

Title (en)

FIRE-RESISTANT MAGNESIUM ALLOY AND PRODUCTION METHOD THEREFOR

Title (de)

FEUERFESTE MAGNESIUMLEGIERUNG UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

ALLIAGE DE MAGNÉSIUM RÉSISTANT AU FEU, ET SON PROCÉDÉ DE PRODUCTION

Publication

**EP 2987874 A1 20160224 (EN)**

Application

**EP 14784615 A 20140414**

Priority

- JP 2013084866 A 20130415
- JP 2014061108 W 20140414

Abstract (en)

A method of manufacturing a flame-retardant magnesium alloy having mechanical properties of a long period stacking ordered magnesium alloy and having an ignition temperature of 800°C or more is provided. In the method of manufacturing a flame-retardant magnesium alloy, a flame-retardant magnesium alloy which contains a atomic% of Zn, b atomic% of at least one element selected from a group consisting of Gd, Tb, Tm and Lu, and x atomic% of Ca and in which a remaining part is formed of Mg and a, b and x satisfy Formulae 1 to 4 below is melted.  $0.2 \leq a \leq 5.0$ ,  $0.5 \leq b \leq 5.0$ ,  $0.5 \leq a + 0.5b \leq 0.5$ ,  $0 < x \leq 0.5$

IPC 8 full level

**B22D 21/04** (2006.01); **B22D 27/04** (2006.01); **C22C 1/02** (2006.01); **C22C 23/04** (2006.01); **C22C 23/06** (2006.01)

CPC (source: EP US)

**B22D 21/007** (2013.01 - EP US); **B22D 21/04** (2013.01 - US); **B22D 27/04** (2013.01 - EP US); **C22C 1/02** (2013.01 - EP US); **C22C 23/04** (2013.01 - EP US); **C22C 23/06** (2013.01 - EP US)

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 2987874 A1 20160224**; **EP 2987874 A4 20170125**; **EP 2987874 B1 20191120**; CN 105283566 A 20160127; CN 105408508 A 20160316; EP 2987875 A1 20160224; EP 2987875 A4 20161130; EP 2987875 B1 20181010; JP 6361051 B2 20180725; JP 6439683 B2 20181219; JP WO2014171548 A1 20170223; JP WO2014171549 A1 20170223; JP WO2014171550 A1 20170223; KR 101863573 B1 20180601; KR 20150140828 A 20151216; KR 20150140829 A 20151216; US 2016068933 A1 20160310; US 2016168666 A1 20160616; WO 2014171548 A1 20141023; WO 2014171549 A1 20141023; WO 2014171550 A1 20141023; WO 2014171550 A9 20151230

DOCDB simple family (application)

**EP 14784615 A 20140414**; CN 201480033445 A 20140414; CN 201480033448 A 20140414; EP 14785713 A 20140414; JP 2014061104 W 20140414; JP 2014061105 W 20140414; JP 2014061108 W 20140414; JP 2015512544 A 20140414; JP 2015512545 A 20140414; JP 2015512546 A 20140414; KR 20157032433 A 20140414; KR 20157032435 A 20140414; US 201414784066 A 20140414; US 201414784095 A 20140414