

Title (en)

PROCESS AND EQUIPMENT FOR PRODUCING COLD-ROLLED STEEL STRIP

Title (de)

VERFAHREN UND VORRICHTUNG ZUM HERSTELLEN EINES KALTGEWALZTEN STAHLBANDES

Title (fr)

PROCÉDÉ ET ÉQUIPEMENT PERMETTANT DE PRODUIRE UNE BANDE D'ACIER LAMINÉE À FROID

Publication

EP 3321394 B1 20191211 (EN)

Application

EP 16821503 A 20160707

Priority

- JP 2015137186 A 20150708
- JP 2016070755 W 20160707

Abstract (en)

[origin: EP3321394A1] Provided is a method of producing a cold rolled steel strip that enables continuous production with long-term stability of a cold rolled steel strip having excellent chemical convertibility, post-coating corrosion resistance in harsh corrosive environments, and surface appearance quality. The method of producing a cold rolled steel strip includes: subjecting a steel strip that has been cold rolled and subsequently continuously annealed to pickling by continuously feeding the steel strip into a mixed acid solution containing a first acid that is oxidizing and a second acid that is non-oxidizing to immerse the steel strip; and subsequently subjecting the steel strip to repickling by continuously feeding the steel strip into an acid solution containing a third acid that is non-oxidizing to immerse the steel strip. The concentration of the first acid in the mixed acid solution is lowered and the concentration of the second acid in the mixed acid solution is raised as the iron ion concentration in the mixed acid solution rises.

IPC 8 full level

C21D 8/02 (2006.01); **C21D 9/46** (2006.01); **C21D 9/56** (2006.01); **C22C 38/00** (2006.01); **C22C 38/02** (2006.01); **C22C 38/04** (2006.01);
C22C 38/12 (2006.01); **C22C 38/16** (2006.01); **C22C 38/18** (2006.01); **C23G 1/00** (2006.01); **C23G 1/08** (2006.01); **C23G 3/02** (2006.01)

CPC (source: EP US)

C21D 8/0278 (2013.01 - EP US); **C21D 9/46** (2013.01 - EP US); **C21D 9/56** (2013.01 - EP US); **C22C 38/00** (2013.01 - EP US);
C22C 38/02 (2013.01 - EP US); **C22C 38/04** (2013.01 - EP US); **C23G 1/00** (2013.01 - EP US); **C23G 1/08** (2013.01 - EP US);
C23G 1/085 (2013.01 - EP US); **C23G 3/021** (2013.01 - EP US); **C23G 3/028** (2013.01 - EP US); **C23G 3/029** (2013.01 - US);
C21D 8/0236 (2013.01 - EP US); **C22C 38/002** (2013.01 - EP US); **C22C 38/12** (2013.01 - EP US); **C22C 38/16** (2013.01 - EP US);
C22C 38/18 (2013.01 - EP 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 3321394 A1 20180516; EP 3321394 A4 20180516; EP 3321394 B1 20191211; CN 107709620 A 20180216; CN 107709620 B 20200414;
US 2018298503 A1 20181018; WO 2017007036 A1 20170112

DOCDB simple family (application)

EP 16821503 A 20160707; CN 201680039032 A 20160707; JP 2016070755 W 20160707; US 201615737904 A 20160707