IMAGING OF MICROARRAYS USING FIBER OPTIC EXCITER

Abstract: Microarrays (11) are imaged by an illumination and detection system that supplies excitation light through one or more optical fibers (20), each fiber transmitting excitation light from an excitation light source (14) to a single spot (12) in the microarray (11). Emission light from each spot is then collected by a collimating lens (15) and converted to a signal that is compiled by conventional software into an image of the entire microarray (11). The optical fibers (20) and the collimating lens (15) are arranged such that the direction of travel of the excitation light (14) and the direction along which the emission light is collected are not coaxial, and preferably both are at an acute angle to the axis normal to the plane of the microarray.
Published:
— with international search report

(88) Date of publication of the international search report:
4 December 2003

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**

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(7) : G02B 6/26


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)


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)

EAST

**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>A,E</td>
<td>US 6,512,618 B1 (HEFLINGER) 28 January 2003 (28.01.2003), see the entire documents</td>
<td>1-10</td>
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☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* 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 invention

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&* document member of the same patent family

Date of the actual completion of the international search: 15 April 2003 (15.04.2003)

Date of mailing of the international search report: 13 MAY 2003

Name and mailing address of the ISA/US:

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Form PCT/ISA/210 (second sheet) (July 1998)