

Title (en)

HYPEREUTECTIC HIGH PRESSURE DIE CAST ALUMINUM-SILICON CAST ALLOY

Title (de)

HYPEREUTEKTISCHE ALUMINIUM SILICIUM HOCHDRUCKGUSSLEGIERUNG

Title (fr)

ALLIAGE HYPEREUTECTIQUE ALUMINIUM SILICIUM POUR COULEE SOUS HAUTE PRESSION

Publication

**EP 3293278 A1 20180314 (EN)**

Application

**EP 17020405 A 20170906**

Priority

US 201615263859 A 20160913

Abstract (en)

The present invention discloses a hypereutectic high pressure die cast aluminum silicon alloy comprising: 16% to 23% by weight silicon, 0.01% to 1.5% by weight iron, 0.01% to 0.6% by weight manganese, 0.01% to 1.3% by weight magnesium, 0.05% to 0.2% by weight strontium, optionally 0.01% to 4.5% by weight nickel, and the balance aluminum, wherein the die cast alloy has a microstructure with a volume fraction of primary silicon of greater than 10%.

IPC 8 full level

**C22C 21/00** (2006.01); **B22D 17/00** (2006.01); **B22D 21/00** (2006.01); **C22C 21/02** (2006.01); **C22C 21/04** (2006.01); **C22C 21/06** (2006.01)

CPC (source: CN EP)

**B22D 17/00** (2013.01 - EP); **B22D 21/007** (2013.01 - EP); **C22C 21/02** (2013.01 - CN EP)

Citation (applicant)

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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 3293278 A1 20180314; EP 3293278 B1 20220309**; CN 107815566 A 20180320; JP 2018044243 A 20180322; JP 6998711 B2 20220210

DOCDB simple family (application)

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