

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 2085591 A1 20090805 (EN)

Application

EP 08172980 A 20081229

Priority

JP 2008017011 A 20080129

Abstract (en)

A control system for an internal combustion engine (1) having an air supply passage (7) for supplying air to the engine (1). The air supply passage (7) includes a first and a second branch passages respectively communicating with a combustion chamber of the engine (1). The engine (1) further includes an exhaust gas recirculation passage for recirculating a part of exhaust gases discharged from the combustion chamber to the first branch passage (7A), a first control valve (26) for controlling an amount of the recirculated exhaust gases, and a second control valve (22) disposed upstream of the first and the second branch passages for opening and closing the air supply passage (7). An operation speed of the second control valve (22) is reduced when closing the second control valve (22) during a valve opening operation of the first control valve (26). The recirculated exhaust gases are thereby prevented from flowing into the second passage where a swirl control valve is disposed, thereby avoiding sticking of the swirl control valve.

IPC 8 full level

F02D 11/10 (2006.01); **F02D 41/10** (2006.01)

CPC (source: EP)

F02D 11/105 (2013.01); **F02D 41/107** (2013.01); **F02M 26/20** (2016.02); **F02D 41/0065** (2013.01); **F02D 2041/0015** (2013.01); **F02D 2041/0017** (2013.01); **F02M 26/05** (2016.02); **F02M 26/10** (2016.02); **F02M 26/48** (2016.02); **F02M 26/50** (2016.02)

Citation (applicant)

JP 2001073881 A 20010321 - HONDA MOTOR CO LTD

Citation (search report)

- [A] US 2003196636 A1 20031023 - ASHIDA MASAOKI [JP], et al
- [A] EP 1617056 A2 20060118 - HONDA MOTOR CO LTD [JP]
- [A] DE 4310839 A1 19941006 - BAYERISCHE MOTOREN WERKE AG [DE]

Cited by

CN108204299A; CN102650244A

Designated contracting state (EPC)

DE GB

Designated extension state (EPC)

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DOCDB simple family (publication)

EP 2085591 A1 20090805; **EP 2085591 B1 20170405**; JP 2009180087 A 20090813; JP 4536783 B2 20100901

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