

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  
• DE 102015205895 A 20150401  
• 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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