

Title (en)

AlMgMn alloy product for welded structures with improved corrosion resistance

Title (de)

Produkt aus AlMgMn-Legierung für Schweißstrukturen mit verbesserter Korossionsbeständigkeit

Title (fr)

Produit pour construction soudée en alliage AlMgMn à tenue à la corrosion améliorée

Publication

EP 0823489 B1 20001102 (FR)

Application

EP 97420125 A 19970723

Priority

FR 9610085 A 19960806

Abstract (en)

[origin: EP0823489A1] A preformed component for building of welded structures, is made of aluminium alloy containing by weight 3.0-6.5% magnesium, 0.2-1.0% manganese, 0.05-0.6% silicon and less than 0.8% iron and 1.3% zinc, also possibly up to 0.15% chromium and up to 0.30% each of copper, titanium, silver, zirconium and vanadium, with other elements and impurities up to 0.05% each and 0.15% total. It comprises 150-2000, preferably 300-1500, particles per square mm. of Mg₂Si of size between 0.5 and 5 microns. Also claimed are a hot-rolled band of the alloy, but containing less than 0.4% Fe, at least 2500, preferably at least 3300 mm. wide, use of the alloy, with up to 0.5% Zn, in naval construction, or with over 0.5% Zn as a coating to protect welded joints in naval construction and use of the alloy in industrial vehicles.

IPC 1-7

C22C 21/08; **C22C 21/06**; **C22F 1/047**

IPC 8 full level

C22C 21/06 (2006.01); **C22C 21/08** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP US)

C22C 21/06 (2013.01 - EP US); **C22C 21/08** (2013.01 - EP US); **C22F 1/047** (2013.01 - EP US)

Cited by

DE10231437B4; US7211161B2; CN110551928A; CN103774067A; FR2837499A1; NO340211B1; CN103757572A; US6695935B1; US10661338B2; WO0066800A1; WO2011134486A1; US6848233B1; WO0026020A1; WO03080884A3; US7727346B2

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