

Title (en)
Method for controlling an internal combustion engine

Title (de)
Verfahren zur Steuerung eines Verbrennungsmotors

Title (fr)
Procédé pour contrôler un moteur à combustion interne

Publication
EP 2420664 A1 20120222 (EN)

Application
EP 10173579 A 20100820

Priority
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Abstract (en)
A method of operating an internal combustion engine with a direct injection system controlled by an engine control unit (ECU) is described. The ECU comprises a flow curve table storing data indicative of fuel quantities vs. injector pulse widths. The method comprises an injector learning event during which actual fuel values related to a fuel injector are determined, said injector learning event being enabled during an idle or deceleration condition of said engine and comprising the steps of: operating the engine into a homogeneous combustion mode; and concurrently degrading the combustion and/or splitting the injection pulses while monitoring the combustion performance to determine learned fuel data.

IPC 8 full level
F02D 41/24 (2006.01)

CPC (source: EP)
F02D 41/2412 (2013.01); **F02D 41/2438** (2013.01); **F02D 41/2441** (2013.01); **F02D 41/2467** (2013.01); **F02D 41/402** (2013.01); **F02D 2041/2055** (2013.01); **F02D 2200/0614** (2013.01); **F02D 2200/0616** (2013.01)

Citation (applicant)
US 6382198 B1 20020507 - SMITH JAMES CRAIG [US], et al

Citation (search report)

- [XY] EP 0947684 A2 19991006 - MAZDA MOTOR [JP]
- [X] US 2006107936 A1 20060525 - MAZET HENRI [FR]
- [Y] WO 0183972 A1 20011108 - BOMBARDIER MOTOR CORP OF US [US], et al
- [A] EP 2108804 A1 20091014 - MAGNETI MARELLI POWERTRAIN SPA [IT]
- [A] DE 19700711 A1 19980917 - SIEMENS AG [DE]

Cited by
GB2611759A; GB2611759B; WO2023062041A1

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 SE SI SK SM TR

Designated extension state (EPC)
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