

Title (en)

FERRITIC STAINLESS STEEL FOR USE IN PRODUCING UREA WATER TANK

Title (de)

FERRITISCHER EDELSTAHL ZUR VERWENDUNG BEI DER HERSTELLUNG EINES HARNSTOFFWASSERTANKS

Title (fr)

ACIER INOXYDABLE FERRITIQUE DESTINÉ À ÊTRE UTILISÉ POUR LA PRODUCTION D'UN RÉSERVOIR D'EAU-URÉE

Publication

EP 2316979 A1 20110504 (EN)

Application

EP 09800430 A 20090723

Priority

- JP 2009063169 W 20090723
- JP 2008190065 A 20080723

Abstract (en)

This ferrite stainless steel for use in producing a urea water tank includes: in terms of mass %, C: 0.05% or less; N: 0.05% or less; Si: 0.02 to 1.5%; Mn: 0.02 to 2%; Cr: 15 to 23%; and either one or both of Nb and Ti at a content within a range of 8(C+N) to 1% (herein, C and N represent the contents of C and N (expressed by mass %), respectively, and the numerical values shown in front of the atomic symbols represent constant numbers), with the remainder being iron and unavoidable impurities, wherein an effective amount of Cr expressed by any one of the following Equations (I), (II), and (III) is 15% or more (herein, the atomic symbols in Equations (I) to (III) represent the contents of the elements (expressed by mass %), and the numerical values shown in front of the atomic symbols represent constant numbers). Here, the effective amount of Cr = Cr + 4Si - 2Mn in the case where only Nb is contained, the effective amount of Cr = Cr + 4Si - 2Mn - 10Ti in the case where only Ti is contained, and the effective amount of Cr = Cr + 4Si - 2Mn - (10Ti - 3Nb) in the case where both of Nb and Ti are contained.

IPC 8 full level

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

CPC (source: EP KR US)

C22C 38/001 (2013.01 - EP KR US); **C22C 38/002** (2013.01 - KR); **C22C 38/02** (2013.01 - EP KR US); **C22C 38/04** (2013.01 - EP US); **C22C 38/18** (2013.01 - EP KR US); **C22C 38/26** (2013.01 - EP KR US); **C22C 38/42** (2013.01 - KR); **C22C 38/44** (2013.01 - KR); **C22C 38/46** (2013.01 - KR); **C22C 38/58** (2013.01 - KR)

Cited by

CN110678566A; EP3604589A4; US11365467B2

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 SM TR

Designated extension state (EPC)

AL BA RS

DOCDB simple family (publication)

EP 2316979 A1 20110504; **EP 2316979 A4 20140122**; CN 102099500 A 20110615; CN 102099500 B 20130123; JP 5588868 B2 20140910; JP WO2010010916 A1 20120105; KR 20110018455 A 20110223; US 2011110812 A1 20110512; WO 2010010916 A1 20100128

DOCDB simple family (application)

EP 09800430 A 20090723; CN 200980128401 A 20090723; JP 2009063169 W 20090723; JP 2010521733 A 20090723; KR 20117001368 A 20090723; US 73742509 A 20090723