

Title (en)
JOINED CONNECTION ON A TWO-PIECE STEEL PISTON AND JOINING METHOD

Title (de)
FÜGEVERBINDUNG AN EINEM ZWEITEILIGEN STAHLKOLBEN UND FÜGEVERFAHREN

Title (fr)
ASSEMBLAGE D'UN PISTON EN ACIER EN DEUX PARTIES ET PROCÉDÉ D'ASSEMBLAGE

Publication
EP 2888466 A1 20150701 (DE)

Application
EP 13752639 A 20130823

Priority
• DE 102012215043 A 20120823
• EP 2013067559 W 20130823

Abstract (en)
[origin: WO2014029878A1] The present invention relates to a piston (1, 31), in particular a gallery-cooled piston for an internal combustion engine, having a piston bottom part (2, 32) and a piston top part (3, 33) which are connected in a joining process to produce the piston (1, 31), wherein the piston top part (3, 33) has at least one ring zone (16) and an inner wall (7), wherein it is provided according to the invention that the piston bottom part (2, 32) has a radially circumferential oblique surface (6) at the end which faces the piston top part (3, 33), which oblique surface (6), interacting with the inner wall (7) of the piston top part (3, 33), brings about a centring action (10) during the joining process of the piston parts (2, 3; 32, 33). Furthermore, the invention relates to a joining method for manufacturing a piston.

IPC 8 full level
F02F 3/00 (2006.01); **F02F 3/22** (2006.01)

CPC (source: EP US)
F02F 3/003 (2013.01 - EP US); **F02F 3/22** (2013.01 - EP US); **F16J 1/005** (2013.01 - US); **F16J 1/01** (2013.01 - US)

Citation (search report)
See references of WO 2014029878A1

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)
WO 2014029878 A1 20140227; DE 102013216854 A1 20140227; EP 2888466 A1 20150701; US 11098800 B2 20210824;
US 2016061326 A1 20160303; US 2018051805 A1 20180222

DOCDB simple family (application)
EP 2013067559 W 20130823; DE 102013216854 A 20130823; EP 13752639 A 20130823; US 201314422852 A 20130823;
US 201715802739 A 20171103