

Title (en)

LENSED TIP OPTICAL FIBER AND METHOD OF MAKING THE SAME

Title (de)

OPTISCHE FASER MIT LINSENSPITZE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

FIBRE OPTIQUE A POINTE PRESENTANT UNE LENTILLE ET SON PROCEDE DE FABRICATION

Publication

**EP 1702226 A4 20090603 (EN)**

Application

**EP 05722400 A 20050110**

Priority

- US 2005000715 W 20050110
- US 75436504 A 20040108
- US 77579304 A 20040209
- US 78676604 A 20040224
- US 79948304 A 20040312

Abstract (en)

[origin: WO2005067676A2] A method is provided for manufacturing a lensed tip optical fiber. The method includes providing an optically transparent cylindrical fiber and etching a first end of the optically transparent cylindrical fiber to form a tip. The tip is heated which forms a lens surface at the heated tip. This lensed tip optical fiber makes optical alignment with other optical fibers and coupling of the optical fiber with photonic devices less burdensome.

IPC 8 full level

**G02B 6/00** (2006.01); **B29C 67/00** (2006.01); **B29D 11/00** (2006.01); **G02B 6/255** (2006.01); **H01L 21/00** (2006.01)

CPC (source: EP KR)

**B29C 67/0044** (2013.01 - EP); **B29D 11/00663** (2013.01 - EP); **G02B 3/00** (2013.01 - KR); **G02B 6/00** (2013.01 - KR); **G02B 6/2552** (2013.01 - EP); **G02B 6/32** (2013.01 - KR); **B29L 2011/0075** (2013.01 - EP)

Citation (search report)

- [XY] US 5595669 A 19970121 - LE BRIS JEAN [FR]
- [XY] EP 0627641 A1 19941207 - FURUKAWA ELECTRIC CO LTD [JP]
- [Y] JP 2003098525 A 20030403 - SEIKO EPSON CORP
- [XY] FR 2741455 A1 19970523 - ALCATEL OPTRONICS [FR]
- [X] US 5996376 A 19991207 - JOHNSON ERIC G [US], et al
- See references of WO 2005067676A2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

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DOCDB simple family (application)

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