

Title (en)

STRUCTURAL STAINLESS STEEL SHEET HAVING EXCELLENT CORROSION RESISTANCE IN WELDED PART, AND METHOD FOR PRODUCING SAME

Title (de)

STAHLBLECH AUS STRUKTURELLEM EDELSTAHL MIT HERVORRAGENDER KORROSIONSBESTÄNDIGKEIT IM GESCHWEISSTEN TEIL SOWIE HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ACIER INOXYDABLE DE CONSTRUCTION AYANT UNE EXCELLENTE RÉSISTANCE À LA CORROSION DANS LA PARTIE SOUDÉE, ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 2578715 B1 20170712 (EN)

Application

EP 11789877 A 20110526

Priority

- JP 2010124059 A 20100531
- JP 2011062640 W 20110526

Abstract (en)

[origin: EP2578715A1] A structural stainless steel sheet which can be manufactured at a low cost and with high efficiency, and possesses excellent welded-part corrosion resistance and a manufacturing method thereof are provided. To be more specific, the structural stainless steel sheet has a composition which contains by mass% 0.01 to 0.03% C, 0.01 to 0.03% N, 0.10 to 0.40% Si, 1.5 to 2.5% Mn, 0.04% or less P, 0.02% or less S, 0.05 to 0.15% Al, 10 to 13% Cr, 0.5 to 1.0% Ni, 4x (C+N) or more and 0.3% or less Ti, and Fe and unavoidable impurities as a balance, V, Ca and O in the unavoidable impurities being regulated to 0.05% or less V, 0.0030% or less Ca and 0.0080% or less O, wherein an F value expressed by Cr +2×Si+4×Ti-2×Ni-Mn-30×(C+N) satisfies a condition that F value#11 and an FFV value expressed by satisfies a condition that FFV value#9.0.

IPC 8 full level

C22C 38/00 (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)

B21B 9/00 (2013.01 - KR US); **C21D 6/005** (2013.01 - EP KR US); **C21D 9/0068** (2013.01 - EP KR US); **C21D 9/46** (2013.01 - EP US);
C22C 38/001 (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP KR US); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US);
C22C 38/42 (2013.01 - EP KR US); **C22C 38/46** (2013.01 - EP KR US); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/58** (2013.01 - EP KR US)

Cited by

CN108690936A; EP3029170A4

Designated contracting state (EPC)

AL 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 RS SE SI SK SM TR

DOCDB simple family (publication)

EP 2578715 A1 20130410; EP 2578715 A4 20150819; EP 2578715 B1 20170712; AU 2011259992 A1 20121220; AU 2011259992 B2 20131219;
BR 112012030684 A2 20171205; BR 112012030684 B1 20180814; CA 2799696 A1 20111208; CA 2799696 C 20151117;
CN 102933732 A 20130213; CN 102933732 B 20160629; ES 2643150 T3 20171121; JP 2012012702 A 20120119; JP 4893866 B2 20120307;
KR 101409291 B1 20140618; KR 20130034025 A 20130404; RU 2012157554 A 20140720; RU 2522065 C1 20140710;
TW 201207128 A 20120216; TW I439555 B 20140601; US 2013126052 A1 20130523; WO 2011152475 A1 20111208

DOCDB simple family (application)

EP 11789877 A 20110526; AU 2011259992 A 20110526; BR 112012030684 A 20110526; CA 2799696 A 20110526;
CN 201180026476 A 20110526; ES 11789877 T 20110526; JP 2011062640 W 20110526; JP 2011117803 A 20110526;
KR 20127032216 A 20110526; RU 2012157554 A 20110526; TW 100119016 A 20110531; US 201113698483 A 20110526