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(12) # EUROPEAN PATENT APPLICATION

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(54) **Components for a lighting installation.**

(57) A terminal block 10 has two electrical terminal pins 16, 17 for plugging into a lamp holder 11 to make electrical contact with lamp contacts 20, 21. The terminal block 10 also has two electrically interconnected line terminals 12, 13 to facilitate electrical interconnection of two or more "live" electrical cables, as well as having an earthing terminal 14 and a neutral terminal 15.

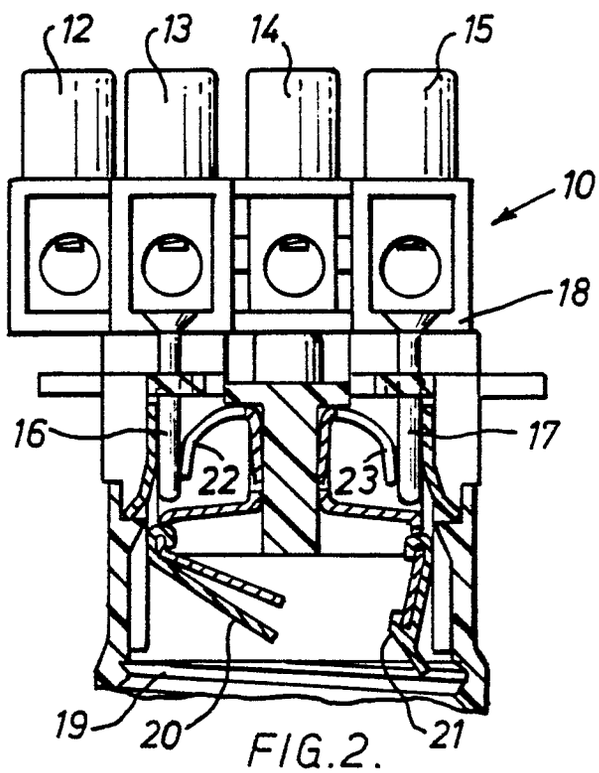

FIG.2.

EP 0 239 183 A1

COMPONENTS FOR A LIGHTING INSTALLATION

This invention relates to components for a lighting installation, one said component being a terminal block, another said component being a lamp holder.

According to one aspect of the present invention there are provided components for a lighting installation, one said component being a terminal block, another said component being a lamp holder, the terminal block comprising terminals for electric cables, the lamp holder comprising a receptacle for a lamp and two contacts to make electrical contact with the lamp, one of said components comprising two projecting electrical terminal pins for plugging into the other said component so as to make electrical connections between the two lamp contacts and at least two said cable terminals respectively.

The invention will be described by way of example with reference to the accompanying drawings, wherein:-

Figure 1 is a perspective view of a terminal block;

Figure 2 is a side elevation of the terminal block of Figure 1 plugged into a lamp holder, the lamp holder being shown broken away and in section;

Figure 3 is a plan view of the lamp holder of Figure 2; and

Figure 4 is a sectional side elevation of the lamp holder on line IV-IV of Figure 3.

Referring to the drawings, which illustrate components 10 and 11 for a lighting installation, one said component is a terminal block 10 whilst the other said component is a lamp holder 11. The terminal block 10 comprises four terminals 12-15 for electric cables (not shown). The terminals 12-(L1) and 13(L) may be electrically interconnected as a pair of terminals and are also electrically connected to a terminal pin 16 projecting downwardly thereof. Terminal 14 is an earthing terminal, whilst terminal 15 (N) is electrically connected to a second downwardly projecting pin 17. The terminals 12-15 and pins 16, 17 are mounted in an insulating block 18 of synthetic resin material.

If, as may well be the case, it is required to connect two or more "live" electric cables together at the terminal block 10, this is a relatively simple matter because of the provision of the two electrically interconnected terminals 12, 13.

The lamp holder 11 comprises a receptacle 19 for a lamp (not shown) and two contacts 20, 21 to make electrical contact with the lamp (which would be of Edison screw type) in well known manner. The lamp holder 11 is adapted as shown for the terminal pins 16 and 17 of the terminal block 10 to be plugged into the lamp holder 11 so as to make electrical connections between the lamp contact 20 and the cable terminals 12 and 13 on the one hand and between the lamp contact 21 and the cable terminal 15 on the other hand.

The two contacts may be used in conjunction with a terminal box or housing (not shown) adapted to house the terminal block 10 with the pins 16, 17 projecting through apertures in a base of the terminal box or housing. The lamp holder 11 may be adapted to be held to the terminal box or housing by two downwardly projecting spring clips of the teminal box or housing engaging suitable detents (not shown) of the lamp holder 11. Alternatively, the lamp holder 11 may be designed to be secured to the terminal box or housing by means of screws. In either case, it is a simple matter to electrically connect the terminal block 10 to the lamp holder 11 by simply plugging it in.

It will be appreciated from comparing Figures 2 and 4 that the lamp contacts 20 and 21 have spring contact portions 22 and 23 respectively which engage the sides of the terminal pins 16 and 17 and strongly resist subsequent disconnection of the terminal block 10 from the lamp holder 11, since the electrical interconnection between the two components 10 and 11 is intended to be permanent, once it has been made.

It will also be appreciated that the components 10 and 11 avoid the use of wires for electrically interconnecting the two components. The use of the terminal pins 16 and 17 instead of such wires greatly facilitates and speeds up installation of the components.

Claims

1. Components for a lighting installation, one said component being a terminal block (10), another said component being a lamp holder (11), the terminal block (10) comprising terminals (12-15) for electric cables, the lamp holder (11) comprising a receptacle (19) for a lamp and two contacts (20,21) to make electrical contact with the lamp, one of said components (10) comprising two projecting electrical terminal pins (16, 17) for plugging into the other said component (11) so as to make electrical connections between the two lamp contacts (20,21) and at least two said cable terminals (12,13,15) respectively.

2. Components for a lighting installation according to claim 1 wherein the terminal block (10) is the component which comprises the two terminal pins (16,17).

3. Components for a lighting installation according to claim 1 or 2 wherein two of the terminals (12,13) are electrically interconnected as a pair of terminals.

4. Components for a lighting installation according to claim 1, 2 or 3 wherein the lamp holder (11) is for an Edison screw lamp.

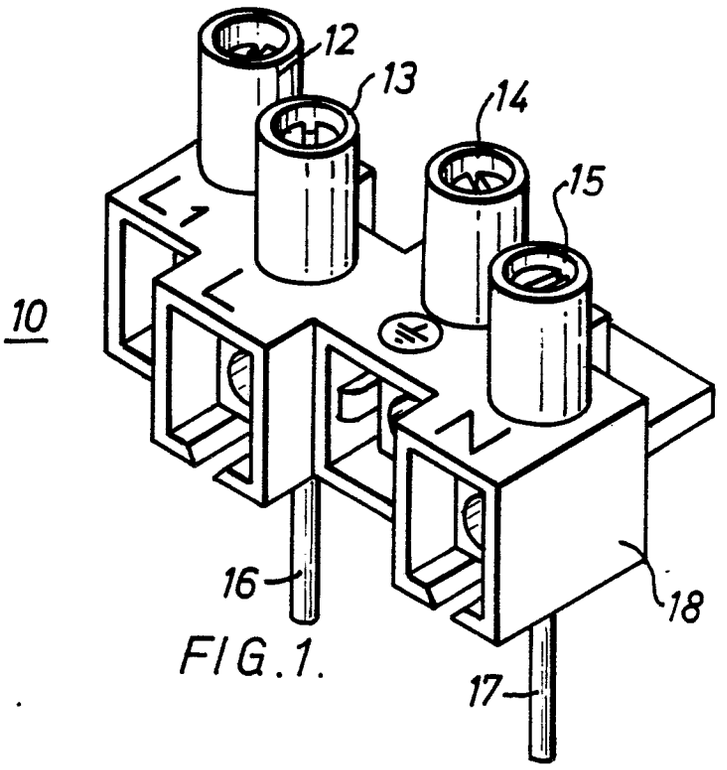

FIG.1.

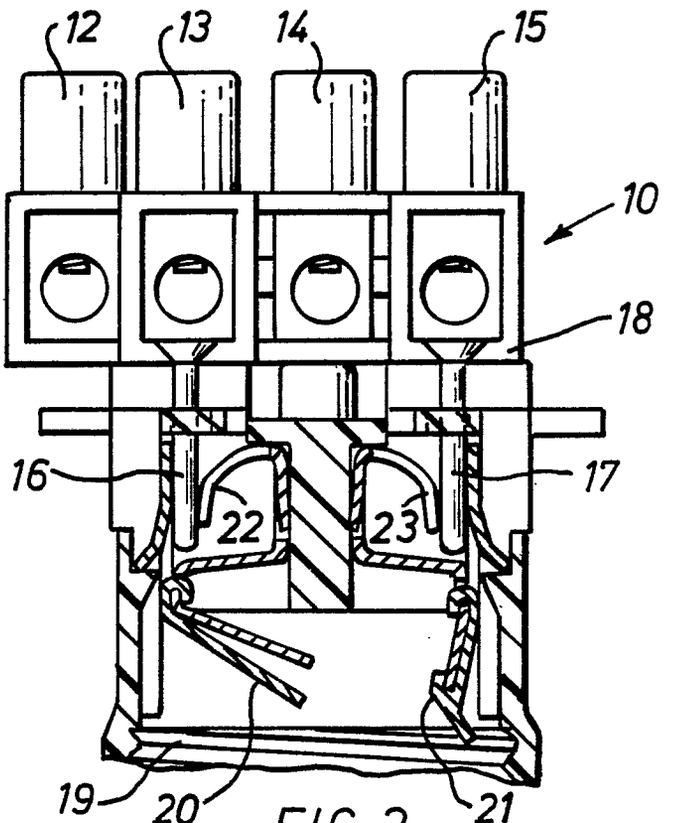

FIG.2.

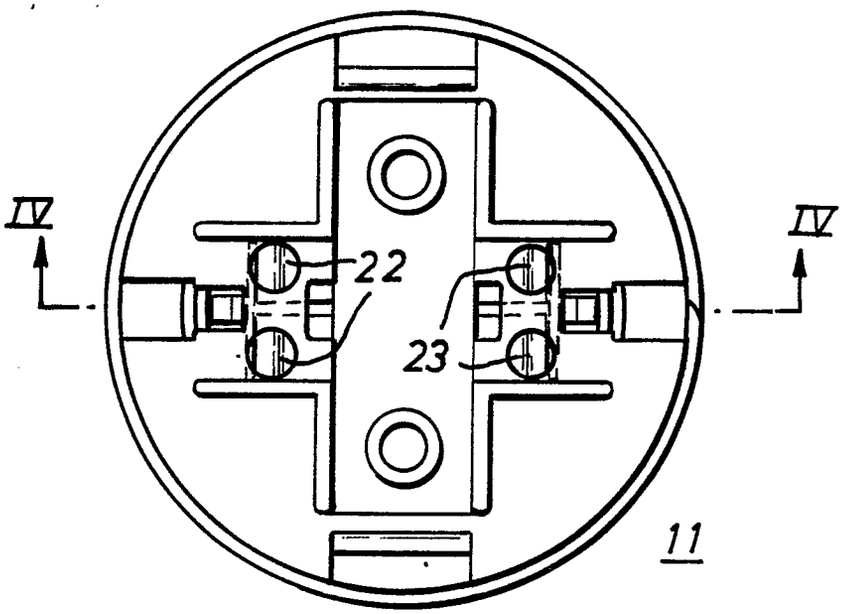

FIG.3.

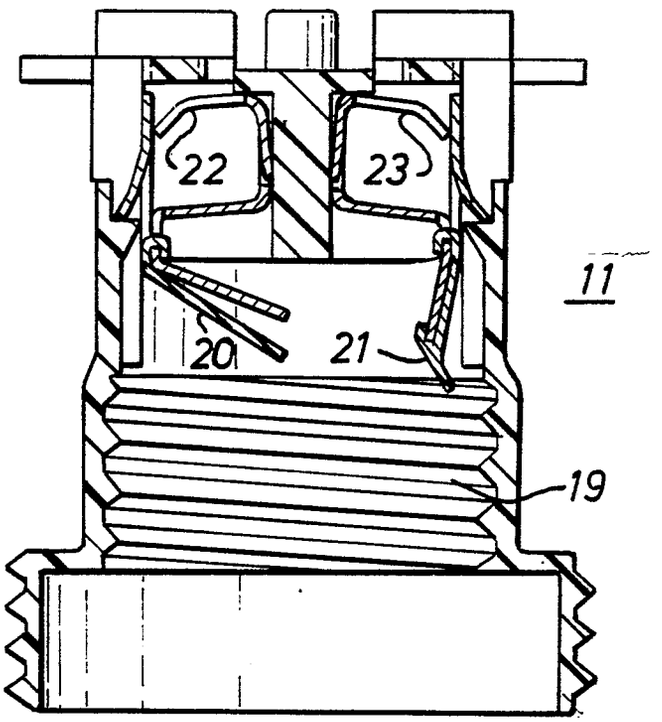

FIG.4.

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EUROPEAN SEARCH REPORT

Application number

EP 87 30 0390

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.4)
X	DE-C-1 130 073 (SIEMENS) * column 4, lines 62-66; figures 1-11 *	1	H 01 R 33/22
A	DE-U-7 436 617 (PISTOR & KRÖNERT) * page 13, lines 5-23; figures 1,3 *	1,4	
A	DE-B-1 127 979 (CONTINENTAL ELEKTROINDUSTRIE) * column 3, line 63 - column 4, Zeile 2 *	2	

TECHNICAL FIELDS SEARCHED (Int. Cl.4)

H 01 R 33/00
H 01 R 9/00
F 21 V 23/00

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
BERLIN	28-04-1987	LEOUFFRE M.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
Y : particularly relevant if combined with another document of the same category
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E : earlier patent document, but published on, or after the filing date
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