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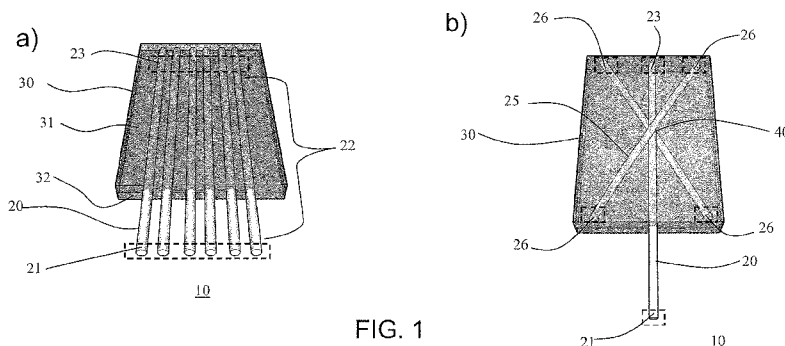


FIG. 1

(57) Abstract: Hydrophilic threads as platforms for inexpensive, low volume, portable diagnostic systems, and methods of making the same are described. A diagnostic system includes a hydrophilic loading thread having an inlet zone at a proximal end; a testing zone at a distal end; and an intermediate zone located between the inlet zone and the testing zone, wherein the testing zone does not directly contact the inlet zone. In another aspect, a diagnostic system includes (i) a hydrophilic loading thread that includes an inlet zone at a proximal end and an intermediate zone at a distal end; and (ii) one or more additional hydrophilic threads that contact the intermediate zone of the loading thread. A method of detecting the presence or absence of an analyte in a fluid sample includes applying the sample to an inlet zone of a diagnostic system that includes a hydrophilic loading thread with an inlet zone at a proximal end; an intermediate zone; and a testing zone at a distal end; wherein the testing zone does not directly contact the inlet zone.

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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 G01N 35/00, G01N 33/48, G01N 33/493, G01N 33/49, G01N 33/50

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 since 1975

Japanese Utility models and applications for Utility models since 1975

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

eKOMPASS(KIPO internal) & keywords: thread, hydrophilic, testing zone, detection, and reagent

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 04861711 A (HEINZ-JURGEN FRIESEN et al.) 29 AUGUST 1989 See column 1, line 4 - column 7, line 12; Figures. 1-2.	1-38
A	US 07008799 B1 (VOLKER ZIMMER et al.) 7 MARCH 2006 See column 9, line 24 - column 11, line 16; Figures. 1-6.	1-38
A	US 06025203 A (PETER VETTER et al.) 15 FEBURARY 2000 See column 1, line 5 - column 5, line 32; Figures. 1-2.	1-38

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

* Special categories of cited documents:

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INTERNATIONAL SEARCH REPORT

Information on patent family members

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