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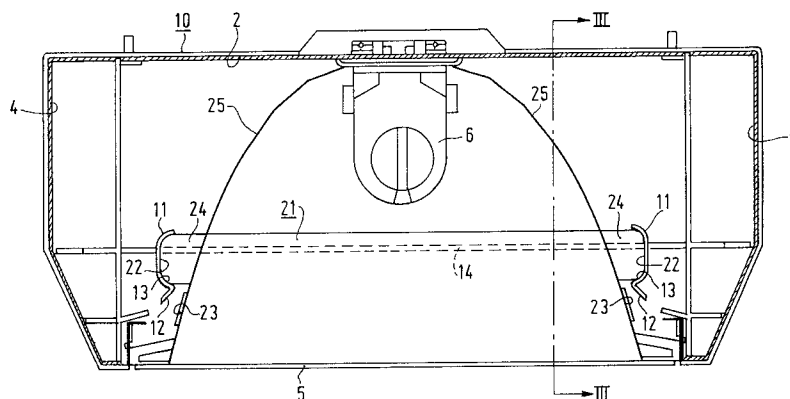
0 620 401 A1

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INTERNATIONAAL OCTROOIBUREAU B.V.,
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NL-5656 AA Eindhoven (NL)**(54) **Luminaire.**

(57) The luminaire has a housing (1) comprising end caps (10) which have resilient means (11) to keep a lamellae grid (20) fixed in the light emission window

(5). The means (11) cooperate with the end faces (22) of lamellae (21). Thereby they are suitable to be used to fix grids of several kinds.

**FIG.2****EP 0 620 401 A1**

The invention relates to a luminaire provided with:

a housing with a base wall having a longitudinal direction and side walls extending away therefrom in the longitudinal direction with end caps transverse thereto;

a louvre comprising slats which have end faces adjacent the side walls in a light emission window opposite the base wall;

the end caps comprising resilient means which hold the louvre in the window.

Such a luminaire is known from DE 858 583.

The louvre of the known luminaire has a V-shaped reflector which interconnects the slats centrally between their end faces. Near the end caps, the reflector has recesses in its end surfaces into which blade springs fastened to the end caps engage. It is necessary for a stable positioning of the louvre that the points of contact of a blade spring in a end surface lie wide apart. For this purpose, the blade springs in the known luminaire are placed close to the base wall, high in the luminaire. As a result, they are accessible only with difficulty if they are to be pressed from the recesses for removing the louvre.

In addition, the legs of the V-shaped reflector are wide apart in order to position said points of contact further away from one another. The reflector as a result intercepts light, which cannot issue to the exterior through the emission window. A V-shaped reflector is essential for the known fastening of the louvre.

EP 0 017 825 discloses a construction for fastening a louvre with slats of a triangular cross-section whose end faces project each through a respective reflector. Two openings are present in some slats, in the base thereof facing towards the base wall. Resilient elements coupled two-by-two extend away from the base wall and carry hooks which grip into the openings of the slats.

The resilient elements have a complicated shape. Special provisions must be present at the base wall for fastening them. Furthermore, the known construction is suitable only for louvres having such triangular slats.

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 and which is suitable for holding slats of different shapes.

According to the invention, this object is achieved in that the resilient means cooperate with the end faces of the slats.

Because of their points of application, *i.e.* the end faces of the slats, it is of no importance for the luminaire according to the invention whether the louvre has a V-shaped reflector in the centre of the slats, or two such reflectors away from the centre,

or, for example, concave side reflectors near the end faces of the slats. Neither is it important whether the slats are V-shaped or flat, or have another shape.

The resilient means are capable of holding the slats in or close to the light emission window, whereby an accurate positioning is possible.

In a favourable embodiment, the resilient means have a lead-in surface extending obliquely relative to the light emission window and an oblique lead-out surface. This embodiment renders it possible to insert the louvre by pressing it into the luminaire against the spring pressure, and to remove it by pulling it out.

It is advantageous when the resilient means extend away from the end caps in the longitudinal direction of the base wall. They require comparatively little material then and can nevertheless have a comparatively great stiffness. Their stiffness may readily be adjusted as required in the luminaire design when they are interconnected up to some distance away from an end cap.

An embodiment which is attractive because of the small amount of assembling work required for the luminaire is one in which the end caps are made of synthetic resin and the resilient means are integral therewith.

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

Fig. 1 shows a luminaire in perspective view;
Fig. 2 is a cross-section taken on the line II-II of a modification;

Fig. 3 is a cross-section taken on the line III-III in Fig. 2; and

Fig. 4 shows a slat from Fig. 2.

In the drawing, the luminaire has a housing 1 with a base wall 2 having a longitudinal direction 3 and side walls 4 extending away therefrom in this longitudinal direction. The housing has end caps 10 transverse to its longitudinal direction. A louvre 20 with slats 21 having end faces 22 (Figs. 2, 4) near the side walls 4 is present in a light emission window 5 opposite the base wall 2.

The end caps 10 have resilient means 11 which hold the louvre 20 in the window 5. The luminaire shown has holders 6 for accommodating an electric lamp, for example, a tubular fluorescent lamp. The slats are V-shaped in cross-section and are interconnected by side reflectors.

The resilient means 11 (Fig. 2) cooperate with the end faces 22 of the slats 21.

They have a lead-in surface 12 which extends obliquely relative to the light emission window 5, and an oblique lead-out surface 13.

The resilient means 11 (Fig. 3) extend away from the end caps 10 in the longitudinal direction 3 of the base wall 1.

The end caps 10 are made of synthetic resin, for example of polyacrylonitril butadiene styrene, and the resilient means 11 are integral therewith.

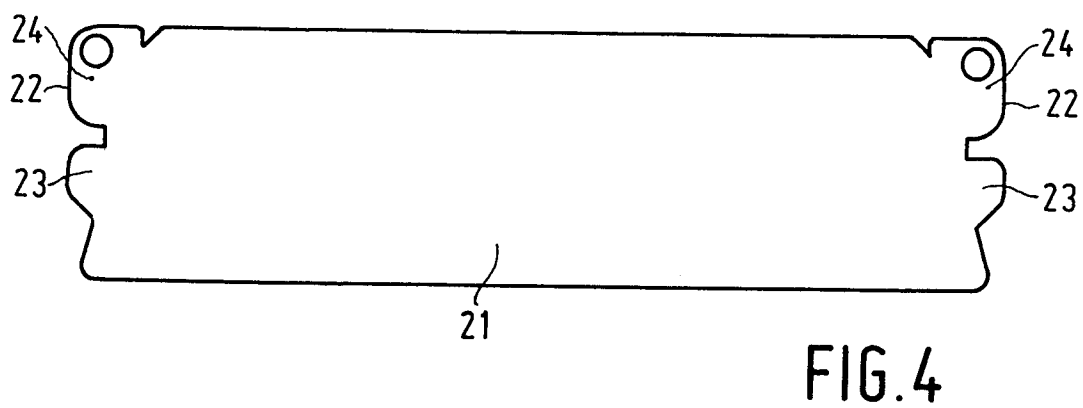
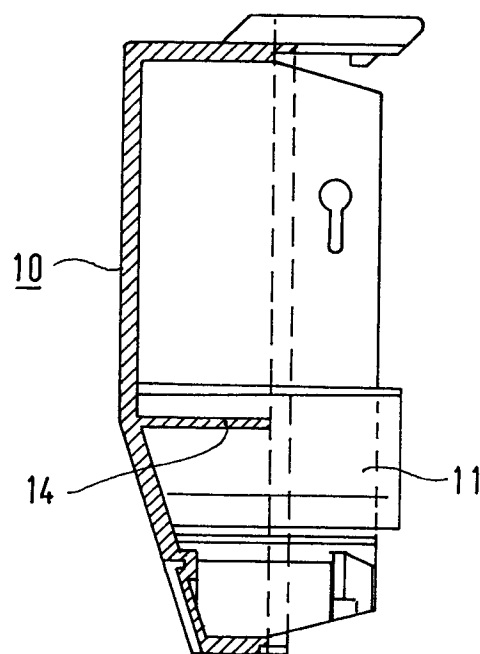
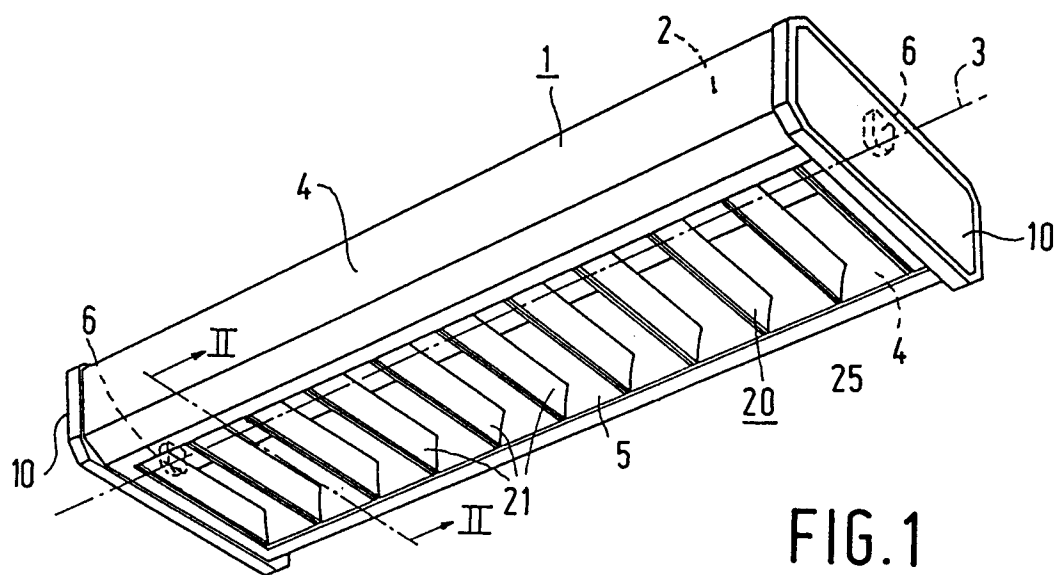
The resilient means 11 are connected to one another up to some distance away from the end cap 10, in the Figure by means of a reinforcement plate 14. 5

The slats 21 of Figs. 2, 4 are flat. They are joined together with side reflectors 25 so as to form a louvre in that tongues 23 of the slats are bent against the side reflectors. Tongues 24 with the recesses therein contribute to the positioning of said side reflectors. Their end faces 22 constitute the end faces of the slats 21 with which the resilient means cooperate. 10 15

Claims

1. A luminaire provided with:
 - a housing (1) with a base wall (2) having a longitudinal direction (3) and side walls (4) extending away therefrom in the longitudinal direction with end caps (10) transverse thereto; 20
 - a louvre (20) comprising slats (21) which have end faces (22) adjacent the side walls (4) in a light emission window (5) opposite the base wall (2); 25
 - the end caps (10) comprising resilient means (11) which hold the louvre (20) in the window (5), characterized in that the resilient means (11) cooperate with the end faces (22) of the slats (21). 30
2. A luminaire as claimed in Claim 1, characterized in that the resilient means (11) have a lead-in surface (12) extending obliquely relative to the light emission window (5) and an oblique lead-out surface (13). 35
3. A luminaire as claimed in Claim 1 or 2, characterized in that the resilient means (11) extend away from the end caps (10) in the longitudinal direction (3) of the base wall (1). 40
4. A luminaire as claimed in Claim 1, 2 or 3, characterized in that the end caps (10) are made of synthetic resin and the resilient means (11) are integral therewith. 45
5. A luminaire as claimed in Claim 4, characterized in that the resilient means (11) of an end cap (10) are interconnected up to some distance away from the end cap (10). 50

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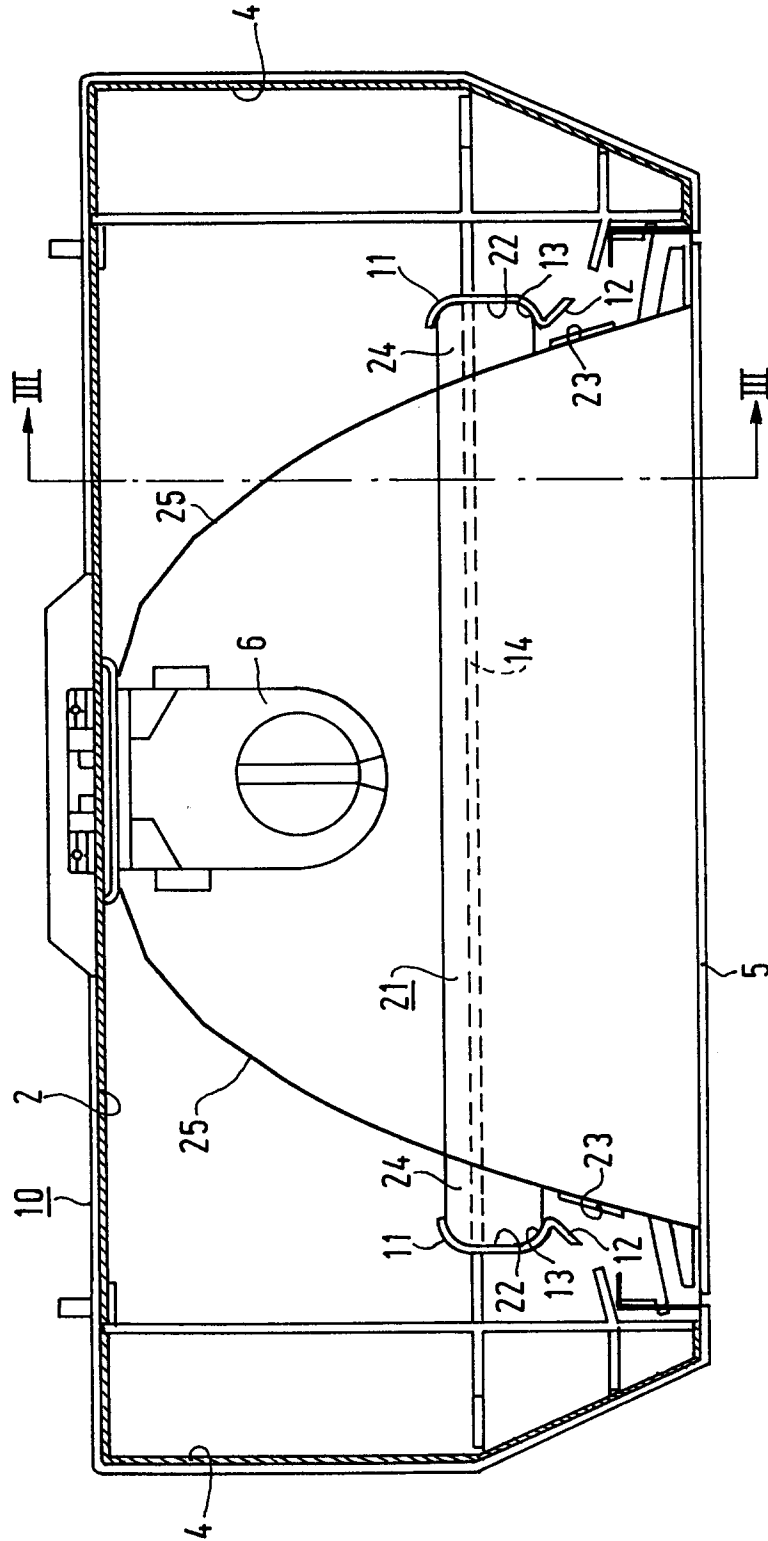


FIG. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 94 20 0980

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
A	EP-A-0 324 467 (SIEMENS AG BERLIN) * column 1, line 50 - column 2, line 1 * * column 2, line 48 - column 5, line 7 * * figures 1-4 * ---	1-3	F21V17/00 F21V11/06 F21V11/02
A	DE-U-86 20 169 (SIEMENS AG BERLIN) * page 6, line 3 - page 7, line 30 * * figures 1-3 * -----	1,2	
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			F21V
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 8 July 1994	Examiner De Mas, A
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			