

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

Title (de)
MAGNESIUMSLEGIERUNGSBLECH MIT HERVORRAGENDER FORMBARKEIT BEI RAUMTEMPERATUR 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

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Abstract (en)
[origin: EP2644728A2] 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 #¼ 10 wt%; Ca: 0.1 #¼ 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.

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• [YD] KR 20100038809 A 20100415 - POSTECH ACAD IND FOUND [KR]
• [Y] KR 20100078107 A 20100708 - IND ACADEMIC COOP [KR]
• [A] JP 2010013725 A 20100121 - NAT INST OF ADV IND & TECHNOL, et al
• [A] ZHOU T ET AL: "Microstructures and properties of rapidly solidified Mg-Zn-Ca alloys", TRANSACTIONS OF NONFERROUS METALS SOCIETY OF CHINA, ELSEVIER, AMSTERDAM, NL, vol. 18, 1 December 2008 (2008-12-01), pages s101 - s106, XP027086921, ISSN: 1003-6326, [retrieved on 20081201]
• See references of WO 2012070870A2

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

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