Title (en)

ALUMINUM ALLOY FOR DIE CASTING, AND DIE-CAST ALUMINUM ALLOY USING SAME

Title (de)

ALUMINIUMLEGIERUNG ZUM DRUCKGIESSEN UND DRUCKGUSSALUMINIUMLEGIERUNG DAMIT

Title (fr)

ALLIAGE D'ALUMINIUM POUR COULÉE SOUS PRESSION ET ALLIAGE D'ALUMINIUM COULÉ SOUS PRESSION L'UTILISANT

Publication

EP 3121302 A1 20170125 (EN)

Application

EP 15883648 A 20150415

Priority

JP 2015002086 W 20150415

Abstract (en)

Provided are an aluminum alloy for die casting, suitable for important safety-related components in automobiles without significantly worsening corrosion resistance even though containing Cu at a ratio capable of providing an effect of improving mechanical characteristics, and an aluminum alloy die cast obtained through die-casting the alloy. More specifically, the present invention is directed to an aluminum alloy for die casting containing, in wt%, 0.03% < Cu #¤ 0.7%, 6.0% < Si #¤ 11.0%, 0.15% #¤ Mg #¤ 0.50%, 0.05% #¤ Fe #¤ 0.6%, 0.05% #¤ Ti #¤ 0.25%, Mn #¤ 0.8%, 0.10% #¤ Cr #¤ 0.40%, and, for the remaining portion, Al and unavoidable impurities.

IPC 8 full level

C22C 21/02 (2006.01)

CPC (source: EP KR US)

C22C 21/02 (2013.01 - EP KR US)

Cited by

EP3342889A1; JP2020152956A; EP3943629A4; DE112017007033B4

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3121302 A1 20170125; **EP 3121302 A4 20170531**; **EP 3121302 B1 20180919**; CN 106255770 A 20161221; JP 5898819 B1 20160406; JP WO2016166779 A1 20170427; KR 20170138916 A 20171218; MX 2016010352 A 20180209; MY 183152 A 20210216; PH 12017500237 A1 20170703; PH 12017500237 B1 20170703; PL 3121302 T3 20190329; US 2017121793 A1 20170504; WO 2016166779 A1 20161020

DOCDB simple family (application)

EP 15883648 A 20150415; CN 201580003603 A 20150415; JP 2015002086 W 20150415; JP 2015528116 A 20150415; KR 20167030544 A 20150415; MX 2016010352 A 20150415; MY PI2017700056 A 20150415; PH 12017500237 A 20170209; PL 15883648 T 20150415; US 201515104439 A 20150415