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(71) Applicant and

(72) Inventor: DAVIS, Randall, W. [US/US]; 433 Matthew Court, Pleasanton, CA 94566 (US).

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(74) Agent: THOEMING, Charles, L.; Bielen, Lampe & Thoeming, P.A., 1390 Willow Pass Road, Suite 1020, Concord, CA 94520 (US).

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.

(54) Title: IMPROVED APPARATUS AND METHOD FOR IDENTIFICATION OF BIOMOLECULES, IN PARTICULAR NUCLEIC ACID SEQUENCES, PROTEINS, AND ANTIGENS AND ANTIBODIES

(57) Abstract: An electrical detection system and method using an array of conductive sense sites within a sensing substrate for electrically detecting the successful hybridization or binding reaction between two chemical substances, particularly between biogenic substances such as nucleotides, proteins and ligands, and antigens and antibodies. The method and apparatus provide an inexpensive, robust, small, repeatable, and intuitively easy to use apparatus for detection of low levels of hybridization with large numbers of closely spaced conductive sense sites within a single substrate.



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INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/30040

A. CLASSIFICATION OF SUBJECT MATTER

IPC: G01N 15/06(2006.01);C12M 1/00(2006.01),C12N 11/16;C07H 21/04(2006.01);C12Q 1/68(2006.01)

USPC: 435/6,283.1,287.2;422/68.1;536/23.1

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. : 435/6, 283.1, 287.2; 422/68.1; 536/23.1

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)
EAST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	WO 99/57550 A1 (TECHNION RESEARCH AND DEVELOPMENT FOUNDATION LTD) 11 November 1999 (11.11.1999) pages 5-8, 17-23, Examples 1-5 and 27-29 and Figures 33-37.	1, 2, 4-10, 13, 14, 17, 18, 21, 22, 35, 36 ----- 3, 11, 12, 15, 16, 19, 20, 23-34
Y	US 6,236,088 B1 (NIELSON et al) 22 May 2001 (22.05.2001) columns 4-8.	1-36
Y	US 6,176,990 B1 (YAGER et al) 23 January 2001 (23.01.2001) columns 3-4 and figures 6-8.	1-36



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"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	"&" document member of the same patent family

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Mail Stop PCT, Attn: ISA/US
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Facsimile No. (571) 273-3201

Authorized officer

BJ Forman

Telephone No. (571)272-0600