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(54) **Title:** METHODS AND KITS FOR DETECTING CELL-FREE PATHOGEN-SPECIFIC NUCLEIC ACIDS

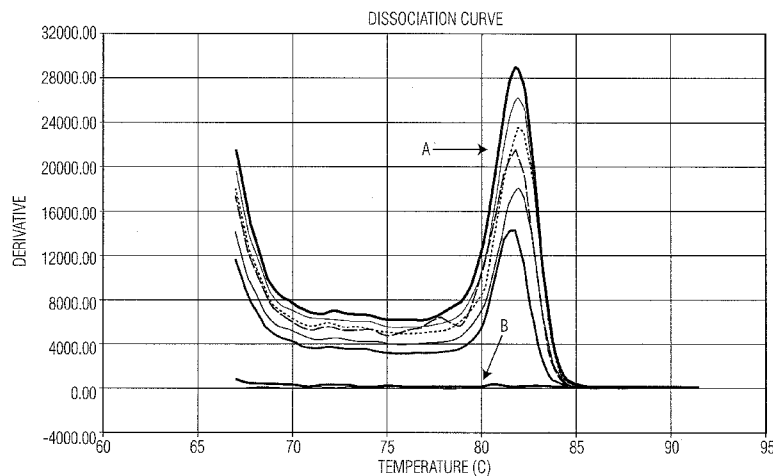


FIG. 3B

(57) **Abstract:** The present invention relates to a method for detecting a target nucleic acid derived from a pathogen in a subject. The method comprises (a) amplifying the nucleic acid sequence of the target nucleic acid, which is obtained from a cell-free fraction of a blood sample from the subject, to produce a double stranded DNA, and (b) detecting the double stranded DNA. The presence of the double stranded DNA indicates the presence of the target nucleic acid in the subject. Also provided are kits for detecting a target nucleic acid derived from a pathogen in a subject.

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INTERNATIONAL SEARCH REPORT

International application No.
PCT/US2012/031814**A. CLASSIFICATION OF SUBJECT MATTER***C12Q 1/68(2006.01)i, C12Q 1/04(2006.01)i, C12N 15/11(2006.01)i*

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)

C12Q 1/68; G01N 33/554; C07H 21/04; C07H 21/02; C12P 19/34; G01N 33/569

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 2010-080691 A1 (YOU, QIMIN) 15 July 2010 See the whole document, especially Claims 2,13,17	1-22
A	US 2004-0038325 A1 (CHRISTOPHER, BENJAMIN PHELPS et al.) 26 February 2004 See the whole document, especially Claims 48,53	1-22
A	US 2003-0073081 A1 (HIROYUKI MUKAI et al.) 17 April 2003 See the whole document, especially Claims 1,17-19	1-22
A	US 6280952 B1 (WEISBURG; WILLIAM G. et al.) 28 August 2001 See the whole document, especially Claims 1,17-19	1-22

 Further documents are listed in the continuation of Box C. See patent family annex.

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"&" document member of the same patent family

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Information on patent family members

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