April 3, 1951 L. L. STOFFEL 2,547,506

RESISTOR

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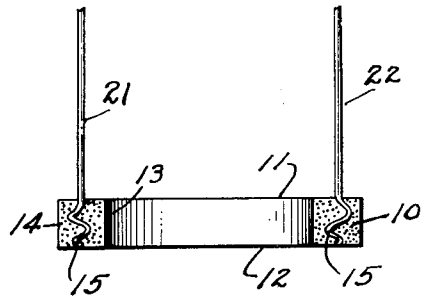


Fig. 1

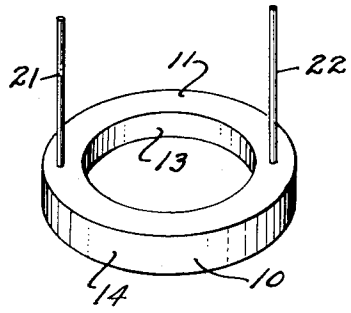


Fig. 2

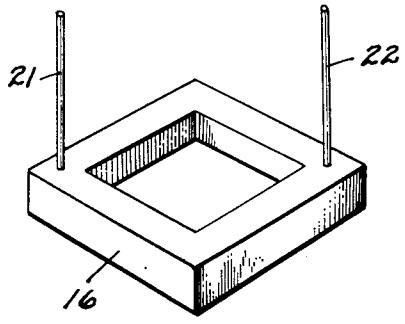


Fig. 3

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RESISTOR

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1 Claim. (Cl. 201—75)

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This invention relates to a resistor suitable for mounting in the base of an electric lamp or other confined space. This resistor comprises a body of high resistant material and two conductors having their ends embedded in spaced regions of the body and leading from the same face of the body in substantially parallel relationship and spaced inwardly of the external contour of the body. By this means I provide a resistor suitable for mounting in a space not materially larger than the external contour of the resistor itself as the conductors do not overhang the external boundary of the resistor body.

My resistor is of endless or annular form, either curvilinear or polygonal, and has flat transverse faces, and the two conductors have their ends embedded in opposite regions of the endless body each in a mid-region between the inner and outer perimeter of such body. Such formation is illustrated in the drawings hereof and is hereinafter more fully explained.

In the drawing, Fig. 1 is a vertical section through one form of my resistor, the section being on a substantially diametric plane of a circular annular unit; Fig. 2 is a perspective of the resistor shown in Fig. 1; Fig. 3 is a perspective of a resistor where the resisting unit is of polygonal annular form.

In the form shown in Figs. 1 and 2, I provide a circularly annular body 10 of carbonaceous material having parallel flat faces 11 and 12 and parallel cylindrical inner and outer edges 13 and 14 respectively. The two metallic conductors 21 and 22 lead in parallelism from one flat face, as the face 11, of the resistance body. The two conductors extend well into the body and are bent laterally therein in a more or less zigzag form, as shown at 15, Fig. 1. This zigzag embedded portion firmly interlocks the conductor to the resisting body. At the same time it enables the conductor to pass immediately from the flat face of the unit well within the external boundary thereof.

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In Fig. 3, I have shown the same two conductors 21 and 22 embedded in the same manner in the resisting body 16, but the resistor body in this case is polygonally annular or endless as shown. However, this form, like the circular form of Figs. 1 and 2 has parallel flat top and bottom faces and also parallel inner and outer perimeters.

It will be seen that with either form of resisting body, the entire structure may be mounted in a cavity having available internal dimensions not materially longer than the exterior of the resistor itself, leaving the two conductors entirely free from the wall of the cavity and in a position for convenient attachment to any conductive members.

I claim:

A resistor comprising a body of carbonaceous material and of circular annular formation with parallel top and bottom faces, and a pair of metallic conductors substantially parallel with each other leading from diametrically opposite regions of the same face of the annulus, each conductor entering the annular body at substantially the mid-region of a radial section thereof and extending well into the body and being diverted laterally within the body to be firmly embedded therein thereby interlocking said conductors with said resistor body.

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