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(54) Title: SYSTEM FOR PERFORMING POLYMERASE CHAIN REACTION NUCLEIC ACID AMPLIFICATION

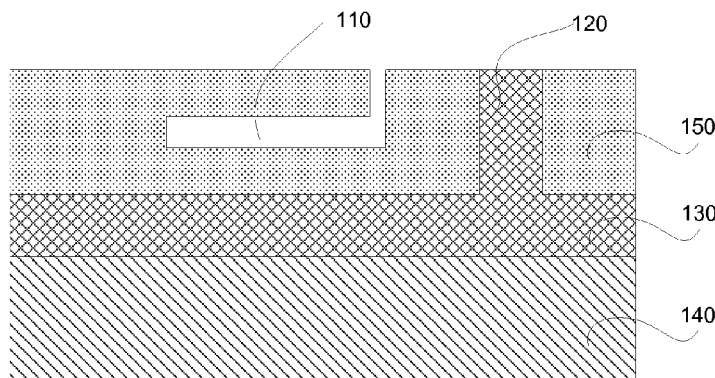


FIG. 1D

(57) Abstract: A printed circuit structure containing a fluidic chamber configured to receive an aqueous solution containing a sample to be analyzed and fluorophore for polymerase chain reaction analysis. The printed circuit structure also contains a heating element that provides for temperature cycling of the fluidic chamber to support polymerase chain reaction analysis.



A. CLASSIFICATION OF SUBJECT MATTER*C12M 1/38(2006.01)i, C12M 1/34(2006.01)i, C12Q 1/68(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)

C12M 1/38; B01L 7/00; G11C 8/00; G01N 31/00; C12Q 1/68; C12M 1/34

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) & Keywords: polymerase chain reaction, printed circuit structure, fluorophore, heating element, etc.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2007-0196237 A1 (NEUZIL, P. et al.) 23 August 2007 See abstract, claims 1, 14, 19-21.	1-4, 10-13, 15, 17-19
A	US 2002-0127152 A1 (BENETT, W. J. et al.) 12 September 2002 See abstract, claims 1, 2, 5, 10-11.	1-4, 10-13, 15, 17-19
A	US 2007-0047377 A1 (BANG, HJ. et al.) 01 March 2007 See abstract, claims 1, 7.	1-4, 10-13, 15, 17-19
A	US 2010-0221726 A1 (ZENHAUSERN, F. et al.) 02 September 2010 See abstract, claims 1-3, 20, 28.	1-4, 10-13, 15, 17-19

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

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