

Title (en)

HIGH-STRENGTH MAGNESIUM ALLOY WIRE AND METHOD FOR MANUFACTURING SAME, HIGH-STRENGTH MAGNESIUM ALLOY PRODUCT, AND HIGH-STRENGTH MAGNESIUM ALLOY SPRING

Title (de)

HOCHFESTER MAGNESIUMLEGIERUNGSDRAHT UND VERFAHREN ZU SEINER HERSTELLUNG, HOCHFESTES MAGNESIUMLEGIERUNGSPRODUKT UND HOCHFESTE MAGNESIUMLEGIERUNGSFEDER

Title (fr)

FIL EN ALLIAGE DE MAGNÉSIUM À HAUTE RÉSISTANCE ET SON PROCÉDÉ DE FABRICATION, PRODUIT À BASE D'ALLIAGE DE MAGNÉSIUM À HAUTE RÉSISTANCE ET RESSORT EN ALLIAGE DE MAGNÉSIUM À HAUTE RÉSISTANCE

Publication

EP 2628813 A1 20130821 (EN)

Application

EP 11832618 A 20111014

Priority

- JP 2010232364 A 20101015
- JP 2011073649 W 20111014

Abstract (en)

A high-strength magnesium alloy wire rod suitable for products in which at least one of bending stress and twisting stress primarily acts is provided. The wire rod has required elongation and 0.2 % proof stress, whereby strength and formability are superior, and has higher strength in the vicinity of the surface. In the wire rod, the surface portion has the highest hardness in a cross section of the wire rod, the highest hardness is 170 HV or more, and the inner portion has a 0.2 % proof stress of 550 MPa or more and an elongation of 5% or more.

IPC 8 full level

C22C 23/06 (2006.01); **B22F 3/14** (2006.01); **B22F 3/20** (2006.01); **C22C 23/00** (2006.01)

CPC (source: EP KR US)

B22F 3/14 (2013.01 - KR); **B22F 3/20** (2013.01 - EP KR US); **B22F 3/24** (2013.01 - US); **B22F 5/12** (2013.01 - EP US); **C22C 23/00** (2013.01 - EP US); **C22C 23/06** (2013.01 - EP KR US); **C22F 1/06** (2013.01 - EP US); **B22F 2998/00** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US)

C-Set (source: EP US)

1. **B22F 2998/00 + B22F 2303/01 + B22F 2301/058**
2. **B22F 2998/10 + B22F 9/08 + B22F 3/10 + B22F 3/20**

Cited by

EP2840155A4; EP3598526A1; EP4224545A3; WO2020016240A1

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

DOCDB simple family (publication)

EP 2628813 A1 20130821; EP 2628813 A4 20140618; CN 103154289 A 20130612; CN 103154289 B 20160120; JP 2012087327 A 20120510; JP 5548578 B2 20140716; KR 101636117 B1 20160704; KR 20130061189 A 20130610; US 2013195711 A1 20130801; WO 2012050188 A1 20120419

DOCDB simple family (application)

EP 11832618 A 20111014; CN 201180049694 A 20111014; JP 2010232364 A 20101015; JP 2011073649 W 20111014; KR 20137011442 A 20111014; US 201113877679 A 20111014