Title (en)

DISPERSION COMPENSATING SINGLE MODE WAVEGUIDE

Title (de)

DISPERSIONSKOMPENSIERTER MONOMODIGER WELLENLEITER

Title (fr)

GUIDE D'ONDES UNIMODAL A COMPENSATION DE LA DISPERSION

Publication

EP 0857313 A4 20000412 (EN)

Application

EP 97934929 A 19970714

Priority

- US 9712136 W 19970714
- US 2329796 P 19960731

Abstract (en)

[origin: WO9804941A1] A dispersion compensating single mode optical waveguide fiber designed to change the wavelength window of operation of a link from 1301 nm to 1550 nm. The dispersion compensating waveguide fiber is characterized by a core glass region refractive index profile comprised of at least three segments (2, 4, 6, 8). The segment (2) on the waveguide center has a positive relative refractive index. At least one segment (4, 8), spaced apart from the waveguide centerline has a negative relative refractive index.

IPC 1-7

G02B 6/22; G02B 6/16; H04B 10/18

IPC 8 full level

G02B 6/02 (2006.01); **C03B 37/023** (2006.01); **G02B 6/036** (2006.01); **H04B 10/18** (2006.01)

CPC (source: EP KR)

G02B 6/02004 (2013.01 - KR); **G02B 6/02261** (2013.01 - EP KR); **G02B 6/0228** (2013.01 - KR); **G02B 6/0286** (2013.01 - KR); **G02B 6/03661** (2013.01 - EP); **G02B 6/03666** (2013.01 - EP KR); G02B 6/02004 (2013.01 - EP); G02B 6/0228 (2013.01 - EP); G02B 6/0286 (2013.01 - EP)

Citation (search report)

- [XAY] EP 0598554 A1 19940525 - AMERICAN TELEPHONE & TELEGRAPH [US]
- [DY] US 5361319 A 19941101 - ANTOS A JOSEPH [US], et al
- [AD] US 4715679 A 19871229 - BHAGAVATULA VENKATA A [US]
- [A] EP 0674193 A2 19950927 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- [A] US 5261016 A 19931109 - POOLE CRAIG D [US]
- [Y] GB 2138429 A 19841024 - STANDARD TELEPHONES CABLES LTD
- [A] US 4778244 A 19881018 - RYAN TIMOTHY G [GB]
- [Y] KAKUI M ET AL: "2.4-GBIT/S, 306-KM REPEATERLESS TRANSMISSION BY USING A DIRECTLY MODULATED DFB-LD AND DISPERSION-COMPENSATING FIBER", OPTICAL FIBER COMMUNICATION. SUMMARIES OF PAPERS PRESENTED AT THE CONFERENCE OFC '95, SAN DIEGO, FEB. 26 - MAR. 3, 1995, 26 February 1995 (1995-02-26), INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS, pages 148/149, XP000517681, ISBN: 0-7803-2654-7
- [YA] SEMENOV V A ET AL: "BROADBAND DISPERSION-COMPENSATING FIBER FOR HIGH-BIT-RATE TRANSMISSION NETWORK USE", APPLIED OPTICS, vol. 34, no. 24, 20 August 1995 (1995-08-20), pages 5331 - 5337, XP000518210, ISSN: 0003-6935
- [Y] TKACH R W ET AL: "TRANSMISSION OF EIGHT 20-GB/S CHANNELS OVER 232 KM OF CONVENTIONAL SINGLE-MODE FIBER", IEEE PHOTONICS TECHNOLOGY LETTERS, vol. 7, no. 11, 1 November 1995 (1995-11-01), pages 1369 - 1371, XP000537980, ISSN: 1041-1135
- See references of WO 9804941A1

Designated contracting state (EPC)

AT CH DE DK ES FR GB IT LI NL SE

DOCDB simple family (publication)

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