

Title (en)

Cooling water channel structure of a cylinder head and method of manufacturing a cylinder head

Title (de)

Zylinderkopfkühlwasserstruktur und Verfahren zur Herstellung

Title (fr)

Structure des conduits de refroidissement pour une culasse et procédé de fabrication

Publication

**EP 1143135 B1 20071121 (EN)**

Application

**EP 01107296 A 20010323**

Priority

JP 2000105248 A 20000406

Abstract (en)

[origin: EP1143135A2] A cooling water channel of a cylinder head (1) has two parallel channels: an intake side channel (2) extending along the periphery of an intake port (5) in a longitudinal direction and an exhaust side channel (3) extending along the periphery of an exhaust port (6) in a longitudinal direction. Furthermore, a central channel (4) defined between the intake port (5) and the exhaust port (6) is divided into upper and lower sides, and the central channel (4a) on the upper side is communicated with the exhaust side channel (3), and the central channel (4b) on the lower side is communicated with the intake side channel (2). <IMAGE>

IPC 8 full level

**F02F 1/36** (2006.01); **F02F 1/42** (2006.01); **B22C 9/24** (2006.01); **B22D 17/22** (2006.01); **F01P 3/02** (2006.01); **F01P 3/14** (2006.01); **F02F 1/24** (2006.01); **F02F 1/38** (2006.01); **F02F 1/40** (2006.01); **F02B 3/06** (2006.01)

CPC (source: EP)

**F02F 1/40** (2013.01); **F02F 1/4214** (2013.01); **F02F 1/4285** (2013.01); **F02B 3/06** (2013.01); **F02F 2001/245** (2013.01)

Cited by

DE102004050923B4; EP1445447A1; CN109441656A; US6981473B2

Designated contracting state (EPC)

DE FR IT

DOCDB simple family (publication)

**EP 1143135 A2 20011010**; **EP 1143135 A3 20021127**; **EP 1143135 B1 20071121**; DE 60131487 D1 20080103; DE 60131487 T2 20080925; JP 2001289116 A 20011019; JP 4250723 B2 20090408

DOCDB simple family (application)

**EP 01107296 A 20010323**; DE 60131487 T 20010323; JP 2000105248 A 20000406