

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
12 April 2007 (12.04.2007)

PCT

(10) International Publication Number
WO 2007/039893 A3

(51) International Patent Classification:

H01S 3/067 (2006.01) *G02B 6/036* (2006.01)
G02B 6/26 (2006.01) *G01S 7/481* (2006.01)
G02B 6/14 (2006.01)

(21) International Application Number:

PCT/IL2006/001090

(22) International Filing Date: 18 August 2006 (18.08.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

171251 2 October 2005 (02.10.2005) IL

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(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,

CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declaration under Rule 4.17:

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

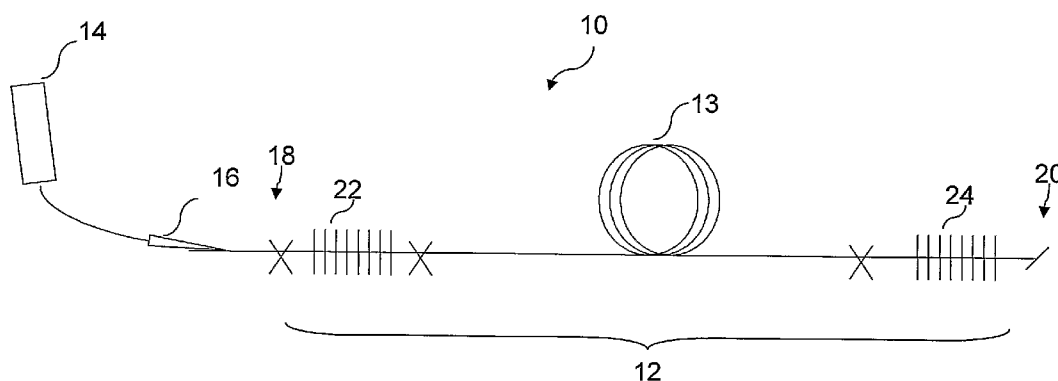
Published:

— *with international search report*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report:
20 September 2007

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: FIBER LASERS



(57) Abstract: Fiber lasers for producing Band I wavelengths include a laser cavity having an optical fiber with specific parameters in length and thickness and doping concentration, and having high reflectivities. Examples show the feasibility of producing such fiber lasers. Fiber lasers for producing Band IV wavelengths include a depolarized laser oscillator, at least one amplifier and a polarizer. Depolarized laser oscillator is an inherently depolarized CW laser, or a depolarized laser diode, which is depolarized by a depolarizer. Additional fiber lasers in accordance with embodiments of the present invention include a double clad active optical fiber having a pump power entry point for sending pump energy through the active optical fiber in a first direction, and a loop portion at a second end of the fiber for sending pump energy through the active optical fiber in a second direction which is opposite to the first direction. A system for coupling light into a fiber in accordance with embodiments of the present invention include a first fiber, a second double clad fiber, and a bulk optic component positioned between the first and second fibers. A mode stripper included within the second fiber allows for removal of high power light which is propagated through the outer clad rather than launched into the core of the second fiber.



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