

Title (en)
MICRO-FLUIDIC SYSTEM

Title (de)
MIKROFLUIDSYSTEM

Title (fr)
SYSTEME MICROFLUIDIQUE

Publication
EP 1317625 A1 20030611 (EN)

Application
EP 01968418 A 20010831

Priority
• US 0127340 W 20010831
• US 22938200 P 20000831

Abstract (en)
[origin: WO0218785A1] According to the present invention, there is provided a micro-fluidic sensor system (6) including a micro-conduit (56) for carrying fluid therethrough having a flexible wall portion (18), at least one micro-fluidic actuator having a closed cavity, flexible mechanism defining a wall of the cavity (11) and flexible wall portion (18) of the micro-conduit for deflecting upon an application of pressure thereto, and expanding mechanism (14) disposed in the cavity for selectively expanding the cavity and thereby selectively flexing said expanding mechanism, and sensor mechanism in fluid communication with the micro-conduit for sensing the presence or absence of molecules. The present invention further provides for a micro-fluidic system for moving micro-fluid amounts including a micro-conduit and at least one micro-fluidic actuator in fluid communication with the micro-conduit.

IPC 1-7
F04B 35/02; F16K 31/122; F16K 7/04; A61B 5/00; A61B 5/103; B81B 3/00; F15C 5/00; F04B 19/24; F04B 43/04

IPC 8 full level
A61B 5/00 (2006.01); **A61B 5/103** (2006.01); **B01L 3/00** (2006.01); **B81B 1/00** (2006.01); **B81B 3/00** (2006.01); **F04B 19/00** (2006.01); **F04B 19/24** (2006.01); **F04B 35/02** (2006.01); **F04B 43/04** (2006.01); **F15C 5/00** (2006.01); **F16K 99/00** (2006.01); **G01N 27/416** (2006.01); **F15B 15/20** (2006.01)

CPC (source: EP US)
A61B 5/145 (2013.01 - EP); **A61B 5/14514** (2013.01 - EP); **A61B 5/14546** (2013.01 - EP); **A61B 5/1491** (2013.01 - EP); **B01L 3/50273** (2013.01 - EP); **B01L 3/502738** (2013.01 - EP); **B81B 1/00** (2013.01 - EP); **B81B 3/0024** (2013.01 - EP); **F04B 19/006** (2013.01 - EP US); **F04B 43/046** (2013.01 - EP US); **F04B 43/14** (2013.01 - EP US); **F16K 99/0001** (2013.01 - EP); **F16K 99/0015** (2013.01 - EP); **F16K 99/0036** (2013.01 - EP); **F16K 99/0061** (2013.01 - EP); **A61B 5/0002** (2013.01 - EP); **A61B 5/14532** (2013.01 - EP); **A61B 2560/0412** (2013.01 - EP); **B01L 2200/10** (2013.01 - EP); **B01L 2300/0636** (2013.01 - EP); **B01L 2300/0645** (2013.01 - EP); **B01L 2300/0816** (2013.01 - EP); **B01L 2300/087** (2013.01 - EP); **B01L 2400/0442** (2013.01 - EP); **B01L 2400/0481** (2013.01 - EP); **B01L 2400/0655** (2013.01 - EP); **B01L 2400/086** (2013.01 - EP); **B81B 2201/036** (2013.01 - EP); **B81B 2201/054** (2013.01 - EP); **F15B 2015/208** (2013.01 - EP); **F16K 2099/0069** (2013.01 - EP); **F16K 2099/0074** (2013.01 - EP); **F16K 2099/0076** (2013.01 - EP); **F16K 2099/008** (2013.01 - EP); **F16K 2099/0084** (2013.01 - EP)

Designated contracting state (EPC)
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)
WO 0218785 A1 20020307; AU 8866801 A 20020313; CA 2420682 A1 20020307; EP 1317625 A1 20030611; EP 1317625 A4 20050810

DOCDB simple family (application)
US 0127340 W 20010831; AU 8866801 A 20010831; CA 2420682 A 20010831; EP 01968418 A 20010831