Title: AGE COMPENSATION IN OPTOELECTRONIC MODULES WITH INTEGRATED TEMPERATURE CONTROL

Abstract: A method for compensating for wavelength drift in a fiber-optic laser transmitter includes: controlling a temperature within the optoelectronic (100) assembly at a defined level; driving the optoelectronic (100) assembly to emit light, wherein the emitted light has a wavelength that is within a channel of operation, the channel of operation including a range of wavelengths centered around a channel center wavelength; assessing from memory (300) within the optoelectronic (100) assembly a control value associated with the temperature of the optoelectronic (100) assembly at defined points within an operational lifetime of the optoelectronic (100) assembly; and recalculating the defined level by reference to the control value, whereby a wavelength of the optoelectronic (100) assembly is maintained within the channel of operation despite an expected drift of wavelength.
SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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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.
## INTERNATIONAL SEARCH REPORT

**International application No.**

PCT/US03/35248

### A. CLASSIFICATION OF SUBJECT MATTER

<table>
<thead>
<tr>
<th>IPC(7)</th>
<th>H01S 3/04</th>
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<tr>
<td>US CL</td>
<td>372/34, 26,20</td>
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</table>

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.: 372/34, 26,20

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

NONE

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

NONE

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y</td>
<td>US 6,055,252 A (Zhang) 25 April 2000 (25.04.2000), See fig. 3-6.</td>
<td>1-20</td>
</tr>
<tr>
<td>Y</td>
<td>US 6,353,623 B1 (Munks et al.) 05 March 2002 (05.03.2002), See fig. 3,12.</td>
<td>1-20</td>
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<tr>
<td>Y</td>
<td>US 5,019,769 A (LEVINSON) 28 May 1991 (28.05.1991), See abstract.</td>
<td>1-20</td>
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<tr>
<td>Y</td>
<td>US 5,281,516 A (STAPLETON et al.) 25 January 1994 (25.01.1994), see fig. 8.</td>
<td>1-20</td>
</tr>
</tbody>
</table>

☐ Further documents are listed in the continuation of Box C.  
☐ See patent family annex.

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"&" document member of the same patent family

Date of the actual completion of the international search  
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