

Title (en)  
SPHEROIDAL CAST ALLOY AND METHOD FOR PRODUCING CAST PARTS FROM SAID SPHEROIDAL CAST ALLOY

Title (de)  
SPHÄROGUSSLEGIERUNG UND VERFAHREN ZUR HERSTELLUNG VON GUSSTEILEN AUS DER SPHÄROGUSSLEGIERUNG

Title (fr)  
ALLIAGE COULE NODULAIRE ET PROCEDE POUR PRODUIRE DES PIECES COULEES A PARTIR DE CET ALLIAGE COULE NODULAIRE

Publication  
**EP 1834005 B1 20100818 (DE)**

Application  
**EP 05803315 A 20051114**

Priority

- EP 2005012160 W 20051114
- DE 102004056331 A 20041122

Abstract (en)  
[origin: US2009047164A1] A spheroidal cast alloy for producing cast iron products with great mechanical strength, high-wear resistance and a high degree of ductility. The alloy comprises the following as non-iron components: between 2.5 and 2.8 wt. % C, between 2.4 and 3.4 wt. % Si, between 0.02 and 0.08 wt. % P, between 0.02 and 0.06 wt. % Mg, between 0.01 and 0.05 wt. % Cr, between 0.002 and 0.02 wt. % Al, between 0.0005 and 0.015 wt. % S, between 0.0002 and 0.002 wt. % B and conventional impurities. The alloy contains between 3.0 and 3.7 wt. % C, between 2.6 and 3.4 wt. % Si, between 0.02 and 0.05 wt. % P, between 0.025 and 0.045 wt. % Mg, between 0.01 and 0.03 wt. % Cr, between 0.003 and 0.017 wt. % Al, between 0.0005 and 0.012 wt. % S and between 0.0004 and 0.002 wt. % B. The alloy is used for example to produce chassis parts or brake discs in the automobile industry.

IPC 8 full level  
**C22C 37/04** (2006.01)

CPC (source: EP KR US)  
**C22C 37/04** (2013.01 - EP KR US)

Cited by  
EP3243920A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)  
**US 2009047164 A1 20090219; US 8771589 B2 20140708;** AT E478164 T1 20100915; AU 2005309042 A1 20060601;  
AU 2005309042 B2 20081120; BR PI0518450 A2 20081118; BR PI0518450 B1 20140930; CA 2579817 A1 20060601; CA 2579817 C 20110510;  
CN 100529135 C 20090819; CN 101072890 A 20071114; DE 102004056331 A1 20060524; DE 502005010119 D1 20100930;  
EP 1834005 A1 20070919; EP 1834005 B1 20100818; ES 2349414 T3 20110103; JP 2008520827 A 20080619; JP 5145047 B2 20130213;  
KR 100969840 B1 20100713; KR 20070083790 A 20070824; MX 2007005255 A 20070709; PT 1834005 E 20101108; SI 1834005 T1 20101231;  
WO 2006056334 A1 20060601; ZA 200704658 B 20080827

DOCDB simple family (application)  
**US 57732705 A 20051114;** AT 05803315 T 20051114; AU 2005309042 A 20051114; BR PI0518450 A 20051114; CA 2579817 A 20051114;  
CN 200580039728 A 20051114; DE 102004056331 A 20041122; DE 502005010119 T 20051114; EP 05803315 A 20051114;  
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MX 2007005255 A 20051114; PT 05803315 T 20051114; SI 200531148 T 20051114; ZA 200704658 A 20070622