

Title (en)

MICROFLUIDIC DEVICE FOR HANDLING IMMISCIBLE FLUIDS

Title (de)

MIKROFLUIDISCHE VORRICHTUNG ZUR HANDHABUNG UNMISCHBARER FLÜSSIGKEITEN

Title (fr)

DISPOSITIF MICROFLUIDIQUE DE MANIPULATION DES FLUIDES NON MISCIBLE

Publication

**EP 3086879 A1 20161102 (FR)**

Application

**EP 14824016 A 20141224**

Priority

- FR 1363551 A 20131224
- EP 2014079337 W 20141224

Abstract (en)

[origin: WO2015097300A1] The process (1200) for handling an element consisting of a first fluid transported by a second fluid that is immiscible with the first fluid in a cavity, at least one wall of which is made of a deformable material, characterized in that it comprises: a step (1205) of introducing the second fluid and the element of the first fluid into the cavity, - a step (1210) of ordering a local deformation of the deformable material of the cavity, at least one other portion of the deformable material of the cavity not being deformed, - a step (1215) of locally deforming a portion of the deformable material forming the cavity in order to at least partially obstruct the passage of the element introduced into the cavity without obstructing the passage of the second fluid and - a step (1220) of moving the element in the cavity to the outside of the deformed portion of the cavity.

IPC 8 full level

**B01L 3/00** (2006.01); **B81B 3/00** (2006.01); **F04B 19/24** (2006.01); **F04B 43/04** (2006.01); **F16K 99/00** (2006.01)

CPC (source: EP US)

**B01L 3/50273** (2013.01 - EP US); **B01L 3/502784** (2013.01 - US); **F04B 19/24** (2013.01 - EP US); **F04B 43/043** (2013.01 - EP US);  
**F16K 99/0026** (2013.01 - EP US); **F16K 99/0044** (2013.01 - EP US); **B01L 2200/0673** (2013.01 - US); **B01L 2200/14** (2013.01 - US);  
**B01L 2300/087** (2013.01 - US); **B01L 2300/123** (2013.01 - US); **B01L 2300/1805** (2013.01 - US); **B01L 2400/0481** (2013.01 - EP US);  
**F04B 43/14** (2013.01 - EP US); **F16K 2099/0084** (2013.01 - US)

Citation (search report)

See references of WO 2015097300A1

Citation (examination)

- DE 102004062893 A1 20060629 - UNIV DRESDEN TECH [DE]
- DE 10157317 A1 20030605 - GESIM GES FUER SILIZIUM MIKROS [DE]

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

**FR 3015310 A1 20150626; FR 3015310 B1 20200911;** EP 3086879 A1 20161102; US 2016367989 A1 20161222; WO 2015097300 A1 20150702

DOCDB simple family (application)

**FR 1363551 A 20131224;** EP 14824016 A 20141224; EP 2014079337 W 20141224; US 201415108281 A 20141224