

[54] LAMP HOLDER

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[58] Field of Search339/50, 88 R, 176 L, 180, 181, 339/188, 17 D, 49, 217

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[57]

ABSTRACT

A base for a lamp socket, comprising a floor having an up-standing wall defining a lamp base receptacle, a portion of the wall having a slot to receive a forward part of an electrical contact, and a bridge spaced from the lamp socket receptacle supported on the floor for holding a rearward part of the electrical contact.

1 Claims, 4 Drawing Figures

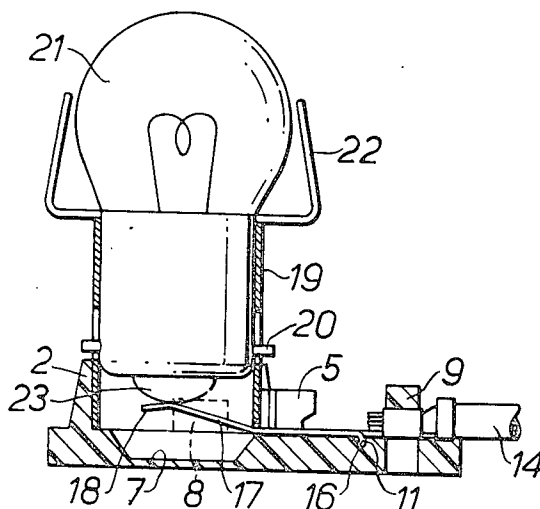


FIG. 1.

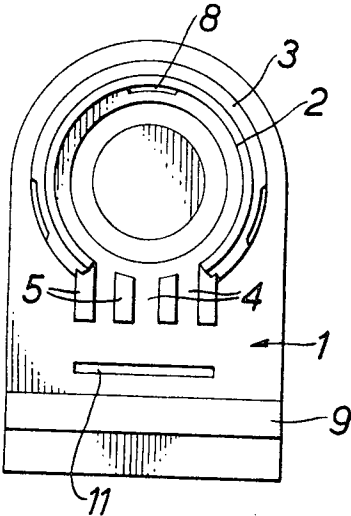


FIG. 2.

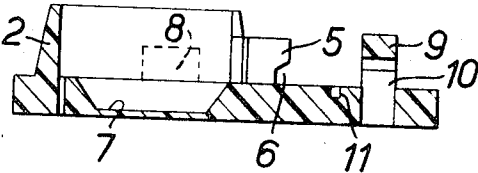


FIG. 3.

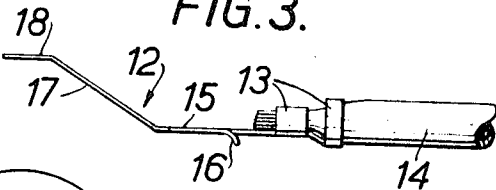
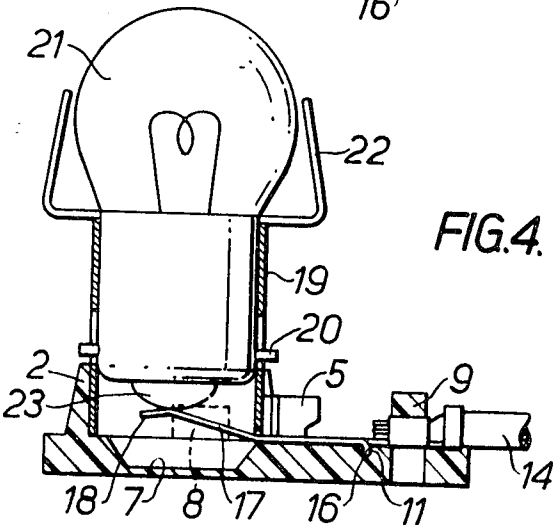


FIG. 4.



LAMP HOLDER

This invention relates to a base for a lamp socket and to a lamp socket incorporating such a base.

A base for a lamp socket, according to this invention, comprises a floor having an upstanding wall defining a lamp socket receptacle, the wall having a slot for receiving a forward portion of an electrical contact, and a bridge spaced from the lamp socket receptacle supported on the floor for holding a rearward portion of the electrical contact.

Preferably walls extend laterally of the slot towards the bridge and have undercut forward corners for engaging an intermediate portion of an electrical contact. Advantageously the inner surface of the lamp socket receptacle wall has notches for receiving projections on a tubular lamp socket having lamp-engaging means.

Preferably the floor has a channel intermediate the slotted portion of the wall and the bridge for receiving a tine extending from the electrical contact so that the contact can lie close to the floor.

This invention includes a lamp socket comprising a base of this invention, a lamp socket received in the lamp socket receptacle and a contact, the contact having a forward part extending into the lamp socket receptacle through the slot and a rearward part passing under the bridge.

This invention is described, by way of example, with reference to the accompanying diagrammatic drawings in which:

FIG. 1 is a top plan view of a base for a lamp socket;

FIG. 2 is a longitudinal sectional view of the base of FIG. 1;

FIG. 3 is a side view of a contact for the base of FIG. 1, crimped to an end of a wire; and

FIG. 4 is a view as FIG. 2 of a lamp socket including a lamp.

The base of FIG. 1 and 2 is moulded of polypropylene and comprises an elongate floor 1 having a rounded end and a straight end. Adjacent the rounded end the floor 1 has a generally circular upstanding wall defining a lamp socket receptacle 2. The outer rim of the wall is bevelled at 3. A portion of the wall has circumferentially spaced apart slots 4, three shown, which extend the height of the wall. Side walls 5 defining the slots 4 are extended in general parallel relation a short distance towards the straight end of the floor 1. The free end of the walls 5 remote from the wall 2 is obliquely undercut at 6, FIG. 2. The floor 1 of the lamp socket receptacle 2 is dished at 7 to receive the base 23 of a lamp 21, FIG. 4, and the inner surface of the wall has radially spaced apart recesses 8 extending to the floor 1 to receive latching projections of a lamp socket 19, FIG. 4. A bridge 9 is integrally supported on the floor 1 adjacent the straight end and lies in a direction generally tangential to the wall 2. The gap 10 between the underside of the bridge 9 and the floor 1 is dimensioned to engage the rearward end of an electrical contact 12, as explained below. Intermediate the bridge 9 and the lamp socket receptacle wall the floor 1 has a shallow closed-ended channel 11 generally parallel to the bridge 9.

A one piece contact 12 of FIG. 3, preferably of phosphor

bronze, has rearward crimping lugs 13 for crimping connection to an end of a wire 14. Forwardly of the lugs 13 and the contact 12 has a middle portion 15, generally oblong in plan, the rearward corners 16 of which are inclined downwardly. Forwardly of the middle portion 15 the contact 12 has a medial tongue portion 17 which is first inclined upwardly out of the plane of the middle portion 15 and then so inclined that the free end 18 lies generally parallel to but above the middle portion 15.

The lamp socket receptacle 2 receives a generally tubular metal lamp socket 19, FIG. 4, by engagement of latching projections of the socket 19 in the recesses 8 of the wall of the receptacle 2. The lamp socket 19 has J-slots in opposite side walls for receiving bayonet prongs 20 of a lamp 21. At its free end, the upper as shown in FIG. 4, the socket 19 has upstanding curved edge shields 22. The lugs 13 of a contact 12 are crimped to the end of a wire 14 and the contact passed through the gap 10 of the bridge 9 and between the side walls 5 to enter a slot 4 until the forward corners of the middle portion 15 are received in the undercut part 6 of the respective side walls 5 and the rearward corners 16 are received in the channel 11. The free end 18 of the tongue 17 then lies above the dished area 7 and the contact 12 is held in position by reception of the middle portion 15 in the undercut part 6 of the respective side walls 5, the downwardly inclined corners 16 in the channel 11 and the crimped lugs 13 in the gap 10 of the bridge 9.

On reception of the lamp 21 in the socket 19, the forward part 18 of a contact is electrically engaged by the base contact 23 of the lamp 21 and resiliently urged towards the floor 7.

The lamp socket is most advantageously used in an automotive vehicle where space is restricted or wiring runs tangential to the lamp. One slot 4, the center one, may be used for a single contact to illuminate a turn indicator light or the outer slots 4 may each receive a contact for a two filament lamp used as a combined stop and rear light. The bridge 9 may be arranged relative to the lamp socket receptacle 2 for receiving flag shaped contacts. The tubular lamp socket 19 may have end projections passed through through-holes in the floor 7 of the lamp socket receptacle 2 and then peened to the underside.

We claim:

1. A lamp assembly comprising a base, said base comprising a floor having an upstanding wall defining a lamp base receptacle, a portion of the wall having a slot to receive a forward part of an electrical contact, a bridge spaced from the lamp base receptacle supported on the floor for holding a rearward part of the electrical contact, a channel disposed in the floor between the lamp base receptacle and the bridge, a lamp socket received in the lamp base receptacle, and an electrical contact having a forward part extending through the slot in the lamp base receptacle, a rearward part disposed under the bridge, and an intermediate part having a lance received in the channel for locking the contact relative to the base.

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