

Title (en)
Method of manufacturing a magnesium-scandium master alloy and method of manufacturing an aluminum alloy containing scandium

Title (de)
Herstellungsverfahren einer Magnesium-Scandium-Vorlegierung und Verfahren zur Herstellung einer Aluminiumlegierung, die Scandium enthält

Title (fr)
Procédé de fabrication d'une alliage mère au magnésium-scandium, et procédé de fabrication d'une alliage d'aluminium contenant scandium

Publication
EP 2298944 A1 20110323 (EN)

Application
EP 09171798 A 20090930

Priority
KR 20090088959 A 20090921

Abstract (en)
Provided are a magnesium mother alloy, a manufacturing method thereof, a metal alloy using the same, and a method of manufacturing the metal alloy. In particular, there are provided a magnesium mother alloy with improved oxidation and ignition properties, and a manufacturing method thereof, and also provided a metal alloy with low cost that is suitable for design purposes using the magnesium mother alloy, and a method of manufacturing the metal alloy. The magnesium mother alloy includes a plurality of magnesium grains, and scandium dissolved in the magnesium grains, or a scandium compound crystallized at grain boundaries which are not inside but outside the magnesium grains. Also, the metal alloy suitable for design purposes is manufactured at low cost by adding the magnesium mother alloy containing scandium into a magnesium alloy or an aluminum alloy.

IPC 8 full level
C22C 1/03 (2006.01); **C22C 21/00** (2006.01); **C22C 23/00** (2006.01)

CPC (source: EP KR US)
B22D 21/04 (2013.01 - KR); **C22C 1/03** (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **C22C 23/00** (2013.01 - EP KR US); **C22C 23/02** (2013.01 - KR US)

Citation (search report)

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Designated contracting state (EPC)
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Designated extension state (EPC)
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DOCDB simple family (publication)
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DOCDB simple family (application)
EP 09171798 A 20090930; JP 2009228466 A 20090930; JP 2012257739 A 20121126; KR 20090088959 A 20090921; US 201414287430 A 20140527; US 57074709 A 20090930