

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
25 June 2009 (25.06.2009)

PCT

(10) International Publication Number
WO 2009/079167 A1

(51) International Patent Classification:
H04B 10/04 (2006.01)

(74) Agent: **PALMIERI, Joseph**; Verizon Legal Department,
Patent Management Group, 1515 North Court House Road,
Suite 500, Arlington, Virginia 22201 (US).

(21) International Application Number:
PCT/US2008/084514

(22) International Filing Date:
24 November 2008 (24.11.2008)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
11/956,764 14 December 2007 (14.12.2007) 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, 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, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

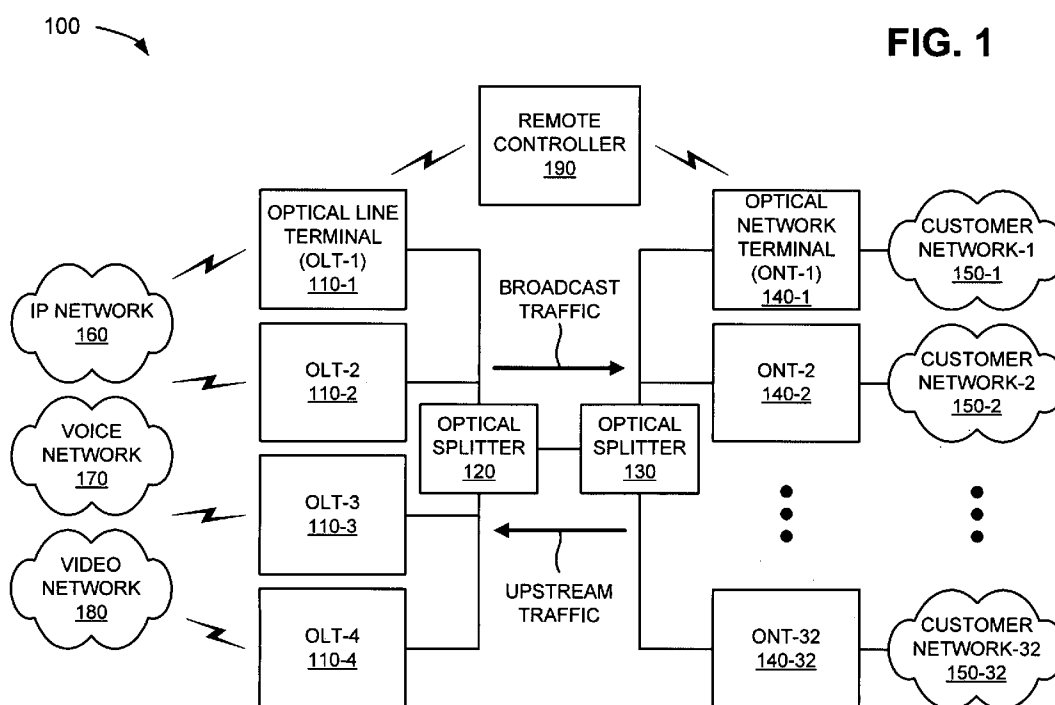
(71) Applicant (for all designated States except US): **VERIZON SERVICES ORGANIZATION INC.** [US/US]; 600 Hidden Ridge, Irving, Texas 75038 (US).

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL,

(72) Inventor: **CHEN, David Z.**; 4005 Brittany Way, Richardson, Texas 75082 (US).

[Continued on next page]

(54) Title: HIGH PERFORMANCE GIGABIT PASSIVE OPTICAL NETWORK



(57) Abstract: A system includes an optical line terminal (OLT) that includes an OLT transmitter. The OLT transmitter includes one or more fixed wavelength optical sources that generate an optical signal at a first wavelength, and an optical waveguide that transmits the optical signal at the first wavelength in an optical network.



NO, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG,
CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report*