

Title (en)
High-strength aluminum alloy for pressure casting and cast aluminum alloy comprising the same

Title (de)
Hochfeste Aluminium-Legierung zum Druckgiessen und daraus gegossene Aluminium-Legierung

Title (fr)
Alliage d'aluminium à haute résistance mécanique pour moulage sous pression et alliage d'aluminium ainsi fondu

Publication
EP 1096028 A3 20020206 (EN)

Application
EP 00309071 A 20001016

Priority
JP 29957899 A 19991021

Abstract (en)
[origin: EP1096028A2] Disclosed is a high-strength cast aluminum alloy obtained by: casting a high-strength aluminum alloy containing 3.5-4.3 % of Cu, 5.0-7.5 % of Si, 0.10-0.25 % of Mg, not more than 0.2 % of Fe, not more than 0.0003 % of P, and the balance comprising Al and unavoidable impurities; and subjecting the alloy thus cast to a T6 treatment. This cast alloy has finer eutectic Si grains by virtue of such a very low P content, enjoys casting and economic merits that are competitive with existing alloys, and satisfies higher mechanical requirements as to tensile strength, elongation, 0.2% proof strength and impact value.

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C22C 21/04

IPC 8 full level
C22C 21/02 (2006.01); **C22C 21/04** (2006.01)

CPC (source: EP)
C22C 21/04 (2013.01)

- Citation (search report)
- [A] EP 0618303 A1 19941005 - HITACHI METALS LTD [JP]
 - [A] US 4786340 A 19881122 - OGAWA MASAHIRO [JP], et al
 - [Y] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 12 26 December 1996 (1996-12-26)
 - [Y] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 03 31 March 1999 (1999-03-31)
 - [Y] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 11 30 September 1998 (1998-09-30)
 - [Y] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 01 31 January 1996 (1996-01-31)
 - [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 02 30 January 1998 (1998-01-30)
 - [A] PATENT ABSTRACTS OF JAPAN vol. 1998, no. 14 31 December 1998 (1998-12-31)
 - [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 274 (C - 1064) 27 May 1993 (1993-05-27)
 - [A] PATENT ABSTRACTS OF JAPAN vol. 018, no. 468 (C - 1244) 31 August 1994 (1994-08-31)

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