

Publication

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Application

EP 94927434 A 19940405

Priority

- US 9403709 W 19940405
- US 4335893 A 19930406
- US 16951293 A 19931217

Abstract (en)

[origin: WO9423319A1] Fused fiberoptic couplers of the type formed by the processes of providing the fibers, assembling them in a close-packed relationship, and heating and drawing the assembly of fibers in the close-packed region. The fiberoptic couplers (37) are fabricated from optical fibers that have optical cores (38, 46, 48, 50) and surrounding cladding and/or spacer fibers that have no core (40, 42, 44). The number of optical and spacer fibers and their relative arrangements are selected to achieve desired properties of the coupler (37). It has been discovered that the steps involved in forming such a coupler, introduce slight size variation that can seriously affect the performance of the coupler, and that these slight variations can be accommodated by slight, controlled, under-sizing of one or more of the surrounding fibers or over-sizing of the central fiber. Other fiberoptic couplers, which may or may not be formed in the above manner, are described.

IPC 1-7

G02B 6/26

IPC 8 full level

G02B 6/28 (2006.01)

CPC (source: EP)

G02B 6/2856 (2013.01)

Citation (search report)

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- [XA] DE 4041438 C1 19920702
- [X] US 4497643 A 19850205 - KOWATA NOBUO [JP], et al
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- [Y] GB 2251957 A 19920722 - TOSHIBA KK [JP]
- [A] PATENT ABSTRACTS OF JAPAN vol. 11, no. 207 (P - 592) 4 July 1987 (1987-07-04)
- [A] PATENT ABSTRACTS OF JAPAN vol. 9, no. 177 (P - 375) 23 July 1985 (1985-07-23)
- [AYX] PATENT ABSTRACTS OF JAPAN vol. 6, no. 112 (P - 124) 23 June 1982 (1982-06-23)
- [A] PATENT ABSTRACTS OF JAPAN vol. 10, no. 180 (P - 471) 24 June 1986 (1986-06-24)
- [AY] ARKWRIGHT J W ET AL: "MONOLITHIC 1 X 19 SINGLE-MODE FUSED FIBRE COUPLERS", ELECTRONICS LETTERS, vol. 27, no. 9, 25 April 1991 (1991-04-25), pages 737 - 738, XP000229481
- See references of WO 9423319A1

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