

Title (en)

ALUMINUM ALLOY, PREPARATION METHOD THEREFOR AND APPLICATION THEREOF

Title (de)

ALUMINIUMLEGIERUNG, HERSTELLUNGSVERFAHREN DAFÜR UND ANWENDUNG DAVON

Title (fr)

ALLIAGE D'ALUMINIUM, SON PROCÉDÉ DE PRÉPARATION ET SON APPLICATION

Publication

EP 4170051 A4 20230510 (EN)

Application

EP 21826605 A 20210602

Priority

- CN 202010557444 A 20200618
- CN 2021097984 W 20210602

Abstract (en)

[origin: EP4170051A1] An aluminum alloy and a preparation method and application thereof are provided. The aluminum alloy includes, in percentages by weight: 9%-11% of Si, 0.001%-0.2% of Mg, 0.3%-0.7% of Fe, 0.003%-0.04% of Sr, 0.003%-0.03% of B, 0.001%-0.2% of Zn, 0.001%-0.1% of Cu, 0.001%-0.09% of Mn, less than 0.05% of Cr, 0.002%-0.05% of Ga, 0.001%-0.01% of Mo, and the balance of aluminum and other elements, wherein a total amount of the other elements is lower than 0.1%.

IPC 8 full level

C22C 21/02 (2006.01); **B22D 17/00** (2006.01); **B22D 21/00** (2006.01); **C22C 1/02** (2006.01); **C22F 1/043** (2006.01); **F28F 21/08** (2006.01)

CPC (source: CN EP)

B22D 21/007 (2013.01 - EP); **C22C 1/026** (2013.01 - CN EP); **C22C 21/02** (2013.01 - CN EP); **C22F 1/043** (2013.01 - CN EP); **F28F 21/084** (2013.01 - CN)

Citation (search report)

- [I] CN 111218589 A 20200602 - SUZHOU CHUNXING PREC MECH CO
- [A] CN 109338176 A 20190215 - UNIV SUZHOU, et al
- [A] JP 2013204087 A 20131007 - HONDA KINZOKU GIJUTSU KK, et al
- [A] CN 108546853 A 20180918 - SHANDONG HUAYU ALLOY MAT CO LTD, et al
- [A] US 2012009081 A1 20120112 - KOHLMANN PETER [DE]
- [A] WO 2018095186 A1 20180531 - BYD CO LTD [CN]
- [A] EP 3342889 A1 20180704 - BEFESA ALUMINIO S L [ES]
- See references of WO 2021254154A1

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

Designated validation state (EPC)

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DOCDB simple family (application)

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