

Title (en)
FERRITIC HEAT-RESISTANT STEEL

Title (de)
FERRITISCHER HITZEBESTÄNDIGER STAHL

Title (fr)
ACIER FERRITIQUE RESISTANT A LA CHALEUR

Publication
EP 1867745 B1 20140806 (EN)

Application
EP 06731263 A 20060406

Priority
• JP 2006307315 W 20060406
• JP 2005111149 A 20050407

Abstract (en)
[origin: EP1867745A1] Heat-resistant steel excellent in high-temperature long-term creep strength and creep-fatigue strength is provided. This heat-resistant steel comprises C: 0.01 to 0.13%, Si: 0.15 to 0.50%, Mn: 0.2 to 0.5%, P: not higher than 0.02%, S; not higher than 0.005%, Cr: exceeding 8.0% but lower than 12.0%, Mo: 0.1 to 1.5%, W: 1.0 to 3.0%, V: 0.1 to 0.5%, Nb: 0.02 to 0.10%, sol. Al: not higher than 0.015%, N: 0.005 to 0.070%, Nd: 0.005 to 0.050% and B: 0.002 to 0.015%, with the balance Fe and impurities; the content of Ni is lower than 0.3%, the content of Co is lower than 0.3% and the content of Cu is lower than 0.1% among the impurities; the steel contains Nd inclusions at a Nd inclusion density of not lower than 10000 inclusions/mm³. This steel may contain, in addition to the above-specified components, one or more elements of Ta, Hf, Ti, Ca and Mg.

IPC 8 full level
C22C 38/02 (2006.01); **C22C 38/04** (2006.01); **C22C 38/22** (2006.01); **C22C 38/24** (2006.01)

CPC (source: EP KR US)
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Cited by
EP1930460A4; US7935303B2

Designated contracting state (EPC)
DE DK FR GB IT

DOCDB simple family (publication)
EP 1867745 A1 20071219; EP 1867745 A4 20110824; EP 1867745 B1 20140806; CA 2603772 A1 20061019; CN 100580119 C 20100113; CN 101151388 A 20080326; DK 1867745 T3 20140825; JP 4609491 B2 20110112; JP WO2006109664 A1 20081113; KR 100933114 B1 20091221; KR 20070103081 A 20071022; US 2008112837 A1 20080515; WO 2006109664 A1 20061019

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