Title (en)

Dispensing and metering system, in particular for substances in microfluidic systems, and method and cartridge with the dispensing and metering system

Title (de)

Abgabe- und Dosiersystem, insbesondere von Substanzen in mikrofluidischen Systemen, sowie Verfahren und Kartusche mit dem Abgabe- und Dosiersystem

Title (fr)

Système de distribution et de dosage, notamment de substances dans des systèmes microfluidiques, et procédé et cartouche dotée du système de distribution et de dosage

Publication

EP 2737949 A3 20141105 (DE)

Application

EP 13191863 A 20131107

Priority

DE 102012221848 A 20121129

Abstract (en)

[origin: EP2737949A2] The system (100) has a separation element (30) for separating stored substance (20) from fluid (10) in an initial configuration, where the stored substance is dispensed to the fluid by actuation upon the element in a continuously metered manner discretely with a time delay or in multiple stages over a predefined period of time and the actuation comprises physical or chemical stimulation of the element. The element completely surrounds the stored substance in the initial configuration, where the actuation ensures permeability of the element for the stored substance. The stored substance is selected from a group consisting of liquid, gas, particle and solid material. The physical stimulation is external force, centrifugal force and hydrostatic pressure or electrical energy. The chemical stimulation is a pH value, solubility, surface size and temperature of the stored substance, the element and the fluid. Independent claims are also included for the following: (1) a cartridge (2) a method for producing a component.

IPC 8 full level

B01L 3/00 (2006.01)

CPC (source: EP US)

B01L 3/502 (2013.01 - EP US); **B01L 3/52** (2013.01 - US); B01L 3/5021 (2013.01 - EP US); B01L 2200/0621 (2013.01 - EP US); B01L 2300/0672 (2013.01 - EP US); B01L 2300/0841 (2013.01 - EP US); B01L 2300/087 (2013.01 - EP US); B01L 2300/163 (2013.01 - EP US); B01L 2400/0409 (2013.01 - EP US); B01L 2400/0472 (2013.01 - EP US); B01L 2400/0481 (2013.01 - EP US); B01L 2400/0677 (2013.01 - EP US); B01L 2400/0683 (2013.01 - EP US); Y10T 137/0318 (2015.04 - EP US)

Citation (search report)

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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)

EP 2737949 A2 20140604; **EP 2737949 A3 20141105**; DE 102012221848 A1 20140605; US 2014144514 A1 20140529

DOCDB simple family (application)

EP 13191863 A 20131107; DE 102012221848 A 20121129; US 201314091523 A 20131127