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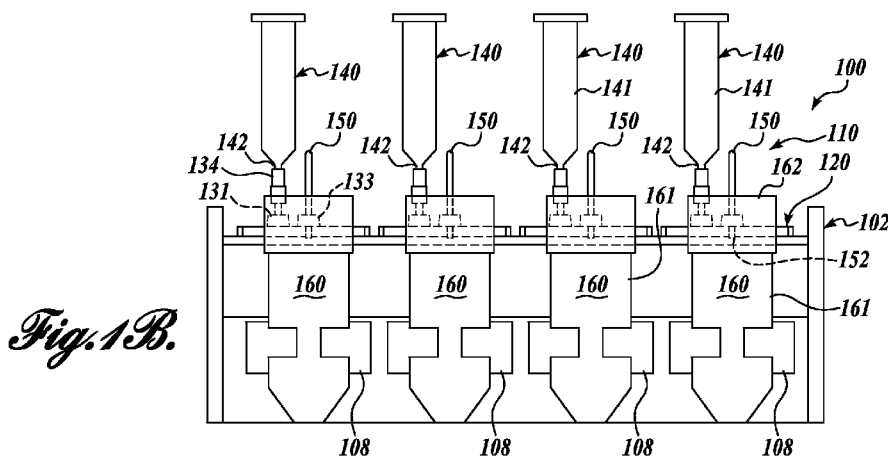
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(54) Title: GRAVITY FLOW FLUIDIC DEVICE FOR NUCLEIC ACID EXTRACTION



*Fig. 1B.*

(57) Abstract: A system, method, and kit for extracting nucleic acid from a sample containing nucleic acid uses an extraction device with an elongate channel. Fluids are provided to the channel via gravity feed to the inlet port. The flow rate and other flow behavior may be controlled with a siphon provided at the outlet port.

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**A. CLASSIFICATION OF SUBJECT MATTER***C12Q 1/68(2006.01)i, C12N 15/10(2006.01)i, C12S 3/20(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; C12M 1/00; B01D 11/04; C12M 1/24; B01D 63/02; C12N 15/10

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) &amp; Keywords: nucleic acid extraction, DNA isolation, elongate channel, siphon tube

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	QIAGEN Catalog, 'QIAamp DNA Blood Midi/Maxi Handbook', Third Edition, April 2010, pp.1-44 see Page 9.	1-27
A	US 5989431 A1 (EVANS, TM.; HUGH, RD.), 23 November 1999 see Abstract; Figure 1.	1-27
A	KR 10-1005924 B1 (POSTECH ACADEMY-INDUSTRY FOUNDATION.), 6 January 2011 see Abstract; Figure 1.	1-27
A	EP 1655366 A2 (SAMSUNG ELECTRONICS CO., LTD.) 10 May 2006 see Abstract; Figure 1.	1-27
A	MALIC, L. et al., 'Current State of Intellectual Property in Microfluidic Nucleic Acid Analysis', Recent Patents on Engineering, 2007, vol.1, pp.71-88 see Page 76.	1-27

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

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

International application No.

**PCT/US2012/038658**

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