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(54) Title: METHOD AND APPARATUS FOR PERFORMING MULTIPLE SIMULTANEOUS MANIPULATIONS OF BIOMOLECULES IN A TWO-DIMENSIONAL ARRAY

(57) Abstract: This invention relates to methods and apparatus for performing multiple simultaneous manipulations of biomolecules in a two-dimensional array, such as a gel, membrane, tissue biopsy, etc. Such manipulations particularly include assays and nucleic acid amplification protocols.

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**INTERNATIONAL SEARCH REPORT**

International application No.

PCT/US03/37208

<b>A. CLASSIFICATION OF SUBJECT MATTER</b>		
IPC(7) : C12Q 1/68 US CL : 435/6		
According to International Patent Classification (IPC) or to both national classification and IPC		
<b>B. FIELDS SEARCHED</b>		
Minimum documentation searched (classification system followed by classification symbols) U.S. : 435/6, 435/91.2, 435/7.1, 435/4, 436/518		
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 practicable, search terms used) Please See Continuation Sheet		
<b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 2004/0053326 A1 (EMMERT-BUCK et al.) 18 March 2004 (18.03.2004), page 2 col. 1, examples 2, 3 and 5.	1-24
Y	US 2004/0081987 A1 (KNEZEVIC et al.) 29 April 2004 (29.04.2004), pages 3-5, example 11.	1-24
Y	US 2004/0081979 A1 (KNEZEVIC et al.) 29 April 2004 (29.04.2004), Fig 11, page 7 col. 2, page 14, page 15 col. 2.	1-24
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input type="checkbox"/> See patent family annex.		
* Special categories of cited documents:		
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"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)	"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 documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"Z"	document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed		
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Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 872-9306	Authorized officer Heather Calamita <i>J. Roberts for</i> Telephone No. 571.272.1600	

**INTERNATIONAL SEARCH REPORT**

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**Continuation of B. FIELDS SEARCHED Item 3:**  
CAPLUS, MEDLINE  
Layered expression scanning, transcriptome, array