

Title (en)

METHOD FOR OPERATING A SOOT SENSOR

Title (de)

VERFAHREN ZUM BETREIBEN EINES RUSSSENSORS

Title (fr)

PROCÉDÉ SERVANT À FAIRE FONCTIONNER UN CAPTEUR DE SUIE

Publication

EP 2652280 A2 20131023 (DE)

Application

EP 11815758 A 20111214

Priority

- DE 102010054671 A 20101215
- EP 2011072778 W 20111214

Abstract (en)

[origin: WO2012080347A2] The invention relates to a method for operating a soot sensor in the exhaust gas tract of an internal combustion engine. Said soot sensor comprises an inter-digital electrode structure to which a measurement voltage is applied. Soot particles from the exhaust gas flow deposit themselves on the inter-digital electrode structure and the measuring current flowing over the soot particles and the inter-digital electrode structure is evaluated as a measurement for the soot concentration of the soot sensor. Said soot sensor comprises a heating element for burning clean the inter-digital electrode structure. The aim of the invention is to provide a method for operating a soot sensor which has good measurement results, said soot sensor should have the shortest possible idle time. To this end, a point in time for burning clean the soot sensor is determined in accordance with the operational state of the internal combustion engine and then, the burning clean of the inter-digital electrode structure starts by heating the soot sensor by means of the heating element.

IPC 8 full level

F01N 9/00 (2006.01); **G01N 15/06** (2006.01)

CPC (source: EP US)

F01N 9/002 (2013.01 - EP US); **G01N 15/0656** (2013.01 - EP US); **F01N 2560/05** (2013.01 - EP US); **Y02T 10/40** (2013.01 - EP US)

Citation (search report)

See references of WO 2012080347A2

Citation (examination)

- EP 1225316 A2 20020724 - HOFMANN WALTER [DE]
- EP 2199553 A1 20100623 - HONDA MOTOR CO LTD [JP]
- DE 102009003091 A1 20101118 - BOSCH GMBH ROBERT [DE]

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

DOCDB simple family (publication)

WO 2012080347 A2 20120621; **WO 2012080347 A3 20120816**; DE 102010054671 A1 20120621; EP 2652280 A2 20131023; US 2013283887 A1 20131031

DOCDB simple family (application)

EP 2011072778 W 20111214; DE 102010054671 A 20101215; EP 11815758 A 20111214; US 201113994056 A 20111214