



(51) International Patent Classification:
H01B 7/08 (2006.01) *H01B 11/00* (2006.01)

(21) International Application Number:
PCT/US2010/060640

(22) International Filing Date:
16 December 2010 (16.12.2010)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/378,902 31 August 2010 (31.08.2010) US

(71) Applicant (for all designated States except US): **3M INNOVATIVE PROPERTIES COMPANY** [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **GUNDEL, Douglas B.** [US/US]; 3M Center, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).

(74) Agents: **MOSHREFZADEH, Robert S.** et al.; 3M Center, Office of Intellectual Property Counsel, Post Office Box 33427, Saint Paul, Minnesota 55133-3427 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ,

CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))

(54) Title: SHIELDED ELECTRICAL CABLE IN TWINAXIAL CONFIGURATION

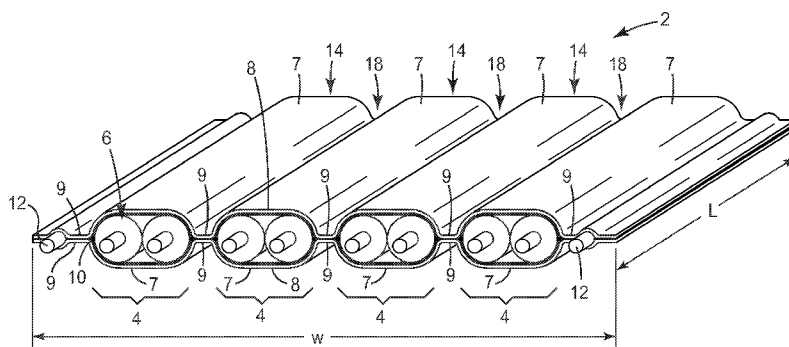


FIG. 1

(57) Abstract: A shielded electrical cable (2) includes one or more conductor sets (4) extending along a length (L) of the cable (2) and being spaced apart from each other along a width (W) of the cable (2). Each conductor set (4) has one or more conductors (6) having a size no greater than 24 AWG and each conductor set (4) has an insertion loss of less than about -20 dB/meter over a frequency range of 0 to 20GHz. First and second shielding films (8) are disposed on opposite sides of the cable (2), the first and second films (8) including cover portions (7) and pinched portions (9) arranged such that, in transverse cross section, the cover portions (7) of the first and second films (8) in combination substantially surround each conductor set (4), and the pinched portions (9) of the first and second films (8) in combination form pinched portions of the cable (2) on each side of each conductor set (4).