



Europäisches Patentamt  
European Patent Office  
Office européen des brevets



(11) **EP 1 191 505 A1**

(12) **EUROPEAN PATENT APPLICATION**

(43) Date of publication:  
**27.03.2002 Bulletin 2002/13**

(51) Int Cl.7: **G09F 13/04**

(21) Application number: **01500233.0**

(22) Date of filing: **20.09.2001**

(84) Designated Contracting States:  
**AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU  
MC NL PT SE TR**  
Designated Extension States:  
**AL LT LV MK RO SI**

(71) Applicant: **Frasquet Palau, Vicente**  
**08029 Barcelona (ES)**

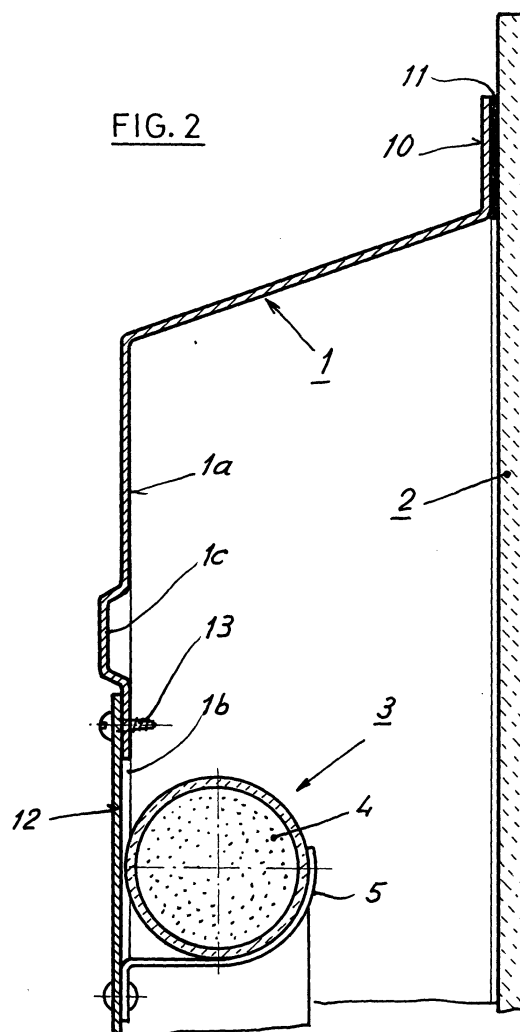
(72) Inventor: **Frasquet Palau, Vicente**  
**08029 Barcelona (ES)**

(30) Priority: **21.09.2000 ES 200002352**

(74) Representative: **Manresa Val, Manuel et al**  
**Rambla de Catalunya, 32,2o 2a**  
**08007 Barcelona (ES)**

(54) **An improved luminous sign**

(57) An improved luminous sign which is composed of a box (1) within which a luminous equipment (3) is installed, and at the opening of said box there is a cover (2) of a material which can, at least partly, allow the light to pass through it, in which are printed or marked the texts and/or drawings constituting an advertisement, which are quite conspicuous thanks to the light diffused by that equipment (3) and there exists in said box (1) an aperture eventually closed by a trap door (12), said trap door (12) being detachable in order to have access to said equipment (3) when it is convenient and in addition on said trap door (12) said luminous equipment has been installed.



## Description

**[0001]** This invention relates to an improved luminous sign and, namely, a sign of the type which is composed of a box within which a luminous equipment is installed, at same time the cover of that box is constituted by a translucent material plate which has the texts, drawings or graphics to be advertised on it, which are quite conspicuous thanks to the light diffused by that internal luminous equipment and with which significant advantages are reached with respect to the signs of this kind currently existing, namely when they have to be dismantled for intervening on said luminous equipment.

**[0002]** In fact, mentioned signs are well-known in which cover there is the texts and/or graphics to be advertised is joined to the box itself by means of a series of appendages, flanges, mechanical fixtures which of course are an hindrance for taking said cover apart for intervening within said box.

**[0003]** This is quite obvious in the event of a failure of some component of said internal luminous equipment, for this the sign has to be dismantled for repairing or replacing the component which failed with subsequent bother that means.

**[0004]** This drawbacks is overcome with this improved luminous sign in which said cover bearing the texts and/or graphics to be advertised is joined to the opening of its box by means of an adhesive, and in which corresponding luminous equipment is mounted on a trap door which can be taken apart from the bottom of the box itself; in the event of a failure of some of the components of that equipment, it is only the trap door supporting the luminous equipment which has to be removed, then repair the defective component and newly mount said trap door, without having to disassemble the cover bearing the advertisement which, as it has been presently checked, is of course an enormous and boring operation, all of its as it will be seen in details through the description below.

**[0005]** On the other hand, a visual perception is also achieved which is clear and perfect, without any external joining element (screws, profiles, rivets, etc.) to be seen, achieving a fully novel effect in the sector in which this invention is focused.

**[0006]** For best understanding the description two sheets of drawings are attached for non limiting example purpose, in which:

Fig. 1 illustrates a front elevation view of the sign involved, partly open for showing its internal organisation.

And Fig. 2 is a longitudinal section of same sign through cutting plane II-II of preceding Fig. 1.

**[0007]** According to that figures, (Fig.1) the improved luminous sign object of this invention is basically composed of a box 1 and a cover 2.

**[0008]** Box 1 which although it has been illustrated

with an oval outline can have any other outline, for example circular or polygonal, contains the luminous equipment 3 formed, in the case of the drawings attached, by a toric fluorescent tube 4 attached by means of a fastener 5 and with corresponding starter 6 and ballast 7, all of them connected to each other and with the external mains 8 in a conventional way.

**[0009]** Cover 2, on its hand, is constituted of a translucent material plate where are marked or printed with some known means, the texts, graphics or drawings to be advertised 9. Said cover 2 can also be plain or moulded, with some embossment, if the drawing requires it so.

**[0010]** It must be pointed out in the sign object of this invention (Fig.2) the fact that the edge of the opening of box 1 shows a perimetric flange 10, said perimetric flange 10 serving as a seat for an adhesive 11 on which it will stay tightly and permanently joined to said cover 2.

**[0011]** It will also be noted that the bottom 1a of said box 1 shows a large aperture 1b eventually closed by a trap door 12 bearing the luminous equipment disclosed 3 and secured on the bottom of the box 1 by means of screws 13. There exists, surrounding said aperture 1b, a not too deep groove 1c having holes 14 through it, each having two different widths, and of a known kind, designed to pass through them the head of a corresponding screw (not shown) and to hang the assembly of the sign from a wall (not seen).

**[0012]** Again referring to said perimetric flange 10, it must be stated that although it has been illustrated outwardly folded in the drawings attached, it is obvious that it could also be directed inwardly the box 1, but anyways, it will remain within same ideal plane designed to apply said cover 2 to it. In addition, flange 10 may be continuous or discontinuous.

**[0013]** It is obvious that with the organisation disclosed, in the event of a failure of the luminous equipment 3 it will only be necessary to take the sign down and open said trap door 12 close to which said equipment 3 will be accessible to proceed to repair it.

**[0014]** A case of embodiment having been broadly disclosed and illustrated, it is stated that this sign can be produced with more convenient materials, with a more suitable size and with means more fit, all of it being comprised within the spirit of following claims.

## Claims

1. An improved luminous sign of the type which is basically composed of a box (1) within which a luminous equipment (3) is installed and at the opening of said box there is a cover (2) of a material which can on one hand, allow the light pass through it, and on which are marked or printed texts and/or graphics (9) constituting an advertisement, which are conspicuously visible thanks to the light diffused by that equipment (3) **characterized in that** on said box (1) exists an aperture (1b) eventually closed by

a trap door (12), said trap door (12) being detachable in order to allow the access to said equipment (3) when it is convenient and **in that** said luminous equipment (3) has been installed on said trap door (12).

5

2. An improved sign according to claim 1 **characterized in that** the edge of the opening of said box (1) shows a perimetric flange (10) serving as a seat for an adhesive (11) on which said cover (2) bearing the texts and/or graphics (9) to be advertised stays tightly and permanently joined. 10
3. An improved sign according to claim 2 **characterized in that** said aperture (1b) eventually closed by the trap door (12) is located on the bottom of said box (1) 15
4. An improved sign according to claim 2 **characterized in that** said aperture (1b) eventually closed by the trap door (12) is located on one side of said box (1). 20
5. An improved luminous sign according to claim 2 **characterized in that** said perimetric flange (10) is folded outwardly the box (1). 25
6. An improved luminous sign according to claim 2 **characterized in that** said perimetric flange (10) is folded inwardly the box (1). 30
7. An improved luminous sign according to claim 6 **characterized in that** said perimetric flange (10) is continuous. 35
8. An improved luminous sign according to claim 6 **characterized in that** said perimetric flange (10) is discontinuous. 40

45

50

55

60

65

FIG. 1

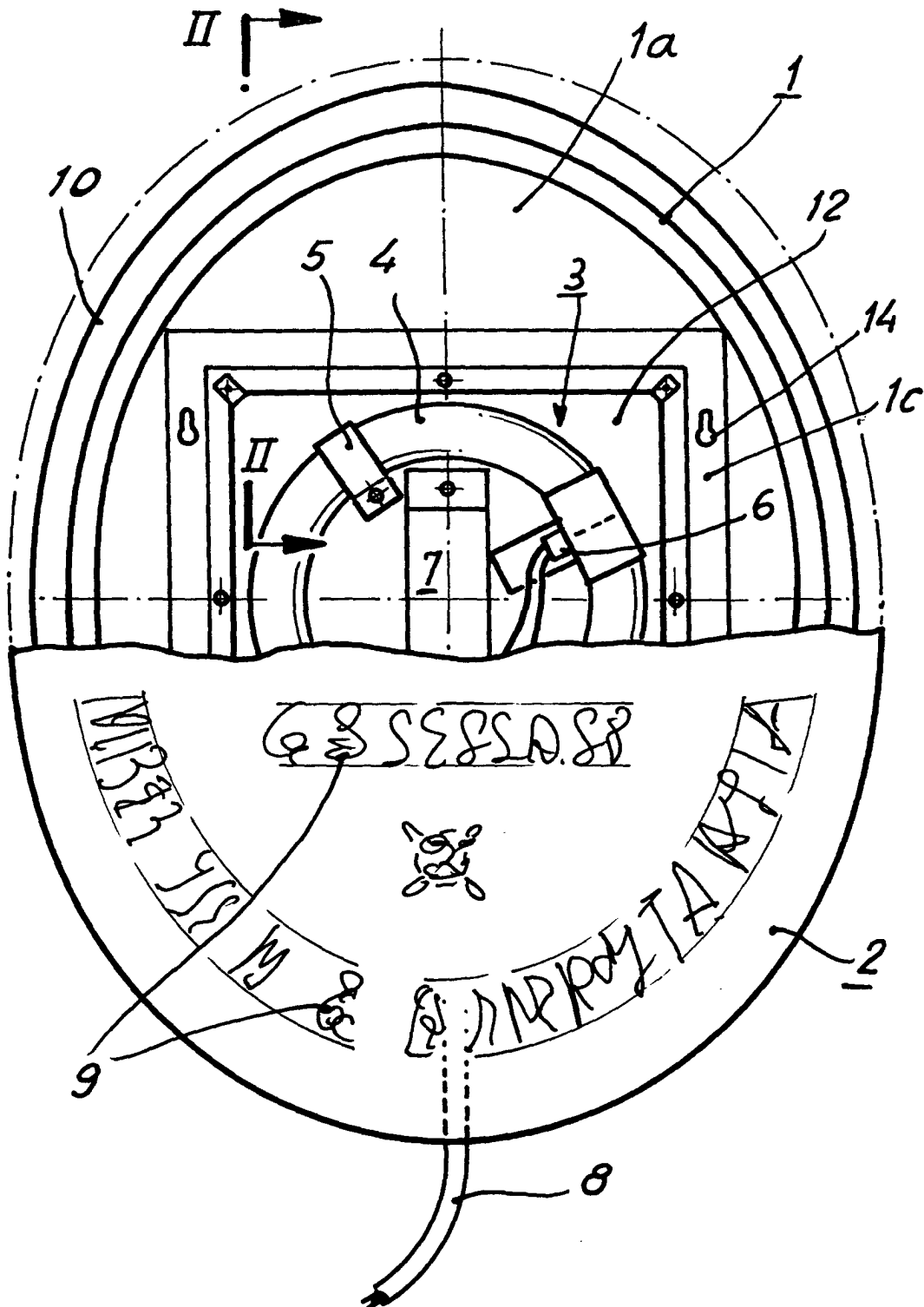
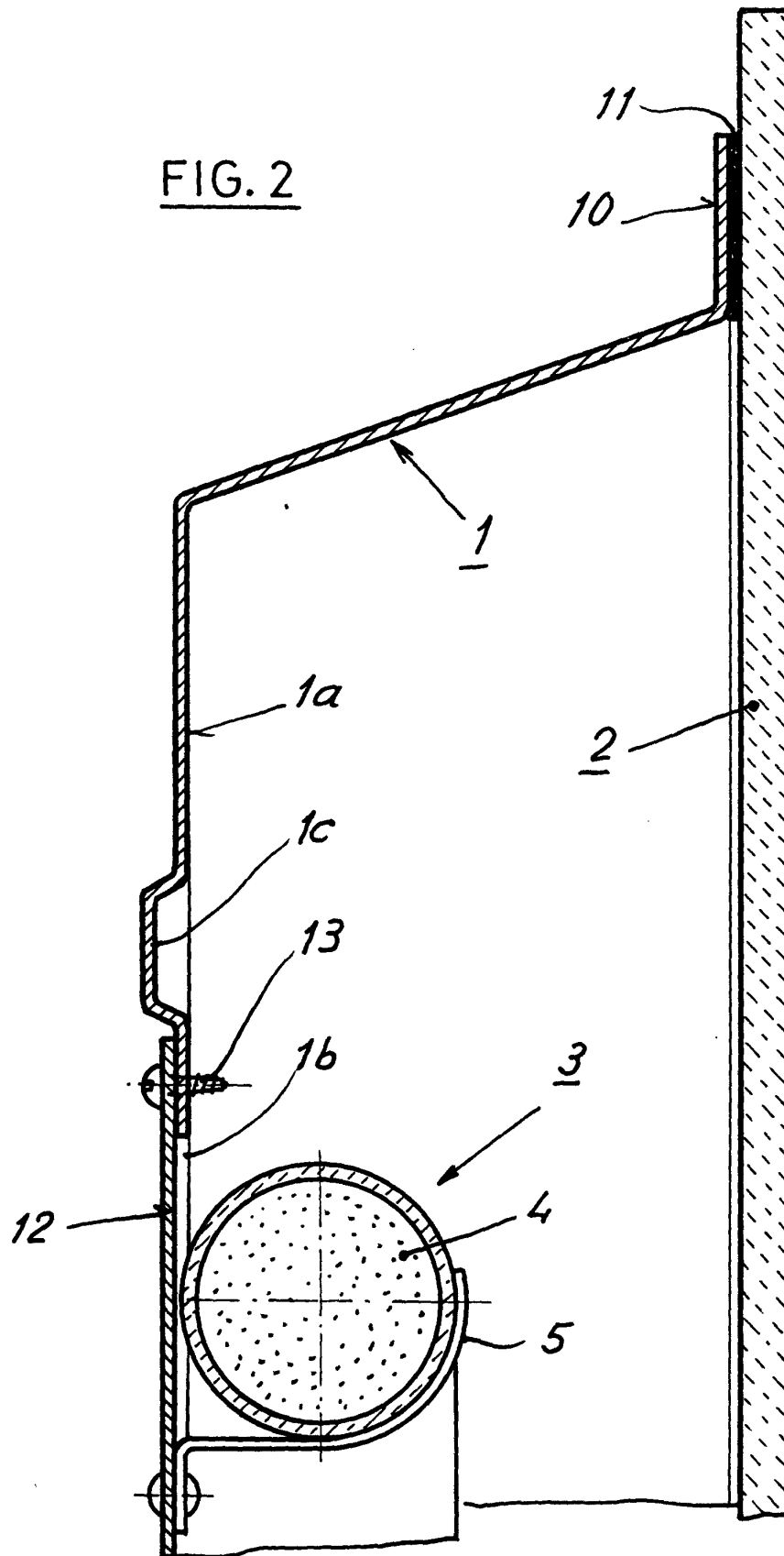


FIG. 2





European Patent  
Office

# EUROPEAN SEARCH REPORT

Application Number  
EP 01 50 0233

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.7)
Y	EP 0 337 902 A (INT CONCEPTION SYSTEMES ELECTR) 18 October 1989 (1989-10-18) * abstract; claims; figures *	1-8	G09F13/04
Y	GB 2 322 726 A (EDWARD PRYOR AND SON LIMITED) 2 September 1998 (1998-09-02) * abstract; figures *	1-8	
X	EP 0 303 568 A (GROSFO AG) 15 February 1989 (1989-02-15) * the whole document *	1	
X	FR 2 608 820 A (JEAN MARIE RICHARD) 24 June 1988 (1988-06-24) * abstract; figures *	1	
X	US 3 093 918 A (KOCH WALTER L ET AL) 18 June 1963 (1963-06-18) * column 4, line 22 - line 24; claims; figures *	1-8	
A	US 4 035 632 A (RAYMAN ROBERT R) 12 July 1977 (1977-07-12)		TECHNICAL FIELDS SEARCHED (Int.Cl.7)
A	WO 96 32707 A (HATEM TRIKI) 17 October 1996 (1996-10-17)		G09F
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 November 2001	Examiner Gallo, G
<p>CATEGORY OF CITED DOCUMENTS</p> <p>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</p> <p>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 &amp; : member of the same patent family, corresponding document</p>			

EPO FORM 1503 03 B2 (P04001)

**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 01 50 0233

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

14-11-2001

Patent document cited in search report		Publication date	Patent family member(s)		Publication date
EP 0337902	A	18-10-1989	FR	2629938 A1	13-10-1989
			EP	0337902 A1	18-10-1989
GB 2322726	A	02-09-1998	EP	0960415 A1	01-12-1999
			WO	9837537 A1	27-08-1998
EP 0303568	A	15-02-1989	CH	673345 A5	28-02-1990
			EP	0303568 A1	15-02-1989
FR 2608820	A	24-06-1988	FR	2608820 A1	24-06-1988
US 3093918	A	18-06-1963	NONE		
US 4035632	A	12-07-1977	NONE		
WO 9632707	A	17-10-1996	FR	2733074 A1	18-10-1996
			WO	9632707 A1	17-10-1996