

Title (en)

Recirculated exhaust gas cooling device for internal combustion engine

Title (de)

Kühlvorrichtung für rückgeführtes Abgas einer Brennkraftmaschine

Title (fr)

Système de refroidissement de gaz d'échappement recirculé pour moteur à combustion interne

Publication

EP 1233170 A3 20060503 (EN)

Application

EP 02000973 A 20020116

Priority

JP 2001042846 A 20010220

Abstract (en)

[origin: EP1233170A2] A part of the exhaust gas of an exhaust manifold (3) of an internal combustion engine is recirculated to an intake manifold (4) through an exhaust gas recirculation passage (18) passing through a cooling box (12). An exhaust gas recirculation valve (31) to regulate the flow rate of the recirculated exhaust gas is provided in the middle of the exhaust gas recirculation passage (18) in the cooling box (12). A water jacket (16) communicating with a water jacket in the cylinder head (2) is formed in the cooling box (12). By cooling the exhaust gas passage (18) and exhaust gas recirculation valve (31) with coolant in the water jacket (16), temperature of the recirculated exhaust gas efficiently lowers. With this construction, the cooling box (12) can be molded independently from the cylinder head (2), and complicated core molding is unnecessary.

IPC 8 full level

F02F 1/36 (2006.01); **F02M 25/07** (2006.01); **F01P 3/02** (2006.01); **F01P 3/12** (2006.01)

CPC (source: EP)

F02M 26/30 (2016.02); **F02M 26/41** (2016.02); **F02M 26/32** (2016.02)

Citation (search report)

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- [X] EP 1010889 A2 20000621 - DETROIT DIESEL CORP [US]
- [X] EP 0916837 A2 19990519 - BEHR GMBH & CO [DE], et al
- [XY] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 05 30 April 1998 (1998-04-30)

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