Title (en)
   CARBON BLACK CHARGE SENSOR

Title (de)
   RUßLADUNGSSENSOR

Title (fr)
   CAPTEUR DE CHARGE EN SUIE

Publication
   EP 2193362 A2 20100609 (DE)

Application
   EP 08804980 A 20081001

Priority
   • EP 2008063191 W 20081001
   • DE 202007013735 U 20071001

Abstract (en)
   [origin: WO2009047195A2] The invention relates to a sensor device for determining electrically conducting and/or electrically charged particles
   contained in a gas flow, particularly carbon black particles in the exhaust gas flow of a diesel motor, comprising at least two electrodes to be
   disposed in the gas flow, at least one of the electrodes being completely embedded in a non-conductive material in the region to be disposed
   in the gas flow. A further aspect of the invention relates to a sensor device for determining a mass flow of a medium, comprising a heating wire
   that is disposed such that said heating wire can be placed in the mass flow, a regulating unit or controller configured to heat the heating wire in a
   first measuring phase to a certain temperature above the temperature of the mass flow and to determine the mass flow via the measurement of a
   voltage that is required for maintaining said temperature of the heating wire, characterized by a measuring device for determining the temperature
   of the medium in a second measuring phase via a measurement of the resistance of a heating wire, particularly the heating wire, a controller that is
   configured to control the heating wire in the first measuring phase to a temperature that is a function of the temperature of the medium determined
   in the second measuring phase, and a correcting device configured to correct the mass flow determined from the voltage measured in the first
   measuring phase by a temperature-dependent value determined from the resistance of the heating wire measured in the second measuring phase.

IPC 8 full level
   G01N 27/22 (2006.01); **G01N 15/06** (2006.01)

CPC (source: EP)
   G01N 15/0656 (2013.01)

Citation (search report)
   See references of WO 2009047195A2

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)
   WO 2009047195 A2 20090416; **WO 2009047195 A3 20090618**; EP 2193362 A2 20100609; EP 2500719 A1 20120919

DOCDB simple family (application)
   EP 2008063191 W 20081001; EP 08804980 A 20081001; EP 10160088 A 20081001