

Title (en)

Method for detecting the readiness of a lambda probe for functions in selected operating phases

Title (de)

Verfahren zur Erkennung der Betriebsbereitschaft einer Lambda-Sonde für Funktionen in ausgewählten Betriebsphasen

Title (fr)

Procédé de reconnaissance de la capacité de fonctionnement d'une sonde lambda pour des fonctions dans des phases de fonctionnement sélectionnées

Publication

EP 2336532 A3 20140618 (DE)

Application

EP 10193702 A 20101203

Priority

DE 102009054751 A 20091216

Abstract (en)

[origin: EP2336532A2] The method involves determining the time gradient of the sensor signal which characterizes the oxygen concentration. The time gradient is determined during a transition of a combustion engine (110) from an operational phase into a selected operational phase. The operational availability of a lambda sensor (130), for functions in the selected operational phase of the combustion engine, does not exist when the time gradient goes against zero. Independent claims are also included for the following: (1) a method for detecting the gas permeability of a lambda sensor surrounding protective tube; (2) a computer program; and (3) a computer program product.

IPC 8 full level

F02D 41/12 (2006.01); **F02D 41/14** (2006.01); **F02D 41/24** (2006.01)

CPC (source: EP)

F02D 41/123 (2013.01); **F02D 41/1495** (2013.01); **F02D 41/2441** (2013.01); **F02D 41/2454** (2013.01); **F02D 41/1454** (2013.01);
F02D 41/2474 (2013.01)

Citation (search report)

- [X] EP 1748173 A2 20070131 - DENSO CORP [JP]
- [X] EP 1048834 A2 20001102 - SIEMENS AG [DE]
- [X] EP 1961942 A2 20080827 - NGK SPARK PLUG CO [JP], et al
- [I] DE 19548071 A1 19960704 - NIPPON DENSO CO [JP]

Cited by

JP2016031041A; FR3062167A1; US10267255B2; US10060894B2; WO2016017157A1; WO2013087262A1

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)

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DOCDB simple family (application)

EP 10193702 A 20101203; CN 201010589221 A 20101215; DE 102009054751 A 20091216