

Title (en)

Method for estimating the dilution of fuel in the oil of an internal combustion engine

Title (de)

Verfahren zur Abschätzung der Verdünnung eines Kraftstoffes im Öl eines Verbrennungsmotors

Title (fr)

Procedé d'estimation de la dilution du carburant dans l'huile d'un moteur à combustion interne

Publication

EP 2520785 B1 20180725 (FR)

Application

EP 12305325 A 20120320

Priority

FR 1153898 A 20110506

Abstract (en)

[origin: EP2520785A2] The method involves estimating dilution rate (C) of fuel based on an operating mode of an internal combustion engine. Dilution rate variation (dC) is calculated (120) at every instant from a set of parameters apart from a post-injection fuel regeneration phase, where the parameters include a value representative of evaporation temperature of diluted fuel in an oil of the engine and time elapsed from an end of the regeneration phase. The variation of dilution rate during each time step is calculated according to a kinetic law of order 1 by a specific equation.

IPC 8 full level

F01M 11/10 (2006.01); **F02D 41/02** (2006.01); **F02D 41/04** (2006.01)

CPC (source: EP)

F01M 11/10 (2013.01); **F02D 41/027** (2013.01); **F01M 2250/60** (2013.01); **F02D 2250/11** (2013.01)

Cited by

CN111396171A; FR3091312A1; FR3009338A1; CN114707766A; FR3040738A1; WO2020136047A1

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)

EP 2520785 A2 20121107; **EP 2520785 A3 20170215**; **EP 2520785 B1 20180725**; FR 2974853 A1 20121109; FR 2974853 B1 20150501

DOCDB simple family (application)

EP 12305325 A 20120320; FR 1153898 A 20110506