Title (en)

LIQUID-COOLED INTERNAL COMBUSTION ENGINE

Title (de

FLÜSSIGKEITSGEKÜHLTE BRENNKRAFTMASCHINE

Title (fr)

MOTEUR À COMBUSTION INTERNE REFROIDI PAR LIQUIDE

Publication

EP 2132423 A1 20091216 (DE)

Application

EP 08735640 A 20080401

Priority

- EP 2008053866 W 20080401
- AT 5372007 A 20070405

Abstract (en)

[origin: WO2008122544A1] The invention relates to a liquid-cooled internal combustion engine (1) comprising a cylinder housing (2) for at least one cylinder (13) and at least one cylinder head (3). The at least one cylinder (13) in the cylinder housing (2) is surrounded by a cooling jacket (5). A lower partial cooling chamber (7) that adjoins a fireproof cover (18) and an upper partial cooling chamber (6) which is fluidically connected to the lower partial cooling chamber (7) via at least one overflow port (8, 9) are disposed in the cylinder head (3), which is connected to the cylinder housing (2). A coolant outlet (14) that can be connected to a pressure sink extends from the lower partial pressure chamber (7). In order to improve cooling, at least one coolant inlet (12) that can be connected to a pressure source extends into the cooling jacket (5) of the cylinder housing (2), and the cooling jacket (5) is directly fluidically connected to the upper partial cooling chamber (6) via at least one riser (10, 11) such that coolant flows from the pressure source into the cooling jacket (5) of the cylinder housing (2), from the cooling jacket (5) into the upper partial cooling chamber (6) of the cylinder head (3) and on into the lower partial cooling chamber (7) via the overflow port (8, 9), and from the lower partial cooling chamber (7) to the pressure sink during operation of the engine.

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)

Citation (search report)

See references of WO 2008122544A1

Cited by

DE102018116973A1; WO2024119208A1; WO2020011926A1; WO2015086791A1; EP3379063A1

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DOCDB simple family (publication)

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