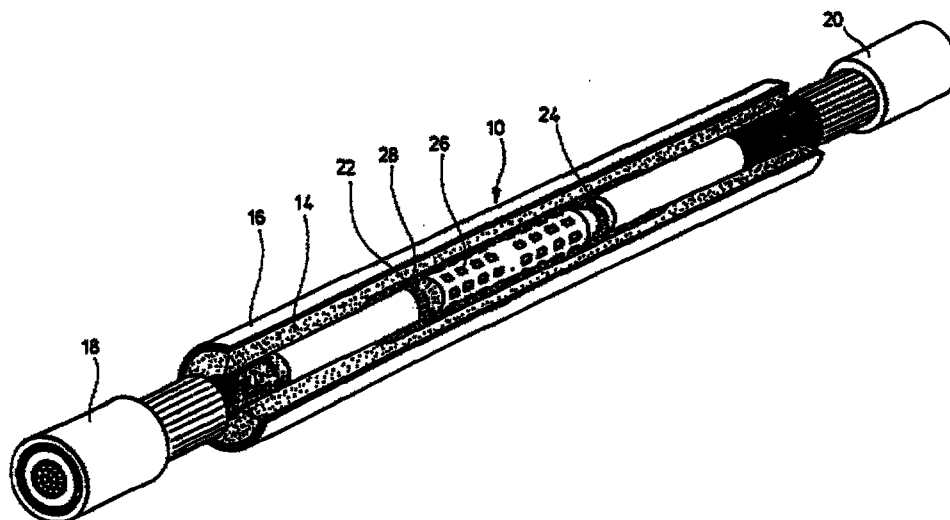




INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: H02G 15/184, 15/103	A1	(11) International Publication Number: WO 95/31845 (43) International Publication Date: 23 November 1995 (23.11.95)
(21) International Application Number: PCT/US95/06125 (22) International Filing Date: 17 May 1995 (17.05.95) (30) Priority Data: P 44 17 363.6 18 May 1994 (18.05.94) DE P 44 17 364.4 18 May 1994 (18.05.94) DE (71) Applicant (for all designated States except US): MINNESOTA MINING AND MANUFACTURING COMPANY [US/US]; 3M Center, P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): VIEBRANZ, Manfred, G., G. [DE/DE]; Am Stubbenberg 3, D-21279 Appel (DE). KRABS, Raymond, A., W. [DE/DE]; Jaegerstrasse 106, D-21079 Hamburg (DE). HELLBUSCH, Dieter [DE/DE]; An den Hoefon 30, D-21217 Seevetal (DE). MUENCHOW, Burkhard [DE/DE]; Hartwig-Hesse-Strasse 18, D-20257 Hamburg (DE). CHAMBERLAIN, Craig [US/US]; 8231 Afton Road, Woodbury, MN (US). KNORR, Winfried, K. [DE/DE]; Bernburger Strasse 12, D-22455 Hamburg (DE).	(74) Agents: ANDERSON, David, W. et al.; Minnesota Mining and Manufacturing Company, Office of Intellectual Property Counsel, P.O. Box 33427, Saint Paul, MN 55133-3427 (US). (81) Designated States: CA, JP, MX, SG, US, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>	

(54) Title: CYLINDRICAL RADIALY SHRINKABLE SLEEVE FOR AN ELECTRICAL CABLE AND COMPOSITION THEREOF

**(57) Abstract**

Cylindrical radially shrinkable sleeve (10) for enclosing a connection or an end termination of an electrical cable, in particular for a medium voltage cable, having an insulation surrounded by a shielding layer, the sleeve (10) comprising an outer shielding layer (16) of semi-conductive material and at least an insulation layer (14) on the inner side of the shielding layer (16), with the unit of the cylindrical layers made of permanent flexible material adapted to be retained in a radially expanded state by mechanical support means, preferably a support core, wherein the radially innermost layer is of a homogeneous material having a relative dielectric constant which is significantly larger than that of said insulation of said cable. The material is a matrix of dielectric plastic material containing microspheres which are electrically conductive either totally or only at the outer surface thereof and which have a diameter between 10 and 500 μm . The microspheres are uniformly mixed into said matrix material, with the compound having a dielectric constant equal to or larger than 3 and a dielectric strength of at least 5 kV/mm.