

Title (en)

MICROFLUIDIC EXTRACTION AND REACTION DEVICE

Title (de)

MIKROFLUIDISCHE EXTRAKTIONS- UND REAKTIONSAPPARAT

Title (fr)

DISPOSITIF MICROFLUIDIQUE D'EXTRACTION ET DE RÉACTION

Publication

EP 2349565 A1 20110803 (DE)

Application

EP 09741258 A 20090930

Priority

- EP 2009062677 W 20090930
- DE 102008042581 A 20081002

Abstract (en)

[origin: WO2010037774A1] The invention relates to a microfluidic arrangement (14) for extracting and optionally processing an extract from a sample and for transferring the extract in flowable form to a microfluidic chip (12) using an extractor (30) comprising a compressible extraction chamber and at least one opening thereof, a reactor (46) that comprises a reaction chamber (62), an inlet opening that communicates with the at least one opening of the extractor (30), wherein the two openings define a flow path between the chambers, an outlet opening for fluidically connecting to the microfluidic chip (12) and a ventilation opening of the reaction chamber (62), and comprising a filter arrangement (34) installed in the flow path between the extractor (30) and the reactor (46). The invention also relates to a lab-on-a-chip system (10) comprising such a microfluidic arrangement (14) and a microfluidic chip (12) that is rigidly connected to the reactor (46).

IPC 8 full level

B01L 3/00 (2006.01); **G01N 1/40** (2006.01)

CPC (source: EP US)

B01L 3/502753 (2013.01 - EP US); **G01N 1/405** (2013.01 - EP US); **B01L 2200/027** (2013.01 - EP US); **B01L 2200/028** (2013.01 - EP US);
B01L 2200/0605 (2013.01 - EP US); **B01L 2200/16** (2013.01 - EP US); **B01L 2300/0681** (2013.01 - EP US); **B01L 2300/0832** (2013.01 - EP US);
B01L 2300/0838 (2013.01 - EP US); **B01L 2300/1827** (2013.01 - EP US); **B01L 2400/0478** (2013.01 - EP US); **B01L 2400/0622** (2013.01 - EP US);
B01L 2400/0644 (2013.01 - EP US); **Y10T 436/25** (2015.01 - EP US); **Y10T 436/25375** (2015.01 - EP US); **Y10T 436/255** (2015.01 - EP US)

Citation (search report)

See references of WO 2010037774A1

Citation (examination)

- EP 1878498 A1 20080116 - ROCHE DIAGNOSTICS GMBH [DE], et al
- WO 2007002579 A2 20070104 - BIOVERIS CORP [US], et al
- US 2004182788 A1 20040923 - DORIAN RANDEL [US], et al
- WO 2009117212 A1 20090924 - SCIENT PLASTIC PRODUCTS INC [US], et al

Designated contracting state (EPC)

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 SE SI SK SM TR

DOCDB simple family (publication)

DE 102008042581 A1 20100408; DE 102008042581 B4 20120202; EP 2349565 A1 20110803; US 2011236273 A1 20110929;
US 8449830 B2 20130528; WO 2010037774 A1 20100408

DOCDB simple family (application)

DE 102008042581 A 20081002; EP 09741258 A 20090930; EP 2009062677 W 20090930; US 99826909 A 20090930