

Title (en)

CYLINDER HEAD HOUSING, METHOD FOR PRODUCING A CYLINDER HEAD HOUSING, AND CASTING CORE

Title (de)

ZYLINDERKOPFGEHÄUSE, VERFAHREN ZUR HERSTELLUNG EINES ZYLINDERKOPFGEHÄUSES UND GIEßKERN

Title (fr)

BOÎTIER DE CULASSE, PROCÉDÉ POUR LA FABRICATION D'UN BOÎTIER DE CULASSE ET NOYAU DE COULÉE

Publication

EP 3615783 A1 20200304 (DE)

Application

EP 18717361 A 20180412

Priority

- DE 102017109185 A 20170428
- EP 2018059387 W 20180412

Abstract (en)

[origin: WO2018197228A1] The invention relates to a cylinder head housing (30) for an internal combustion engine, which internal combustion engine forms at least two cylinders arranged in-line, the cylinder head housing comprising: receiving openings for one exhaust valve each, which exhaust valves are associated with the individual cylinders of the internal combustion engine; exhaust gas channels (46), which extend from said exhaust-valve receiving openings and which are merged into an exhaust gas outlet channel (50); and cooling channels (52-74, 78, 80), which cooling channels (52-74, 78, 80) comprise a roof distribution channel (52), which is connected to injector cooling channels (56) for arranging above respective cylinders, the injector cooling channels (56) each being connected to a plurality of roof network channels (58), which extend in different radial directions with respect to a longitudinal axis of the particular injector receiving opening and which are connected directly or indirectly to at least two roof collection channels (62), which are arranged on different sides with respect to the line defined by the injector cooling channels (56), and/or comprise a manifold distribution channel (64), which extends along the line of the exhaust-valve receiving openings, the manifold distribution channel (64) being connected to a plurality of manifold network channels (66), which extend along the exhaust gas channels (46) and which are connected directly or indirectly to a manifold collection channel (68), which extends along the line of the exhaust-valve receiving openings.

IPC 8 full level

F02F 1/40 (2006.01); **F01P 3/14** (2006.01); **F01P 3/16** (2006.01); **F02F 1/24** (2006.01); **F02F 1/38** (2006.01)

CPC (source: EP US)

F01P 3/02 (2013.01 - US); **F02F 1/108** (2013.01 - US); **F02F 1/38** (2013.01 - US); **F02F 1/40** (2013.01 - EP US); **F02F 1/242** (2013.01 - EP); **F02F 1/243** (2013.01 - EP); **F02F 1/38** (2013.01 - EP); **F02F 2200/08** (2013.01 - EP)

Citation (search report)

See references of WO 2018197228A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

DE 102017109185 A1 20181031; CN 110582630 A 20191217; CN 110582630 B 20220225; EP 3615783 A1 20200304; EP 3615783 B1 20220112; US 11078865 B2 20210803; US 2020056563 A1 20200220; WO 2018197228 A1 20181101

DOCDB simple family (application)

DE 102017109185 A 20170428; CN 201880026656 A 20180412; EP 18717361 A 20180412; EP 2018059387 W 20180412; US 201916664320 A 20191025