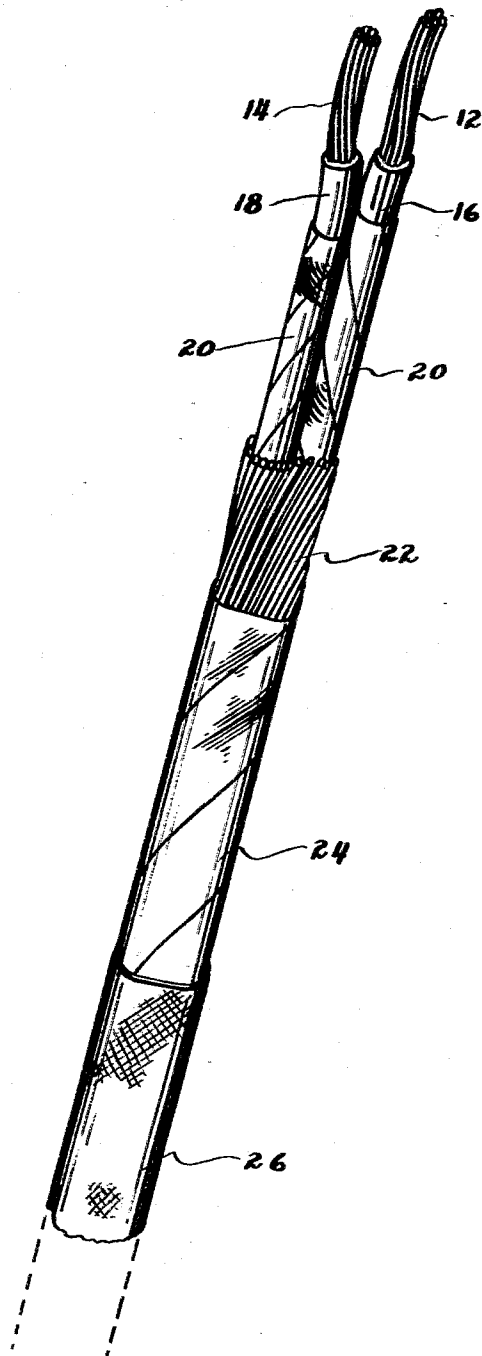


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G. S. EAGER, JR
SERVICE ENTRANCE CABLE

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INVENTOR.

GEORGE S. EAGER, JR.

BY

Ernest Whitmore Hendon & Graham

ATTORNEYS

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SERVICE ENTRANCE CABLE

George S. Eager, Jr., Upper Montclair, N.J., assignor to
General Cable Corporation, New York, N.Y., a corporation of New Jersey

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3 Claims. (Cl. 174-105)

This invention relates to improved cable construction and, more particularly, relates to improved construction for service entrance cable.

Conventional service entrance cable utilizes rubber insulated conductors having a rubber filled fabric tape wrapped over the insulation of each conductor and color coded as desired. A similar rubber filled fabric tape is wrapped over the concentric neutral. Such conventional cable construction is, however, relatively bulky and inflexible for the requisite mechanical protector and the desired integrity of the moisture barrier.

It is, therefore, one object of this invention to provide an improved service entrance cable construction.

In accordance with this object, there is provided, in a preferred embodiment of this invention, a service entrance cable having rubber insulated conductors. The insulation is lacquered as desired for color coding and each insulated conductor is wrapped with a polyester tape. The conductors are assembled and a concentric neutral, consisting of a plurality of uninsulated strands, is assembled thereto. A polyester tape is wrapped over the concentric neutral before application of the outer fabric cover.

This invention will be more clearly understood by reference to the following description taken in conjunction with the accompanying drawing which is a broken-away plan view of a cable constructed in accordance with the present invention.

In the FIGURE there is shown a service entrance cable comprising conductors 12 and 14, respectively insulated with rubber insulation 16, 18. For color coding of the cable conductors, the rubber insulation may be lacquered with the desired color. For example, the insulation 16 may be lacquered with a red lacquer. The insulation 18 on the other conductor would not be lacquered since the normal black color of the insulation is in itself sufficient color coding.

Each of the insulated conductors is wrapped with a polyester tape 20. The polyester tape such as the tape sold under the Du Pont trademark Mylar, is wrapped in an overlapping helix. The polyester tape is preferably a clear polyester tape so that the color coding may be readily observed therethrough and is prevented from unwrapping by an adhesive applied over the insulation at the tape wrapping station.

The clear polyester tape serves the purpose of mechanically protecting the insulation and serves as a moisture barrier.

A concentric neutral 22, consisting of a plurality of uninsulated conductors applied over the two conductors, is provided in conventional fashion. A clear polyester

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tape 24 is wrapped over the concentric neutral, serving both to prevent the entry of saturants and/or finishing compounds of the outer fabric wrap 26 from contaminating the concentric neutral or the insulation conductors and to prevent entry of moisture in the finished cable. The outer wrap 26 may be of conventional construction comprising a fabric braid saturated and finished in accordance with conventional practice.

The polyester tape provides better mechanical protection of the insulation, improved protection against moisture entry, and has better electrical properties, particularly in its character of having a higher dielectric strength. The cable construction in accordance with this invention can be constructed in a smaller size for the same electrical and mechanical properties of cable constructed in accordance with conventional practice.

In addition, the transparency of the polyester tape allows color coding of conductors to be accomplished by simply lacquering the insulation of the respective conductors. Finally, the low frictional coefficient of the Mylar surface allows the conductors to slide more readily. Thus, the resultant cable is more flexible, is easier to install and is less subject to component damage as a result of sharp bending than conventional service entrance cable construction.

This invention may be variously modified and embodied within the scope of the subjoined claims.

What is claimed is:

1. A cable consisting of insulated conductors, the outer surfaces of the insulated conductors being color coded for identification, one from the other, an overlapping, helically applied, transparent polyester tape wrapping on the insulation of each of said insulated conductors, a concentric neutral conductor around the insulated and polyester-wrapped conductors, a helically applied polyester tape wrapping over the neutral conductor, and an outer protective covering over the last-mentioned polyester wrapping, the last-mentioned polyester wrapping constituting a seal preventing penetration of material of the outer protective covering to the neutral conductor and inhibiting penetration of moisture to the interior of the cable.

2. A cable in accordance with claim 1, which includes adhesive between the insulation of the insulated conductors and the polyester tape wrappings thereon to prevent unwrapping of the latter.

3. A cable in accordance with claim 1 in which at least one of said insulated conductors has a lacquer coating for color coding said conductor.

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