

(12) International Application Status Report

Received at International Bureau: 24 June 2004 (24.06.2004)

Information valid as of: (..)

Report generated on: 16 January 2021 (16.01.2021)

(10) Publication number:

WO2004/100324

(43) Publication date:

18 November 2004 (18.11.2004)

(26) Publication language:

English (EN)

(21) Application Number:

PCT/US2004/011620

(22) Filing Date:

15 April 2004 (15.04.2004)

(25) Filing language:

English (EN)

(31) Priority number(s):

10/429,261 (US)

(31) Priority date(s):

02 May 2003 (02.05.2003)

(31) Priority status:

Priority document received (in compliance with PCT Rule 17.1)

(51) International Patent Classification:

H01S 3/09 (2006.01); **H01S 3/091** (2006.01)

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(54) Title (EN): LASER RESISTANT TO INTERNAL IR-INDUCED DAMAGE

(54) Title (FR): LASER RESISTANT AUX DOMMAGES INDUITS PAR LE RAYONNEMENT INFRAROUGE INTERNE

(57) Abstract:

(EN): Co-doping the gain medium (102) of a diode-pumped laser (100) to make the laser resistant to long-term degradation from high-intensity internal infrared radiation is disclosed. Co-doping the gain medium (102) with ions such as Cr^{3+} that make the gain medium (102) resistant to external ionizing radiation solves problems of long-term degradation of the gain medium (102).

(FR): Le milieu actif d'un laser infrarouge à diode de pompage est co-dopé de manière à rendre le laser résistant à la dégradation à long terme provoquée par le rayonnement infrarouge interne à haute intensité. Le co-dopage du milieu actif avec des ions tels que Cr^{3+} et Ce^{3+} qui rendent ledit milieu actif résistant au rayonnement ionisant externe résout le problème de la dégradation à long terme du milieu actif.

International search report:

Received at International Bureau: 21 September 2005 (21.09.2005) [US]

International Report on Patentability (IPRP) Chapter II of the PCT:

Not available

(81) Designated States:

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, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

European Patent Office (EPO) : AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR

African Intellectual Property Organization (OAPI) : BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

African Regional Intellectual Property Organization (ARIPO) : BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW

Eurasian Patent Organization (EAPO) : AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

Declarations:

Declaration of inventorship (Rules 4.17(iv) and 51bis.1(a)(iv)) for the purposes of the designation of the United States of America