

Title (en)

Engine having a cooling water port cover

Title (de)

Brennkraftmaschine mit einem Kühlwasserkanaldeckel

Title (fr)

Moteur à combustion interne avec un couvercle pour les conduits de refroidissement par eau

Publication

EP 1258608 B1 20080604 (EN)

Application

EP 02009169 A 20020424

Priority

JP 2001145069 A 20010515

Abstract (en)

[origin: EP1258608A2] A cooling water inlet/outlet cover affixed to a side surface of a cylinder head 2 of an engine E includes a first cover portion C1 and a second cover portion C2. The first cover portion C1 defines an inflow path 20 for introducing cooling water from a radiator 25 to an inlet 42 communicating with a thermostat-type path opening/closing mechanism 15. The second cover portion C2 defines an outflow path 21 for guiding cooling water from the outlet 49 to a radiator 25 and an outflow path 22 partitioned from the outflow path 21 by the partition wall 68 to guide cooling water from the outlet 52 to a heater core 29 and a throttle body 7. The cooling water inlet/outlet cover C further includes a reservoir portion 71 for holding an extruded part of a liquid packing 54 to be coated around the outlets 49, 52 to prevent the extruded part of the liquid packing 54 from spoiling an elastic material packing 46. This configuration contributes to facilitating connection of hoses to the cooling water inlet and outlets formed in the engine body, thereby facilitating assembly of the engine, and further reducing the number of parts. <IMAGE>

IPC 8 full level

F01P 7/16 (2006.01); **F02F 1/36** (2006.01); **F01P 3/02** (2006.01); **F01P 11/00** (2006.01); **F02F 7/00** (2006.01); **F02F 11/00** (2006.01)

CPC (source: EP)

F01P 7/16 (2013.01); **F01P 11/00** (2013.01); **F01P 2060/00** (2013.01); **F01P 2060/08** (2013.01)

Cited by

US10168110B2; US7444962B2; WO2005088098A1

Designated contracting state (EPC)

DE GB

DOCDB simple family (publication)

EP 1258608 A2 20021120; **EP 1258608 A3 20041201**; **EP 1258608 B1 20080604**; BR 0201840 A 20030311; BR 0201840 B1 20101019; CN 1224777 C 20051026; CN 1385599 A 20021218; DE 60226923 D1 20080717; JP 2002339744 A 20021127; JP 3775571 B2 20060517; MY 130969 A 20070731; TW 554133 B 20030921

DOCDB simple family (application)

EP 02009169 A 20020424; BR 0201840 A 20020515; CN 02119914 A 20020515; DE 60226923 T 20020424; JP 2001145069 A 20010515; MY PI20021720 A 20020513; TW 91108231 A 20020422