

Title (en)  
HIGH STRENGTH MAGNESIUM ALLOY

Title (de)  
HOCHFESTE MAGNESIUMLEGIERUNG

Title (fr)  
ALLIAGE DE MAGNESIUM A HAUTE RESISTANCE

Publication  
**EP 1339888 B1 20110413 (EN)**

Application  
**EP 00966545 A 20000926**

Priority  
KR 0001072 W 20000926

Abstract (en)  
[origin: WO0227053A1] The present invention provides high strength magnesium alloys consisting essentially of 3 SIMILAR 10 wt.% Zn, 0.25 SIMILAR 3.0 wt.% Mn, and the balance of Mg and inevitable impurities, the high strength magnesium alloy further containing 1 SIMILAR 6 wt.% Al, 0.1 SIMILAR 4.0 wt.% Si, and 0.1 SIMILAR 2.0 wt.% Ca, in order to provide a high strength magnesium alloy having an improved hardness and strength, and an excellent elongation at an ambient temperature. In addition, the present invention provides a method for preparing the high strength magnesium alloy characterized in that a Zn-Mn mother alloy is added to a magnesium melt by a fluxless melting method, and process conditions for working and heat-treating an obtained cast material.

IPC 8 full level  
**B22D 21/04** (2006.01); **C22C 23/04** (2006.01); **C22C 23/00** (2006.01); **C22C 23/02** (2006.01); **C22F 1/00** (2006.01); **C22F 1/06** (2006.01)

CPC (source: EP)  
**C22C 23/02** (2013.01); **C22C 23/04** (2013.01); **C22F 1/06** (2013.01)

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)  
**WO 0227053 A1 20020404**; AT E505567 T1 20110415; AU 2000276884 B2 20050929; AU 7688400 A 20020408; CA 2423459 A1 20020404; CA 2423459 C 20090915; CN 100390313 C 20080528; CN 1469937 A 20040121; DE 60045848 D1 20110526; EP 1339888 A1 20030903; EP 1339888 A4 20050316; EP 1339888 B1 20110413; IL 154897 A0 20031031; IL 154897 A 20091224; JP 2004510057 A 20040402; JP 3891933 B2 20070314; NO 20031349 D0 20030325; NO 20031349 L 20030523

DOCDB simple family (application)  
**KR 0001072 W 20000926**; AT 00966545 T 20000926; AU 2000276884 A 20000926; AU 7688400 A 20000926; CA 2423459 A 20000926; CN 00819991 A 20000926; DE 60045848 T 20000926; EP 00966545 A 20000926; IL 15489700 A 20000926; JP 2002530813 A 20000926; NO 20031349 A 20030325