

Title (en)
LIQUID-COOLED INTERNAL COMBUSTION ENGINE

Title (de)
FLÜSSIGKEITSGEKÜHLTE BRENNKRAFTMASCHINE

Title (fr)
MOTEUR À COMBUSTION INTERNE REFROIDI PAR LIQUIDE

Publication
EP 2132423 B1 20101117 (DE)

Application
EP 08735640 A 20080401

Priority
• EP 2008053866 W 20080401
• AT 5372007 A 20070405

Abstract (en)
[origin: US8584627B2] A liquid-cooled internal combustion engine which includes a cylinder housing for at least one cylinder and at least one cylinder head, with the at least one cylinder in the cylinder housing being enclosed by a cooling jacket and with a bottom partial cooling chamber adjacent to a fire deck and an upper partial cooling chamber which is flow-connected with the same via at least one transfer opening being arranged in the cylinder head which is connected with the cylinder housing, with a coolant outlet which can be connected with a pressure sink originating from the bottom partial cooling chamber. In order to improve cooling, at least one coolant inlet which can be connected with a pressure source opens into the cooling jacket of the cylinder housing and the cooling jacket is flow-connected directly with the upper partial cooling chamber via at least one riser manifold, so that coolant flows in engine operation from the pressure source to the cooling jacket of the cylinder housing and from there to the upper partial cooling chamber of the cylinder head and further via the transfer opening into the bottom partial cooling chamber and from there to the pressure sink.

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

CPC (source: EP US)
F01P 3/02 (2013.01 - EP US); **F02F 1/242** (2013.01 - EP US); **F02F 1/40** (2013.01 - EP US); **F01P 2003/028** (2013.01 - EP US)

Cited by
DE102018116973A1; WO2020011926A1; WO2015086791A1; EP3379063A1

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

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