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(54) **Luminaire**

(57) The luminaire has a housing (1) of C-shaped cross-section in which laterally of the light-emission window (5) channel-shaped spaces (6) are present. Circuitry (10) for operating a lamp (1) is accommodated in a channel-shaped metal holder (13), which has a bottom (13), walls (14) and transitional portions (15) connecting these, which are at an angle to the bottom (13) as well as to the walls (14). A bracket is fixed to the holder (11) in a clamping manner in that the transitional

portions (15) are held in respective incisions (22,23) in the bracket. The bracket (20) allows for mounting the circuitry (10) in a channel-shaped space (6) of the housing (1), while nevertheless the connection (21) of the holder (11) to the housing (1), laterally of the holder (11), can be made and is accessible through the light emission window (5) of the housing (1).

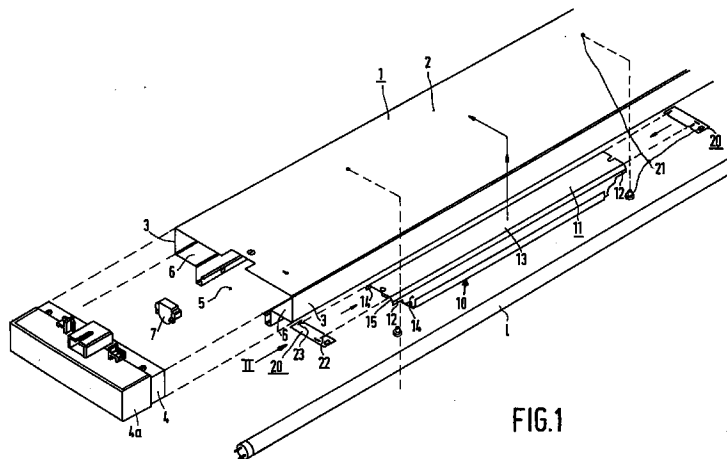


FIG.1

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Description

The invention relates to a luminaire comprising:

a housing with a base and connected thereto mutually opposed first and mutually opposed second walls, the first walls being bent towards one another at a distance from the base so as to bound a light emission window together with the second walls and so as to form a channel-shaped space on either side of the light emission window;

a circuitry unit for the electric supply of an electric lamp, which circuitry unit is fixed in one of said channel-shaped spaces;

a lampholder in the housing for accommodating an electric lamp in front of the light emission window and for connecting said lamp electrically to the circuitry unit,

the circuitry unit being accommodated in a channel-shaped holder with end portions, which holder is formed from metal plating and has a bottom and walls perpendicular thereto and connected to the bottom via transitional portions which enclose an angle with the bottom and with the walls.

Such a luminaire is known from EP-B-0 241 074.

It is important to give luminaires a small constructional height. To achieve this, means for operating the lamp or lamps such as a supply unit, such as, for example, a ballast, are preferably accommodated in the luminaire in a space laterally of the lamp space. Such commercially available devices, however, are usually so designed, as also in the case of the known luminaire, that the means for fastening them to a housing, such as screws, are applied to a location of the bottom between the walls. Given a compact construction of the luminaire, however, this location is often difficult to reach through the light emission window with a tool, or indeed not at all.

In the known luminaire, a frame is present in the housing to which the circuitry unit is fastened before the frame is enclosed in the housing. A disadvantage of this is that the luminaire must be fully dismantled for the replacement of a defective circuitry unit. In addition, a frame requires additional mounting steps.

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 possible an easy mounting and, if necessary, replacement of the circuitry unit.

According to the invention, this object is achieved in that the holder is connected with clamping force at at least one end portion to a metal bracket which extends to laterally of the holder and has a fastening to the housing there.

Owing to the measure according to the invention, the circuitry unit can be accommodated wholly or mainly in a channel-shaped space while its fastening or fastenings is/are nevertheless realized laterally of the circuitry

unit and are thus accessible through the light emission window. The circuitry unit can accordingly be replaced without the luminaire being detached from its suspension points, for example at a ceiling, and without dismantling it. This would not be the case if the circuitry unit were fixed to the base from the outside, for example by means of screws through this base.

A fastening of the bracket to the holder of the circuitry unit with clamping force is attractive because of its simplicity. It is advantageous when the bracket is a substantially flat strip having parallel incisions in each of which a respective transitional portion is held with clamping fit. This bracket is particularly easy to apply in that it is passed over the holder. It is favorable then when the incisions each have a narrowing entrance so as to be self-locating. The bracket may be so dimensioned that it cuts into the material of the holder when being placed thereon, whereby a good electrical contact is realized and the circuitry unit is reliably grounded via the bracket.

The placement on the transitional portions means that the bracket can fit only in one location, i.e. at one given distance to the bottom. This fact is utilized in an advantageous embodiment in that the bracket is caused to press against the bottom of the holder. The bracket is then at only a small distance from the base, i.e. at a distance equal to the material thickness of the holder. It is prevented thereby that the bracket has given the circuitry unit a strong tilt after the bracket has been fastened in the housing. If so desired, the bracket may have a rim flanged towards the housing or a bulge with a height of approximately the material thickness of the holder at an end adjacent the fastening to the housing. Tilting is effectively counteracted thereby.

It is favorable when the bracket has a bulge in the extended direction of an incision situated adjacent the fastening. This renders the bracket more resistant to bending in situ and renders the use of a narrower bracket and/or a bracket of thinner material possible. It is favorable then when the bulge has a height which is smaller than the material thickness of the bottom. The bulge will then lie clear of the housing, irrespective of the direction of the bulge.

It is favorable for a rigid fastening when the two end portions of the holder are each connected to a respective bracket with clamping force. The ease of manufacture of the luminaire and its logistics are served by the fact that the brackets can be identical.

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

Fig. 1 is an exploded view of the luminaire;

Fig. 2 shows the luminaire of Fig. 1 taken on the line II; and

Fig. 3 shows the luminaire of Fig. 2 taken on the line III.

In Fig. 1, the luminaire has a housing 1 with a base 2 and connected thereto mutually opposed integral first

walls 3 and mutually opposed assembled second walls 4, the first walls 3 being bent towards one another at a distance from the base 2 so as to bound a light emission window 5 together with the second walls 4 and to form a channel-shaped space 6 in the housing on either side of the light emission window.

A circuitry unit 10 for the high-frequency electric supply of an electric lamp is designed to be fixed in one of said channel-shaped spaces 6. A lampholder 7 is present in the housing for accommodating an electric lamp 1 in front of the light emission window 5 and connect this lamp electrically to the unit 10. The unit 10 is accommodated in a channel-shaped holder 11 with end portions 12. The holder 11 is formed from metal plating and has a bottom 13 and perpendicular thereto walls 14 which are connected to the bottom 13 via transitional portions 15 which enclose an angle with the bottom 13 and with the walls 14. The second walls 4 have a technical function, such as supporting a lampholder 7. They are each covered by a cap 4a in the finished luminaire.

The holder 11 is connected at at least one end portion 12, see Figs. 2 and 3, with clamping force to a metal bracket 20 which extends to laterally of the holder 11 and has a fastening 21 to the housing 1 there. The fastening 21 in Fig. 1 is a screw which is inserted through an opening in the bracket 20 into a hole in the base 2 and tightened.

The bracket 20 is a substantially flat strip having parallel incisions 22, 23, see also Fig. 3, in each of which a respective transitional portion 15 is held with clamping force.

The bracket 20 presses against the bottom 13 of the holder 11, see Fig. 2.

The bracket has a bulge 24, see also Figs. 2 and 3, which lies in the extended direction of an incision 22 situated adjacent the fastening 21.

The bulge 21 has a height which is smaller than the material thickness of the bottom 13, see Fig. 2.

A bracket 20 is present for each of the two end portions 12 of the holder 11 in Fig. 1. The brackets 20 are identical and, because of their simplicity, inexpensive.

Claims

1. A luminaire comprising:

a housing (1) with a base (2) and connected thereto mutually opposed first (3) and mutually opposed second walls (4), the first walls (3) being bent towards one another at a distance from the base (2) so as to bound a light emission window (5) together with the second walls (4) and so as to form a channel-shaped space (6) on either side of the light emission window; a circuitry unit (10) for the electric supply of an electric lamp, which circuitry unit is fixed in one of said channel-shaped spaces (6); a lampholder (7) in the housing for accommodating an electric lamp in front of the light emis-

sion window (5) and for connecting said lamp electrically to the circuitry unit (10),

the circuitry unit (10) being accommodated in a channel-shaped holder (11) with end portions (12), which holder (11) is formed from metal plating and has a bottom (13) and walls (14) perpendicular thereto and connected to the bottom (13) via transitional portions (15) which enclose an angle with the bottom (13) and with the walls (14),

characterized in that the holder (11) is connected with clamping force at at least one end portion (12) to a metal bracket (20) which extends to laterally of the holder (11) and has a fastening (21) to the housing (1) there.

2. A luminaire as claimed in Claim 1, characterized in that the bracket (20) is a substantially flat strip having parallel incisions (22, 23) in each of which a respective transitional portion (15) is held with clamping fit.
3. A luminaire as claimed in Claim 2, characterized in that the bracket (20) presses against the bottom (13) of the holder (11).
4. A luminaire as claimed in Claim 2 or 3, characterized in that the bracket has a bulge (24) in the extended direction of an incision (22) situated adjacent the fastening (21).
5. A luminaire as claimed in Claim 4, characterized in that the bulge (24) has a height smaller than the material thickness of the bottom (13).
6. A luminaire as claimed in any one or several of the preceding Claims, characterized in that the two end portions (12) of the holder (11) are each connected with clamping force to a respective bracket (20).
7. A luminaire as claimed in Claim 6, characterized in that the brackets (20) are identical.

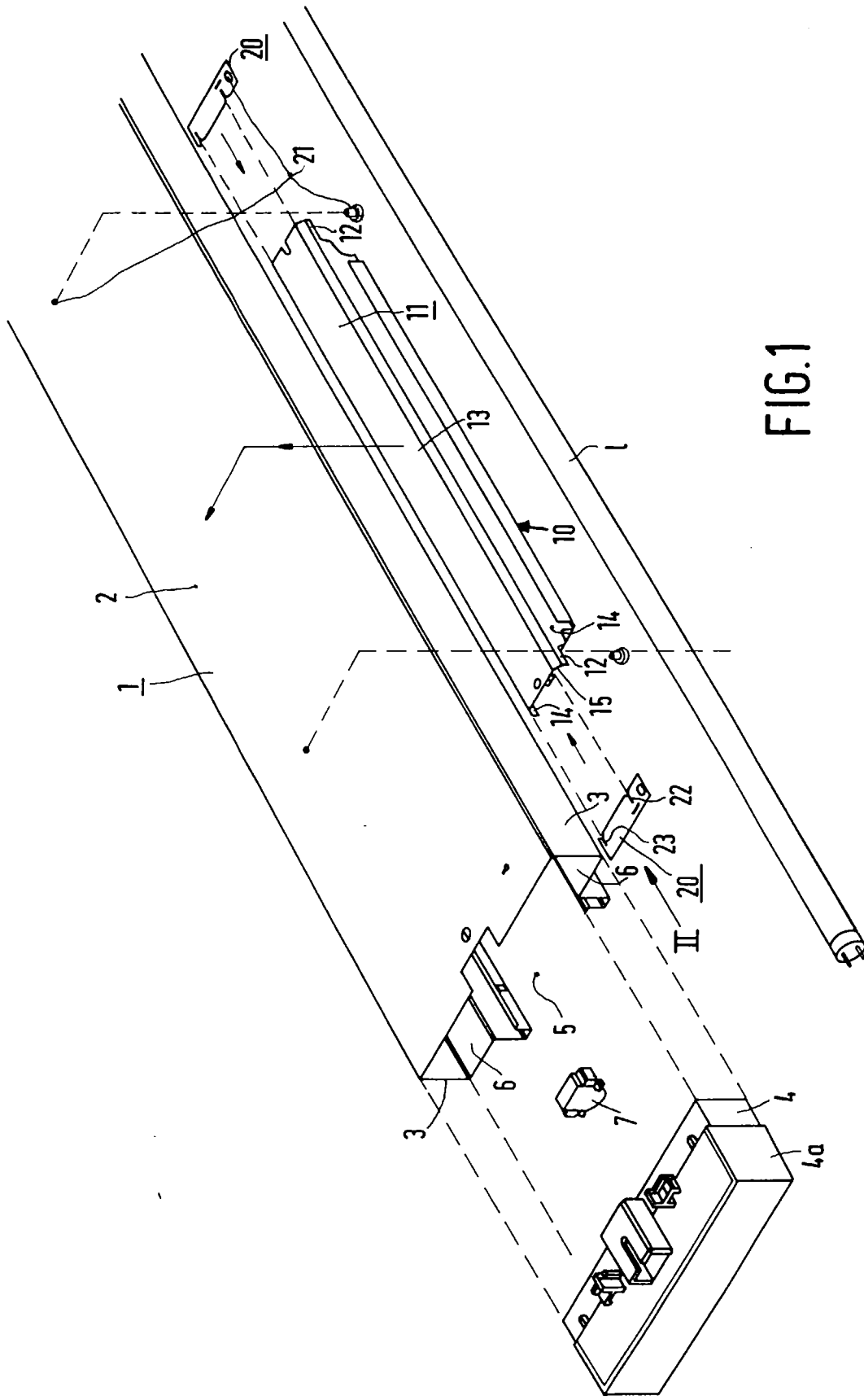
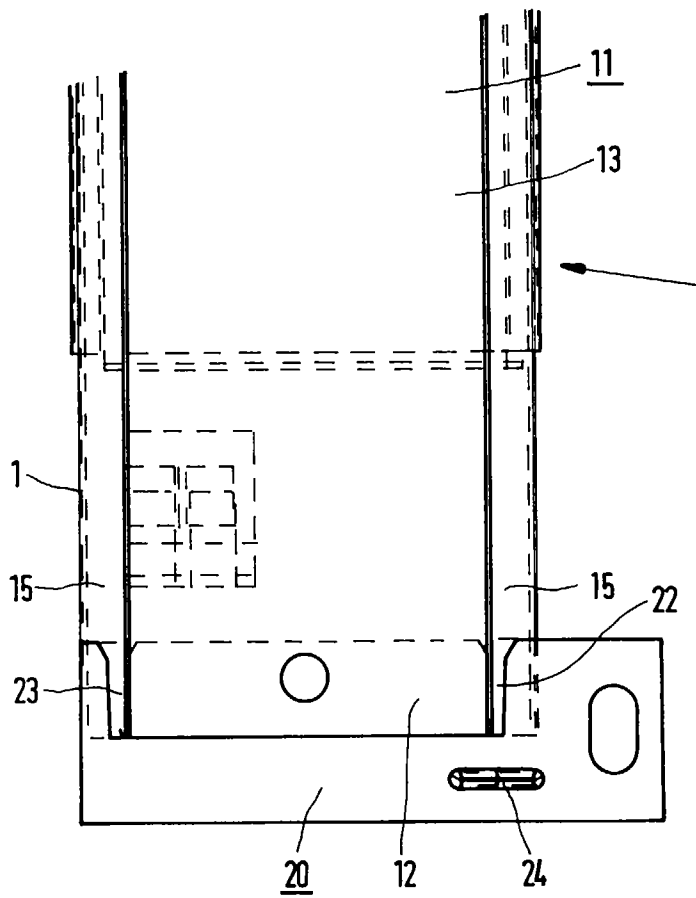
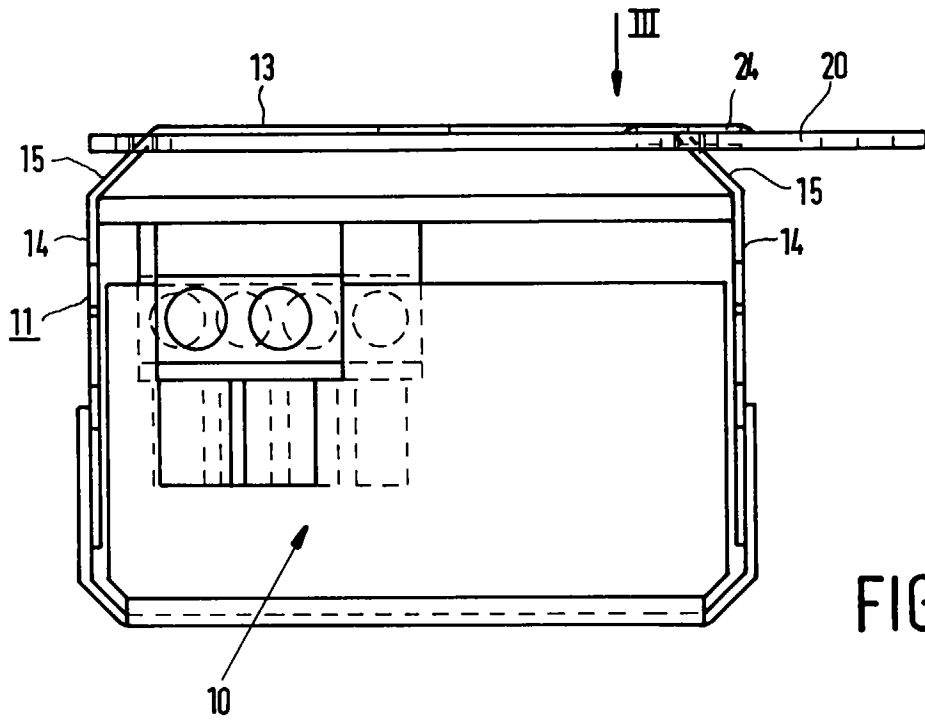


FIG.1





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EUROPEAN SEARCH REPORT

Application Number
EP 97 20 0984

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.6)
Y	DE 10 44 973 B (SIEMENS SCHUCKERT-WERKE AG) 27 November 1958 * column 4, line 34 - line 54; figures 4-7 *	1,3,6,7	F21S3/02
D,Y	--- EP 0 241 074 A (PHILIPS PATENTVERWALTUNG ; PHILIPS NV (NL)) 14 October 1987 * figure 1 *	1,3,6,7	
A	--- FR 2 122 501 A (GRECO FABBRICA ITALIANA APEARECCHI ILLUMINAZIONE S.P.A) 1 September 1972 * page 1, line 38 - page 2, line 13; figure 2 * -----	1	
The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (Int.Cl.6)
			F21S F21V
Place of search	Date of completion of the search	Examiner	
THE HAGUE	3 July 1997	Van Overbeeke, J	
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