

Title (en)

LOW SLOPE DISPERSION MANAGED WAVEGUIDE

Title (de)

WELLENLEITER MIT VERTEILTER DISPERSION GERINGER STEIGUNG

Title (fr)

GUIDE D'ONDE GERE EN DISPERSION FAIBLE PENTE

Publication

EP 1066540 A4 20050518 (EN)

Application

EP 99913812 A 19990217

Priority

- US 9903403 W 19990217
- US 7575498 P 19980223

Abstract (en)

[origin: WO9942869A1] Disclosed is a single mode optical waveguide fiber having alternating segments of positive and negative dispersion and dispersion slope. The relative indexes, the refractive index profiles and the radii of the segments are chosen to provide low total dispersion and dispersion slope. One embodiment consists of a first central major index profile (10) of outer radius r1, surrounded by a first annular segment (12) of outer radius r2, surrounded by second annular segment (14) of outer radius r3. Preferred waveguides in accordance with the invention exhibit a dispersion over the range of 1520 to 1625 nm which at all times have a magnitude which is less than 2, and more preferably less than 1 ps/nm<2>-km. The total dispersion of the waveguide fiber is in the range of about -2.0 to +2.0 ps/nm-km at 1550 nm. The waveguide also features a low polarization mode dispersion.

IPC 1-7

G02B 6/16

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [X] US 5448674 A 19950905 - VENGSARKAR ASHISH M [US], et al
- [X] WO 9804941 A1 19980205 - CORNING INC [US], et al
- [X] EP 0812076 A1 19971210 - LUCENT TECHNOLOGIES INC [US]
- See references of WO 9942869A1

Designated contracting state (EPC)

CH DE DK ES FI FR GB IT LI NL SE

DOCDB simple family (publication)

WO 9942869 A1 19990826; AU 3180599 A 19990906; AU 750557 B2 20020725; BR 9907943 A 20001024; CA 2318423 A1 19990826; CN 1120379 C 20030903; CN 1288523 A 20010321; EP 1066540 A1 20010110; EP 1066540 A4 20050518; ID 27455 A 20010412; JP 2002504702 A 20020212; JP 4208415 B2 20090114; KR 100703246 B1 20070403; KR 20010041230 A 20010515

DOCDB simple family (application)

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