

Title (en)

MICROFLUID STRUCTURE WITH CAVITIES

Title (de)

MIKROFLUIDISCHE STRUKTUR MIT VERTIEFUNGEN

Title (fr)

STRUCTURE MICROFLUIDIQUE AVEC DES CAVITÉS

Publication

EP 2729251 A1 20140514 (DE)

Application

EP 12732642 A 20120702

Priority

- EP 11172775 A 20110705
- EP 2012062863 W 20120702
- EP 12732642 A 20120702

Abstract (en)

[origin: WO2013004673A1] The invention relates to a microfluidic structure (1), comprising at least one cavity (10) having at least one inlet opening (11) and at least one outlet opening (12), wherein the cavity (10) can be filled with a liquid or a liquid can flow through the cavity and at least one element (13) is provided inside the cavity (10), which element stops the flow of the liquid at least temporarily and/or diverts the flow of the liquid at least in some regions within the cavity (10). According to the invention, the at least one element (13) is formed by a recess (13) introduced into a wall of the cavity (10), which recess (13) has at least one first region (14) at which the liquid stops at least temporarily and/or is diverted at least in some regions and at least one second region (15) at which the liquid preferably flows into the recess (13). Such a microfluidic structure makes it possible to fill the cavity (10) without air inclusions. Thereby, the useful volume of the cavity (10) is not limited, and the production costs of a microfluidic component (2) having such a microfluidic structure (1) can be kept low.

IPC 8 full level

B01L 3/00 (2006.01)

CPC (source: EP US)

B01L 3/5027 (2013.01 - EP US); **B01L 3/502738** (2013.01 - EP US); **B01L 3/502746** (2013.01 - EP US); **B01L 3/502723** (2013.01 - US); **B01L 3/502753** (2013.01 - US); **B01L 2200/0642** (2013.01 - US); **B01L 2200/0684** (2013.01 - EP US); **B01L 2300/0809** (2013.01 - US); **B01L 2300/0858** (2013.01 - US); **B01L 2300/0864** (2013.01 - US); **B01L 2400/0406** (2013.01 - EP US); **B01L 2400/084** (2013.01 - EP US); **B01L 2400/086** (2013.01 - EP US)

Citation (search report)

See references of WO 2013004673A1

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

DOCDB simple family (publication)

WO 2013004673 A1 20130110; EP 2729251 A1 20140514; EP 2729251 B1 20181114; JP 2014521056 A 20140825; JP 6098020 B2 20170322; US 2014227148 A1 20140814; US 2015251182 A1 20150910; US 9409171 B2 20160809

DOCDB simple family (application)

EP 2012062863 W 20120702; EP 12732642 A 20120702; JP 2014517765 A 20120702; US 201214127341 A 20120702; US 201514719503 A 20150522