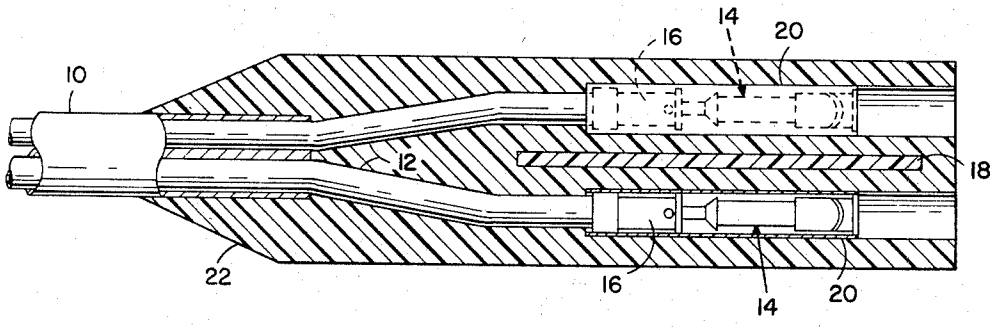
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MOLDFORM RECEPTACLE

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MOLDFORM RECEPTACLE

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ABSTRACT OF THE DISCLOSURE

A moldform receptacle wherein the pin inserts are wrapped with Teflon tape, and Mylar strips are inserted between the pin inserts before molding the receptacle.

This invention relates to molded receptacles and particularly relates to a molded receptacle made of a polyurethane material, with male or female pins bonded within and insulated from each other by means of an insulating material.

There is a need for a connector which can be made on-the-job. An example of this would be an assembly plant. It is, also, desired that the make-up of the connector be determined by the user. Previous assembly techniques required the purchase of connectors of various sizes and shapes. This required a reservoir of various connectors to be maintained to meet the needs of assembly. If a connector of unusual characteristics or a nonstandard number of contacts were needed, it must be ordered, thereby causing a loss of time. The situation could arise when the desired connector would not be an "off-the-shelf" item and the procurement time would be even longer. Some assemblies desire to have cables of predetermined length to have molded connectors on its ends. Acquisition time could cause a needless delay in manufacture.

It is, therefore, an object of this invention to provide a method of producing a moldform receptacle which can be made up on-the-job by the user thereof.

It is, also, an object of this invention to provide a moldform receptacle which has good insulating properties.

It is, yet, another object of this invention to provide a moldform receptacle which may be made on-the-job and which may have the make-up thereof varied as desired.

Another object of this invention is to provide a moldform receptacle which may be molded to the end(s) of a cable of predetermined length.

A moldform receptacle can be easily made attached to the end of a cable. After inserting the ends of the cable into a mold and correspondingly into the male or female pins located with the mold, polyurethane is then forced into the mold and allowed to harden. Further insulating features may be obtained by the use of Teflon and Mylar. Teflon may be located around the pins and Mylar may be located between the pins. The various features of novelty which characterize this invention are pointed out with particularity in the claim annexed to and forming a part of this specification. For a better understanding of the invention, however, its advantages and specific objects, reference should be had to the accompanying drawing and descriptive matter in which is illustrated and described

a preferred embodiment of the invention, and in which the single figure shows a cross-sectional view illustrating a basic concept of the invention.

A cable of predetermined length **10** has the insulation removed from the conductors **12** thereof and the conductors having been cleaned with a solvent are inserted into the pin inserts **14**. Caution should be taken so that the exposed wire, when inserted into the crimp cup **16**, does not extend out beyond the crimp cup. A predesigned aluminum mold, cleaned with solvent and treated with mold release agent, accepts the pin inserts in given slots. A strip of Mylar **18** is inserted between the pins to increase the insulation properties and dielectric capabilities. Teflon tape **20** is wrapped around each pin to increase the insulating properties and to prevent the polyurethane **22** from creeping into or around the friction lock area of the pin inserts. The same process takes place whether the pin insert be male or female, although, the conditions differ in the pin make-up. The polyurethane compound is injected into the mold containing the prewired pins. This process is performed by allowing the compound to flow from the bottom up, allowing all air to leave the mold.

It should be understood, of course, that the foregoing disclosure relates only to a preferred embodiment of the invention and that it is intended to cover all changes and modifications of the example of the invention herein chosen for the purpose of disclosure, which does not constitute a departure from the spirit and scope of the invention.

I claim:

1. A moldform receptacle comprising: a molding compound; a plurality of pin inserts; a multiconductor cable, the conductors thereof being connected to a corresponding one of said pin inserts; and means for insulating said pin inserts from each other, said insulating means comprising an insulating tape wrapped about each of said pin inserts for the entire length thereof and an insulating strip having a length at least as great as the length of said pin inserts, disposed between said pin inserts, parallel to said pin inserts, and spaced from said pin inserts to increase the insulation therebetween; said pin inserts, multiconductor cable and insulating means being totally surrounded by and maintained in spaced relations by said molding compound, whereby said receptacle is adapted for carrying a high voltage without arcing between said pin inserts.

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