

Title (en)

Spheroidal cast iron particularly for piston rings and method for its production

Title (de)

Kugelgraphitgusseisen für Kolbenringe und Verfahren zu seiner Herstellung

Title (fr)

Fonte nodulaire pour segments de piston et procédé pour la fabrication de ladite fonte

Publication

**EP 1384794 B1 20060524 (EN)**

Application

**EP 03016555 A 20030724**

Priority

IT MI20021670 A 20020726

Abstract (en)

[origin: EP1384794A1] A spheroidal cast iron, particularly for piston rings for pistons of engines, with a particular alloyed chemical composition and subjected to a heat treatment known as austempering, which comprises an austenitization treatment followed by an isothermal hardening treatment, has mechanical characteristics that are comparable with those of the steel currently used to produce piston rings, while maintaining the best tribological and self-lubrication characteristics of spheroidal cast irons, and a process suitable to obtain said spheroidal cast iron.

IPC 8 full level

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CPC (source: EP US)

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**C21D 1/20** (2013.01 - EP US); **C21D 2211/001** (2013.01 - EP US); **C21D 2211/002** (2013.01 - EP US); **C21D 2211/006** (2013.01 - EP US)

Cited by

CN106119684A; EP1566454A1; CN111020362A; RU2635032C1; CN109811108A; DE102004040056A1; CN111004968A; DE102004040055A1;  
CN110983172A; CN103725950A; RU2627316C1; RU2659534C1; EP2780488A4; CN105838975A; CN108950370A; CN102851572A;  
RU2643768C1; RU2652903C1; CN114603089A; WO2006072663A3; WO2006018054A1; WO2006018053A1; US9169526B2; US9644245B2

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DOCDB simple family (publication)

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ES 2264507 T3 20070101; IT MI20021670 A1 20040126; PT 1384794 E 20061031; US 2004071584 A1 20040415

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