

Title (en)

HOT-ROLLED STEEL SHEET HAVING EXCELLENT COMPOSITE CORROSION RESISTANCE TO SULFURIC ACID AND HYDROCHLORIC ACID AND MANUFACTURING METHOD THEREFOR

Title (de)

WARMGEWALZTES STAHLBLECH MIT HERVORRAGENDER KOMBINIERTER KORROSIONSBESTÄNDIGKEIT GEGEN SCHWEFELSÄURE UND SALZSÄURE UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

TÔLE D'ACIER LAMINÉE À CHAUD AYANT UNE EXCELLENTE RÉSISTANCE COMBINÉE À LA CORROSION PAR L'ACIDE SULFURIQUE ET L'ACIDE CHLORHYDRIQUE ET SON PROCÉDÉ DE FABRICATION

Publication

EP 3305936 B1 20190710 (EN)

Application

EP 15893419 A 20150528

Priority

KR 2015005381 W 20150528

Abstract (en)

[origin: EP3305936A1] Disclosed are: a hot-rolled steel sheet having excellent composite resistance to sulfuric acid and hydrochloric acid; and a manufacturing method therefor. An aspect of the present invention provides a hot-rolled steel sheet having excellent composite corrosion resistance to sulfuric acid and hydrochloric acid, the hot-rolled steel sheet containing, by weight%, 0.05-0.1% of C, 0.5-1.5% of Mn, 0.02% or less of P, 0.02% or less of S, 0.01-0.1% of Al, 0.2-0.6% of Cu, 0.05-0.1% of Sb, the remainder Fe, and inevitable impurities, wherein Cu and Sb are enriched within 500 nm from the surface in the thickness direction, and the mass loss to a solution of 16.9 vol% of sulfuric acid + 0.35 vol% of hydrochloric acid is 2.0 mg/cm²/hr.

IPC 8 full level

C22C 38/16 (2006.01); **C21D 6/00** (2006.01); **C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 38/00** (2006.01); **C22C 38/04** (2006.01); **C22C 38/06** (2006.01); **C22C 38/60** (2006.01)

CPC (source: EP KR US)

C21D 1/84 (2013.01 - KR); **C21D 6/005** (2013.01 - EP US); **C21D 8/02** (2013.01 - EP KR US); **C21D 8/0205** (2013.01 - EP US); **C21D 8/0226** (2013.01 - EP KR US); **C21D 8/0263** (2013.01 - KR); **C21D 9/46** (2013.01 - EP KR US); **C22C 38/002** (2013.01 - EP US); **C22C 38/04** (2013.01 - EP KR US); **C22C 38/06** (2013.01 - EP KR US); **C22C 38/16** (2013.01 - EP KR US); **C22C 38/60** (2013.01 - EP KR US)

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 3305936 A1 20180411; **EP 3305936 A4 20180411**; **EP 3305936 B1 20190710**; CN 107614721 A 20180119; CN 107614721 B 20190813; JP 2018519422 A 20180719; JP 6549254 B2 20190724; KR 102098511 B1 20200407; KR 20180027534 A 20180314; US 2018148811 A1 20180531; WO 2016190467 A1 20161201

DOCDB simple family (application)

EP 15893419 A 20150528; CN 201580080459 A 20150528; JP 2017561739 A 20150528; KR 2015005381 W 20150528; KR 20187003152 A 20150528; US 201515577228 A 20150528