

Title (en)

Aluminum alloy for die casting, die casting method using same alloy, and die casting product by same method

Title (de)

Aluminiumlegierung zum Druckgiessen, Herstellungsverfahren durch Druckgiessen dieser Legierung, und durch dieses Verfahren hergestelltes druckgegossenes Produkt

Title (fr)

Alliage d'aluminium pour moulage sous pression, méthode de moulage sous pression avec cet alliage, et produit moulé sous pression obtenu par cette méthode

Publication

**EP 1331281 A1 20030730 (EN)**

Application

**EP 03000610 A 20030114**

Priority

JP 2002009839 A 20020118

Abstract (en)

An aluminum alloy for a die casting, used as the material of parts of an automotive vehicle. The aluminum alloy consists essentially of Si in an amount ranging from 10 to 12% by weight, Mg in an amount ranging from 0.15 to 0.50% by weight, Mn in an amount ranging from 0.5 to 1.0% by weight, Fe in an amount of not more than 0.15% by weight, Ti in an amount of not more than 0.1% by weight, Sb in an amount ranging from 0.05 to 0.20% by weight, B in an amount ranging from 0.005 to 0.02%, and balance consisting of aluminum and inevitable impurities. Sb in the amount ranging from 0.05 to 0.20% by weight could be replaced with Sr in an amount from 0.005 to 0.020% by weight. <IMAGE>

IPC 1-7

**C22C 21/02**; **C22C 21/04**

IPC 8 full level

**B22D 17/00** (2006.01); **B22D 17/14** (2006.01); **C22C 21/02** (2006.01); **C22C 21/04** (2006.01); **C22F 1/00** (2006.01); **C22F 1/043** (2006.01)

CPC (source: EP US)

**B22D 17/14** (2013.01 - EP US); **C22C 21/04** (2013.01 - EP US)

Citation (search report)

- [AD] EP 0687742 A1 19951220 - RHEINFELDEN ALUMINIUM GMBH [DE]
- [A] PATENT ABSTRACTS OF JAPAN vol. 1999, no. 04 30 April 1999 (1999-04-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 09 30 September 1997 (1997-09-30)
- [A] PATENT ABSTRACTS OF JAPAN vol. 017, no. 648 (M - 1518) 2 December 1993 (1993-12-02)

Cited by

EP2455505A1; EP2735621A1; US7108042B2; EP2226397A1; DE102010060670A1; EP2694692A4; US9322086B2; WO2010124835A1; WO2010100204A1; US8480822B2; WO2012138767A2; US9038704B2; US11584977B2

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**EP 1331281 A1 20030730**; **EP 1331281 B1 20050518**; DE 60300659 D1 20050623; DE 60300659 T2 20051117; JP 2003213354 A 20030730; JP 4007488 B2 20071114; US 2003136477 A1 20030724

DOCDB simple family (application)

**EP 03000610 A 20030114**; DE 60300659 T 20030114; JP 2002009839 A 20020118; US 33674003 A 20030106