

Title (en)

HIGHLY MOLDED MAGNESIUM ALLOY SHEET AND METHOD FOR MANUFACTURING SAME

Title (de)

HOCHGEFORMTES BLECH AUS EINER MAGNESIUMLEGIERUNG UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

FEUILLE D'ALLIAGE DE MAGNÉSIUM HAUTEMENT MOULÉE ET SON PROCÉDÉ DE FABRICATION

Publication

EP 3530766 A2 20190828 (EN)

Application

EP 17861500 A 20171020

Priority

- KR 20160137652 A 20161021
- KR 2017011682 W 20171020

Abstract (en)

The present invention relates to a high-formed magnesium alloy sheet and a method of manufacturing the same. One embodiment of the present invention provides a magnesium alloy sheet comprising: 3.0 wt% or less (excluding 0 wt%) of Zn, 1.5 wt% or less (excluding 0 wt%) of Ca, 1.0 wt % or less (excluding 0 wt%) of Mn, balance of Mg and inevitable impurities, for a total of 100 wt%, wherein, the magnesium alloy sheet further comprises 0.3 wt% or less of Al, based on 100 wt% of the entire magnesium alloy sheet, and the magnesium alloy sheet satisfies the following formulas (1) and (2): $[Zn]/[Ca] \leq 4.0$ ----- formula (1) $[Zn] + [Ca] > [Mn]$ ----- formula (2) $[Zn]$, $[Ca]$, and $[Mn]$ refer to weight percent of each component.

IPC 8 full level

C22C 23/04 (2006.01); **B21B 1/46** (2006.01); **B21B 3/00** (2006.01); **C22F 1/06** (2006.01)

CPC (source: EP KR US)

B21B 1/46 (2013.01 - US); **B21B 1/463** (2013.01 - KR); **B21B 3/003** (2013.01 - KR); **C22C 23/04** (2013.01 - EP KR US);
C22F 1/06 (2013.01 - EP KR US)

Cited by

CN110819920A; EP3561096A4; US11149330B2

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 3530766 A2 20190828; EP 3530766 A4 20190925; CN 109844152 A 20190604; JP 2019535893 A 20191212; KR 102043774 B1 20191112;
KR 20180044213 A 20180502; US 2020056270 A1 20200220; WO 2018074896 A2 20180426; WO 2018074896 A3 20180614

DOCDB simple family (application)

EP 17861500 A 20171020; CN 201780065079 A 20171020; JP 2019520972 A 20171020; KR 2017011682 W 20171020;
KR 20170136586 A 20171020; US 201716343918 A 20171020