

Title (en)
DUPLEX STAINLESS STEEL, DUPLEX STAINLESS STEEL SLAB, AND DUPLEX STAINLESS STEEL MATERIAL

Title (de)
ROSTFREIER DUPLEXSTAHL, PLATTE AUS DEM ROSTFREIEN DUPLEXSTAHL UND MATERIAL AUS DEM ROSTFREIEN DUPLEXSTAHL

Title (fr)
ACIER INOXYDABLE DUPLEX, BRAME D'ACIER INOXYDABLE DUPLEX ET MATÉRIAU D'ACIER INOXYDABLE DUPLEX

Publication
EP 2770076 A1 20140827 (EN)

Application
EP 12842430 A 20121017

Priority
• JP 2011231352 A 20111021
• JP 2011266351 A 20111206
• JP 2012076821 W 20121017

Abstract (en)
One aspect of this duplex stainless steel contains, in mass%, C: 0.03% or less, Si: 0.05% to 1.0%, Mn: 0.1% to 7.0%, P: 0.05% or less, S: 0.0001% to 0.0010%, Ni: 0.5% to 5.0%, Cr: 18.0% to 25.0%, N: 0.10% to 0.30%, Al: 0.05% or less, Ca: 0.0010% to 0.0040%, and Sn: 0.01% to 0.2%, with the remainder being Fe and inevitable impurities, wherein a ratio Ca/O of the amounts of Ca and O is in a range of 0.3 to 1.0, and a pitting index PI shown by formula (1) is in a range of less than 30, $PI = Cr + 3.3 \#c Mo + 16 \#c N$

IPC 8 full level
C22C 38/00 (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/42** (2006.01); **C22C 38/44** (2006.01); **C22C 38/46** (2006.01); **C22C 38/48** (2006.01); **C22C 38/50** (2006.01); **C22C 38/52** (2006.01); **C22C 38/54** (2006.01); **C22C 38/58** (2006.01)

CPC (source: EP KR US)
C21D 6/004 (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0263** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US); **C22C 38/001** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP US); **C22C 38/005** (2013.01 - EP US); **C22C 38/008** (2013.01 - EP US); **C22C 38/02** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C22C 38/06** (2013.01 - EP US); **C22C 38/42** (2013.01 - EP US); **C22C 38/44** (2013.01 - EP US); **C22C 38/46** (2013.01 - EP US); **C22C 38/48** (2013.01 - EP US); **C22C 38/50** (2013.01 - EP US); **C22C 38/52** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP US); **C22C 38/58** (2013.01 - EP KR US)

Cited by
WO2016120525A1; EP3250732A4; EP3276028A4; US11001932B2

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 2770076 A1 20140827; **EP 2770076 A4 20160309**; **EP 2770076 B1 20191204**; CN 103857816 A 20140611; CN 103857816 B 20170215; ES 2768088 T3 20200619; KR 101632516 B1 20160621; KR 101648694 B1 20160816; KR 20140064941 A 20140528; KR 20160028514 A 20160311; TW 201333223 A 20130816; TW I460293 B 20141111; US 2014255244 A1 20140911; US 2016340764 A1 20161124; WO 2013058274 A1 20130425; ZA 201402169 B 20150429

DOCDB simple family (application)
EP 12842430 A 20121017; CN 201280050356 A 20121017; ES 12842430 T 20121017; JP 2012076821 W 20121017; KR 20147009392 A 20121017; KR 20167005157 A 20121017; TW 101138219 A 20121017; US 201214347437 A 20121017; US 201615226287 A 20160802; ZA 201402169 A 20140324