

Title (en)

FERRITIC STAINLESS STEEL WITH EXCELLENT HEAT RESISTANCE AND TOUGHNESS

Title (de)

FERRITISCHER NICHTTROTENDER STAHL MIT HERVORRAGENDER WÄRMEBESTÄNDIGKEIT UND ZÄHIGKEIT

Title (fr)

ACIER INOXYDABLE FERRITIQUE AYANT D'EXCELLENTE RÉSISTANCE À LA CHALEUR ET TÉNACITÉ

Publication

EP 2264202 B1 20141008 (EN)

Application

EP 09718001 A 20090305

Priority

- JP 2009054707 W 20090305
- JP 2008057613 A 20080307

Abstract (en)

[origin: EP2264202A1] A ferritic stainless steel being excellent in thermal fatigue resistance and oxidation resistance and also having toughness that is equivalent to or higher than that of Type 429 is provided without adding an expensive element such as Mo or W. Specifically, the ferritic stainless steel includes C: 0.015 mass% or less, Si: 0.5 mass% or less, Mn: 0.5 mass% or less, P: 0.04 mass% or less, S: 0.006 mass% or less, Cr: 16 to 20 mass%, N: 0.015 mass% or less, Nb: 0.3 to 0.55 mass%, Ti: 0.01 mass% or less, Mo: 0.1 mass% or less, W: 0.1 mass% or less, Cu: 1.0 to 2.5 mass%, Al: 0.2 to 1.2 mass%, and the balance of Fe and inevitable impurities.

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/28** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP KR US)

C22C 38/001 (2013.01 - EP KR US); **C22C 38/004** (2013.01 - KR); **C22C 38/005** (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/20** (2013.01 - EP KR US); **C22C 38/22** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/28** (2013.01 - EP KR US)

Cited by

EP3719164A4; EP2557194A1

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 2264202 A1 20101222; **EP 2264202 A4 20131225**; **EP 2264202 B1 20141008**; BR PI0909643 A2 20150922; CN 101965415 A 20110202; CN 101965415 B 20140101; ES 2519716 T3 20141107; JP 2009235573 A 20091015; JP 5387057 B2 20140115; KR 20100105800 A 20100929; KR 20130049835 A 20130514; RU 2443796 C1 20120227; TW 200946694 A 20091116; TW I431122 B 20140321; US 2011123387 A1 20110526; WO 2009110641 A1 20090911

DOCDB simple family (application)

EP 09718001 A 20090305; BR PI0909643 A 20090305; CN 200980108061 A 20090305; ES 09718001 T 20090305; JP 2009050160 A 20090304; JP 2009054707 W 20090305; KR 20107019883 A 20090305; KR 20137010258 A 20090305; RU 2010140956 A 20090305; TW 98107277 A 20090306; US 92083709 A 20090305