

Title (en)

ENGINEERED ALUMINUM ALLOY AND METHOD OF FABRICATING THE SAME

Title (de)

TECHNISIERTE ALUMINIUMLEGIERUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ALLIAGE D'ALUMINIUM MODIFIÉ ET SON PROCÉDÉ DE FABRICATION

Publication

EP 3342897 A2 20180704 (EN)

Application

EP 18150026 A 20180102

Priority

KR 20160183446 A 20161230

Abstract (en)

Provided are an aluminum alloy having an adjusted microstructure in an aluminum matrix or an aluminum alloy matrix for high elongation ratio or high strength and a method of fabricating the same. The aluminum alloy includes an aluminum-based matrix; and a precipitation compound dispersed in the aluminum-based matrix. The precipitation compound comprises a compound containing aluminum, one or more transition metals, and one or more non-metallic elements.

IPC 8 full level

C22F 1/04 (2006.01); **C22C 1/10** (2006.01); **C22C 21/00** (2006.01); **C22C 32/00** (2006.01)

CPC (source: EP KR)

C22C 1/026 (2013.01 - KR); **C22C 1/1036** (2013.01 - EP); **C22C 1/1052** (2023.01 - EP); **C22C 21/00** (2013.01 - EP KR); **C22C 21/02** (2013.01 - EP KR); **C22C 21/08** (2013.01 - EP); **C22C 32/001** (2013.01 - KR); **C22C 32/0036** (2013.01 - EP); **C22C 32/0047** (2013.01 - KR); **C22F 1/04** (2013.01 - EP KR); **C22F 1/043** (2013.01 - KR)

Citation (applicant)

- LEE ET AL., SCRIPTA MATERIALIA, vol. 92, 2014, pages 23 - 24
- OUYANG ET AL.: "Physica B", vol. 407, 2012, article "Thermodynamic and physical properties of FeAl and Fe Al: atomistic study by EAM simulation", pages: 4530 - 4536
- R.P. REED; R.E. SCHRAMM, J. APPL. PHYS., vol. 45, 1974, pages 4705

Cited by

EP3967782A1; CN112063868A

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)

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