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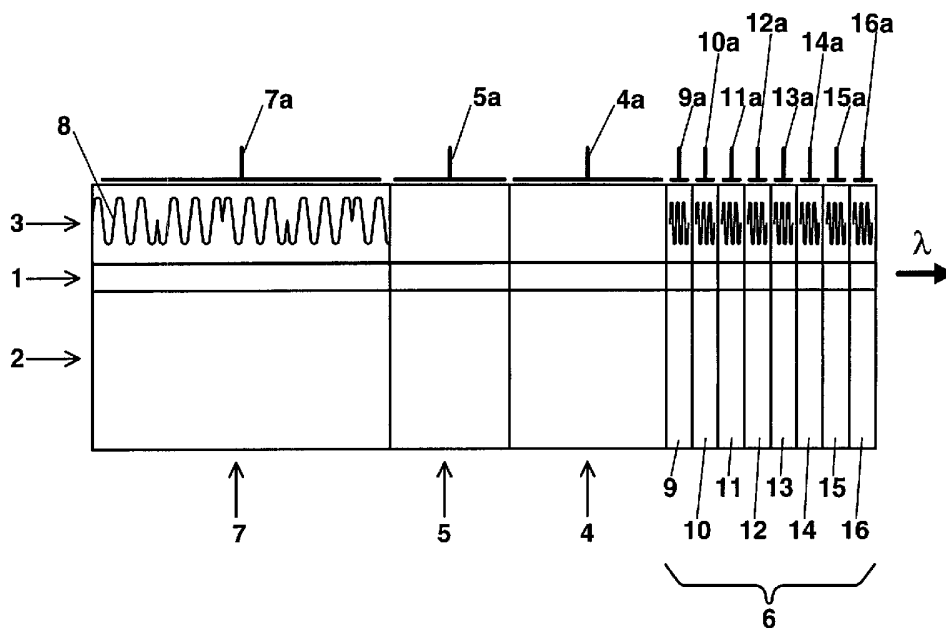
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[Continued on next page]

(54) Title: TUNEABLE LASER



(57) Abstract: A tuneable laser has a gain section bounded at one end by a first reflector in the form of a distributed Bragg reflector adapted to produce a comb of reflective peaks and on the other end by a second Bragg reflector, the second Bragg reflector adapted to reflect at a plurality of wavelengths and being capable of being varied selectively through discrete segments so that one or more segments of the Bragg reflector can be tuned to a lower wavelength to reflect with a segment reflecting at that lower wavelength to enhance the reflectivity at that lower wavelength.



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**Declarations under Rule 4.17:**

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designation US*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii)) for the following designation US*
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## INTERNATIONAL SEARCH REPORT

Internal Application No  
PCT/GB 02/03463

A. CLASSIFICATION OF SUBJECT MATTER  
IPC 7 H01S5/0625

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, WPI Data, 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          | US 5 379 318 A (WEBER JEAN-PIERRE)<br>3 January 1995 (1995-01-03)<br>the whole document                                         | 1-4, 8-13             |
| A          | US 4 885 753 A (CHINONE NAOKI ET AL)<br>5 December 1989 (1989-12-05)<br>column 8, line 65 -column 9, line 42;<br>figures 1,6,10 | 1                     |
| A          | US 5 838 714 A (DELORME FRANCK)<br>17 November 1998 (1998-11-17)<br>the whole document                                          | 1                     |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date                                                                                                                       |
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