

Title (en)  
Cooling system for an internal combustion engine

Title (de)  
Kühlsystem für eine Hubkolbenbrennkraftmaschine

Title (fr)  
Système de refroidissement pour un moteur à combustion interne

Publication  
**EP 0671552 B1 19970903 (DE)**

Application  
**EP 95102644 A 19950224**

Priority  
DE 4407984 A 19940310

Abstract (en)  
[origin: EP0671552A1] The coolant flows through a closed circuit system to a cooler (19). The system comprises a top set of passages (9) in the block (2) at combustion-chamber level, and a separate bottom one (5) at the crankcase (4). The top set is open towards the cylinder head (3), and forms a single top system of passages (12) with the coolant chambers. The chambers are connected to the passages in the block via ports (11) in the head bottom plate. The top system can extend downwards towards the crank-case as far as the level of the piston rings when the pistons (8) are at tdc. The bottom set of passages can be level with the piston bdc position.

IPC 1-7  
**F01P 3/02; F02F 1/14; F02F 1/16**

IPC 8 full level  
**F01P 3/02** (2006.01); **F02F 1/14** (2006.01); **F02F 1/16** (2006.01)

CPC (source: EP)  
**F01P 3/02** (2013.01); **F02F 1/14** (2013.01); **F02F 1/163** (2013.01); **F01P 2025/50** (2013.01); **F02F 2001/104** (2013.01)

Cited by  
DE102014222734A1; DE19628542A1; CN111894753A; FR3024886A1; FR2855555A1; EP2578836A3; EP3358161A1; DE10011143A1; DE10011143B4; AT523181A4; AT523181B1; US7845316B2; US10323565B2; WO2016027012A1; WO2009007143A1; WO9949201A1; US6397792B1

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