

Title (en)  
Cylinder head for a water cooled internal combustion engine

Title (de)  
Zylinderkopf für eine wassergekühlte Brennkraftmaschine

Title (fr)  
Culasse pour un moteur à combustion interne refroidi par liquide

Publication  
**EP 1083328 A3 20020130 (DE)**

Application  
**EP 00116735 A 20000803**

Priority  
DE 19943003 A 19990909

Abstract (en)  
[origin: DE19943003C1] The cylinder head has a control arrangement (24) in a cooling channel (15) for a directed cooling water flow and for cooling the hot spot (22) on the wall (23) of the cylinder head (2). The control mechanism operates adjacent to the hot spot in a cooling channel causing a cross-flow of cooling water in the cylinder head

IPC 1-7  
**F02F 1/40**; **F01P 3/02**

IPC 8 full level  
**F01P 3/02** (2006.01); **F02F 1/40** (2006.01); **F02F 1/42** (2006.01); **F02B 1/04** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP US)  
**F02F 1/40** (2013.01 - EP US); **F02F 1/4214** (2013.01 - EP US); **F02B 1/04** (2013.01 - EP US); **F02F 2001/245** (2013.01 - EP US)

Citation (search report)  
• [X] DE 19644409 C1 19980129 - DAIMLER BENZ AG [DE]  
• [X] GB 706974 A 19540407 - DAIMLER BENZ AG  
• [X] GB 583652 A 19461223 - FODENS LTD, et al  
• [X] DE 1064289 B 19590827 - MOTOREN WERKE MANNHEIM AG  
• [X] FR 1006447 A 19520423 - KLOECKNER HUMBOLDT DEUTZ AG

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**DE 19943003 C1 20001109**; EP 1083328 A2 20010314; EP 1083328 A3 20020130; JP 2001090605 A 20010403; US 6427642 B1 20020806

DOCDB simple family (application)  
**DE 19943003 A 19990909**; EP 00116735 A 20000803; JP 2000268766 A 20000905; US 65974800 A 20000911