

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
18 November 2004 (18.11.2004)

PCT

(10) International Publication Number  
WO 2004/100324 A3

(51) International Patent Classification<sup>7</sup>: H01S 3/09

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.

(21) International Application Number:  
PCT/US2004/011620

(22) International Filing Date: 15 April 2004 (15.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
10/429,261 2 May 2003 (02.05.2003) US

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, 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, IT, LU, 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).

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**Declaration under Rule 4.17:**

— of inventorship (Rule 4.17(iv)) for US only

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**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

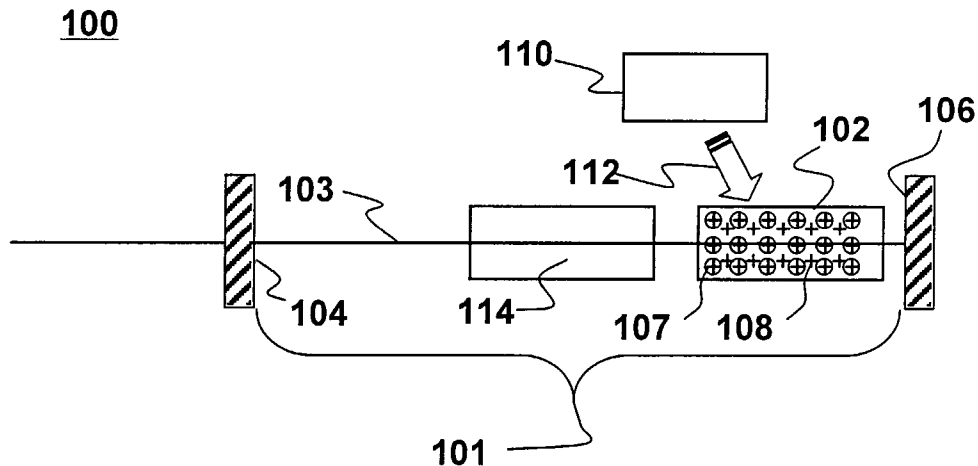
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(88) Date of publication of the international search report:  
3 November 2005

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM,

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: LASER RESISTANT TO INTERNAL IR-INDUCED DAMAGE



(57) Abstract: 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<sup>3+</sup> that make the gain medium (102) resistant to external ionizing radiation solves problems of long-term degradation of the gain medium (102).

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US04/11620

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : H01S 3/09  
 US CL : 372/19, 69

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 372/19, 69

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5,285,467 (SCHEPS) 08 February 1994 (08.02.1994), the entire document.	1-3,5-7-15, 19-27,29-43, 45-60, 64-65
Y	US 3,335,674 (HARDY) 28 November 1967 (28.11.1967), entire document.	4, 28, 44
Y	US 3,609,389 (BJORKHOLM) 28 September 1971 (28.09.1971), entire document.	16-18, 61-63

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See patent family annex.

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"O"	document referring to an oral disclosure, use, exhibition or other means	
"P"	document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

Date of the actual completion of the international search

31 August 2005 (31.08.2005)

Date of mailing of the international search report

19 SEP 2005

Name and mailing address of the ISA/US

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