

Title (en)

MICROFLUIDICS MODULE AND CARTRIDGE FOR IMMUNOLOGICAL AND MOLECULAR DIAGNOSIS IN AN ANALYSIS MACHINE

Title (de)

MIKROFLUIDIK-MODUL UND KASSETTE FÜR DIE IMMUNOLOGISCHE UND MOLEKULARE DIAGNOSTIK IN EINEM ANALYSEAUTOMATEN

Title (fr)

MODULE MICROFLUIDIQUE ET CARTOUCHE DE DIAGNOSTIC IMMUNOLOGIQUE ET MOLÉCULAIRE DANS UN ANALYSEUR AUTOMATIQUE

Publication

**EP 3131676 A1 20170222 (DE)**

Application

**EP 15718187 A 20150416**

Priority

- DE 102014105437 A 20140416
- EP 2015058258 W 20150416

Abstract (en)

[origin: WO2015158818A1] The invention relates to a microfluidics module (100) for both the immunological and molecular diagnosis of samples, wherein channels (1, 3, 3', 3'', 4, 7, 7', 7'', 8, 8') and/or cavities (2, 5) having inlets (1a, 1b, 3a-3i) for fluid samples and reagents, as well as inlet-assigned containers, container receiving means or container anchoring points are formed in a main body, and which module has a detection channel (80), for receiving a test-specific detection medium, that can be connected with channels (8, 7, 3) of the module. A central multi-port valve (6) is essential for the function, and controllably connects individual channels (3, 4, 7, 7', 7'', 8) on the module. The channels belong to channel structures which are assigned certain functions and which are all directly or indirectly connected to the multi-port valve (6), wherein at least sections of the channel structures and channels form circuits (10, 30, 40, 70), the channels (1, 3, 3', 3'', 4, 7, 7', 7'', 8, 8') and/or cavities (2, 5) of which circuits are at least partially arranged close to the base surface (120), in order to permit procedures, controlled by the analysis device, within the test process. The invention also relates to a cartridge (200) for receiving a microfluidics module (100), a reagent module (300), and a method for carrying out both immunological and, optionally, molecular tests using the microfluidics module (100).

IPC 8 full level

**B01L 3/00** (2006.01)

CPC (source: EP US)

**B01L 3/502738** (2013.01 - EP US); **B01L 7/52** (2013.01 - EP US); **F16K 99/0013** (2013.01 - EP US); **F16K 99/0028** (2013.01 - EP US); **B01L 2200/0605** (2013.01 - EP US); **B01L 2200/10** (2013.01 - EP US); **B01L 2300/0816** (2013.01 - EP US); **B01L 2300/0867** (2013.01 - EP US); **B01L 2400/0487** (2013.01 - EP US); **B01L 2400/0622** (2013.01 - EP US); **B01L 2400/0644** (2013.01 - EP US); **B01L 2400/065** (2013.01 - US); **F16K 2099/0084** (2013.01 - EP US)

Citation (search report)

See references of WO 2015158818A1

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)

**DE 102014105437 A1 20151022;** EP 3131676 A1 20170222; US 2017028403 A1 20170202; WO 2015158818 A1 20151022

DOCDB simple family (application)

**DE 102014105437 A 20140416;** EP 15718187 A 20150416; EP 2015058258 W 20150416; US 201515303964 A 20150416