Title (en)

METHOD FOR PRODUCING AN ENGINE COMPONENT, ENGINE COMPONENT, AND USE OF AN ALUMINIUM ALLOY

Title (de)

VERFAHREN ZUR HERSTELLUNG EINES MOTORBAUTEILS, MOTORBAUTEIL UND VERWENDUNG EINER ALUMINIUMLEGIERUNG

Title (fr)

PROCÉDÉ DE FABRICATION D'UN COMPOSANT DE MOTEUR, COMPOSANT DE MOTEUR ET UTILISATION D'UN ALLIAGE D'ALUMINIUM

Publication

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Application

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Priority

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Abstract (en)

[origin: WO2014076174A1] A method is described for producing an engine component, more particularly a piston for an internal combustion engine, in which an aluminium alloy is cast using the gravity die casting method and wherein the aluminium alloy comprises the following alloy elements: 9 to ≤10.5% by weight silicon, >2.0 to <3.5% by weight nickel, >3.7 to 5.2% by weight copper, <1% by weight cobalt, 0.5 to 1.5% by weight magnesium, 0.1 to 0.7% by weight iron, 0.1 to 0.4% by weight manganese, >0.1 to <0.2% by weight zirconium, >0.1 to <0.2% by weight vanadium, 0.05 to <0.2% by weight titanium, 0.004 to 0.008% by weight phosphorus, wherein said aluminium alloy further comprises aluminium and unavoidable impurities. The invention further describes an engine component, in particular a piston for an internal combustion engine, wherein the engine component consists, at least partially, of an aluminium alloy, and the use of an aluminium alloy to produce an engine component, more particularly a piston of an internal combustion engine.

IPC 8 full level

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