

Title (en)

Zinc-base alloy for mold, zinc-base alloy block for mold and method for preparing the same

Title (de)

Zinkbasis Legierung für Form, Block aus zinkhaltigen Legierung für Form und Verfahren zu deren Herstellung

Title (fr)

Alliage à base de zinc pour moule, bloc d'alliage à base de zinc pour moule et leur procédé de preparation

Publication

EP 0902097 A1 19990317 (EN)

Application

EP 98111182 A 19980618

Priority

JP 22781097 A 19970825

Abstract (en)

A zinc-base alloy and a zinc-base alloy block for use in the production of molds are herein disclosed, the alloy comprises 5 to 15% by weight of Al, 3 to 6% by weight of Cu and 0.01 to 0.1% by weight of Mg and the balance of Zn except for inevitable contaminants and wherein an epsilon -phase consisting of a Zn-Cu solid solution exists in a particulate state. The block comprises 5 to 15% by weight of Al, 3 to 6% by weight of Cu and 0.01 to 0.1% by weight of Mg and the balance of Zn except for inevitable contaminants, wherein an epsilon -phase consisting of a Zn-Cu solid solution exists in a particulate state and wherein it has a tensile strength as determined at 25 DEG C of not less than 25 kgf/mm² and a surface hardness of not less than 100 HB. The alloy and the block can be prepared by unidirectionally solidifying a molten zinc-base alloy comprising 5 to 15% by weight of Al, 3 to 6% by weight of Cu and 0.01 to 0.1% by weight of Mg and the balance of Zn except for inevitable contaminants.

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C22C 18/04

IPC 8 full level

C22C 1/02 (2006.01); **C22C 18/04** (2006.01)

CPC (source: EP)

C22C 18/04 (2013.01)

Citation (search report)

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