

Title (en)

HOT-ROLLED AND ANNEALED FERRITIC STAINLESS STEEL SHEET, AND METHOD FOR MANUFACTURING SAME

Title (de)

WARMGEWALZTES UND GEGLÜHTES FERRITISCHES ROSTFREIES STAHLBLECH UND VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

TÔLE D'ACIER INOXYDABLE FERRITIQUE LAMINÉE À CHAUD ET RECUITE ET SON PROCÉDÉ DE PRODUCTION

Publication

EP 3587610 A4 20200304 (EN)

Application

EP 18790531 A 20180424

Priority

- JP 2017087756 A 20170427
- JP 2018016545 W 20180424

Abstract (en)

[origin: EP3587610A1] The present invention provides a hot-rolled and annealed ferritic stainless steel sheet which has sufficient corrosion resistance and in which cracks can be prevented during blanking into a thick flange, and a method for manufacturing the same. A hot-rolled and annealed ferritic stainless steel sheet has a chemical composition containing, in percent by mass, C: 0.001% to 0.020%, Si: 0.05% to 1.00%, Mn: 0.05% to 1.00%, P: 0.04% or less, S: 0.01% or less, Al: 0.001% to 0.100%, Cr: 10.0% to 19.0%, Ni: 0.65% to 1.50%, Ti: 0.10% to 0.40%, and N: 0.001% to 0.020%, with the balance being Fe and unavoidable impurities, and has a threshold stress intensity factor K_{IC} of 35 MPa \sqrt{m} or more.

IPC 8 full level

C22C 38/50 (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (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 38/52** (2006.01); **C22C 38/54** (2006.01)

CPC (source: EP KR US)

B21B 3/02 (2013.01 - US); **C21D 6/004** (2013.01 - US); **C21D 6/005** (2013.01 - US); **C21D 6/007** (2013.01 - US); **C21D 6/008** (2013.01 - US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP US); **C21D 8/0263** (2013.01 - US); **C21D 8/0273** (2013.01 - EP); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/00** (2013.01 - EP); **C22C 38/001** (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/004** (2013.01 - EP); **C22C 38/005** (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 - US); **C22C 38/50** (2013.01 - EP KR US); **C22C 38/52** (2013.01 - EP US); **C22C 38/54** (2013.01 - EP KR US); **C21D 2211/005** (2013.01 - EP)

Citation (search report)

- [I] EP 3124635 A1 20170201 - NIPPON STEEL & SUMIKIN SST [JP]
- [A] WO 2016068139 A1 20160506 - NIPPON STEEL & SUMIKIN SST [JP]
- [A] JP 2002285300 A 20021003 - KAWASAKI STEEL CO
- [A] JP 2001020046 A 20010123 - SUMITOMO METAL IND
- [A] JP 2001181798 A 20010703 - KAWASAKI STEEL CO
- [A] JP 2012167298 A 20120906 - NAKAYAMA STEEL WORKS LTD
- See references of WO 2018199062A1

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

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3587610 A1 20200101; **EP 3587610 A4 20200304**; **EP 3587610 B1 20220706**; CN 110546294 A 20191206; CN 110546294 B 20220322; ES 2924685 T3 20221010; JP 6432720 B1 20181205; JP WO2018199062 A1 20190627; KR 20190131528 A 20191126; MX 2019012549 A 20191202; TW 201843316 A 20181216; TW I685574 B 20200221; US 2020385835 A1 20201210; WO 2018199062 A1 20181101

DOCDB simple family (application)

EP 18790531 A 20180424; CN 201880027591 A 20180424; ES 18790531 T 20180424; JP 2018016545 W 20180424; JP 2018540074 A 20180424; KR 20197030951 A 20180424; MX 2019012549 A 20180424; TW 107114282 A 20180426; US 201816607174 A 20180424