

- (51) International Patent Classification:
G02B 6/44 (2006.01)

(21) International Application Number:
PCT/US2015/020082

(22) International Filing Date:
12 March 2015 (12.03.2015)

(25) Filing Language:
English

(26) Publication Language:
English

(30) Priority Data:
61/954,774 18 March 2014 (18.03.2014) US

(71) Applicant: CORNING OPTICAL COMMUNICATIONS LLC [US/US]; 800 17th Street Nw, Hickory, North Carolina 28601 (US).

(72) Inventors: BRINGUIER, Anne Germaine; 55 Lake Point Circle, Taylorsville, North Carolina 28681 (US). WILLIAMSON, Brandon Robert; 2005 20th Street Pl. NE, Hickory, North Carolina 28601 (US).

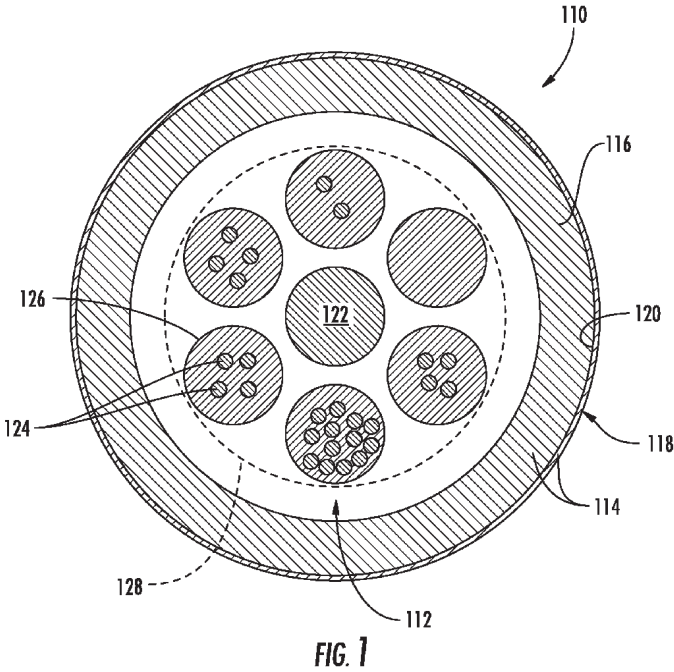
(74) Agent: DOYLE, William D.; Corning Optical Communications LLC, Intellectual Property Department SP-TI-03-1, Corning, New York 14831 (US).

(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, BN, 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, IR, IS, JP, KE, KG, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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,

[Continued on next page]

(54) Title: JACKET FOR A FIBER OPTIC CABLE



(57) Abstract: A fiber optic cable includes a core and a jacket surrounding the core. The jacket includes a base layer, a surface layer defining an exterior surface of the fiber optic cable, and an interface between the surface and base layers. The base layer is formed from a first composition that includes polyethylene. The surface layer has a thickness of at least 300 micrometers and is formed from a second composition that differs from the first composition. The second composition includes polyethylene as well as one or more additives, including paracrystalline carbon. The interface cohesively bonds the surface and base layers to one another at least in part due to molecular chain entanglement of the polyethylene of the first and second compositions.

WO 2015/142604 A1

SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, **Published:**
GW, KM, ML, MR, NE, SN, TD, TG). — *with international search report (Art. 21(3))*