

Title (en)

High strength magnesium alloys and process for manufacturing by rapid solidification.

Title (de)

Hochfeste Magnesiumlegierungen und Verfahren zu ihrer Herstellung durch rasche Erstarrung.

Title (fr)

Alliages de magnésium à haute résistance mécanique et procédé d'obtention par solidification rapide.

Publication

**EP 0419375 B1 19940406 (FR)**

Application

**EP 90420383 A 19900821**

Priority

FR 8911357 A 19890824

Abstract (en)

[origin: EP0419375A1] Magnesium alloys of high mechanical strength and a process for the production of these alloys by rapid solidification and consolidation by spinning generally exceeding 400 MPa or even 500 MPa, an elongation at break which is generally at least 5%, a chemical weight composition included within the following limits:      Aluminium    2-11%      Zinc    0-12%  
Manganese    0-1%      Calcium    0.5-7%      Rare earths    0.1-4% with main impurities and the remainder being magnesium, their structure consisting of grains of average size smaller than 3  $\mu\text{m}$  and of intermetallic compounds of size smaller than 2  $\mu\text{m}$ , precipitated at the grain boundaries.

IPC 1-7

**C22C 23/02**

IPC 8 full level

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CPC (source: EP US)

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Cited by

EP0799901A1; FR2850672A1; DE10236440B4; EP0791662A1; US5811058A; DE19937184B4; GB2296256A; DE4446898A1; US5681403A;  
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