Title (en)

OPTICAL FIBRES.

Title (de)

OPTISCHE FASERN.

Title (fr)

FIBRES OPTIQUES.

Publication

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Application

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Priority

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Abstract (en)

[origin: WO8403362A1] Single mode, single polarisation fibres are produced by the introduction of anisotropy into an optical fibre of otherwise arbitrary geometry and arbitrary but guiding refractive index profiles. The anisotropy, which may be induced by the application of transverse stress to the optical fibre, is sufficient to establish conditions under which one mode of linearly polarised light "leaks" from the fibre. In the case of step-profile optical fibres, having a core (10) and a cladding (11), the anisotropy may be such that one mode of propagation of light is completely eliminated from the fibre. Alternatively, in such fibres, the anisotropy may be such that the leakage of the unwanted mode from the fibre is gradual, so that the fibre effectively attenuates that mode, thereby eliminating the propagation of that mode when the fibre has a sufficient length.

IPC 1-7

G02B 5/172

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

- [XP] DE 3213704 A1 19840202 - ANT NACHRICHTENTECH [DE]
- [Y] FR 2498339 A1 19820723 - NIPPON TELEGRAPH & TELEPHONE [JP]
- [Y] ELECTRONICS LETTERS, vol. 17, no. 12, 11 June 1981, pages 419,420, London, GB; K. KITAYAMA et al.: "Polarisation-maintaining single-mode fibre with azimuthally inhomogeneous index profile"

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

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