

Title (en)
MAGNESIUM ALLOY, MAGNESIUM ALLOY MEMBER AND METHOD FOR MANUFACTURING SAME, AND METHOD FOR USING MAGNESIUM ALLOY

Title (de)
MAGNESIUMLEGIERUNG, MAGNESIUMLEGIERUNGSELEMENT UND VERFAHREN ZUR HERSTELLUNG DAVON SOWIE VERFAHREN ZUR VERWENDUNG DER MAGNESIUMLEGIERUNG

Title (fr)
ALLIAGE DE MAGNÉSIUM, ÉLÉMENT EN ALLIAGE DE MAGNÉSIUM ET PROCÉDÉ DE FABRICATION DE CE DERNIER, ET PROCÉDÉ D'UTILISATION DE L'ALLIAGE DE MAGNÉSIUM

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Application
EP 13797477 A 20130528

Priority
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Abstract (en)
[origin: EP2835437A1] A magnesium alloy of the present invention has the chemical composition that contains 0.02 mol% or more and less than 0.1 mol% of at least one element selected from yttrium, scandium, and lanthanoid rare earth elements, and magnesium and unavoidable impurities accounting for the remainder. A magnesium alloy member of the present invention is produced by hot plastic working of the magnesium alloy in a temperature range of 200 °C to 550 °C, followed by an isothermal heat treatment performed in a temperature range of 300 °C to 600 °C. The magnesium alloy is preferred for use in applications such as in automobiles, railcars, and aerospace flying objects. The magnesium alloy and the magnesium alloy member can overcome the yielding stress anisotropy problem, and are less vulnerable to the rising price of rare earth elements.

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