

Title (en)
INTERNAL COMBUSTION ENGINE

Title (de)
BRENNKRAFTMASCHINE

Title (fr)
MOTEUR À COMBUSTION INTERNE

Publication
EP 3374620 B1 20220504 (DE)

Application
EP 16791311 A 20161103

Priority
• DE 102015014514 A 20151111
• EP 2016001827 W 20161103

Abstract (en)
[origin: WO2017080636A1] Described is an internal combustion engine, in particular with a dual-circuit water cooling system, comprising a crankcase, at least one inlet and/or outlet rail that is arranged upstream of the crankcase, communicates with the crankcase and holds coolant, at least one coolant-conducting cylinder head, and at least one outlet and/or inlet rail that is arranged downstream of the cylinder head, communicates with the cylinder head and holds coolant.

IPC 8 full level
F02F 1/14 (2006.01); **F01P 3/02** (2006.01); **F02F 1/10** (2006.01); **F02F 1/36** (2006.01)

CPC (source: EP US)
F01P 3/02 (2013.01 - EP US); **F01P 3/20** (2013.01 - US); **F01P 7/165** (2013.01 - US); **F02F 1/10** (2013.01 - EP US); **F02F 1/14** (2013.01 - EP US); **F02F 1/36** (2013.01 - EP US); **F02F 1/40** (2013.01 - US); **F02M 26/28** (2016.02 - EP US); **F02M 26/30** (2016.02 - EP US); **F02M 26/32** (2016.02 - EP US); **F01P 2003/027** (2013.01 - EP US); **F01P 2060/00** (2013.01 - US)

Citation (examination)
• DE 102013113609 A1 20150611 - PORSCHE AG [DE]
• AT 508178 A2 20101115 - AVL LIST GMBH [AT]
• DE 102010052830 A1 20120531 - GM GLOBAL TECH OPERATIONS INC [US]
• EP 1491739 A1 20041229 - VOLVO PENTA AB [SE]
• FR 2225628 A1 19741108 - PERKINS ENGINES LTD [GB]
• DD 101459 A1 19731112

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)
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EP 3374620 B1 20220504; ES 2918500 T3 20220718; US 10954844 B2 20210323; US 2018347443 A1 20181206; WO 2017080636 A1 20170518

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DE 102015014514 A 20151111; DK 16791311 T 20161103; EP 16791311 A 20161103; EP 2016001827 W 20161103; ES 16791311 T 20161103;
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