Title (en)

Cast-iron alloy for heat resistant motor parts

Title (de)

Gusseisen-Legierung für thermisch hochbelastete Motorenteile

Title (fr)

Alliage de fonte à graphite à haute résistance thermique

Publication

**EP 0829551 A3 19990616 (DE)**

Application

**EP 97114724 A 19970826**

Priority

DE 19636808 A 19960911

Abstract (en)

[origin: DE19636808C1] A novel spheroidal graphite alloy cast iron for high temperature engine parts has the composition 2.7-3.4 (preferably 2.9-3.2)% C, 4.4-5.4 (preferably 4.6-4.9)% Si, 0.4-1.2 (preferably 1.0-1.2)% Ni, \}0.5% Cr, 0.7-1.4 (preferably 0.8-0.9)% Mo, \}0.5% Mn, 0.03-0.08% Mg, balance Fe and usual trace elements. Preferably, the sum of Si, Ni and Mo is 5.8-7.0%. The cast iron is produced by the usual process for grey cast iron with spheroidal graphite, but inoculation is preferably carried out at several points, i.e. inoculation with 0.3-0.4% FeSi 75 in the casting equipment and inoculation with 0.2% FeSi 75 in the mould, to give reproducible quality with finely distributed graphite spheroids of 6-8 size.

IPC 1-7

**C22C 37/04**

IPC 8 full level

**C22C 37/10** (2006.01); **F01N 13/10** (2010.01); **F01N 13/16** (2010.01)

CPC (source: EP)

**C22C 37/10** (2013.01); **F01N 13/102** (2013.01); **F01N 13/16** (2013.01)

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DOCDB simple family (application)

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