

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.

IPC 1-7  
**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)  
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