

Title (en)

Coolant and lubricant passage for internal combustion engines

Title (de)

Kühl- und Schmiermittelführung für Brennkraftmaschinen

Title (fr)

Passage pour agents de refroidissement et de lubrification pour un moteur à combustion interne

Publication

**EP 0907009 A3 20000913 (DE)**

Application

**EP 98117618 A 19980917**

Priority

DE 19743445 A 19971001

Abstract (en)

[origin: EP0907009A2] The cylinder head (3) and crankcase (2) have separate cooling water feed/drainage channels (6a, 6b) and oil intake/outlet bores (7a, 7b) axis-parallel to the crankshaft. Water/oil feed return are via a one-part distributor (5) flanged to the cylinder head and crankcase. Coolant flows from the water channels via cross channels to cooling faces in the cylinder head and back via return channels. Lubricant flows via distributor bores to the consumers, and back via collection bores.

IPC 1-7

**F01M 11/02**; **F01P 11/04**

IPC 8 full level

**F01M 5/00** (2006.01); **F01M 11/02** (2006.01); **F01P 11/02** (2006.01); **F01P 11/04** (2006.01)

CPC (source: EP)

**F01M 5/002** (2013.01); **F01P 11/02** (2013.01); **F01P 11/04** (2013.01)

Citation (search report)

- [A] CH 349830 A 19601031 - SULZER AG [CH]
- [A] GB 444488 A 19360318 - ARTHUR ALEXANDER RUBBRA, et al
- [A] US 4911120 A 19900327 - SUMI KIYOHIDE [JP]
- [A] DE 1704248 U 19550804 - MASCHF AUGSBURG NUERNBERG AG [DE]

Cited by

EP2169292A1; CN110998086A; JP2021113534A; US6702054B2; TWI385301B

Designated contracting state (EPC)

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DOCDB simple family (publication)

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