

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 B1 20220706 (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)

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 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