Title (en)

SENSOR, METHOD AND USE THEREOF FOR DETECTING THE SIZE DISTRIBUTION OF PARTICLES IN A GAS STREAM

Title (de)

SENSOR, VERFAHREN SOWIE DEREN VERWENDUNG ZUR DETEKTION DER GRÖßENVERTEILUNG VON TEILCHEN IN EINEM GASSTROM

Title (fr)

DÉTECTEUR, PROCÉDÉ ET LEUR UTILISATION POUR LA DÉTECTION DE LA GRANULOMÉTRIE DE PARTICULES DANS UN FLUX GAZEUX

Publication

EP 2171426 A1 20100407 (DE)

Application

EP 08775024 A 20080711

Priority

• EP 2008059107 W 20080711
• DE 102007033215 A 20070717

Abstract (en)

[origin: WO2009010471A1] The invention relates to a sensor for detecting the size distribution of particles in a gas stream. Said sensor comprises an electrode system having at least three electrodes (1, 1'; 2, 2'; 3, 3'; 4, 4') lying in a plane, at least one voltage supply device (201; 202; 203; 204) and at least one voltage measuring and/or current measuring device (301; 302; 303; 304). The sensor is characterized in that two electrodes each of different polarity (1, 1'; 2, 2'; 3, 3'; 4, 4') form a pair of electrodes (11; 12; 13; 14), said pair of electrodes (11; 12; 13; 14) being arranged along an imaginary beam (X1, S1), lying in the plane of the electrodes, in such a manner that the beam (X1, S1) extends between the two electrodes (1, 1'; 2, 2'; 3, 3'; 4, 4') of a pair of electrodes (11; 12; 13; 14). The pairs of electrodes (11; 12; 13; 14) arranged along the beam (X1; S1) are connected to at least one voltage measuring and/or current measuring device (301; 302; 303; 304) in such a manner that the voltage and/or the current flowing between every pair of electrodes (11; 12; 13; 14) can be determined individually. The invention also relates to a corresponding method and to the use thereof.

IPC 8 full level

G01N 15/02 (2006.01)

CPC (source: EP)

G01N 15/0266 (2013.01); F01N 2560/05 (2013.01); F01N 2560/12 (2013.01)

Citation (search report)

See references of WO 2009010471A1

Citation (examination)

GB 2374671 A 20021023 - CAMBUSTION LTD [GB]

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 MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA MK RS

DOCDB simple family (publication)

DE 102007033215 A1 20090122; EP 2171426 A1 20100407; WO 2009010471 A1 20090122

DOCDB simple family (application)

DE 102007033215 A 20070717; EP 08775024 A 20080711; EP 2008059107 W 20080711