United States Patent

Howe et al.

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[54] LAMPHOLDER

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[30] **Foreign Application Priority Data**

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[52] **U.S. Cl.** **240/152,** 240/52, 339/128

[51] **Int. Cl.** **F21v 17/00,** H02b 1/02

[58] **Field of Search** .....240/52, 152, 133, 143; 339/128, 127, 188, 59 L, 98 L; 174/151, 152, 153

[56] **References Cited**

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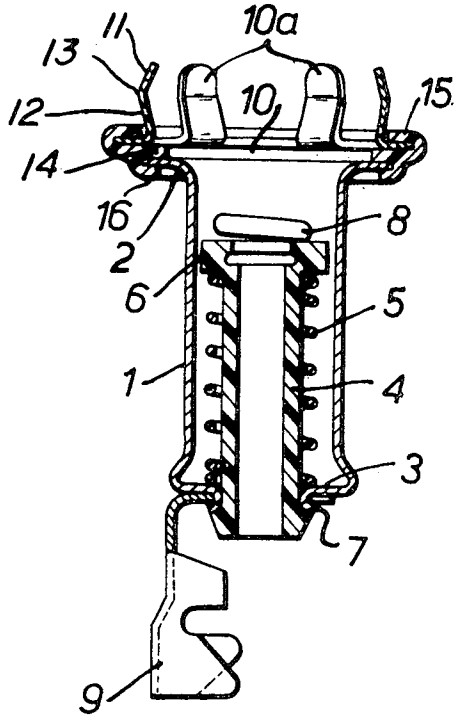
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[57] **ABSTRACT**

This invention comprises a lampholder including a hollow metal body defining a lamp base receiving cavity having a metal attaching ring secured to the open end by a one-piece molding of synthetic plastics secured to a flange on the body and the base of the attaching ring, the plastics molding serving to electrically insulate the metal ring from the metal body.

2 Claims, 4 Drawing Figures



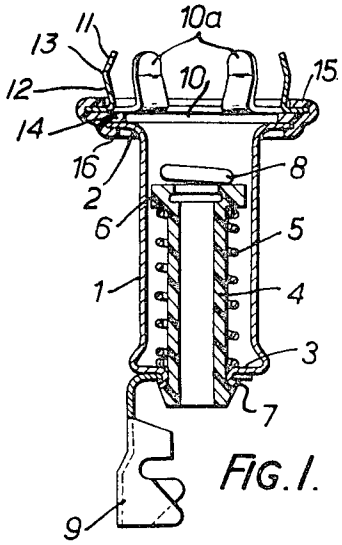


FIG. 1.

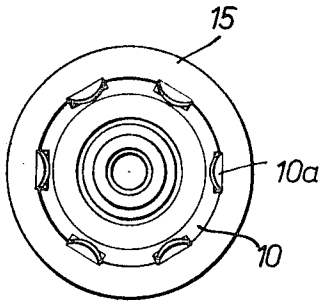


FIG. 2.

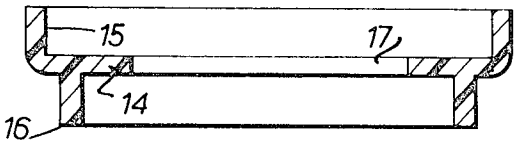


FIG. 3.

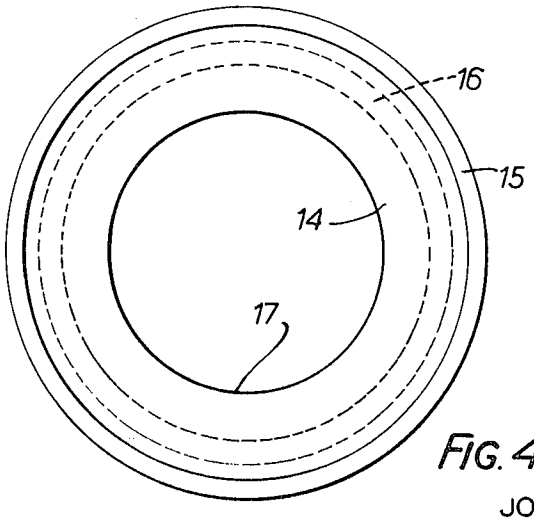


FIG. 4.

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LAMPHOLDER

This invention relates to a lampholder adapted to be assembled with an apertured support.

The present invention provides a lampholder for assembly in an aperture in a support comprising a hollow metal body defining a lamp base receiving cavity open at one end and in which is mounted contact means for engaging contact means on the lamp base, a metal attaching ring comprising a base and resilient fingers being provided for snapping into the apertured support, the said ring being mounted at said one end of the metal body and secured in insulated relation to the body by a one-piece moulding of synthetic plastics including a first annular portion embracing and secured to a radial flange at the said one end of the metal body and a second annular portion embracing and secured to the base of the attaching ring, a portion of the moulding disposed between said first and second annular portions being disposed in overlying relation to the said flange on the metal body and serving electrically to isolate the ring from said body.

To enable the invention to be fully understood, one embodiment will now be described with reference to the accompanying drawings in which:

FIG. **1** is a sectional side view of a lampholder according to one embodiment of the invention;

FIG. **2** is a plane view thereof;

FIG. **3** is a sectional side view of a plastics moulding for securing the attaching member to the body of the holder; and

FIG. **4** is a plan view thereof.

As illustrated in the drawings, the holder comprises a hollow metal body **1** of cylindrical shape defining a cavity for receiving the base of a lamp. The body is formed with a radial outwardly extending flange **2** at the open lamp-receiving end and an inwardly extending flange **3** at the opposite end. The latter flange defines a central opening through which a stem **4** of insulating material is slidably located. A coil spring **5** surrounds the stem, its opposite ends abutting a head **6** on the stem and the flange **3** of the body of the holder. The spring serves to urge the stem inwardly of the body and a shoulder **7** on the stem limits its inward movement. A contact **8** is mounted on the inner end of the stem for engagement with the contact on the base of the lamp to be inserted.

9 indicates a wiring tag which, as shown, is secured to the outer face of the flange **3** by burring over the edges of the flange.

To enable the holder to be assembled in an aperture in a support, a metal attaching member is provided comprising a base **10** formed with a plurality of resilient fingers **10***a* including inwardly and outwardly inclined portions **11**, **12**, defining a shoulder **13**, the fingers being adapted to snap into an aperture in a support.

The support usually comprises a metal panel and it is necessary that the metal body of the holder be electrically insulated from the panel and it therefore follows that the metal attaching member which engages the panel must not be in electrical engagement with the body of the holder.

With the holder according to the present invention, a one-piece moulding of synthetic plastics is provided for securing the attaching member to the hollow body of the holder and, as shown, in FIGS. **3** and **4**, it initially comprises a base **14** having a first annular wall **15** and a second annular wall **16** of less diameter than the wall **15**. As shown, the base **14** has a central opening indicated by **17**. The moulding may be made of nylon or other suitable synthetic thermoplastics material.

The moulding is assembled with the holder by positioning the flange **2** against the base **14** and applying heat and pressure to curl the wall **16** inwardly to underlie the flange **2** so that the adjacent portions of the base **14** and wall **16** are heat sealed to the flange. The attaching member is secured by positioning the base **10** on the opposite face of the base **14** of the moulding and applying heat and pressure to curl the wall **15** over the base **10** of the attaching member so that it is heat sealed to the adjacent portion of the base **14** and wall **15** of the moulding. The attaching member is accordingly securely attached to the body of the holder and is electrically insulated therefrom.

The wall of the body **1** may be formed with bayonet type slots or screw threads according to whether the holder is to receive a bayonet or edison-type lamp.

A lead wire is adapted to be attached to the terminal **9** by crimping tongues on the terminal to grip the lead wire.

Any suitable means, for example, a plug terminal, may be provided for connecting the contact **8** of the plunger to a second lead wire, the plug being inserted into the hollow stem of the plunger.

We claim:

1. A lampholder for assembly in an aperture in a support comprising a hollow metal body defining a lamp base receiving cavity open at one end, a radial flange at said one end of said body, contact means mounted in said cavity, a metal attaching ring comprising a base and resilient fingers attached to said body for snapping into the apertured support, the said ring being mounted at said one end of the metal body and a one-piece moulding of synthetic plastics securing said ring to said body and including a first annular portion embracing and secured to said radial flange and a second annular portion embracing and secured to said base of said attaching ring, a portion of the moulding disposed between said first and second annular portions being disposed in overlying relation to the said flange on the metal body and serving electrically to isolate the ring from said body.

2. A lampholder as claimed in claim **1**, wherein the said first and second annular portions are deformed by heat and pressure to embrace and be secured to the flange on the metal body and the base of the attaching ring respectively.

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