Title (en)

Method and device for engine control in a vehicle

Title (de)

Verfahren und Vorrichtung zur Motorsteuerung bei einem Kraftfahrzeug

Title (fr)

Procédé et dispositif de commande d'un moteur à combustion interne dans un véhicule

Publication

EP 1672206 A3 20070516 (DE)

Application

EP 05251628 A 20050317

Priority

DE 102004061462 A 20041217

Abstract (en)

[origin: EP1672206A2] The method involves calculating duration of an injection pulse for triggering a fuel injector in an internal combustion engine. The engine air/fuel ratio value as measured by a wide range air/fuel ratio (AFR) sensor is input to an air/fuel ratio observer (28). The difference between the measured ratio and the required air/fuel ratio is output as an error by the observer to an AFR controller (42), which controls the pulse duration. The required air/fuel ratio is calculated from on an air mass value which varies based on ambient situation e.g. temperature, and necessary fuel amount. An independent claim is also included for a device for controlling an internal combustion engine of a motor vehicle.

IPC 8 full level

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

CPC (source: EP US)

F02D 41/1401 (2013.01 - EP US); **F02D 41/2454** (2013.01 - EP US); **F02D 41/248** (2013.01 - EP US); F02D 41/2467 (2013.01 - EP US); F02D 2041/1416 (2013.01 - EP US); F02D 2041/1433 (2013.01 - EP US); F02D 2200/0602 (2013.01 - EP US)

Citation (search report)

- [X] US 4552116 A 19851112 - KUROIWA HIROSHI [JP], et al
- [X] US 2003221680 A1 20031204 - TONETTI MARCO [IT], et al
- [X] DE 3603137 A1 19870806 - BOSCH GMBH ROBERT [DE]
- [A] US 2003164166 A1 20030904 - TAKEUCHI KATSUHIKO [JP], et al

Cited by

CN108999709A

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU MC NL PL PT RO SE SI SK TR

Designated extension state (EPC)

AL BA HR LV MK YU

DOCDB simple family (publication)

EP 1672206 A2 20060621; **EP 1672206 A3 20070516**; **EP 1672206 B1 20091230**; AT E453794 T1 20100115; DE 102004061462 A1 20060706; DE 502005008782 D1 20100211; US 2006130820 A1 20060622; US 7322346 B2 20080129

DOCDB simple family (application)

EP 05251628 A 20050317; AT 05251628 T 20050317; DE 102004061462 A 20041217; DE 502005008782 T 20050317; US 26444505 A 20051101