

Title (en)  
Use of an Aluminium casting alloy

Title (de)  
Verwendung einer Aluminium-Gusslegierung

Title (fr)  
Utilisation d'un alliage d'aluminium

Publication  
**EP 1657319 A1 20060517 (DE)**

Application  
**EP 05021924 A 20051007**

Priority  
DE 102004053746 A 20041106

Abstract (en)  
New aluminum casting alloy (I) comprises (by weight) 5-11% silicon, 0.1-0.8% magnesium, 0.05-5% silver, at most 0.30% iron, at most 0.20% titanium, at most 2/3 of the iron content of manganese, at most 0.10% zinc and the remainder aluminum, the contents of further impurities being at most 0.03% individually and at most 0.1% in total. An independent claim is included for the production of castings from (I), where the casting is solution annealed, quenched and hot stored.

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

CPC (source: EP)  
**C22C 21/02** (2013.01); **C22F 1/043** (2013.01)

Citation (applicant)  
• DE 1255456 B 19671130 - SVENSKA METALLVERKEN AB  
• AT 3653 U1 20000626 - AVL LIST GMBH [AT]  
• US 3765877 A 19731016 - SPERRY P, et al  
• EP 0445684 A1 19910911 - YOSHIDA KOGYO KK [JP]

Citation (search report)  
• [XD] US 3765877 A 19731016 - SPERRY P, et al  
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• [A] FEIKUS, F. J. (VAW ALUMINIUM): "Optimization of aluminum-silicon-cast alloys for cylinder heads.; Zylinderkopfe .", GIESSEREI-PRAXIS, (FEB 1999), 2, P. 50-57, 6 REFERENCE(S), NUMERICAL DATA; GRAPHS., GERMANY ISSN: 0016-9781, 1999, XP009057734  
• [A] H. FUCHS, H.-J. HAGEBÖLLING, F. HUSMEIER, M. WAPPELHORST: "Legierungsentwicklung für hochbeanspruchte Diesel-Zylinderköpfe", GIESSEREI-RUNDSCHAU, no. 50, 2003, pages 66 - 71, XP009057735  
• [A] H. FUCHS, M. WAPPELHORST: "Leichtmetallwerkstoffe für hochbelastete Motorblöcke und Zylinderköpfe", MTZ, no. 64, 2003, pages 868 - 875, XP002356404

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