

Title (en)  
METHOD FOR PRODUCING A PISTON FOR AN INTERNAL COMBUSTION ENGINE AND PISTON FOR AN INTERNAL COMBUSTION ENGINE

Title (de)  
VERFAHREN ZUR HERSTELLUNG EINES KOLBENS FÜR EINEN VERBRENNUNGSMOTOR SOWIE KOLBEN FÜR EINEN VERBRENNUNGSMOTOR

Title (fr)  
PROCÉDÉ POUR PRODUIRE UN PISTON DESTINÉ À UN MOTEUR À COMBUSTION INTERNE ET PISTON DESTINÉ À UN MOTEUR À COMBUSTION INTERNE

Publication  
**EP 2603348 A1 20130619 (DE)**

Application  
**EP 11787583 A 20110809**

Priority  
• DE 102010033879 A 20100810  
• DE 2011001564 W 20110809

Abstract (en)  
[origin: US2012037115A1] A method for the production of a piston for an internal combustion engine has the following steps: producing an upper piston part having at least one joining surface, b) producing a lower piston part having at least one joining surface, c) producing a direct contact between the at least one joining surface of the upper piston part and the at least one joining surface of the lower piston part, d) heating the upper piston part and the lower piston part by induction or by a direct flow of current over the joining surfaces in the region of the joining surfaces that have been brought into direct contact, e) connecting the upper and lower piston parts with one another to produce a piston by a pressing process, and machining the piston to finish it.

IPC 8 full level  
**B23K 11/04** (2006.01); **B23K 13/06** (2006.01); **B23K 20/02** (2006.01); **B23P 15/10** (2006.01); **F02F 3/00** (2006.01); **F02F 3/22** (2006.01)

CPC (source: EP KR US)

**B23K 11/04** (2013.01 - EP KR US); **B23K 13/05** (2013.01 - EP US); **B23K 13/06** (2013.01 - EP KR US); **B23K 20/02** (2013.01 - KR);  
**B23K 20/023** (2013.01 - EP US); **B23K 20/028** (2013.01 - EP US); **B23K 20/12** (2013.01 - EP US); **B23K 20/129** (2013.01 - EP US);  
**B23K 20/227** (2013.01 - EP US); **B23K 20/24** (2013.01 - EP US); **B23P 15/10** (2013.01 - EP KR US); **F02F 3/00** (2013.01 - KR);  
**F02F 3/003** (2013.01 - EP US); **F02F 3/22** (2013.01 - EP KR US); **B23K 2101/003** (2018.07 - EP US); **B23K 2103/04** (2018.07 - EP US);  
**B23K 2103/06** (2018.07 - EP US); **Y10T 29/49256** (2015.01 - EP US)

Citation (search report)

See references of WO 2012019593A1

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)

**US 2012037115 A1 20120216**; BR 112013004071 A2 20160614; CN 103118831 A 20130522; DE 102010033879 A1 20120216;  
EP 2603348 A1 20130619; JP 2013542355 A 20131121; KR 20140007791 A 20140120; WO 2012019593 A1 20120216

DOCDB simple family (application)

**US 201113206089 A 20110809**; BR 112013004071 A 20110809; CN 201180046163 A 20110809; DE 102010033879 A 20100810;  
DE 2011001564 W 20110809; EP 11787583 A 20110809; JP 2013523486 A 20110809; KR 20137005860 A 20110809