

Title (en)
High-strength magnesium-based alloy.

Title (de)
Hochfeste Legierungen auf Magnesiumbasis.

Title (fr)
Alliages à base de magnésium à haute résistance.

Publication
EP 0548875 A1 19930630 (EN)

Application
EP 92121691 A 19921221

Priority
JP 34473891 A 19911226

Abstract (en)
A high-strength magnesium-based alloy possessing a microcrystalline composition represented by the general formula: $Mg_aAl_bZn_c$ (wherein a, b, and c stand for atomic percents respectively in the ranges of $80 \leq a \leq 92$, $4 \leq b \leq 12$, and $4 \leq c \leq 12$). This alloy can be advantageously produced by rapidly solidifying the melt of an alloy of the composition shown above by the liquid quenching method. It is useful as high-strength materials and highly refractory materials owing to its high hardness, strength, and heat-resistance. It is also useful as materials with high specific strength because of light weight and high strength. <IMAGE>

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IPC 8 full level
C22C 23/00 (2006.01); **C22C 23/02** (2006.01); **C22C 45/00** (2006.01)

CPC (source: EP)
C22C 1/11 (2023.01); **C22C 23/02** (2013.01); **C22C 23/04** (2013.01); **C22C 45/005** (2013.01)

Citation (search report)

- [XP] EP 0470599 A1 19920212 - YOSHIDA KOGYO KK [JP]
- [A] EP 0166917 A1 19860108 - ALLIED CORP [US]

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EP2295613A4; CN113454256A; US8313692B2

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