

Title (en)
Controller for internal combustion engine

Title (de)
Regler für eine Brennkraftmaschine

Title (fr)
Dispositif de commande pour moteur à combustion interne

Publication
EP 1602811 A3 20060607 (EN)

Application
EP 05011611 A 20050530

Priority
JP 2004163515 A 20040601

Abstract (en)
[origin: EP1602811A2] A controller for controlling an engine (11) to generate an output torque that is substantially equal to a target torque required by a driver. An ECU (56) calculates a pumping loss torque based on a pressure difference between a pressure in a crank chamber and an intake air pressure. The pumping loss torque is loss of an output torque of a crankshaft (19) caused by a pumping loss that occurs when a piston reciprocates. The ECU adds the pumping loss torque to the target torque required by the driver to calculate a final target torque. The ECU controls the engine based on the final target torque reflecting the pumping loss torque that is in accordance with the driving state of the engine.

IPC 8 full level
F02D 11/10 (2006.01); **F02D 45/00** (2006.01)

CPC (source: EP)
F02D 11/105 (2013.01); **F02D 2200/0406** (2013.01); **F02D 2200/1004** (2013.01); **F02D 2200/1006** (2013.01); **F02D 2200/703** (2013.01); **F02D 2250/18** (2013.01)

Citation (search report)

- [X] EP 1184553 A2 20020306 - BOSCH GMBH ROBERT [DE]
- [A] US 2002069860 A1 20020613 - MARCIL JEAN-PIERRE [CA]
- [A] EP 1418321 A2 20040512 - FORD GLOBAL TECH LLC [US]
- [A] US 6575022 B1 20030610 - SCHNEIDER MATTHEW L [US], et al
- [DA] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 08 30 June 1999 (1999-06-30)

Cited by
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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

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