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(71) Applicant: **AGILIX CORPORATION** [US/US]; 2  
Church Street South, Suite 401, New Haven, CT 06519  
(US).

(72) Inventor: **LIZARDI, Paul, M.**; 7 Stoney Brook Road,  
Wallingford, CT 06492 (US).

(74) Agent: **HODGES, Robert, A.**; Needle & Rosenberg, P.C.,  
127 Peachtree Street, N.E., The Candler Building, Atlanta,  
GA 30303-1811 (US).

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(54) Title: SENSITIVE CODED DETECTION SYSTEMS

(57) Abstract: Disclosed are compositions and methods for sensitive multiplex detection of analytes. The disclosed compositions, referred to as detectors, accomplish this detection by associating specific binding molecules - which interact with desired targets - with block groups in a carrier. The block groups are made up of blocks which, through the combination of different blocks, constitute a code for a given detector. The blocks are detectable and each detector is distinguishable from other detectors by its block group. The coding of the block groups greatly increasing the number of distinguishable detectors from a relatively small number of blocks. The detection burden remains low even with such a large number of block groups because only the blocks need be distinguished from each other during detection. Numerous block molecules of each type making up the block group can be present in the carrier to effectively amplify the signal generated from targets.



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# INTERNATIONAL SEARCH REPORT

International application No.

PCT/US02/35526

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 33/566

US CL : 436/501

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. : 436/501

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

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 6,027,890 A (NESS et al.) 22 February 2000 (22.02.2000), columns 2-76.	1-116
Y	US 5,961,923 A (NOVA et al.) 05 October 1999 (05.10.1999), columns 7-44	1-116
Y	US 5,981,180 A (CHANDLER et al.) 09 November 1999 (09.11.1999), columns 3-26	1-116

<input type="checkbox"/> Further documents are listed in the continuation of Box C.		<input type="checkbox"/> See patent family annex.	
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<p>Name and mailing address of the ISA/US</p> <p>Mail Stop PCT, Attn: ISA/US</p> <p>Commissioner for Patents</p> <p>P.O. Box 1450</p> <p>Alexandria, Virginia 22313-1450</p> <p>Facsimile No. (703)305-3230</p>		<p>Authorized officer</p> <p>Kenneth R Horlick</p> <p>Telephone No. 703-308-0196</p>	

# INTERNATIONAL SEARCH REPORT

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**Continuation of B. FIELDS SEARCHED Item 3:**  
USPAT, DERWENT WPI, MEDLINE, BIOSIS  
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