

Title (en)

FORMED PRODUCT OF MAGNESIUM ALLOY AND MAGNESIUM ALLOY SHEET

Title (de)

FORMPRODUKT AUS MAGNESIUMLEGIERUNG UND MAGNESIUMLEGIERUNGSBLECH

Title (fr)

PRODUIT TRAVAILLÉ EN ALLIAGE DE MAGNÉSIUM ET FEUILLE D'ALLIAGE DE MAGNÉSIUM

Publication

EP 2351863 A4 20150826 (EN)

Application

EP 09821745 A 20090929

Priority

- JP 2009005004 W 20090929
- JP 2008272241 A 20081022

Abstract (en)

[origin: EP2351863A1] A formed product of a magnesium alloy having excellent impact resistance and a magnesium alloy sheet suitable as a material for the formed product are provided. The formed product is produced by press-forming a magnesium alloy sheet having an Al content of 7% by mass to 12% by mass and has a flat portion that is not subjected to drawing deformation. In a metal texture in a cross section of the flat portion in the thickness direction, the number of coarse intermetallic compound (Mg 17 Al 12) particles having a particle size of 5 µm or more present in a surface area region extending from a surface of the flat portion to a position one-third of the thickness from the surface in the thickness direction is five or less. The formed product has a texture in which the number of coarse precipitations d 1 is small and in which fine precipitations d 0 are dispersed. The formed product is less likely to be dented even when impacted because of dispersion strengthening owing to the fine precipitations and solid-solution strengthening owing to Al that sufficiently forms a solid solution.

IPC 8 full level

C22C 23/02 (2006.01); **C22F 1/00** (2006.01); **C22F 1/06** (2006.01)

CPC (source: EP KR US)

C22C 23/02 (2013.01 - EP KR US); **C22F 1/06** (2013.01 - EP KR US)

Citation (search report)

- [XP] EP 2060642 A1 20090520 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- [E] EP 2453031 A1 20120516 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- [E] EP 2447381 A1 20120502 - SUMITOMO ELECTRIC INDUSTRIES [JP]
- See references of WO 2010047045A1

Designated contracting state (EPC)

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DOCDB simple family (publication)

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