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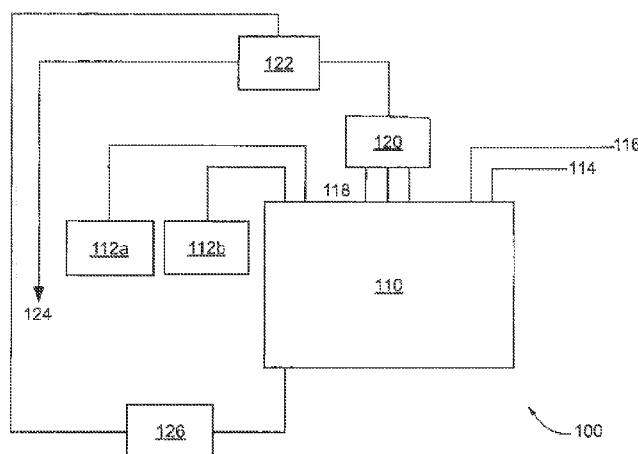
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(54) Title: LAB-ON-VALVE ANALYTICAL SYSTEM

Fig. 1



(57) Abstract: A lab-on-valve analytical system includes a rotary sample preparation assembly having a stator and a rotor. The rotor includes a plurality of integral syringe pumps which can be aligned with passages formed within the stator. The stator passages can be connected with fluid inlet connector which connect the sample preparation assembly with fluid sources, and fluid outlet connectors which connect the sample preparation assembly with one or more wet chemical analytical devices. Some embodiments can include a mixer and optical sensor connected with the fluid outlets. One or more drive motors can be used to control simultaneous actuation of one or more of the syringe pumps, thereby providing for simultaneous delivery of metered volumes of fluid.



A. CLASSIFICATION OF SUBJECT MATTER*G01N 35/10(2006.01)i, G01N 1/38(2006.01)i, G01N 21/25(2006.01)i, B01L 3/00(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)

G01N 35/10; C07H 21/04; F16K 3/10; C12P 19/34; G01N 1/10; F16K 11/10

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) & Keywords: rotary, valve, analytical, rotor, stator, plunger, motor

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 6748975 B2 (HARTSHORNE; HERBERT A. et al.) 15 June 2004 See the abstract; clams 1-35	1-18
A	US 06162602A A (GAUTSCH; JAMES W.) 19 December 2000 See the abstract; claims 1-19	1-18
A	US 04068528A A (GUNDELFINGER; RICHARD) 17 January 1978 See the abstract; claims 1-16	1-18
A	US 7186383 B2 (WEBSTER et al.) 06 March 2007 See the abstract; claims 1-19	1-18



Further documents are listed in the continuation of Box C.



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