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(54) Title: MULTIPLEXED STRAND DISPLACEMENT FOR NUCLEIC ACID DETERMINATIONS

(57) Abstract: Multiplexed determinations of large numbers of events are achieved in an accurate and simple manner by using a combination of different oligonucleotides, which serve for both capture and release from a support and strand displacement oligonucleotides for sequential release of groups of oligonucleotides. Also included, as part of the oligonucleotide reagents may be identifiers, which serve to identify a particular characteristic. The method is illustrated using primers for initiation of chain extension joined to or serving as the capture/release sequence, where the extended primer has an identifier. After extending the primer, the extended primers are captured and independently released and the released extended primers assayed. The subject method finds application for nucleic acid sequence determinations, single nucleotide polymorphism determinations, identification of nucleic acid fragments, and the like.

# INTERNATIONAL SEARCH REPORT

national Application No

PCT/US 00/18301

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12Q1/68

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)

IPC 7 C12Q

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 practical, search terms used)

EPO-Internal, WPI Data, PAJ, BIOSIS, MEDLINE, CHEM ABS Data, EMBASE

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                 | Relevant to claim No. |
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|            | claim 42                                                                                                           |                       |
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|            | claims 1-17; example 2                                                                                             |                       |
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|            | examples 1,2                                                                                                       |                       |
|            | -/--                                                                                                               |                       |



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages                                                                                                                                                                                   | Relevant to claim No. |
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| A          | EP 0 871 774 A (UNIV STRATHCLYDE)<br>21 October 1998 (1998-10-21)<br>example 9<br>-----                                                                                                                                                                              | 14                    |

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Information on patent family members

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