

Title (en)

METHOD AND APPARATUS FOR FIBER DELIVERY OF HIGH POWER LASER BEAMS

Title (de)

VERFAHREN UND VORRICHTUNG FÜR FASERABGABE VON HOCHLEISTUNGSLASERSTRAHLEN

Title (fr)

PROCÉDÉ ET APPAREIL D'AMENÉE DE FIBRE DE FAISCEAUX LASER À GRANDE PUISSANCE

Publication

EP 2954600 A4 20160302 (EN)

Application

EP 13874791 A 20130208

Priority

US 2013025404 W 20130208

Abstract (en)

[origin: WO2014123538A1] In various embodiments, an optical fiber (11) includes a core (42) having a relatively large area selected so as to raise a threshold of stimulated Raman scattering or stimulated Brillouin scattering, or both, the core (42) having a high aspect ratio elongated cross-section and having a first refractive index. The core is narrower in a fast-axis direction and wider in a slow-axis direction, such that the fiber is mechanically flexible in the fast-axis direction and is mechanically rigid in the slow-axis direction.

IPC 8 full level

H01S 3/30 (2006.01)

CPC (source: EP)

G02B 6/02009 (2013.01); **H01S 3/005** (2013.01); **G02B 6/024** (2013.01); **H01S 2301/03** (2013.01)

Citation (search report)

No further relevant documents disclosed

Citation (examination)

- DAVID A. ROCKWELL ET AL: "Semi-guiding high-aspect-ratio core (SHARC) fiber providing single-mode operation and an ultra-large core area in a compact coilable package", OPTICS EXPRESS, vol. 19, no. 15, 15 July 2011 (2011-07-15), pages 442 - 444, XP055173941, DOI: 10.1364/OE.19.014746
- See also references of WO 2014123538A1

Designated contracting state (EPC)

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Designated extension state (EPC)

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DOCDB simple family (application)

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