



(1) Publication number:

0 599 408 A1

(2) EUROPEAN PATENT APPLICATION

(21) Application number: **93203231.1**

(51) Int. Cl.⁵: **F21V** 17/00, G09F 13/04

2 Date of filing: 18.11.93

③ Priority: 26.11.92 EP 92203652

Date of publication of application:01.06.94 Bulletin 94/22

Designated Contracting States:
AT BE DE DK ES FR GB IT NL SE

Applicant: PHILIPS ELECTRONICS N.V. Groenewoudseweg 1 NL-5621 BA Eindhoven(NL)

Inventor: Fähbdrich, Wilhelm c/o Int. Octrooibureau B.V., Prof. Holstlaan 6 NL-5656 AA Eindhoven(NL) Inventor: Dieperink, Menno c/o Int. Octrooibureau B.V., Prof. Holstlaan 6 NL-5656 AA Eindhoven(NL)

Representative: Rooda, Hans et al INTERNATIONAAL OCTROOIBUREAU B.V., Prof. Holstlaan 6 NL-5656 AA Eindhoven (NL)

(54) Luminaire.

The luminaire has a housing (1) having a base wall (2) opposite to a window (3). Side walls (4) connected to the base wall, are mutually connected by corner members (5). A light-transmitting cover (6) is accommodated in the window. Screening members (7) connected to the corner members have a position (71) in which they keep the cover (6) fixed in the window (3). They can be removed from said position without tools being needed. The luminaire may be mounted into a false ceiling. A masking member (9) may be demountably attached to the corners members so as to conceal them when the luminaire is mounted against a wall or ceiling.

5

15

25

30

40

45

50

55

The invention relates to a luminaire comprising: a housing with a base wall and opposite thereto a window for allowing light to emerge;

side walls connected to the base wall and interconnected by means of corner pieces;

a light-transmitting cover accommodated in the window:

screening members detachably connected to the corner pieces and extending substantially parallel to the window.

Such a luminaire is known from DE-GM 82.36.930. The known luminaire is of modular construction. The screening members therein in conjunction with profiles constitute a flame by which the cover is held. To remove the cover from the housing, for example for exchanging a lamp, the screws with which the screening members are fastened to the corner pieces must be unscrewed. This is inconvenient.

It is an object of the invention to provide a luminaire of the kind described in the opening paragraph which is of a simple construction, which renders removal of the cover easy.

According to the invention, this object is achieved in that the screening members have a fixation position in which they extend to in front of the window so as to keep the cover fixed in the window, and in that at least two adjoining screening members can be removed from their fixation positions without the use of tools.

In the luminaire according to the invention, at least two adjoining screening members from among the screening members fixing the cover in its position in the window can be moved from their fixation position without tools, for example using the thumb ad index finger, upon which the cover may be tilted and removed from the window. It is convenient when all screening members can be removed in this way. It is then not necessary for the user to try to remember which screening members are removable in this way. Neither need ay marks be present identiying these removable screening members.

The screening members may be removable from their fixation positions by a swivelling movement. Alternatively, they may be detachably snapped into the corner pieces. Easy to construct and to operate, however, are screening members which can be moved from their fixation position in outward direction by sliding. They may be laterally slidable, along the one or the other wall merging into the corner piece. A diagonal sliding possibility, however, is unequivocally clear to the user. It is attractive in that case when the screening members can slide into an end position in which they have a stop against the corner piece. It can be counteracted then that the screening member becomes uncoupled from the corner piece and is to be brought

into engagement again later. It is also attractive when the screening member is slidable from its fixation position against a resistance, for example, in that the screening member in its fixation position has a snap connection with the corner piece.

In an embodiment, the luminaire has a collar around the window extending away from the housing, and the screening members overlap said collar. In this embodiment, the luminaire is particularly suitable for recessed mounting into a false ceiling. Fastenings to this ceiling may then be realised, for example, on the collar where the latter is overlapped by the screening members in the fixation position.

In some embodiments of a luminaire of modular construction, elements such as openings or reinforcements may be present at the outside of the corner pieces, which elements are to be hidden from the view of a observer. In a favourable embodiment, a masking member is fastened to each of the corner pieces at the outside of the housing, which masking member extends from the collar to the base wall. It is favourable when the masking member is detachably fastened, for example, by means of a snap connection. The luminaire with masking members is suitable for use against a wall or ceiling, whereas without said masking members it can be used for recessed mounting into a false ceiling, the collar then being exposed so as to serve as a stop against a ceiling.

The cover may be a transparent or milky, possibly coloured, light-refracting or scattering element, for example, a reflecting or scattering grid possibly built up from slats.

The housing may comprise means for accommodating one or several lamps, single-capped or double-capped, such as linear or compact fluorescent lamps, discharge lamps of other types, or incandescent lamps. Light-concentrating means may be present in the housing, such as a reflector, and possibly means for operating a lamp, such as a ballast. These means may be fastened, for example, to the base wall.

Embodiments of the luminaire according to the invention are shown in the drawing, in which

Fig. 1 shows a embodiment in perspective view; Fig. 2a shows a detail of Fig. 1 taken on the line IIa;

Fig. 2b shows the detail of Fig. 2a with the screening member in the fixation position;

Fig. 2c shows the corner piece of Fig. 2a and b without screening member;

Fig. 2d shows the corner piece taken on the line IId in Fig. 2c;

Fig. 3a shows the screening member taken on the line IIIa in Fig. 1;

Fig. 3b shows the screening member taken on the line IIIb in Fig. 3a;

15

25

30

35

40

50

55

Fig. 4a shows the masking member taken on the line IVa in Fig. 1;

Fig. 4b shows the masking member taken on the line IVb in Fig. 4a;

Fig. 4c shows the masking member taken on the line IVc in Fig. 4b.

The luminaire of Fig. 1 has a housing 1 with a base wall 2 and opposite thereto a window 3 for the emission of light. Side walls 4 are connected to the base wall and interconnected by corner pieces 5. A light-transmitting cover 6 is accommodated in the window 3. Screening members 7 are detachably connected to the corner pieces. They extend substantially parallel to the window 3.

The screening members 7 have a fixation position 71 in which they extend to in front of the window 3 so as to keep the cover 6 fixed in the window. At least two adjoining screening members 7 can be removed from their fixation positions without the use of tools. The cover can then tilt with its non-fixed edge from the window and subsequently be taken away completely. In the embodiment drawn, all screening members are removable in this manner. In the Figure, they are slidable from their fixation position 71 outwards into an end position 72.

The window 3 is surrounded by a collar 8 projecting outwards from the housing 1. The screening members 7 overlap said collar.

A masking member 9, which extends from the collar 8 to the base wall 2, is fastened to each corner piece 5 at the outside of the housing 1. The masking member 9 is detachably fastened.

In the subsequent Figures, parts have the same reference numerals as in the preceding Figure

It is visible in Fig. 2 that the screening members 7 can be moved diagonally from their fixation position 71 into their end position 72 and *vice versa*.

The screening members 7 have a snap connection 73, 51 with the corner piece 5 (Figs. 2a, 2c, Fig. 3) in their fixation position 71. Projections 73 are present for that purpose at the screening member 7, capable of gripping into respective recesses 51 in the corner piece 5.

The screening members 7 each have a stop 73, 52 with the corner piece 5 in their end position 72. The projections 73 then abut against grooves

The corner pieces 5 have a guide 53 for the screening members 7.

Each screening member 7 has hooks 74 (Fig. 3) which grip around the guide 53. A nose 75 at each screening member supports the cover 6 in the fixation position 71. The cover is then enclosed between the walls 4 in the window 3 (Fig. 2c) between the nose 75 and a reinforcement wall 54

of the corner pieces.

The corner piece 5 of Fig. 2c has a recessed hole 54 through which a fastening agent, for example a screw, can be passed so as to fasten the luminaire in a false ceiling. This screw is then covered by the screening member in its fixation position 71, and even in its end position 72.

The corner piece 5 in addition has cavities, in Fig. 2c holes 56 in its collar portion 8, for accommodating pins present at a masking member (Fig. 4). Furthermore, a recess 57 (Fig. 2d) is present in the corner piece 5 for cooperating with a masking member.

The masking member 9 (Fig. 4) has a snap connection 91, 55 with the corner piece 5. The masking member for this purpose has a split pin with head 91 which snaps into the hole 55 in the corner piece. Pins 92 cooperate with the holes 56 in the corner piece 5 for keeping the masking member in position. In the embodiment drawn, the masking member in addition comprises hooks 93 which cooperate with the recess 57 of the corner piece for further defining the position of the masking member.

Provided with the masking members, the luminaire is suitable for fastening against a wall or a ceiling. Functional features of the corner pieces which render the luminaire visually less attractive are then entirely invisible to the observer.

Claims

1. A luminaire comprising:

a housing (1) with a base wall (2) and opposite thereto a window (3) for allowing light to emerge;

side walls (4) connected to the base wall and interconnected by means of corner pieces (5);

a light-transmitting cover (6) accommodated in the window (3);

screening members (7) detachably connected to the corner pieces ad extending substantially parallel to the window (3),

characterized in that the screening members (7) have a fixation position (71) in which they extend to in front of the window (3) so as to keep the cover (6) fixed in the window, and in that at least two adjoining screening members (7) can be removed from their fixation positions without the use of tools.

A luminaire as claimed in Claim 1, characterized in that the at least two adjoining screening members (7) can slide outwards from their fixation position (71) into an end position (72).

3. A luminaire as claimed in Claim 1 or 2, characterized in that the screening members (7) have a snap connection (73, 51) with the corner piece (5) in their fixation position (71).

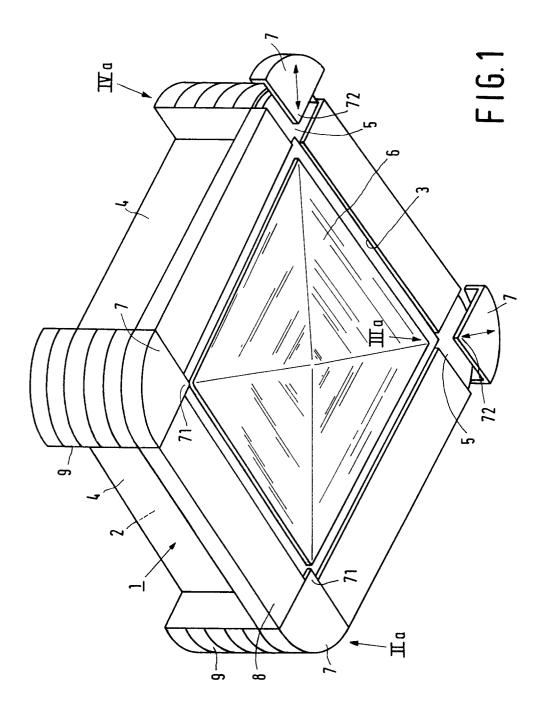
4. A luminaire as claimed in Claim 2, characterized in that the screening members (7) have a stop (74) against the corner piece (5) in their end position (72).

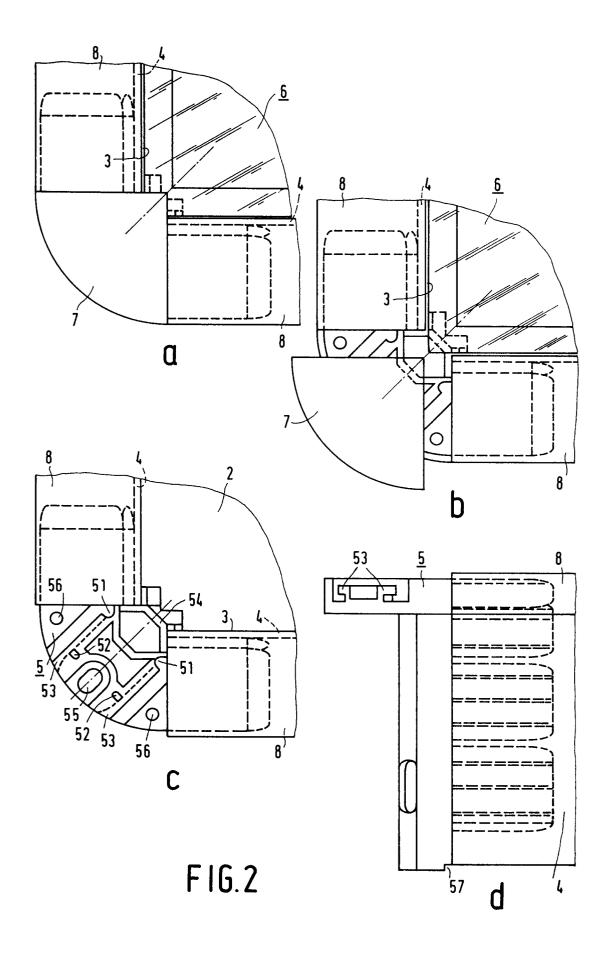
5. A luminaire as claimed in Claim 1 or 2, characterized in that the window (3) is surrounded by a collar (8) projecting outwards from the housing (1), and the screening members (7) overlap the collar (8).

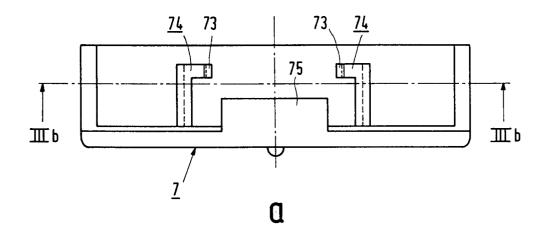
6. A luminaire as claimed in Claim 5, characterized in that a masking member (9) which extends from the collar (8) to the base wall (2) is fastened to each of the corner pieces (5) at the outside of the housing (1).

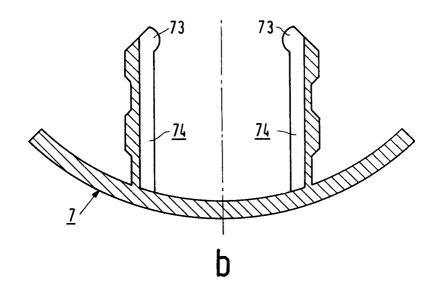
7. A luminaire as claimed in Claim 6, characterized in that the masking member (9) is detachably fastened.

8. A luminaire as claimed in Claim 7, characterized in that the masking member (9) has a snap connection (91, 55) with the corner piece (5).

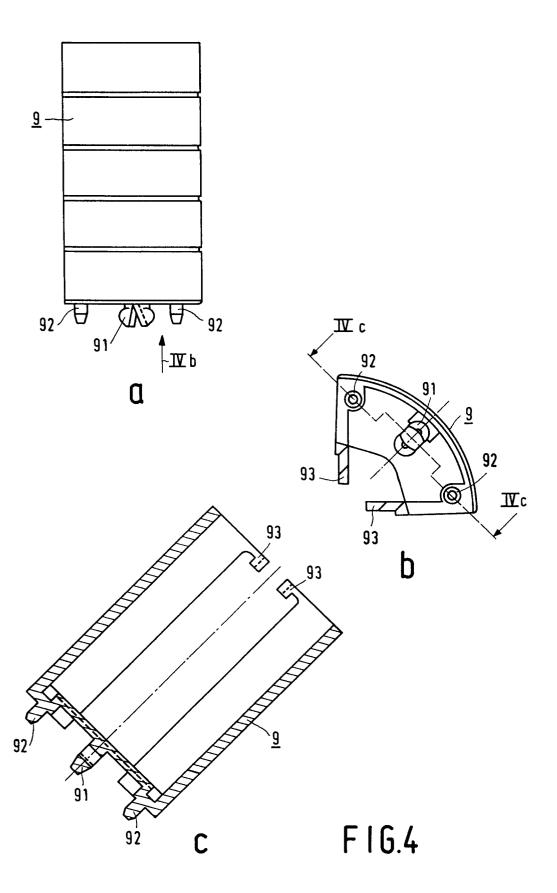








F16.3





EUROPEAN SEARCH REPORT

Application Number EP 93 20 3231

	DOCUMENTS CONSIDE			
Category	Citation of document with indica of relevant passage		Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
A	FR-A-2 667 967 (APPLICUTILISATIONS DES PROPR DES MATERIAUX) * page 12, line 1 - li * page 14, line 28 - 1 1,7-9 *	IETES ELECTRIQUES ne 28 *		F21V17/00 G09F13/04
A,D	DE-U-82 36 930 (RUDOLF CO KG) * page 7, line 18 - pa figures 3-5 *		[
A	FR-A-697 593 (ÉTABLISS CIE) * the whole document *			
				TECHNICAL FIELDS SEARCHED (Int.Cl.5)
				F21 V
				G09F F21S A47G
	The present search report has been of Place of search THE HAGUE	Irawn up for all claims Date of completion of the search 18 February 1994	Mar	Examiner
X : par Y : par doc A : tec	CATEGORY OF CITED DOCUMENTS ticularly relevant if taken alone ticularly relevant if combined with another ument of the same category hnological background n-written disclosure ermediate document	T: theory or principle E: earlier patent docur after the filing date D: document cited in L: document cited for	underlying the ment, but puble the application other reasons	invention ished on, or