transversely to the light emission window is present in the light emission window,

the housing has a light window opposite the light emission window, while a lamella of the louver carries the support.

The louver renders it impossible to look into an accommodated lamp in directions transverse to the lamellae at wide angles to the normal light emission window. In general, the louver will screen off angles of more than 65°.

Light may be radiated through the light window towards the ceiling to which the luminaire is fastened. A lower brightness contrast between the light emission window and the ceiling is obtained thereby, as well as an indirect illumination of the relevant space. The light window may be closed with a light-transmitting, possibly light-scattering or light-deflecting, for example prismatic plate.

The support achieves that the accommodated lamp occupies a defined position relative to the reflecting means, so that a predetermined light distribution in and through the light emission window is obtained. Without a support, the lamp could assume an oblique position relative to the light emission window under the influence of its own weight.

If the support were present at the side of the lamp facing away from the light emission window, an uneven illumination would be formed on the ceiling through the light window, i.e. a shadow would be formed. This unevenness would be unpleasant in view of the comparatively small distance which is normally present between a luminaire and a ceiling and in view of the usually smooth structure of a ceiling.

In the luminaire according to the invention, however, the support is present at the side of the lamp facing away from the light window. The support may be overlapped wholly or partly by the lamella carrying the support, especially if the lamella has a substantially triangular shape in cross-section of which the base lies inside the housing and is connected to the support. In that case the support will intercept no or substantially no light which would otherwise leave the light emission window. Any light which is still intercepted, however, will cause hardly any irregularities in the illumination of the area covered in view of the comparatively great distance to that area and the intermixing with light which takes place owing to the very nature of the louver. The support may accordingly also be used in a luminaire which has a louver with flat slats by way of lamellae. The support may then be clamped or snapped onto a slat, for example with a furcate portion of this support.

It is an advantage of the luminaire according to the invention that the support need not grip around the lamp, because the support is underneath the lamp in the operational position of the luminaire. The lamp-supporting surface of the support may be plane. It is favorable, however, when the supporting surface has sloping end portions. These may lie laterally of a mounted lamp and center the lamp in a direction parallel to the lamella.

It is an advantage of these supports that they require no force for putting the lamp into position on the support, which is the case in the known support which grips around the lamp. Once a lamp has been placed in the luminaire through the light emission window, the louver may be provided and the lamp will be automatically lifted thereby into its defined position.

The support may be made from synthetic resin, for example thermoplastic synthetic resin, for example PVC, polymethyl methacrylate, polyester, etc., and may be transparent. The louver is usually made from metal, such as aluminum, but may alternatively be made from synthetic resin, which is possibly painted or metallized.

The luminaire may be designed for a compact fluorescent lamp, such as a lamp having at least two straight tube portions in which a low-pressure mercury discharge can be generated.

An embodiment of the luminaire according to the invention is shown in the drawing, in which

Fig. 1 is a cross-section of a luminaire; and
Fig. 2 is an exploded view along II in Fig. 1.

The luminaire of Fig. 1 is provided with a housing 1

having a light emission window 2. A lampholder 3 is arranged in the housing for accommodating a tubular, single-ended electric lamp l in the housing along the light emission window, in the Figure a compact fluorescent lamp with two parallel tubular portions which consumes a power of 40 W during operation and has a total length of approximately 57 cm (see also Fig. 2). Reflecting means 4 are present in the housing, i.e. two reflectors for directing light towards the light emission window 2. A support 5 is present in the housing for supporting a lamp to be accommodated in the lampholder 3 in a point at a distance from this lampholder.

A louver 10 (see also Fig. 2) comprising several parallel lamellae 11 directed transversely to the light emission window is present in this light emission window 2. The housing (Fig. 1) has a light window 12 opposite the light emission window 2 and closed by means of a transparent plate 20 in the Figure, for example made of polymethyl methacrylate. A lamella 11' of the louver 10 carries the support 5.

The support 5 has a plane supporting surface 13 for the lamp l. The supporting surface 13 has sloping end portions 14. The lamellae 11, 11' are substantially triangular in cross-section, with their bases inside the housing 1. It is visible in Fig. 2 that the support 5 supports the lamp l adjacent the free end portion l" thereof, remote from its lamp cap l', which is held in the lampholder 3 (Fig. 1).

Claims

1. A luminaire provided with:

   a housing (1) with a light emission window (2);
   a lampholder (3) in the housing for accommodating a tubular, single-ended electric lamp alongside the light emission window;
   reflecting means (4) in the housing for directing light towards the light emission window (2);
   a support (5) in the housing for supporting a lamp to be accommodated in the lampholder (3) in a point remote from said lampholder,

   characterized in that a louver (10) with several parallel lamellae (11) directed transversely to the light emission window (2) is present in the light emission window,

   the housing has a light window (12) opposite the light emission window (2), while a lamella (11') of the louver (10) carries the support (5).

2. A luminaire as claimed in Claim 1, characterized in that the support (5) has a lamp-supporting surface (13) which is plane.

3. A luminaire as claimed in Claim 2, characterized in that the lamp-supporting surface (13) has sloping end portions (14).

4. A luminaire as claimed in Claim 1, 2 or 3, characterized in that the lamellae (11, 11') are substantially triangular in cross-section with their bases inside the housing (1).

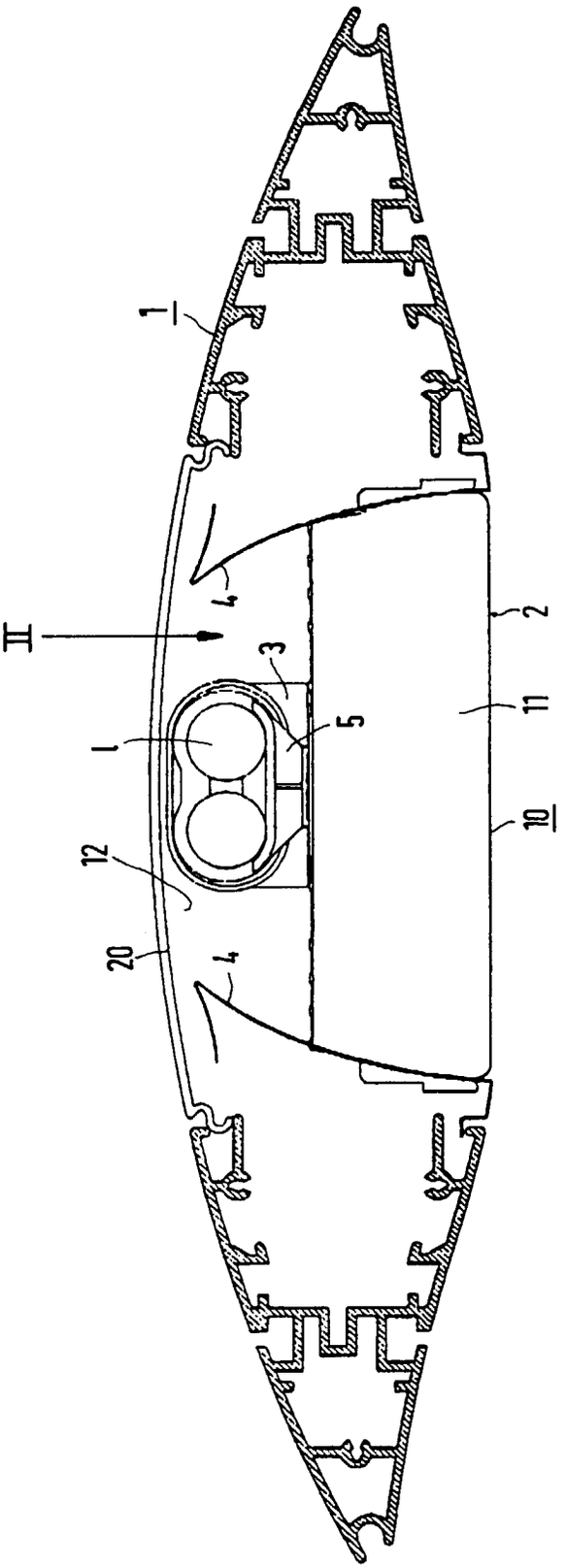

FIG.1

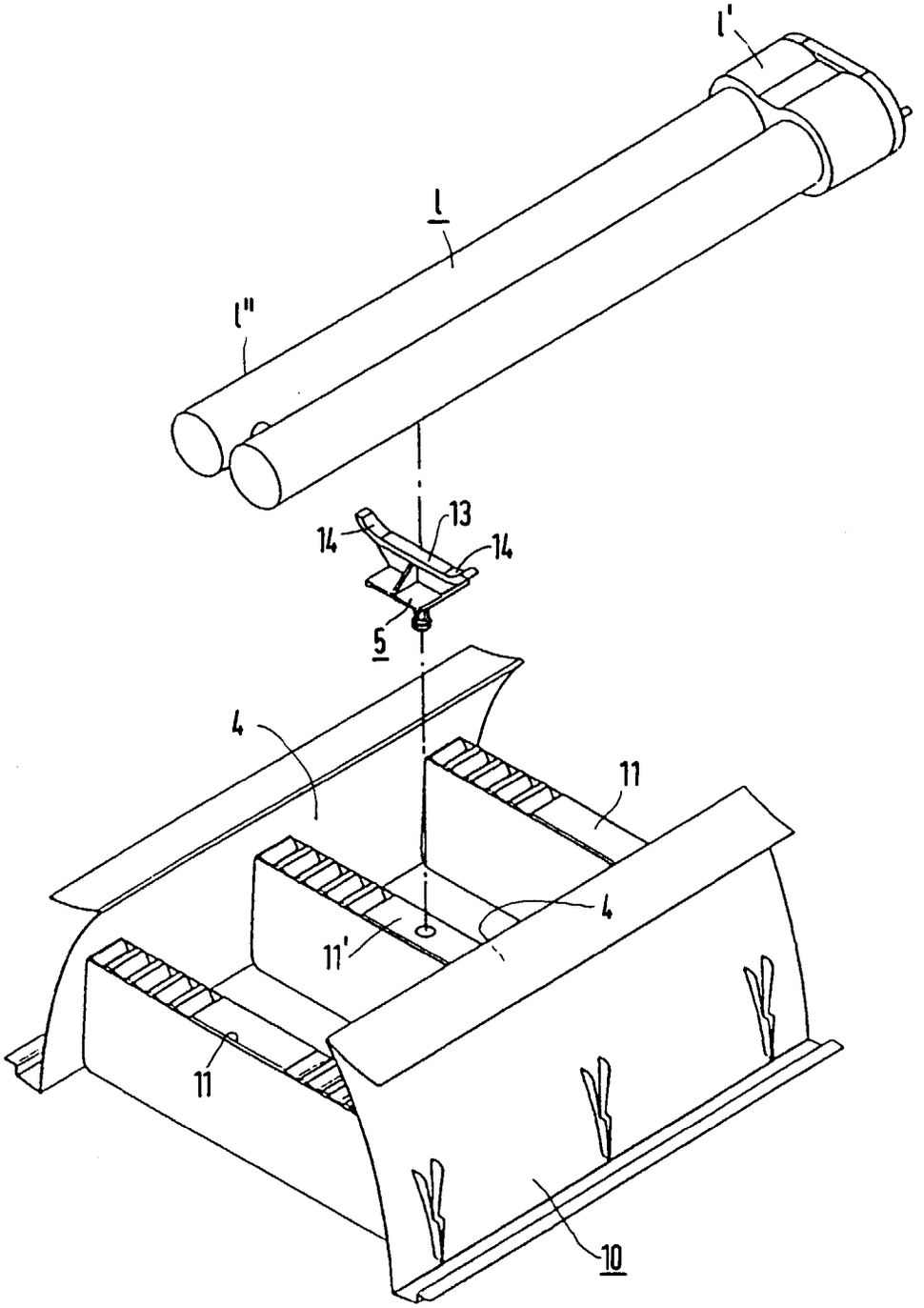

FIG.2