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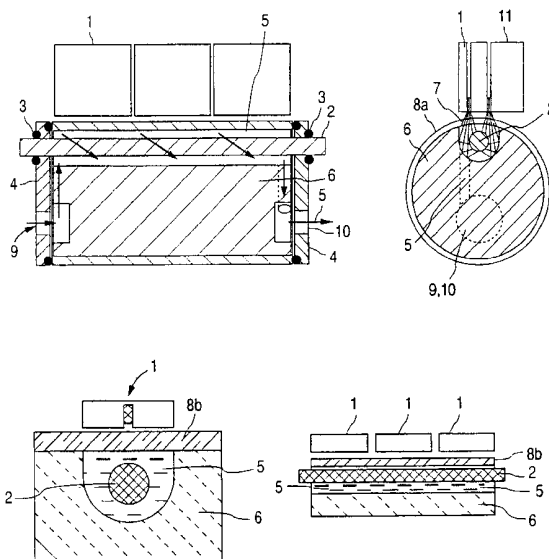
(43) International Publication Date
28 February 2002 (28.02.2002)

PCT

(10) International Publication Number
WO 02/17443 A3

- (51) International Patent Classification⁷: H01S 3/02. 3/0941
- (21) International Application Number: PCT/EP01/09808
- (22) International Filing Date: 24 August 2001 (24.08.2001)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data: 60/228,185 25 August 2000 (25.08.2000) US
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- (81) Designated State (national): JP.
- (84) Designated States (regional): European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR).
- Published: — with international search report
- (88) Date of publication of the international search report: 30 May 2002
- 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: DIODE-PUMPED SOLID STATE LASER



(57) Abstract: A side-pumped, diode-pumped solid state laser device includes an elongated housing having an elongated cavity defined therein and further having an elongated opening defined between the cavity and the exterior of the housing. A solid state rod is disposed within the cavity and is preferably surrounded by a cooling fluid. A cover seal sealably covering the opening and thereby encloses the cavity. The cover seal is formed of a material that is at least substantially transparent to pumping radiation at a predetermined pumping wavelength. A diode array emits the pumping radiation that traverses the cover seal and the opening to be absorbed by the rod to excite laser active species within the rod. The laser device further includes a resonator including the rod disposed therein for generating a laser beam.



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INTERNATIONAL SEARCH REPORT

national Application No
PCT/EP 01/09808

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 H01S3/02 H01S3/0941		
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) IPC 7 H01S		
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 practical, search terms used) EPO-Internal, PAJ, INSPEC		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 018, no. 022 (E-1490), 13 January 1994 (1994-01-13) & JP 05 259540 A (MITSUBISHI ELECTRIC CORP), 8 October 1993 (1993-10-08) cited in the application abstract	1,8-13, 18-24, 36, 42-47, 53-58, 64-67
X A	--- US 5 619 522 A (DUBE GEORGE) 8 April 1997 (1997-04-08) abstract; figures 2,5	1,8-13, 20-24 25,36, 47,58,68
A	--- US 6 075 803 A (BULL DOUGLAS J ET AL) 13 June 2000 (2000-06-13) figure 4 --- -/--	1
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C.		
<input checked="" type="checkbox"/> Patent family members are listed in annex.		
* Special categories of cited documents:		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *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		
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Date of the actual completion of the international search 25 February 2002		Date of mailing of the international search report 04/03/2002
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Galanti, M

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP 01/09808

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
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Information on patent family members

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