

Title (en)

HIGH PERFORMANCE CREEP RESISTANT MAGNESIUM ALLOYS

Title (de)

KRIECHBESTÄNDIGE HOCHLEISTUNGSMAGNESIUMLEGIERUNGEN

Title (fr)

ALLIAGES DE MAGNÉSIUM RÉSISTANTS AU FLUAGE ET À HAUTE PERFORMANCE

Publication

EP 3097217 A1 20161130 (EN)

Application

EP 14879634 A 20140717

Priority

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- IL 2014050649 W 20140717

Abstract (en)

[origin: WO2015111035A1] A magnesium based alloy consisting of, by weight: at least 94.8% magnesium, 2.5-4.6% neodymium, 0.05-0.40%) yttrium, and 0.03-0.65%) zirconium and incidental impurities. Optionally, the alloy further contains up to 0.02%>wt. calcium. The alloy is suitable for high pressure die casting (HPDC) as well as for sand casting, investment casting, permanent mold casting, twin roll casting and direct chill casting. The disclosed alloy exhibits good castability, high strength, high corrosion resistance and high creep resistance at room temperature, as well as in high temperatures.

IPC 8 full level

C22C 23/06 (2006.01)

CPC (source: EP US)

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