

Title (en)  
Exhaust gas recirculation

Title (de)  
Abgasrückführung

Title (fr)  
Recyclage des gaz d'échappement

Publication  
**EP 1426603 B2 20100825 (EN)**

Application  
**EP 02293023 A 20021206**

Priority  
EP 02293023 A 20021206

Abstract (en)  
[origin: EP1426603A1] An exhaust gas recirculation arrangement for an engine is disclosed. The arrangement comprises an exhaust gas recirculation (EGR) valve 10 having a body portion 112 in which is housed a poppet valve 106 that is moveable to control a flow of recirculated exhaust gas 60 through that body portion 112. An actuator portion 110 is connected to the body portion 112 and is operably connected to the poppet valve 106 so as to control movement thereof. The arrangement further comprises an engine manifold 12 that is adapted for mounting thereto of the exhaust gas recirculation valve 10 and has at least one coolant passage 40, 42 ; 400, 420 defined therein. The body portion 112 is in unit construction with the actuator portion 110 and the exhaust gas recirculation valve 10 is mounted to the manifold 12 by substantially encasing at least a part of that body portion 112 in a recess 20 defined in the manifold 12. In use, a coolant 48 is circulated through the coolant passage 40, 42 ; 400, 420 in such a manner that the coolant 48 conducts heat away from a region of the manifold 12 in which is defined the recess 20. <IMAGE>

IPC 8 full level  
**F02M 25/07** (2006.01); **F02M 35/10** (2006.01)

CPC (source: EP)  
**F02M 26/12** (2016.02); **F02M 26/32** (2016.02); **F02M 26/53** (2016.02); **F02M 26/73** (2016.02); **F02M 35/10222** (2013.01); **F02M 35/10268** (2013.01); **F02M 35/10288** (2013.01); **F02M 35/10347** (2013.01); **F01P 2060/16** (2013.01); **F02M 26/09** (2016.02); **F02M 26/66** (2016.02)

Citation (opposition)  
Opponent :  
• WO 0175291 A1 20011011 - SIEMENS AUTOMOTIVE INC [CA]  
• US 2002023630 A1 20020228 - BALEKAI PRIYANKAR S [US], et al  
• US 4147141 A 19790403 - NAGANO TETSURO

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