

Title (en)

CAST ALUMINUM ALLOY, AND USE THEREOF

Title (de)

ALUMINIUM-GUSSLEGIERUNG UND DEREN VERWENDUNG

Title (fr)

ALLIAGE DE FONDERIE D'ALUMINIUM ET UTILISATION

Publication

EP 2173916 A2 20100414 (DE)

Application

EP 08773992 A 20080714

Priority

- EP 2008005744 W 20080714
- DE 102007033827 A 20070718

Abstract (en)

[origin: WO2009010264A2] Disclosed is a novel high-strength, heat-resistant cast aluminum silicon alloy that has good heat conductivity, is particularly suitable for producing engine parts, especially for casting cylinder heads and cylinder crankcases, and has the following composition: 2.6 to 4.5 wt.% of silicon; 0.5 to 3 wt.% of copper, 0.001 to 0.3 wt.% of magnesium, 0.001 to 0.8 wt.% of zirconium; a total of 0 to 4 wt.% of one or more of the optional elements encompassing manganese, iron, cobalt, zinc, nickel, vanadium, niobium, beryllium, lithium, yttrium, cerium, scandium, hafnium, silver, titanium, strontium, sodium, potassium, calcium, antimony, sulfur, barium, boron, nitrogen, and carbon, the remainder being composed of aluminum and inevitable impurities, at a heat conductivity which is adjusted by means of the aforementioned composition and exceeds 178 W/mK at 250°C

IPC 8 full level

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CPC (source: EP)

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Citation (search report)

See references of WO 2009010264A2

Cited by

CN107675038A; CN111809085A; CN111485146A

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DOCDB simple family (publication)

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