

Title (en)
METHODS AND SYSTEMS FOR MICROFLUIDIC PROCESSING

Title (de)
VERFAHREN UND SYSTEME ZUR MIKROFLUIDISCHEN VERARBEITUNG

Title (fr)
PROCEDES ET SYSTEMES DE TRAITEMENT MICROFLUIDIQUE

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Application
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- US 1451901 A 20011214
- US 1452001 A 20011214
- US 7537102 A 20020215

Abstract (en)
[origin: WO03012406A1] The present invention relates to a system and method for moving samples, such as fluids, within a microfluidic system using a plurality of gas actuators (168, 170, 172) for applying pressure at different locations within the microfluidic. The system includes a substrate (130, 132) which forms a fluid network through which fluid flows, and a plurality of gas actuators (168, 170, 172) integral with the substrate (130, 132). One such actuator (168) is coupled to the network at a first location for providing gas pressure to move a microfluidic sample within the network. Another gas actuator (170) is coupled to the network at a second location for providing gas pressure to further move at least a portion of the microfluidic sample within the network. A valve (915, 216) is coupled to the microfluidic network so that, when the valve is closed, it substantially isolates the second gas actuator from the first gas actuator.

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Citation (search report)

- [A] US 5635358 A 19970603 - WILDING PETER [US], et al
- [A] US 5922591 A 19990713 - ANDERSON ROLFE C [US], et al
- [A] WO 9822625 A1 19980528 - REGENT OF THE UNIVERSITY OF MI [US], et al
- [A] HANDIQUE K ET AL: "ON-CHIP THERMOPNEUMATIC PRESSURE FOR DISCRETE DROP PUMPING", ANALYTICAL CHEMISTRY, AMERICAN CHEMICAL SOCIETY, US LNKD- DOI:10.1021/AC000711F, vol. 73, no. 8, 15 April 2001 (2001-04-15), pages 1831 - 1838, XP001030281, ISSN: 0003-2700
- See references of WO 03012406A1

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