

Title (en)

High chromium ferritic heat resisting steel and method of heat treatment for the same

Title (de)

Temperaturbeständiger ferritischer Stahl mit hohem Chromgehalt und Verfahren zur Wärmebehandlung desselben

Title (fr)

Acier ferritique réfractaire riche en chrome et procédé pour son traitement thermique

Publication

EP 1116796 A2 20010718 (EN)

Application

EP 01300136 A 20010108

Priority

JP 2000006219 A 20000111

Abstract (en)

The invention provides a method of heat-treatment for high chromium ferritic heat resisting steel, which comprises the steps of: (a) heat-treating for 5 seconds or longer high chromium ferritic steel containing chromium (Cr) in amount of 7-12 weight %; one or two elements of molybdenum (Mo) and tungsten (W) as a solid-solution strengthening element; and one or more of elements for forming (a) MX carbonitride(s) at a temperature higher than both solid-solution temperature of said element(s) for forming the MX carbonitride(s) and a precipitation starting temperature of delta ferrite; (b) cooling said steel at a rate of 0.5 DEG C/s or faster; and (c) subsequently tempering said steel.

IPC 1-7

C21D 6/00; C21D 6/02

IPC 8 full level

C21D 6/00 (2006.01); **C22C 38/00** (2006.01); **C22C 38/22** (2006.01); **C22C 38/28** (2006.01); **C21D 1/18** (2006.01)

CPC (source: EP US)

C21D 6/02 (2013.01 - EP US); **C21D 1/18** (2013.01 - EP US); **C21D 2211/004** (2013.01 - EP US)

Cited by

EP1557477A4; CN109628712A; CN110358898A

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

EP 1116796 A2 20010718; EP 1116796 A3 20031217; JP 2001192730 A 20010717; US 2002033210 A1 20020321

DOCDB simple family (application)

EP 01300136 A 20010108; JP 2000006219 A 20000111; US 75509801 A 20010108