

Title (en)

Exhaust gas recirculating system for internal combustion engines

Title (de)

Abgasrückführungssystem für eine Brennkraftmaschine

Title (fr)

Système de recirculation de gaz d'échappement pour un moteur à combustion interne

Publication

**EP 1640599 A1 20060329 (EN)**

Application

**EP 05017625 A 20050812**

Priority

JP 2004274603 A 20040922

Abstract (en)

Provided is an EGR system (10) which can selectively cool the EGR depending on the operating condition of the engine (1), and is provided with a switching valve (15) having an improved operating stability. The switching valve (15) comprises a valve stem (32) including a first end formed with a poppet valve member (18), a second end connected to a diaphragm actuator (16) and a slidably guided intermediate portion, a cooler port valve seat (29b) communicating with the cooler passage (13b) and a bypass port valve seat (29a) communicating with the bypass passage (13a). The bypass port valve seat (29a) is located adjacent to the diaphragm actuator (16) and the cooler port valve seat (29b) is located remote from the diaphragm actuator (16), with respect to an inlet port (26) communicating with the exhaust manifold (5).

IPC 8 full level

**F02M 25/07** (2006.01)

CPC (source: EP)

**F02M 26/26** (2016.02); **F02M 26/55** (2016.02); **F02M 26/69** (2016.02); **F02M 26/05** (2016.02); **F02M 26/28** (2016.02); **F02M 26/50** (2016.02)

Citation (applicant)

JP H06288306 A 19941011 - MITSUBISHI MOTORS CORP

Citation (search report)

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- [A] US 2004107949 A1 20040610 - MIYOSHI SOTSUO [JP], et al
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Designated contracting state (EPC)

DE FR GB

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