

Title (en)
HEAT-RESISTANT ALUMINIUM ALLOY

Title (de)
WARMFESTE ALUMINIUMLEGIERUNG

Title (fr)
ALLIAGE D'ALUMINIUM RÉISTANT À LA CHALEUR

Publication
EP 3670689 B1 20231018 (DE)

Application
EP 18214766 A 20181220

Priority
EP 18214766 A 20181220

Abstract (en)
[origin: WO2020126198A1] The invention relates to an alloy for casting components on an aluminium-magnesium-copper-manganese basis, with a composition consisting of: 5.0 to 9.5% by weight magnesium; 3.0 to 7.5% by weight copper; 1.5 to 4.7% by weight silicon; 0.1 to 1.0% by weight manganese; max. 2% by weight nickel; max. 1% by weight iron; max. 0.5% by weight zirconium; up to 500 ppm beryllium, up to 0.5 % by weight titanium; max. 0.8% by weight strontium; up to 500 ppm phosphorus; optionally up to 0.5% by weight of the elements zinc, chromium, molybdenum, vanadium, hafnium, calcium, gallium or boron and the remainder aluminium and unavoidable impurities. The invention is also directed to a component cast from the aforementioned alloy, preferably cast by gravity die casting. The invention is directed furthermore to a cylinder head which comprises the alloy according to the invention.

IPC 8 full level
C22C 21/06 (2006.01); **C22C 21/08** (2006.01); **C22C 21/14** (2006.01); **C22C 21/16** (2006.01); **C22F 1/047** (2006.01); **C22F 1/057** (2006.01)

CPC (source: EP)
C22C 21/06 (2013.01); **C22C 21/08** (2013.01); **C22C 21/14** (2013.01); **C22C 21/16** (2013.01); **C22F 1/047** (2013.01); **C22F 1/057** (2013.01)

Citation (examination)
EP 1757709 B1 20071017 - RHEINFELDEN ALUMINIUM GMBH [DE]

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)
EP 3670689 A1 20200624; **EP 3670689 B1 20231018**; **EP 3670689 C0 20231018**; WO 2020126198 A1 20200625

DOCDB simple family (application)
EP 18214766 A 20181220; EP 2019080431 W 20191106