

Title (en)

PISTON FOR AN INTERNAL COMBUSTION ENGINE AND METHOD FOR THE PRODUCTION THEREOF

Title (de)

KOLBEN FÜR EINEN VERBRENNUNGSMOTOR UND VERFAHREN ZU SEINER HERSTELLUNG

Title (fr)

PISTON POUR UN MOTEUR À COMBUSTION INTERNE ET SON PROCÉDÉ DE FABRICATION

Publication

EP 2652302 B1 20170426 (DE)

Application

EP 11833594 A 20111215

Priority

- DE 102010055161 A 20101218
- DE 102011114105 A 20110922
- DE 2011002128 W 20111215

Abstract (en)

[origin: WO2012079566A2] The present invention relates to a piston (10) for an internal combustion engine, comprising a piston head (11) and a piston skirt (16), wherein the piston head (11) has a circumferential ring part (15) and a circumferential cooling channel (23) in the region of the ring part (15), wherein the piston skirt (16) has piston bosses (17), which are provided with boss bores (18) and which are arranged on the underside (11a) of the piston head (11) by means of boss connections (19), wherein the piston bosses (17) are connected to each other by means of running surfaces (21, 22). According to the invention, at least one axial bore (24a, 24b, 24c, 24d), which is closed to the outside and which is arranged between a running surface (21, 22) and a boss bore (18), is provided inside a piston boss (17), the at least one bore (24a, 24b, 24c, 24d) opens into the cooling channel (23), and the cooling channel (23) and the at least one bore (24a, 24b, 24c, 24d) contain a filling (27) of sodium and/or potassium.

IPC 8 full level

F02F 3/18 (2006.01)

CPC (source: EP US)

F02F 3/18 (2013.01 - EP US); **F02F 3/22** (2013.01 - US); **F01P 1/04** (2013.01 - US)

Citation (examination)

DE 726685 C 19421019 - VERSUCHSANSTALT FUER LUFTFAHRT

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)

WO 2012079566 A2 20120621; **WO 2012079566 A3 20121004**; CN 203655459 U 20140618; DE 102011114105 A1 20120621; EP 2652302 A2 20131023; EP 2652302 B1 20170426; JP 2013545927 A 20131226; JP 6113075 B2 20170412; US 2013312695 A1 20131128; US 8899208 B2 20141202

DOCDB simple family (application)

DE 2011002128 W 20111215; CN 201190000988 U 20111215; DE 102011114105 A 20110922; EP 11833594 A 20111215; JP 2013543525 A 20111215; US 201113995017 A 20111215