

Title (en)

METHOD FOR MANUFACTURING A PISTON OF AN INTERNAL COMBUSTION ENGINE, COMPRISING AN IMPROVED ALUMINUM SILICON ALLOY

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES KOLBENS EINER BRENNKRAFTMASCHINE, BESTEHEND AUS EINER VERBESSERTEN ALUMINIUMSILIZIUM-LEGIERUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UN PISTON POUR UN MOTEUR À COMBUSTION INTERNE COMPOSÉ D'UN ALLIAGE D'ALUMINIUM-SILICIUM ÉVOLUÉ

Publication

EP 2318560 A2 20110511 (DE)

Application

EP 09778312 A 20090903

Priority

- EP 2009006393 W 20090903
- DE 102008045800 A 20080905

Abstract (en)

[origin: WO2010025919A2] The invention relates to a method for manufacturing a piston of an internal combustion engine, wherein a piston blank is cast from an aluminum silicon alloy while adding copper proportions and thereafter is finished, wherein according to the invention the copper proportion is a maximum of 5.5% of the aluminum silicon alloy, and proportions of titanium (Ti), zirconium (Zr), chromium (Cr), and/or vanadium (V) are added to the aluminum silicon alloy.

IPC 8 full level

C22C 21/02 (2006.01)

CPC (source: EP)

C22C 21/02 (2013.01); **C22C 21/04** (2013.01); **F02F 3/0084** (2013.01); **F16J 1/01** (2013.01); **F05C 2201/903** (2013.01)

Citation (search report)

See references of WO 2010025919A2

Designated contracting state (EPC)

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 SE SI SK SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

WO 2010025919 A2 20100311; **WO 2010025919 A3 20100617**; CN 102177266 A 20110907; DE 102009039838 A1 20100429; EP 2318560 A2 20110511; JP 2012502176 A 20120126

DOCDB simple family (application)

EP 2009006393 W 20090903; CN 200980134569 A 20090903; DE 102009039838 A 20090903; EP 09778312 A 20090903; JP 2011525461 A 20090903