

Title (en)
MAGNESIUM ALLOY SHEET HAVING SUPERIOR FORMABILITY AT ROOM TEMPERATURE, AND METHOD FOR MANUFACTURING SAME

Title (de)
MAGNESIUMSLEGIERUNGSBLECH MIT HERVORRAGENDER FORMBARKEIT BEI RAUMLTEMPERATUR UND HERSTELLUNGSVERFAHREN
DAFÜR

Title (fr)
FEUILLE D'ALLIAGE DE MAGNÉSIUM AYANT UNE APTITUDE SUPÉRIEURE AU FAÇONNAGE À LA TEMPÉRATURE AMBIANTE ET SON
PROCÉDÉ DE FABRICATION

Publication
EP 2644728 A2 20131002 (EN)

Application
EP 11843068 A 20111123

Priority
• KR 20100116975 A 20101123
• KR 2011008991 W 20111123

Abstract (en)
The present invention provides a magnesium alloy plate having high formability, in which Ca is added to a Mg-Zn alloy as a precipitation enhancing alloy, and a precipitation behavior is improved by twin-roll strip casting and subsequent heat treatment to obtain high strength and low anisotropy, and thus press formability is greatly improved compared to a conventional magnesium alloy plate. The magnesium alloy plate includes : Zn: 1 #1/4 10 wt%; Ca: 0.1 #1/4 5 wt%; and balances of magnesium (Mg) and inevitable impurities, wherein the magnesium alloy plate has a limiting dome height (LDH) of 7 mm or more.

IPC 8 full level
C22C 23/04 (2006.01); **B22D 11/06** (2006.01); **C22F 1/06** (2006.01)

CPC (source: EP)
C22C 23/04 (2013.01); **C22F 1/06** (2013.01); **B22D 11/0622** (2013.01)

Cited by
DE102016116244A1; EP3741880A1; WO2020234655A1; CN106854724A; CN107541627A; JP2018080363A; EP3205736A1

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 2644728 A2 20131002; EP 2644728 A4 20170517; KR 101303585 B1 20130911; KR 20120055304 A 20120531;
WO 2012070870 A2 20120531; WO 2012070870 A3 20120823

DOCDB simple family (application)
EP 11843068 A 20111123; KR 20100116975 A 20101123; KR 2011008991 W 20111123