

Title (en)
ALUMINIUM CASTING ALLOY, A PROCESS FOR THE MANUFACTURE OF AN ENGINE COMPONENT, ENGINE COMPONENT AND THE USE OF AN ALUMINIUM CASTING ALLOY FOR THE MANUFACTURE OF AN ENGINE COMPONENT

Title (de)
ALUMINIUM-GUSSLEGIERUNG, VERFAHREN ZUR HERSTELLUNG EINES MOTORBAUTEILS, MOTORBAUTEIL UND VERWENDUNG EINER ALUMINIUM- GUSSLEGIERUNG ZUR HERSTELLUNG EINES MOTORBAUTEILS

Title (fr)
ALLIAGE D'ALUMINIUM, PROCÉDÉ DE FABRICATION D'UN COMPOSANT D'UN MOTEUR, COMPOSANT D'UN MOTEUR ET SON PROCÉDÉ DE FABRICATION

Publication
EP 3277854 B1 20190220 (DE)

Application
EP 16710767 A 20160321

Priority
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• EP 2016056123 W 20160321

Abstract (en)
[origin: WO2016156084A1] The application relates to a cast aluminum alloy, to a method for producing an engine component, in particular a piston for an internal combustion engine, wherein a cast aluminum alloy is cast in the gravity permanent-mold casting method, to an engine component, in particular a piston for an internal combustion engine, at least partially consisting of a cast aluminum alloy, and to the use of a cast aluminum alloy to produce an engine component, in particular a piston for an internal combustion engine. The cast aluminum alloy consists of the following alloying elements: silicon: 9.0 wt% to < 10.5 wt%, nickel: 0.8 wt% to < 1.9 wt%, copper: 1.8 wt% to < 3.6 wt%, magnesium: 0.5 wt% to 1.8 wt%, iron: 0.9 wt % to < 1.4 wt%, zirconium and/or vanadium: in each case, 0.05 to <= 0.3 or 0.2%, respectively, manganese: up to <= 0.4 wt%, titanium: up to <= 0.15 wt%, phosphorus: up to <= 0.05 wt%, and aluminum and unavoidable impurities as the remainder.

IPC 8 full level
C22C 21/02 (2006.01); **C22C 21/04** (2006.01)

CPC (source: EP KR US)
C22C 21/02 (2013.01 - EP KR US); **F02F 3/00** (2013.01 - KR); **B22D 21/007** (2013.01 - EP US); **F02F 3/00** (2013.01 - EP US); **F02F 3/0084** (2013.01 - US)

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