

[54] **FLUORESCENT LAMP ADAPTER ASSEMBLY**

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[58] Field of Search 339/50-57, 339/147, 168, 170, 258 TC; 240/51.11, 51.12

[56] **References Cited**

UNITED STATES PATENTS

2,507,898	5/1950	Gaynor et al.	339/52 R X
2,534,361	12/1950	Ludwig	339/53 X
3,120,419	2/1964	Dwarkin	339/168
3,168,987	2/1965	Heisler	240/51.11 R

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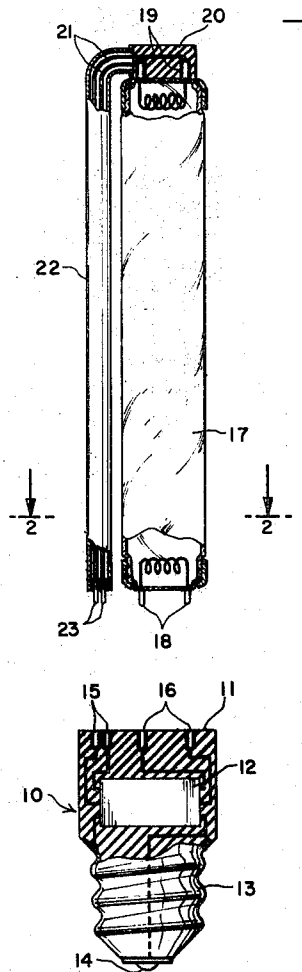
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[57]

ABSTRACT

An adapter assembly for coupling a standard fluorescent lamp to an incandescent lamp fixture socket, comprising a base member having a lower threaded portion for disposal in the fixture socket, a ballast transformer electrically coupled to the threaded base, and a plurality of electrical contacts disposed in the base member and electrically coupled to the transformer for electrically coupling the electrodes of the fluorescent lamp to the ballast transformer. One end of the fluorescent lamp is disposed in a pair of the electrical contacts in the base member, while the other end of the tube is electrically coupled to the ballast transformer by a cap slidably disposed over the end of the lamp which includes electrical contacts coupled by elongated wires in an elongated tube disposed adjacent the lamp to another pair of contacts in the base member. The adapter assembly permits the insertion of a standard fluorescent lamp in an incandescent lamp socket fixture without modification.

1 Claim, 3 Drawing Figures



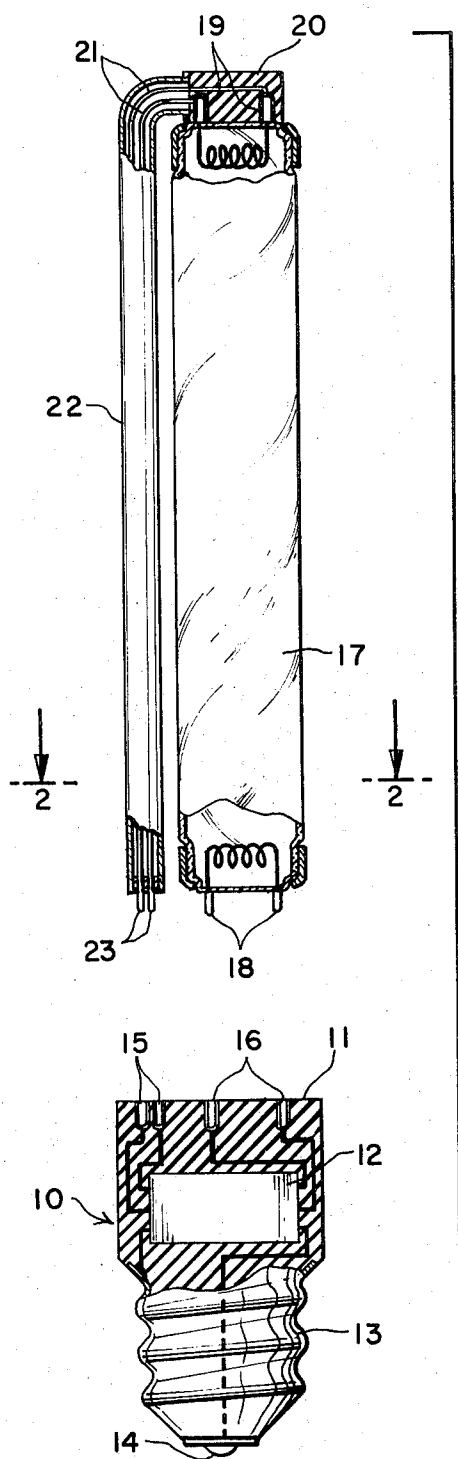


Fig. 1.

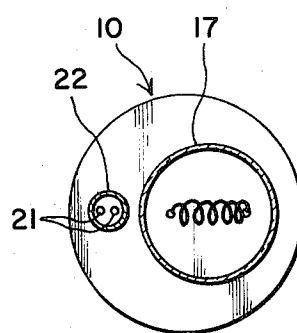


Fig. 2.

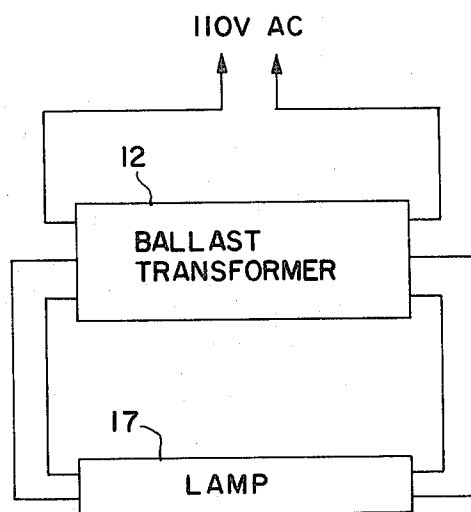


Fig. 3.

FLUORESCENT LAMP ADAPTER ASSEMBLY

The present invention relates generally to electrical lamps, and in particular, to a fluorescent lamp adapter assembly for electrically coupling a fluorescent lamp to an incandescent lamp socket.

Fluorescent lamps which are constructed for use in conventional incandescent light fixtures are known. However, these lamps are not similar to conventional lamps and are specifically constructed for such use, and the adapter assembly and the lamp must be purchased in combination and can function only as a unit. The adapter assemblies now offered, thus, do not permit the use of a conventional standard fluorescent lamp therewith so as to enable the lamp to be inserted into an incandescent lamp fixture.

Accordingly, the present invention provides a novel adapter assembly for permitting the insertion of a standard fluorescent lamp into an incandescent lamp fixture socket. The assembly includes a threaded base member, for insertion in an incandescent lamp fixture socket, having a ballast transformer disposed therein coupled to a plurality of electrical contacts disposed in recesses provided in the base member. An elongated tube, generally L-shaped has a pair of outwardly extending contact pins at one end thereof which are received in a pair of the electrical contacts in the base member, and a cap including a pair of electrical contacts at the other end thereof coupled to the contact pins for disposal over one end of a fluorescent lamp and for receiving the contact pins of the lamp. The elongated tube is disposed adjacent the fluorescent lamp when it and the lamp are disposed in the electrical contacts provided in the base member, and electrically couples one end of the lamp to the ballast transformer. The contact pins on the other end of the lamp are disposed in the contacts in the base member which also couple the lamp to the ballast transformer. The elongated tube also aids in the support of the lamp on the base member in a vertical position.

It is, therefore, an object of the present invention to provide a fluorescent lamp adapter assembly for mounting a conventional fluorescent lamp in an incandescent lamp fixture socket.

It is also an object of the present invention to provide a fluorescent lamp adapter assembly which is simple in design, easy to manufacture, and efficient and reliable in operation.

Other objects and features of the present invention will become apparent from the following detailed description when taken in connection with the accompanying drawings which disclose one of the embodiments of the invention. It is to be understood that the drawings are designed for the purpose of illustration only, and are not intended as a definition of the limits and scope of the invention disclosed therein.

In the drawings, wherein similar reference numerals denote similar elements throughout the several views:

FIG. 1 is an exploded perspective view of a fluorescent lamp adapter assembly constructed in accordance with the present invention, shown with a fluorescent lamp connected thereto;

FIG. 2 is a cross-sectional top view of the lamp and assembly, taken along section 2—2 of FIG. 1; and

FIG. 3 is an electrical schematic diagram of the lamp and adapter assembly.

Referring to the drawings, specifically FIGS. 1 and 2, the adapter assembly comprises a base member 10, constructed of electrical insulation material 11, in which a ballast transformer 12 is disposed. The base member includes an electrically conductive, threaded shell 13 disposed on the lower portion thereof for threadable engagement with a conventional incandescent lamp fixture socket. Ballast transformer 12 is electrically coupled at one end to shell 13, and at the other end to an external, electrically-conductive contact member 14 disposed on the bottom surface of the base member. Electrical contacts 15 and 16 are disposed in recesses in base member 10 for electrically connecting fluorescent lamp 17 to the power supply at the fixture socket. External contact pins 18 of the fluorescent lamp are received in contacts 16 in base member 10. The contact pins at the other end of lamp 17 are electrically coupled by contacts 19 disposed in removable, electrically nonconductive cap 20 disposed over the end of lamp 17, and coupled to transformer 12 by a pair of electrically conductive wires 21 disposed within an elongated electrically nonconductive tube 22 disposed adjacent the entire length of lamp 17. The ends of wires 21 form outwardly extending contact pins 23 which extend from one end of tube 22 and are disposed in contacts 15 for completing the electrical circuit between the transformer and the fluorescent lamp. FIG. 3 illustrates schematically the electrical connections between the 110 volt AC power source at the fixture socket and fluorescent lamp 17.

While only a single embodiment of the present invention has been shown and described, it will be obvious to those persons of ordinary skill in the art that many changes and modifications may be made thereunto without departing from the spirit and scope of the invention.

What is claimed is:

1. A fluorescent lamp adapter assembly, for coupling a fluorescent lamp to an incandescent lamp fixture socket, comprising:

a base member, having a threaded lower portion for disposal in the fixture socket, and having a plurality of external electrical contact members disposed thereon electrically insulated from each other;

a ballast transformer, disposed in said base member, and electrically coupled to said contact members;

a plurality of electrical contacts, disposed in recesses in said base member for coupling the electrodes of the fluorescent lamp to said transformer, said contacts being arranged for receiving contact pins disposed on the ends of the fluorescent lamp;

a cap, slidably disposed over one end of the fluorescent lamp, and including electrical contacts disposed therein coupled to said contacts in said base member, for receiving the contact pins of the fluorescent lamp, and thereby coupling one end of said lamp to said ballast transformer; and

an elongated electrically nonconductive, generally L-shaped tube, coupled to said cap, and a plurality of electrical wires, disposed within said tube and coupled to said contacts in said cap, said wires extending from one end of said tube so as to form electrical contact pins receivable in said electrical contacts in said base member.

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