

Title (en)

METHOD FOR DETECTING PARTICLES IN A GAS STREAM AND DETECTOR

Title (de)

VERFAHREN ZUR DETEKTION VON TEILCHEN IN EINEM GASSTROM UND SENSOR HIERZU

Title (fr)

PROCEDE DE DETECTION DE PARTICULES DANS UN FLUX GAZEUX ET DETECTEUR UTILISE

Publication

**EP 1436589 A2 20040714 (DE)**

Application

**EP 02785044 A 20021008**

Priority

- DE 0203779 W 20021008
- DE 10149731 A 20011009
- DE 10244702 A 20020924

Abstract (en)

[origin: WO03034053A2] The invention concerns a detector and a method for detecting particles in a gas stream, in particular of soot in an exhaust gas stream. Said detector comprises first and second electrodes, an electric voltage capable of being applied between the first electrode and the second electrode such that a gas discharge can be stimulated at least intermittently between the electrodes. The invention is characterized in that at least a dielectric layer (116; 138, 140) is interposed between the first electrode (2; 11; 112; 134) and the second electrode (3; 13; 114; 136) so that the electric discharge produced between the two electrodes is systematically dielectric hindered and the two electrodes are connected to a device for measuring an electric current or electric discharge pulses, so that the variation of an electrical measurement signal provides an indication of the density of particles in the gas stream based on the particles in the dielectric hindered discharge zone.

IPC 1-7

**G01N 15/06**

IPC 8 full level

**G01N 15/06** (2006.01); **G01N 27/92** (2006.01)

CPC (source: EP)

**G01N 15/0656** (2013.01); **G01N 27/92** (2013.01)

Citation (search report)

See references of WO 03034053A2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR IE IT LI LU MC NL PT SE SK TR

DOCDB simple family (publication)

**WO 03034053 A2 20030424**; **WO 03034053 A3 20031009**; EP 1436589 A2 20040714

DOCDB simple family (application)

**DE 0203779 W 20021008**; EP 02785044 A 20021008