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[Continued on next page]

(54) Title: METHODS FOR INCREASING ACCURACY OF NUCLEIC ACID SEQUENCING

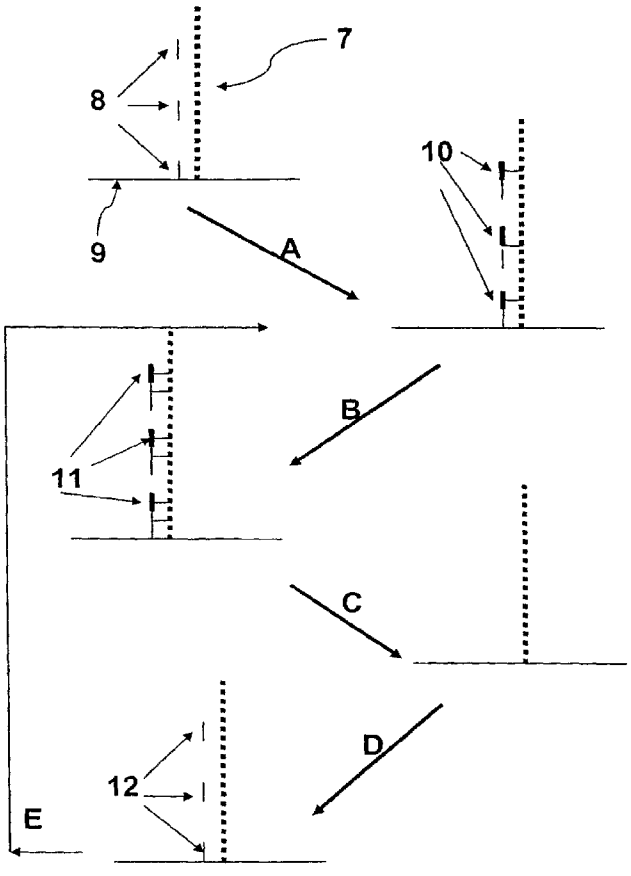

FIG. 2

(57) Abstract: The invention provides methods for improving the fidelity of a sequencing-by-synthesis reaction by resequencing at least a portion of a nucleic acid template.

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A. CLASSIFICATION OF SUBJECT MATTER
IPC(8) - C12Q 1/68; C12P 19/34; C12M 3/00 (2008.01)
USPC - 435/6
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)
USPC - 435/6

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 435/91.1-91.2, 287.2; 536/23.1; 436/89; 977/924 (see search terms below)

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
PubWEST (PGPB,USPT,USOC,EPAB,JPAB); Google Scholar
Search Terms Used:
resequenc$, single ADJ molecule ADJ sequence, single ADJ molecule ADJ sequencing, fluorescent ADJ label$, optically-detectable ADJ label$, remov$ NEAR2 primer

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	BRASLAVSKY et al. Sequence information can be obtained from single DNA molecules. PNAS (*Proceedings of the National Academy of Sciences*), 1 April 2003, Vol 100, No 7, pp 3960-3964, especially pg 3960-3962; Fig. 1b and 2	1-22
Y	US 6,451,525 B1 (BLASBAND et al.) 17 September 2002 (17.09.2002) Abstract; col 3, ln 17-25; col 6, ln 59-61; col 11, ln 27-33; col 12, ln 31-47; col 13, ln 51-59; claim 1	1-22

☐ Further documents are listed in the continuation of Box C. ☐

* Special categories of cited documents:
"A" document defining the general state of the art which is not considered to be of particular relevance
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"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
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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. 571-273-3201	Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774

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