

Title (en)

RAW MAGNESIUM-ALLOY POWDER MATERIAL, MAGNESIUM ALLOY WITH HIGH PROOF STRESS, PROCESS FOR PRODUCING RAW MAGNESIUM-ALLOY POWDER MATERIAL, AND PROCESS FOR PRODUCING MAGNESIUM ALLOY WITH HIGH PROOF STRESS

Title (de)

ROHES MAGNESIUMLEGIERUNGSPULVERMATERIAL, MAGNESIUMLEGIERUNG MIT HOHER ELASTIZITÄTSGRENZE, VERFAHREN ZUR HERSTELLUNG VON ROHEM MAGNESIUMLEGIERUNGSPULVERMATERIAL UND VERFAHREN ZUR HERSTELLUNG EINER MAGNESIUMLEGIERUNG MIT HOHER ELASTIZITÄTSGRENZE

Title (fr)

MATIÈRE PULVÉRULENTE EN ALLIAGE DE MAGNÉSIUM BRUT, ALLIAGE DE MAGNÉSIUM PRÉSENTANT DES LIMITES D'ÉLASTICITÉ ÉLEVÉES, PROCÉDÉ DE PRODUCTION DE MATIÈRES PULVÉRULENTES EN ALLIAGE DE MAGNÉSIUM BRUT, ET PROCÉDÉ DE PRODUCTION D'UN ALLIAGE DE MAGNESIUM A GRANDE ELASTICITÉ

Publication

EP 1897638 A4 20100602 (EN)

Application

EP 06766721 A 20060614

Priority

- JP 2006311952 W 20060614
- JP 2005176410 A 20050616

Abstract (en)

[origin: EP1897638A1] A raw magnesium alloy powder material having a relatively small crystal grain diameter is obtained by subjecting a starting material powder having a relatively large crystal grain diameter to a plastic working in which the powder is passed through a pair of rolls to undergo compressive deformation or shear deformation. The starting material powder is a magnesium alloy powder having a fine intermetallic compound (21) precipitated and dispersed in a base (22) by a heat treatment. A work strain (22) is formed around the precipitated intermetallic compound (21) in the magnesium alloy powder after processed by the plastic working. The magnesium alloy powder after processed by the plastic working has a maximum size of 10mm or less and a minimum size of 0.1mm or more, and the magnesium particle constituting the base (20) has a maximum crystal grain diameter of 20 μ m or less.

IPC 8 full level

B21C 23/01 (2006.01); **B22F 1/00** (2022.01); **B22F 1/142** (2022.01); **B22F 3/20** (2006.01); **B22F 9/04** (2006.01); **C22C 1/04** (2006.01); **C22C 23/02** (2006.01); **C22F 1/06** (2006.01)

CPC (source: EP KR US)

B21C 23/002 (2013.01 - EP US); **B21C 23/01** (2013.01 - EP US); **B22F 1/00** (2013.01 - EP KR US); **B22F 1/142** (2022.01 - EP KR US); **B22F 3/20** (2013.01 - EP US); **B22F 9/04** (2013.01 - EP KR US); **C22C 1/04** (2013.01 - KR); **C22C 1/0408** (2013.01 - EP US); **C22C 1/047** (2023.01 - EP US); **C22C 23/02** (2013.01 - EP US); **C22F 1/06** (2013.01 - KR); **B22F 2003/208** (2013.01 - EP US); **B22F 2009/041** (2013.01 - EP US); **B22F 2009/046** (2013.01 - EP US); **B22F 2998/10** (2013.01 - EP US); **B22F 2999/00** (2013.01 - EP US)

Citation (search report)

- [XPA] WO 2005123972 A1 20051229 - TOUDAI TLO LTD [JP], et al
- [E] EP 1770180 A1 20070404 - TOUDAITLO LTD [JP]
- [E] EP 1726385 A1 20061129 - KONDOH KATSUYOSHI [JP], et al
- [XAI] US 5129960 A 19920714 - CHANG CHIN-FONG [US], et al
- See references of WO 2006134980A1

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DOCDB simple family (publication)

EP 1897638 A1 20080312; **EP 1897638 A4 20100602**; CN 101193715 A 20080604; CN 101193715 B 20101208; JP 2006348349 A 20061228; KR 20080028362 A 20080331; US 2009263268 A1 20091022; WO 2006134980 A1 20061221

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