

Title (en)

METHODS AND SYSTEMS FOR MICROFLUIDIC PROCESSING

Title (de)

VERFAHREN UND SYSTEME ZUR MIKROFLUIDISCHEN VERARBEITUNG

Title (fr)

PROCEDES ET SYSTEMES DE TRAITEMENT MICROFLUIDIQUE

Publication

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Application

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- US 1452001 A 20011214
- US 7537102 A 20020215
- EP 02715213 A 20020327
- US 0209440 W 20020327

Abstract (en)

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 system. 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 (1320, 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 (916, 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.

IPC 8 full level

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Citation (applicant)

US 95392101 A 20010918

Citation (search report)

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**WO 03012406 A1 20030213**; **WO 03012406 A9 20030320**; EP 1438567 A1 20040721; EP 1438567 A4 20100602; EP 1438567 B1 20180725; EP 3427834 A1 20190116; ES 2683698 T3 20180927; JP 2005514718 A 20050519; JP 4596776 B2 20101215

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