Title (en)

Aluminium alloy for pressure die casting

Title (de)

Aluminium-Druckgusslegierung

Title (fr)

Alliage d'aluminium pour moulage sous pression

Publication

EP 1612286 A2 20060104 (DE)

Application

EP 05405361 A 20050526

Priority

CH 10912004 A 20040629

Abstract (en)

The aluminum alloy for die casting, especially with high ductility and expansion in the casting condition for the automotive industry, incorporates selectively 0.05-0.3 wt.% zirconium, 30-300 ppm of strontium or 5-30 ppm of sodium and/or 1-30 ppm of calcium for durable refinement of gallium phosphide and/or indium phosphide in a volume to give 1-250 ppm of phosphorus for granular refinement, and titanium and boron introduced into aluminum pre-alloy, with 1-2 wt. % titanium and 1-2 wt.% boron, for grain refining : The aluminum alloy incorporates (in wt.%) 8.0-11.5 silicon, 0.08-0.4 magnesium, 0.3-0.8 manganese, =0.1 iron, =0.1 copper, =0.1 zinc, =0.15 titanium, =0.05-0.5 molybdenum, and =0.05-0.3 zirconium.

IPC 8 full level

C22C 21/02 (2006.01); **C22C 1/06** (2006.01); **C22C 21/04** (2006.01)

IPC 8 main group level

C01F (2006.01)

CPC (source: EP KR US)

C22C 1/06 (2013.01 - EP US); **C22C 21/02** (2013.01 - EP KR US); **C22C 21/04** (2013.01 - EP US)

Cited by

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