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(54) Title: METHODS AND COMPOSITIONS FOR THE AMPLIFICATION, DETECTION AND QUANTIFICATION OF NUCLEIC ACID FROM A SAMPLE

(57) Abstract: Methods and kits for the amplification, detection and quantification of a nucleic acid from a sample are disclosed. The methods of the invention may be used in a wide range of applications, including, but not limited to, the detection and quantification of fetal nucleic acid from maternal plasma, the detection and quantification of circulating nucleic acids from neoplasms (malignant or non-malignant), accurate pooling analysis for low frequency alleles, or any other application requiring sensitive quantitative analysis of nucleic acids.



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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US 07/71232

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C40B 20/08 (2008.04)

USPC - 506/6

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)

IPC(8): C40B 20/08 (2008.04)

USPC: 506/6

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)

WEST (PGPB,USPT,EPAB,JPAB): amplification, quantification, nucleic acid, high copy, low copy, reactor, vessel, maternal, fetal, methylation specific, apparatus, mass spectrometry; esp@cenet: sequenom, quantification, lee; Google Scholar: amplifying, low copy, nucleic acid; Google Web: amplifying, nucleic acid

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----	US 2005/0042639 A1 (KNAPP et al.) 24 February 2005 (24.02.2005), abstract; para [0008], [0015], [0019], [0037], [0039], [0040], [0044], [0045], [0047], [0049], [0050], [0051], [0053], [0056], [0094], [0095], [0121], [0142], [0214], [0215], [0233], [0236], [0238], [0249].	1-7, 25, 26, 27 ----- 8-24, 28, 29, 30, 31
Y	US 2003/0232351 A1 (FEINBERG) 18 December 2003 (18.12.2003), para [0075], [0093], [0145], [0149].	8, 22, 23, 24
Y	US 2006/0099581 A1 (BERLIN) 11 May 2006 (11.05.2006), abstract; para [0012], [0015].	9, 10, 23, 24
Y	US 6,814,934 B1 (HIGUCHI) 9 November 2004 (09.11.2004), col 3, ln 4-6; col 21, ln 14-17; col 29, ln 53-55.	11-24, 29, 30, 31
Y	US 5,641,658 A (ADAMS et al.) 24 June 1997 (24.06.1997), abstract; col 5, ln 23-29; col 12, ln 61-65.	28, 29,
Y	US 5,786,183 A (RYDER et al.) 28 July 1998 (28.07.1998), abstract; col 3, ln 55-60; col 24, ln 10-20.	28, 29

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* 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

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