

Title (en)
Cylinder head for watercooled internal combustion engine

Title (de)
Zylinderkopf für eine wassergekühlte Brennkraftmaschine

Title (fr)
Culase pour un moteur à combustion interne refroidi par eau

Publication
EP 1083329 A3 20020130 (DE)

Application
EP 00116737 A 20000803

Priority
DE 19943001 A 19990909

Abstract (en)
[origin: DE19943001C1] The cylinder head for a water-cooled internal combustion motor has a flow unit (19) for additional coolant water in the coolant channel (15). It gives a targeted coolant water flow and cooling at the hot spot (17) at the wall (18) of the cylinder head (2). The flow unit (19) has one or more additional channels (20) to give the coolant flow pattern at the hot spot (17).

IPC 1-7
F02F 1/40; **F01P 3/14**

IPC 8 full level
F02F 1/38 (2006.01); **F01P 3/02** (2006.01); **F02F 1/10** (2006.01); **F02F 1/40** (2006.01); **F02F 1/24** (2006.01)

CPC (source: EP US)
F02F 1/40 (2013.01 - EP US); **F02F 2001/247** (2013.01 - EP US); **F02F 2001/248** (2013.01 - EP US)

Citation (search report)
• [X] DE 3802886 A1 19880818 - AVL VERBRENNUNGSKRAFT MESSTECH [AT]
• [X] DE 19508113 A1 19960919 - DAIMLER BENZ AG [DE]
• [X] DE 2037315 A1 19720210
• [A] DE 19644409 C1 19980129 - DAIMLER BENZ AG [DE]
• [A] GB 706974 A 19540407 - DAIMLER BENZ AG

Cited by
US6883472B2; WO2004022961A1

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 19943001 C1 20001026; DE 50012277 D1 20060427; EP 1083329 A2 20010314; EP 1083329 A3 20020130; EP 1083329 B1 20060301; ES 2254079 T3 20060616; JP 2001090604 A 20010403; US 6499444 B1 20021231

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