

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 A2 20051207 (EN)

Application
EP 05011611 A 20050530

Priority
JP 2004163515 A 20040601

Abstract (en)
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.

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F02D 11/10

IPC 8 full level
F02D 45/00 (2006.01); **F02D 11/10** (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 (applicant)
JP H1162658 A 19990305 - NISSAN MOTOR

Cited by
FR3100568A1; FR3102214A1; FR3029877A1; FR3029861A1; US10294880B2; US10018531B2

Designated contracting state (EPC)
DE FR

DOCDB simple family (publication)
EP 1602811 A2 20051207; **EP 1602811 A3 20060607**; **EP 1602811 B1 20120502**; JP 2005344565 A 20051215; JP 4033173 B2 20080116

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