

Title (en)
METHOD FOR OPERATING AN EXHAUST-GAS SENSOR

Title (de)
VERFAHREN ZUM BETREIBEN EINES ABGASSENSORS

Title (fr)
PROCÉDÉ DE FONCTIONNEMENT DE CAPTEUR DE GAZ D'ÉCHAPPEMENT

Publication
EP 4018087 A1 20220629 (DE)

Application
EP 20742193 A 20200710

Priority
• DE 102019212393 A 20190819
• DE 102019220584 A 20191227
• EP 2020069546 W 20200710

Abstract (en)
[origin: WO2021032360A1] A method for operating an exhaust-gas sensor in an exhaust-gas section of an internal combustion engine of a vehicle, wherein the exhaust-gas sensor (10) has a ceramic sensor element (12) with at least one measuring electrode (16, 18) and with a heating device (30), wherein, on the basis of data relating to the internal combustion engine and the exhaust-gas sensor, a binary dewpoint end signal (TPE) is calculated which indicates whether or not the occurrence of liquid water in the exhaust-gas section is still to be expected, characterized in that, whenever the vehicle is shut down and at the same time the dewpoint end signal (TPE) has the value that signals that the occurrence of liquid water in the exhaust-gas section is still to be expected, the sensor element (12) is heated for a certain time to a temperature (T) by means of the heating device (30) thereof such that the sensor element (12) dries.

IPC 8 full level
F02D 41/04 (2006.01); **F02D 35/00** (2006.01); **F02D 41/14** (2006.01)

CPC (source: CN EP KR US)
F02D 41/042 (2013.01 - CN EP KR); **F02D 41/1438** (2013.01 - CN EP); **F02D 41/1446** (2013.01 - CN KR); **F02D 41/1466** (2013.01 - CN KR); **F02D 41/1494** (2013.01 - CN EP KR); **G01M 15/102** (2013.01 - US); **G01N 37/00** (2013.01 - US); **F02D 41/1446** (2013.01 - EP); **F02D 41/1466** (2013.01 - EP); **F02D 2041/1472** (2013.01 - CN EP KR US)

Citation (search report)
See references of WO 2021032360A1

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)
WO 2021032360 A1 20210225; CA 3151703 A1 20210225; CN 114585806 A 20220603; DE 102019220584 A1 20210225; EP 4018087 A1 20220629; KR 20220047617 A 20220418; MX 2022002015 A 20220311; US 2022326119 A1 20221013

DOCDB simple family (application)
EP 2020069546 W 20200710; CA 3151703 A 20200710; CN 202080073268 A 20200710; DE 102019220584 A 20191227; EP 20742193 A 20200710; KR 20227008619 A 20200710; MX 2022002015 A 20200710; US 202017634432 A 20200710