Title (en)

METHOD FOR DETERMINING THE VOLUMETRIC FLOW RATE OF A FLUID MEDIUM THROUGH A MEASURING SECTION AND ASSOCIATED MEASURING DEVICE

Title (de)

VERFAHREN ZUR BESTIMMUNG DES VOLUMENFLUSSES EINES STRÖMENDEN MEDIUMS DURCH EINE MESSSTRECKE UND ZUGEORDNETE MESSEINRICHTUNG

Title (fr)

PROCÉDÉ DE DÉTERMINATION DU DÉBIT VOLUMIQUE D'UN MILIEU EN ÉCOULEMENT À TRAVERS UNE SECTION DE MESURE ET MOYEN DE MESURE ASSOCIÉ

Publication

EP 3152525 A1 20170412 (DE)

Application

EP 15725992 A 20150520

Priority

• DE 102014008284 A 20140603
• EP 2015001027 W 20150520

Abstract (en)

[origin: WO2015185185A1] Disclosed is a method for determining the volumetric flow rate of a fluid medium through a measuring section in a substantially gas-type independent manner, said method comprising the following steps: pulsed heating of the medium by means of a heating element; recording a first time at which a maximum temperature occurs at a first temperature sensor lying upstream or downstream from, and adjacent to, the heating element; recording a second time at which a maximum temperature occurs at a second temperature sensor lying downstream of the heating element, wherein the second temperature sensor is located further away from the heat source than the first temperature sensor; calculating a time difference between the first and the second time; and determining the volumetric flow rate on the basis of the time difference.

IPC 8 full level

G01F 1/684 (2006.01); **G01F 1/7084** (2022.01)

CPC (source: CN EP US)

G01F 1/688 (2013.01 - CN); **G01F 1/7044** (2013.01 - EP US); **G01F 1/7084** (2013.01 - CN EP US); **G01N 25/18** (2013.01 - US); G01N 25/18 (2013.01 - EP)

Citation (search report)

See references of WO 2015185185A1

Citation (examination)

WO 9502164 A1 19950119 - IC SENSORS INC [US], et al

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 102014008284 A1 20151203; CN 106537100 A 20170322; EP 3152525 A1 20170412; US 2017102256 A1 20170413; WO 2015185185 A1 20151210

DOCDB simple family (application)

DE 102014008284 A 20140603; CN 201580029350 A 20150520; EP 15725992 A 20150520; EP 2015001027 W 20150520; US 201615368730 A 20161205