

Title (en)
Control system for internal combustion engine

Title (de)
Steuersystem für einen Verbrennungsmotor

Title (fr)
Système de contrôle pour moteur à combustion interne

Publication
EP 2058491 A2 20090513 (EN)

Application
EP 08253562 A 20081030

Priority
JP 2007290196 A 20071107

Abstract (en)
In a system for controlling an internal combustion engine (12) mounted on a vehicle (10) and having an electric motor (44) that drives a throttle valve (24) installed in an intake pipe (22) of the engine and an accelerator (16) installed to be operable by the operator, it is configured to comprise a motor controller that conducts one of a full-step drive control for driving the motor at a full-step angle θ_f , a micro-step drive control for driving the motor at a micro-step angle θ_m which is made by dividing the full-step angle and a variable-step drive control for driving the motor at a step angle θ_v which changes in response to a control difference d between actual throttle opening and desired throttle opening, and controls the operation of the motor so as to decrease the difference (66, S24, S30, S34). With this, it becomes possible to improve response and control accuracy of the throttle valve and also enhances drivability.

IPC 8 full level
F02D 11/10 (2006.01)

CPC (source: EP)
F02D 11/105 (2013.01); **F02D 11/106** (2013.01); **F02D 35/0007** (2013.01); **F02D 2011/102** (2013.01); **F02D 2011/104** (2013.01); **F02D 2200/0404** (2013.01); **F02D 2200/602** (2013.01)

Citation (applicant)
JP H09317538 A 19971209 - AISIN SEIKI

Cited by
CN112448626A

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)
AL BA MK RS

DOCDB simple family (publication)
EP 2058491 A2 20090513; **EP 2058491 A3 20120829**; JP 2009115003 A 20090528

DOCDB simple family (application)
EP 08253562 A 20081030; JP 2007290196 A 20071107