

Title (en)

HIGH ALLOY IRON, USE OF THE MATERIAL FOR STRUCTURAL COMPONENTS THAT ARE SUBJECT TO HIGH THERMAL STRESS AND CORRESPONDING STRUCTURAL COMPONENT

Title (de)

HOCHLEGERTER GUSSEISENWERKSTOFF, VERWENDUNG DES WERKSTOFFS FÜR THERMISCH HOCHBELASTETE BAUTEILE SOWIE ENTSPRECHENDES BAUTEIL

Title (fr)

MATERIAU DE FONTE DE FER FORTEMENT ALLIÉ, UTILISATION DE CE MATERIAU POUR DES COMPOSANTS SOUMIS A DES CONTRAINTES THERMIQUES ELEVÉES ET COMPOSANT CORRESPONDANT

Publication

EP 1846583 B1 20081231 (DE)

Application

EP 06708061 A 20060207

Priority

- EP 2006050714 W 20060207
- DE 102005006778 A 20050212

Abstract (en)

[origin: US2008267808A1] The invention relates to a high alloy iron that has an austenitic structure and a spherical graphite configuration and comprises the following components in percent by weight: carbon<2.0%, silicon 2.0-6.0%, nickel 29-36%, chrome 1.0-2.5%, niobium 0.1-1.0% and molybdenum 0.1-2.5%. The invention also relates to the use of the cast iron material for structural components that are subject to high thermal stress, especially for exhaust manifolds and turbocharger housings of internal combustion engines of the individual or integrated type of construction. The invention finally relates to a structural component that is subject to high thermal stress, especially the exhaust system of an engine consisting of the aforementioned cast iron material.

IPC 8 full level

C22C 37/08 (2006.01)

CPC (source: EP US)

C22C 37/08 (2013.01 - EP US); **F01N 13/10** (2013.01 - EP US); **F01N 13/16** (2013.01 - EP US); **F01N 2530/04** (2013.01 - EP US)

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 2008267808 A1 20081030; AT E419406 T1 20090115; CA 2599091 A1 20060817; CA 2599091 C 20140506; CN 100532610 C 20090826; CN 101120112 A 20080206; DE 102005006778 A1 20060817; DE 102005006778 B4 20131002; DE 502006002489 D1 20090212; EP 1846583 A1 20071024; EP 1846583 B1 20081231; WO 2006084838 A1 20060817

DOCDB simple family (application)

US 81522706 A 20060207; AT 06708061 T 20060207; CA 2599091 A 20060207; CN 200680004792 A 20060207; DE 102005006778 A 20050212; DE 502006002489 T 20060207; EP 06708061 A 20060207; EP 2006050714 W 20060207