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## (54) Recirculated exhaust gas cooling device for internal combustion engine

(57)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.

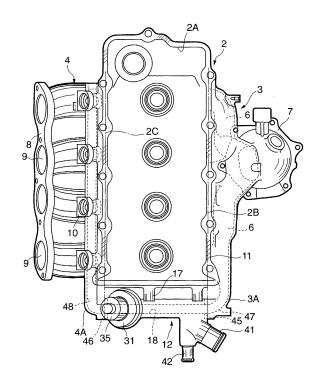


FIG. 1



## **EUROPEAN SEARCH REPORT**

Application Number EP 02 00 0973

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