

Title (en)

HIGHLY DUCTILE MAGNESIUM ALLOYS, METHOD FOR PRODUCING THEM AND USE OF THE SAME

Title (de)

MAGNESIUMLEGIERUNGEN HOHER DUKTILITÄT, VERFAHREN ZU DEREN HERSTELLUNG UND DEREN VERWENDUNG

Title (fr)

ALLIAGES DE MAGNESIUM A HAUTE DUCTILITE, LEUR PROCEDE DE PRODUCTION ET LEUR UTILISATION

Publication

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Application

**EP 00920534 A 20000322**

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Abstract (en)

[origin: WO0063452A1] The invention relates to a magnesium alloy which can contain added quantities or traces of Cd of less than 1.8 wt. % and traces of Cu of up to 0.1 wt. %, Fe of up to 0.05 wt. % and up to 0.005 wt. % Ni. The invention is characterised in that the alloy has an AM, AS, AZ31, EM, EZ, MA, ME, MN, MZ, SA, ZE or ZM base which optionally contains quantities of Ca, Sr, Zr or/and at least one rare-earth element, including Y and La, totalling 0.1 to 12 wt. %. The invention also relates to a method for producing a magnesium alloy of this type. According to this method, a moulded or compacted form is produced and is dynamically recrystallized by forming and/or deforming. The invention also relates to a semi-finished product consisting of a magnesium alloy or a component consisting of or produced with the same or a composite structure with a semi-finished product or component of this type.

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