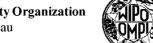
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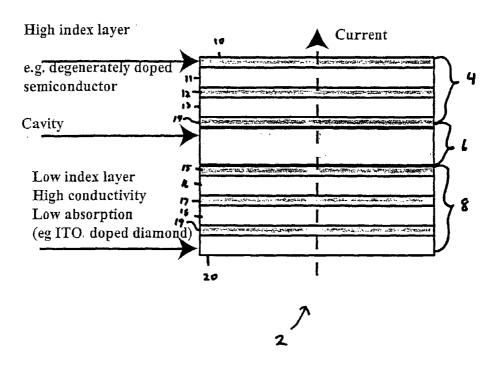
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[Continued on next page]

(54) Title: THERMALLY AND ELECTRICALLY CONDUCTING HIGH INDEX CONTRAST MULTI-LAYER MIRRORS AND DEVICES



(57) Abstract: An optical device is provided. The optical device includes a plurality of high index layers. The optical device also includes a plurality of low index layers. The optical device is formed by creating alternating layers of the plurality of high layers and the plurality of low index layers, such that electricity and heat is allowed to be conducted through said optical device.



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 before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments 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.

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CLASSIFICATION OF SUBJECT MATTER C 7 G02B5/08 G02E A. CLASS G02B5/28 H01S5/183 H01S5/18 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 GO2B 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, WPI Data, PAJ, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages ALMUNEAU G ET AL: "IMPROVED ELECTRICAL X 1,15,29, AND THERMAL PROPERTIES OF INP-ALGAASSB 30,44 BRAGG MIRRORS FOR LONG-WAVELENGTH VERTICAL-CAVITY LASERS" IEEE PHOTONICS TECHNOLOGY LETTERS, IEEE INC. NEW YORK, US, vol. 12, no. 10, October 2000 (2000-10), pages 1322-1324, XP000970125 ISSN: 1041-1135 the whole document -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. X Special categories of cited documents: 'T' later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention *E* earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docucitation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled other means in the art. document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 18/06/2003 20 May 2003 Authorized officer 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, Hervé, D Fax: (+31-70) 340-3016

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