

Title (en)
Fuel injection control system

Title (de)
Brennstoffeinspritzungssteuersystem

Title (fr)
Système de contrôle d'injection de carburant

Publication
EP 2392805 A1 20111207 (EN)

Application
EP 11166845 A 20110520

Priority
• JP 2010128814 A 20100604
• JP 2010128813 A 20100604

Abstract (en)
To provide a fuel injection control system which properly sets a limit value of an air-fuel ratio feedback correction value, thereby making a good air-fuel ratio feedback control possible. While a variation rate of an output value of an oxygen sensor (32) is changed from the positive to the negative or from the negative to the positive predetermined times after a power source of a vehicle is turned on, a control unit (C) sets a first limit range (L1) for an air-fuel ratio feedback correction factor (K02) as an upper/lower limit value which have a predetermined upper/lower width, in which the output value of the oxygen sensor (32) detected in a stoichiometric air-fuel ratio state is a reference value (B1), and which is allowed to be used for calculating a correction injection quantity (T1). After a variation rate of the output value of the oxygen sensor (32) is changed from the positive to the negative or from the negative to the positive predetermined times, the air-fuel ratio feedback correction factor (K02) that is calculated when the variation rate is changed the predetermined times is regarded as a reference value (B2), and a second limit range (L2) which has a predetermined upper/lower width from the reference value (B2) and is narrower than the first limit range (L1) is set.

IPC 8 full level
F02D 41/06 (2006.01); **F02D 41/14** (2006.01); **F02D 41/22** (2006.01)

CPC (source: EP)
F02D 41/065 (2013.01); **F02D 41/1438** (2013.01); **F02D 41/22** (2013.01)

Citation (search report)
• [AD] JP 2006037875 A 20060209 - NISSAN MOTOR
• [A] FR 2923864 A1 20090522 - RENAULT SAS [FR]
• [A] DE 102008043124 A1 20100429 - BOSCH GMBH ROBERT [DE]
• [A] DE 102008000567 A1 20090910 - BOSCH GMBH ROBERT [DE]

Cited by
US2015275804A1; US11199149B2

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)
EP 2392805 A1 20111207; **EP 2392805 B1 20130731**; CN 102269068 A 20111207; CN 102269068 B 20141029

DOCDB simple family (application)
EP 11166845 A 20110520; CN 201110147413 A 20110602