

Title (en)

MICRO-THERMAL CONDUCTIVITY DETECTOR, METHOD TO FABRICATE SUCH AND CHROMATOGRAPHY SYSTEM USING SUCH

Title (de)

MIKROWÄRMELEITFÄHIGKEITSDETEKTOR, VERFAHREN ZUR HERSTELLUNG EINES DERARTIGEN DETEKTORS UND CHROMATOGRAPHIESYSTEM DAMIT

Title (fr)

DÉTECTEUR DE CONDUCTIBILITÉ MICROTHERMIQUE, PROCÉDÉ DE FABRICATION DE CE DÉTECTEUR ET SYSTÈME DE CHROMATOGRAPHIE UTILISANT CE DÉTECTEUR

Publication

EP 2486398 A4 20161026 (EN)

Application

EP 10822815 A 20101011

Priority

- US 25031009 P 20091009
- US 2010052147 W 20101011

Abstract (en)

[origin: WO2011044547A2] A heat flux sensor, a micro-scale gas chromatograph comprising the heat flux sensor, and method for measuring the thermal conductivity of a fluid using such are provided. The heat flux sensor comprises a chamber, a heating element suspended in the chamber, at least two current contacts configured to exchange a current with the heating element, and at least two measurement contacts configured to measure a voltage change along the heating element indicative of the thermal conductivity of the fluid.

IPC 8 full level

G01N 30/66 (2006.01); **G01N 25/18** (2006.01); **G01N 27/18** (2006.01)

CPC (source: EP)

G01N 27/18 (2013.01); **G01N 30/66** (2013.01)

Citation (search report)

- [XY] US 2007028670 A1 20070208 - BONNE ULRICH [US], et al
- [XI] US 5295389 A 19940322 - NAGATA MITSUHIKO [JP], et al
- [A] DE 19639627 A1 19970430 - HEWLETT PACKARD CO [US]
- [XYI] KAANTA B C ET AL: "High Sensitivity Micro-Thermal Conductivity Detector for Gas Chromatography", MICRO ELECTRO MECHANICAL SYSTEMS, 2009. MEMS 2009. IEEE 22ND INTERNATIONAL CONFERENCE ON, IEEE, PISCATAWAY, NJ, USA, 25 January 2009 (2009-01-25), pages 264 - 267, XP031444280, ISBN: 978-1-4244-2977-6
- See references of WO 2011044547A2

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 2011044547 A2 20110414; WO 2011044547 A3 20110909; CA 2775583 A1 20110414; CN 102549422 A 20120704; EP 2486398 A2 20120815; EP 2486398 A4 20161026

DOCDB simple family (application)

US 2010052147 W 20101011; CA 2775583 A 20101011; CN 201080045360 A 20101011; EP 10822815 A 20101011