

Title (en)
Heat-resistant spheroidal graphite cast iron.

Title (de)
Hitzebeständiges Gusseisen mit Kugelgraphit.

Title (fr)
Fonte à graphite sphéroïdal, résistant à la chaleur.

Publication
EP 0076701 A2 19830413 (EN)

Application
EP 82305306 A 19821005

Priority
JP 15754281 A 19811005

Abstract (en)
A heat-resistant spheroidal graphite cast iron consists essentially of not more than 3.4 wt% of C, 3.5 to 5.5 of Si, not more than 0.6 wt% of Mn, 0.1 to 0.7 wt% of Cr, 0.3 to 0.9 wt% of Mo, not more than 0.1 wt% of a spheroidizing agent and the balance of Fe. Compared to conventional high silicon spheroidal graphite cast irons, this cast iron distinctly higher in the resistance to oxidation at high temperatures and is higher in strength too. This cast iron is far lower in production cost than conventional high nickel spheroidal graphite cast irons which are high in the resistance to oxidation at high temperatures. Preferably the cast iron contains at least 1.7 wt% of C and from 0.25 to 0.7 wt% of Cr. Suitable spheroidizing agents are Mg, Ca and Ce. The cast iron may be made by a conventional process by allowing a molten metal of an appropriate composition and containing a spheroidizing agent to solidify in a mould and then subjecting the solidified casts to a spheroidizing-ferritizing heat treatment.

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CPC (source: EP)
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Cited by
CN103509992A; EP1386976A1; AU2006210102B2; EP2267174A3; FR2552447A1; EP1029098A4; EP2694693A4; US8054910B2; WO2006082056A3; WO2008112720A1; EP1865082A1; US11667995B2

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