

Title (en)

PARTICULATE SENSOR WITH A TEST-GAS FLOW PROPELLED BY IONS

Title (de)

PARTIKELSENSOR MIT EINEM VON IONEN GETRIEBENEN MESSGASSTROM

Title (fr)

CAPTEUR DE PARTICULES PRÉSENTANT UN FLUX DE GAZ DE MESURE PROPULSÉ PAR DES IONS

Publication

**EP 3881053 A1 20210922 (DE)**

Application

**EP 19787231 A 20191014**

Priority

- DE 102018219726 A 20181116
- EP 2019077703 W 20191014

Abstract (en)

[origin: WO2020099045A1] Proposed is a particulate sensor (12) comprising: a measuring chamber (30) having at least one test-gas inlet opening (32) and at least one test gas outlet opening (34), both the entire inlet cross-section of the test-gas inlet opening (32) and the entire outlet cross-section of the test-gas outlet opening (34) being smaller than a flow cross-section of the measuring chamber (30) perpendicular to the through-flow of said measuring chamber (30); a corona-discharge electrode (38) and a counter-electrode (40); and a device used to generate an electrical field between the corona-discharge electrode (38) and the counter-electrode (40), said field running from the corona-discharge electrode (38) to the counter-electrode (40) and generating a corona discharge. The particulate sensor (12) is characterised in that, other than the test-gas inlet opening (32) and the test-gas outlet opening (34), the measuring chamber (30) has no additional opening allowing the inflow or outflow of gas.

IPC 8 full level

**G01N 15/06** (2006.01); **B03C 3/41** (2006.01); **G01N 15/00** (2006.01)

CPC (source: EP)

**B03C 3/017** (2013.01); **B03C 3/12** (2013.01); **B03C 3/41** (2013.01); **B03C 3/49** (2013.01); **G01N 15/0656** (2013.01); **B03C 2201/24** (2013.01); **G01N 2015/0046** (2013.01)

Citation (search report)

See references of WO 2020099045A1

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 102018219726 A1 20200520**; EP 3881053 A1 20210922; WO 2020099045 A1 20200522

DOCDB simple family (application)

**DE 102018219726 A 20181116**; EP 19787231 A 20191014; EP 2019077703 W 20191014