

Title (en)
COOLED CYLINDER HEAD FOR A RECIPROCATING ENGINE

Title (de)
GEKÜHLTER ZYLINDERKOPF FÜR EINE KOLBENBRENNKRAFTMASCHINE

Title (fr)
CULASSE REFROIDIE POUR MOTEUR A COMBUSTION INTERNE A PISTONS

Publication
EP 1516113 A1 20050323 (DE)

Application
EP 03760645 A 20030618

Priority

- DE 10227690 A 20020621
- EP 0306440 W 20030618

Abstract (en)
[origin: US6973897B2] The invention relates to a cylinder head comprising a water jacket that is delimited by a flame deck and an oil deck in a water-cooled reciprocating engine with cylinders that are arranged in series, each of said cylinders having at least one intake valve comprising intake ducts and two exhaust valves, whose exhausts open into exhaust ducts, in addition to a receptacle for a fuel injector or a spark plug that is located between the intake valve and the exhaust valves. The cylinder head is characterised in that a system of channels is provided at least in the vicinity of the exhaust side of each cylinder in order to conduct the coolant in the water jacket, whereby the coolant supply is conducted through said system from the exterior on one side of the exhaust duct towards the receptacle and is returned from the interior to the exterior on the other side of the exhaust duct and in that an overflow channel is provided.

IPC 1-7
F02F 1/40; **F02F 1/42**; **F01P 3/02**

IPC 8 full level
F02F 1/36 (2006.01); **F01P 3/02** (2006.01); **F02F 1/24** (2006.01); **F02F 1/40** (2006.01); **F02F 1/42** (2006.01); **F01P 3/14** (2006.01); **F02B 75/18** (2006.01); **F02B 75/20** (2006.01)

CPC (source: EP US)
F01P 3/02 (2013.01 - EP US); **F02F 1/40** (2013.01 - EP US); **F02F 1/4214** (2013.01 - EP US); **F01P 3/14** (2013.01 - EP US); **F01P 2003/024** (2013.01 - EP US); **F02B 75/20** (2013.01 - EP US); **F02B 2075/1816** (2013.01 - EP US)

Cited by
DE102009019327A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)
US 2005145205 A1 20050707; **US 6973897 B2 20051213**; AT E377704 T1 20071115; AU 2003246555 A1 20040106; CN 100340759 C 20071003; CN 1662737 A 20050831; DE 10227690 A1 20040108; DE 50308546 D1 20071220; EP 1516113 A1 20050323; EP 1516113 B1 20071107; JP 2005535819 A 20051124; WO 2004001214 A1 20031231

DOCDB simple family (application)
US 1674804 A 20041221; AT 03760645 T 20030618; AU 2003246555 A 20030618; CN 03814504 A 20030618; DE 10227690 A 20020621; DE 50308546 T 20030618; EP 0306440 W 20030618; EP 03760645 A 20030618; JP 2004514770 A 20030618