

Title (en)

COOLANT JACKET FOR A LIQUID-COOLED CYLINDER HEAD

Title (de)

KÜHLMITTELMANTEL FÜR EINEN FLÜSSIGKEITSGEKÜHLTEN ZYLINDERKOPF

Title (fr)

CHEMISE DE REFROIDISSEMENT DESTINÉE À UNE CULASSE REFROIDIE PAR LIQUIDE

Publication

EP 2619433 A1 20130731 (DE)

Application

EP 11767161 A 20110902

Priority

- DE 102010041105 A 20100921
- EP 2011004450 W 20110902

Abstract (en)

[origin: WO2012038033A1] The invention relates to a coolant jacket (1) for a liquid-cooled cylinder head for an internal combustion engine having a crankcase, wherein the cylinder head has a gas exchange intake side (ES) having two gas exchange intake valves (2) and a gas exchange exhaust side (AS) having two gas exchange exhaust valves (3), wherein a fuel injection valve (4) is provided on the intake side and an ignition device (5) is provided on the exhaust side between the gas exchange valves (2, 3), wherein the coolant jacket (1) extends as a first partial coolant jacket (6) on the exhaust side, coming from the crankcase, between the gas exchange exhaust valves (3) and then radially outside around the ignition device (5) and the fuel injection valve (4) and further in the direction of the intake side (ES) and the crankcase. The optimal cooling of the ignition device and the fuel injection valve according to the invention enables high specific powers and pressures, which leads to a fuel consumption advantage and a cost advantage.

IPC 8 full level

F02F 1/40 (2006.01)

CPC (source: EP US)

F01P 3/02 (2013.01 - US); **F02F 1/40** (2013.01 - EP US)

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

DE 102010041105 A1 20120322; DE 102010041105 B4 20240523; CN 103080520 A 20130501; CN 103080520 B 20150520; EP 2619433 A1 20130731; EP 2619433 B1 20220105; US 10634088 B2 20200428; US 2013192546 A1 20130801; WO 2012038033 A1 20120329

DOCDB simple family (application)

DE 102010041105 A 20100921; CN 201180042490 A 20110902; EP 11767161 A 20110902; EP 2011004450 W 20110902; US 201313826819 A 20130314