

(12) UK Patent Application (19) GB (11) 2 175 461 A

(43) Application published 26 Nov 1986

(21) Application No 8611987
(22) Date of filing 16 May 1986
(30) Priority data
(31) 8512623 (32) 18 May 1985 (33) GB

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(51) INT CL⁴
H02G 3/08 H01R 13/46

(52) Domestic classification (Edition H):
H2E DLX

(56) Documents cited
GB A 2165101 GB 1175121 GB 0582272
GB 1476225 GB 0857667 GB 0531056
GB 1298758

(58) Field of search
H2E
Selected US specifications from IPC sub-classes H01R
H02G

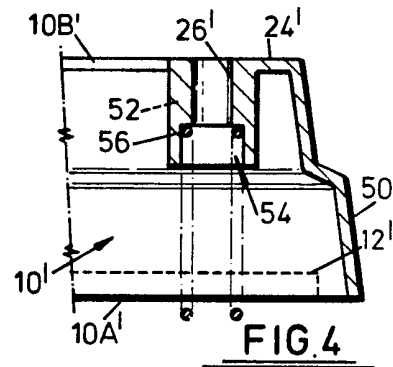
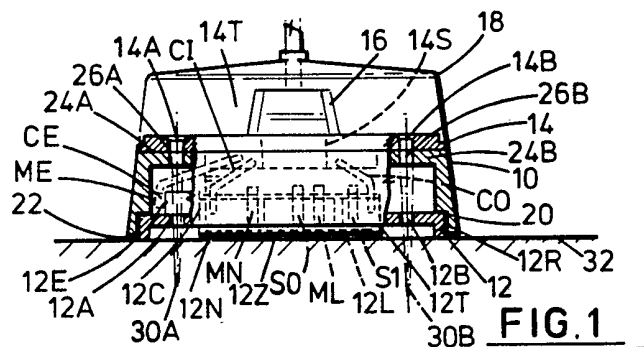
(54) Electrical accessory mounting

(57) An electrical accessory adaptor for mounting a socket connection where a ceiling rose or fittings with similar bases are already in place.

Said adaptor comprising a hollow member (10) open at opposed ends (10A, 10B) one end fitting on and/or over said base plate (12) and the other fitting to a socket device (14). Engagement of the adaptor with the base plate is conveniently by abutment of an inner ledge or ledges (20) of the adaptor on an edge portion of the base plate.

Alternatively, where the adaptor fits over the base plate, spring abutment means (56) is interposed between the adaptor and the base plate to hold the latter against the ceiling.

Screw fixing provisions for the adaptor are conveniently spaced to correspond to the screw fixing provisions of the base plate with the latter removed to afford fixing of the assembly by the fixing provisions of the adaptor.



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SPECIFICATION

Electrical accessory mounting

5 This invention relates to electrical accessory mounting and has particular reference to ceiling roses.

Conventional ceiling roses comprise a base carrying electrical connectors for incoming
10 mains wiring and outgoing appliance, usually lighting, feed cord, usually further permitting loop-in connections of mains wiring. The base interfits with a cover, usually via a screw thread; and through which cover the aforesaid
15 feed cord passes, usually via a central aperture. Removal of such a ceiling rose leaves bare mains wiring, and removal of the cover only often gives access to live wiring or terminals at least minimally even when made to
20 British patent no. 1331501 and meeting test finger requirements.

We have recently made proposals, see our British patent specification no. 2139433A, for a different and safer connection system including socket devices in place of said ceiling rose
25 bases and plug devices in place of said cover, or additional to a cover. It is an object of this invention to further facilitate the installation of such socket devices, or functionally equivalent devices, where ceiling roses or fittings with
30 similar bases are already in place.

According to this invention, an adaptor is provided for an electrical accessory base or plate normally carrying input mains wiring and
35 output cord connections, the adaptor comprising a hollow member open at opposed ends one fitting on and/or over said base-plate and the other fitting to a further electrical accessory. Engagement of the adaptor member with
40 said base plate can conveniently be by abutment of an inner ledge or ledges of the former on an edge-adjacent portion or portions of the latter or by spring abutment means where the adaptor is dimensioned to surround
45 the base plate.

As applied to a ceiling connection accessory of our aforesaid safer connection system, the said member conveniently stands a socket plate off from said baseplate by an amount
50 sufficient to house any rearward extension of the socket unit of the socket plate safely above said base plate, and for required wiring, which may be of mains wiring disconnected from connection provisions of said base plate
55 and reconnected to the socket unit of the socket plate, or, and more generally, of tails connected therebetween which tails may be purpose cut, even prewired, or formed from wires of any cord already attached to said
60 base plate.

Again referring to preferred ceiling connection accessories, same includes the above-mentioned socket plate essentially as a flat circular plate with its socket unit secured into
65 a substantially central aperture to present its

socket entries substantially flush with the outer surface of the socket plate, a plug unit with projecting connection pins in a housing smaller than the socket plate and conveniently
70 having an insert-and-slide action relative to said socket entries, and a centrally apertured cover fitting to the socket plate over the plug housing. For obvious reasons including compatibility with mains outlet boxes, such a socket
75 plate will have screw mounting holes at standard positions also corresponding to those of said base-plate and it is preferred herein for the adaptor member hereof to have inwardly projecting ears also apertured for screw passage at the same standard positions, in which
80 case it will be appreciated that affixment of an adaptor member and socket plate can be screws fitting therethrough and through said base plate, say simply by removing existing fixing screws of the latter for replacement by
85 suitably longer screws.

It is a further preferred feature hereof that our adaptor member can serve the alternative purpose of a plinth for surface mounting of a
90 socket plate directly to a surface, usually a ceiling, i.e. where installed as original accessory equipment or with removal of existing ceiling rose bases.

A continuous taper from socket-plate adjacent walls of the cover through the adaptor unit to the mounting surface is preferred both for moulding convenience and for final eye-appeal.

The present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a schematic partly sectional elevation of an adaptor member 10 hereof relative to an existing ceiling rose base-plate 12 and a socket plate 14 with associated housed
105 plug unit 16 and cover 18;

Figures 2 and 3 are bottom and sectional views of one embodiment of the adaptor member 10 alone; and

110 *Figure 4* is a fragmentary sectional view of an alternative embodiment of adaptor and a spring for abutment with the base-plate.

Referring further to the drawings of Figs. 1 to 3, the adaptor member 10 is of hollow tubular form of generally circular tapering section, i.e. of frusto-conical shape open at both of its opposite ends 10A and 10B. One of those ends, shown as the larger end 10A has an inwardly extending ledge 20, actually
120 formed as a rebate from its rim 22, to engage on the edge adjacent portion of rim 12R of the ceiling rose base-plate 12. The other end of the adaptor member 10, see 10B, is shown simply butting up to the inner surface
125 14I of the socket plate 14. Additionally, the adaptor member 10 has inwardly extending ears 24A, 24B having apertures 26A, 26B at standard spacings corresponding to electrical outlet box (not shown) requirements. The ears
130 24A, 24B are shown at a particularly conve-

nient location flush with end 10B of the adaptor member 10 but could be at different positions in the height of that member so long as there is no fouling of any formations or connection provisions associated with the base-plate 12.

The ceiling rose base-plate 12 is indicated by dashed lines in Fig. 1 as being of the type conforming generally to British patent no.

1331501 in having a trough 12T carrying a set of live, neutral and loop-in connection blocks 12L, 12N, 12Z in a cover 12C suitably apertured for making connections thereto for mains (ML, MN), switching (SO, S1), and for use of an appliance cord (CI, CO). An earth connection is also indicated at 12E for making connections (ME, CE). The connections CI, CO and CE for the purposes hereof are actually taken to appropriate connections of a socket unit 14S fixed on the socket plate 14, and could be either purpose-cut tails or formed from an existing cord after removal of the normal cover (not shown) for the ceiling rose base-plate 12.

Sides of Fig. 1 are shown cut-away to centre lines in order to show positional congruence of the standard hole positions 26A, 26B with holes 12A, 12B in the base plate 12 and holes 14A, 14B in the socket plate 14. Screws 30A, 30B therethrough will attach all three items together to a mounting surface 32, usually a ceiling, and may do so most conveniently as replacements for shorter screws originally fixing the base-plate 12.

The height of the adaptor member 10 is shown adequate to house rearward projection of the socket unit 14S of the socket plate without danger of fouling any part of the base-plate 12 or its associated connection parts, and also to afford room for necessary wiring, see CI, CO, CE.

It is believed to be self-evident how to use the adaptor member 10 hereof in order to convert standard ceiling rose accessories to the plug-socket type accessories of our preferred safer connection system, also that the adaptor member 10 is readily capable of serving simply as a plinth for a socket plate of that preferred system.

Whether or not in the interests of contributing to universability of application of adaptors hereof to as many types and makes of ceiling rose as possible, and at least to doing so without resorting to undue depth, it is further envisaged that the end 10A may be fitted relative to, usually, abut on, a halo affixable to the original ceiling rose, thereby coping with ceiling rose bases of greater than average depth.

Referring now to Fig. 4, there is shown a modified embodiment of adaptor 10', typically for fitting over an existing ceiling rose, base plate, i.e. surrounding the periphery thereof and not in direct abutment therewith as in the aforesaid embodiment. The adaptor has

a generally frusto conical shape, being preferably stepped as illustrated so that the portion 50 is dimensioned to fit over as many types of ceiling rose base plate as possible. Such a base plate is shown dotted at 12'. The adaptor is provided with inwardly extending ears 24' (only one illustrated) which have tubular extensions 52 therefrom, extending from the end 10B' towards the end 10A'. The tubular extension has a bore 26' for accommodating screw fixing provisions as described previously, and conveniently cocentric therewith a counterbore 54 to receive spring means 56 surrounding the screw fixing provisions. In fitting of the adaptor, the screws locating the ceiling rose base plate are removed and the adaptor placed over the base plate. The springs located in the tubular extensions serve to hold the base plate up to the ceiling whilst the adaptor and any socket plate used therewith is secured in position by fitting screws through the holes 26' and those of the base plate. The end 10A' being brought into abutment with the ceiling. The described adaptor is otherwise similar to the previously described embodiment and may be used as a plinth for a socket plate i.e. without a ceiling rose base plate.

95 CLAIMS

1. An adaptor for an electrical accessory base or plate normally carrying input mains wiring and output cord connections, the adaptor comprising a hollow member open at opposed ends one fitting on and/or over said baseplate and the other fitting to a further electrical accessory.

2. An adaptor as claimed in claim 1 in which engagement of the adaptor member with said base plate is by abutment of an inner ledge or ledges of the adaptor on an edge-adjacent portion or portions of the said base plate.

3. An adaptor as claimed in claim 1 in which engagement of the adaptor member with said base plate is by spring abutment means.

4. An adaptor as claimed in any of claims 1, 2 or 3 in which the adaptor member has an inwardly projecting flange or ears accommodating screw mounting holes or a respective screw mounting hole.

5. An adaptor as claimed in claim 4 in which the screw mounting holes are at standard positions corresponding to those of said base plate.

6. An adaptor as claimed in claim 4 or 5, when appendent to claim 3 in which the member has a tubular extension surrounding each said screw mounting hole, which extension has a bore receiving a spring of said spring abutment means to abut with said base plate for location thereof.

7. An adaptor as claimed in any of the preceding claims in which said member stands

a socket plate off from said base-plate by an amount sufficient to house any rearward extension of the socket unit of the socket plate safely above said base plate, and for required

5 wiring.

8. An adaptor as claimed in claim 7 in which the required wiring is mains wiring disconnected from connection provisions of said base plate and reconnected to the socket unit

10 of the socket plate.

9. An adaptor as claimed in claim 7 in which the required wiring comprises tails connected between the connection provisions of said base plate and connections of the socket

15 unit.

10. An adaptor constructed and arranged substantially as hereinbefore described with reference to and as illustrated in the accompanying drawings.

Printed in the United Kingdom for
Her Majesty's Stationery Office, Dd 8818935, 1986, 4235.
Published at The Patent Office, 25 Southampton Buildings,
London, WC2A 1AY, from which copies may be obtained.