

Title (en)
Casting of an aluminium alloy

Title (de)
Gussbauteil aus einer Aluminiumlegierung

Title (fr)
Pièce coulée en alliage d'aluminium

Publication
EP 1564308 A1 20050817 (DE)

Application
EP 05100655 A 20050201

Priority
CH 1952004 A 20040211

Abstract (en)
A casting process for producing a cast product comprises providing an aluminum alloy comprising (wt.%) magnesium (2-4), silicon (0.9-1.5), manganese (0.1-0.4), chromium (0.1-0.4), iron (=0.2), copper (=0.1), zinc (=0.2), titanium (=0.2), zirconium (=0.3), beryllium (=0.008), vanadium (=0.5), and aluminum (balance), with further elements and production-induced contaminants (=0.2); and casting the aluminum alloy to produce a cast product. An independent claim is also included for an aluminum alloy with good heat resistance, comprising (wt.%) magnesium (2-4), silicon (0.9-1.5), manganese (0.1-0.4), chromium (0.1-0.4), iron (=0.2), copper (=0.1), zinc (=0.2), titanium (=0.2), zirconium (=0.3), beryllium (=0.008), vanadium (=0.5), and aluminum (balance), with further elements and production-induced contaminants (=0.2).

Abstract (de)
Ein Gussbauteil mit guter Warmfestigkeit besteht aus einer Legierung mit 2 bis 4 Gew.-% Magnesium, 0,9 bis 1,5 Gew.-% Silizium, 0,1 bis 0,4 Gew.-% Mangan, 0,1 bis 0,4 Gew.-% Chrom, max. 0,2 Gew.-% Eisen, max. 0,1 Gew.-% Kupfer, max. 0,2 Gew.-% Zink, max. 0,2 Gew.-% Titan, max. 0,3 Gew.-% Zirkonium, max. 0,008 Gew.-% Beryllium, max. 0,5 Gew.-% Vanadium sowie Aluminium als Rest mit weiteren Elementen und herstellungsbedingten Verunreinigungen einzeln max. 0,02 Gew.-%, insgesamt max. 0,2 Gew.-%. <IMAGE>

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IPC 8 full level
C22C 21/06 (2006.01); **C22C 21/08** (2006.01)

CPC (source: EP KR US)
A47K 10/3827 (2013.01 - KR); **C22C 21/08** (2013.01 - EP US)

Citation (search report)

- [A] WO 0043560 A1 20000727 - ALUMINIUM LEND GMBH [AT], et al
- [A] US 3868250 A 19750225 - ZIMMERMANN PAUL
- [A] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 10 31 October 1996 (1996-10-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 10 31 August 1998 (1998-08-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 09 31 July 1998 (1998-07-31)
- [A] PATENT ABSTRACTS OF JAPAN vol. 2003, no. 09 3 September 2003 (2003-09-03)

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