

Title (en)
METHOD FOR CONTINUOUSLY ANNEALING AND PREPARING STRIP OF HIGH-STRENGTH STEEL FOR THE PURPOSE OF HOT-DIP GALVANIZING IT

Title (de)
VERFAHREN ZUM KONTINUIERLICHEN GLÜHEN UND VORBEREITEN EINES BANDS AUS HOCHFESTEM STAHL ZUM ZWECK DER FEUERVERZINKUNG DES BANDS

Title (fr)
PROCEDE DE RECUIT ET DE PREPARATION EN CONTINU D'UNE BANDE D'ACIER A HAUTE RESISTANCE EN VUE DE SA GALVANISATION AU TREMPÉ

Publication
EP 1999287 B1 20090819 (FR)

Application
EP 07719191 A 20070313

Priority
• BE 2007000026 W 20070313
• BE 200600201 A 20060329

Abstract (en)
[origin: WO2007109865A1] The present application relates to a method for continuously annealing and preparing a strip of high-strength steel for the purpose of hot-dip coating it in a bath of liquid metal, in which said steel strip is treated in at least two sections, comprising in succession, when considering the direction of advance of the strip: a section called the heating and holding section, in which the strip is heated and then held at a given annealing temperature in an oxidizing atmosphere; and a section called the cooling and transfer section, in which the annealed strip at least is cooled and undergoes complete reduction, in a reducing atmosphere, of the iron oxide present in the oxide layer formed in the previous section, in such a way that the oxidizing atmosphere is separated from the reducing atmosphere, a controlled oxygen content is maintained in the heating and holding section between 50 and 1000 ppm, and a controlled hydrogen content is maintained in the cooling and transfer section at a value of less than 4% and preferably less than 0.5%.

IPC 8 full level
C23C 2/02 (2006.01)

CPC (source: EP KR US)
C23C 2/00 (2013.01 - EP US); **C23C 2/0222** (2022.08 - EP KR US); **C23C 2/0224** (2022.08 - EP KR US); **C23C 2/06** (2013.01 - KR); **C23C 2/40** (2013.01 - KR)

Cited by
DE102013105378B3; US10400315B2

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2007109865 A1 20071004; AT E440156 T1 20090915; AU 2007231473 A1 20071004; AU 2007231473 B2 20101202; BE 1017086 A3 20080205; BR PI0709419 A2 20110712; CA 2644459 A1 20071004; CA 2644459 C 20131112; CN 101466860 A 20090624; CN 101466860 B 20130522; DE 602007002064 D1 20091001; EP 1999287 A1 20081210; EP 1999287 B1 20090819; ES 2331634 T3 20100111; JP 2009531538 A 20090903; JP 5140660 B2 20130206; KR 101406789 B1 20140612; KR 20080111507 A 20081223; MX 2008012494 A 20081212; PL 1999287 T3 20100129; RU 2008142434 A 20100510; RU 2426815 C2 20110820; UA 92079 C2 20100927; US 2010062163 A1 20100311; US 8409667 B2 20130402; ZA 200808424 B 20091230

DOCDB simple family (application)
BE 2007000026 W 20070313; AT 07719191 T 20070313; AU 2007231473 A 20070313; BE 200600201 A 20060329; BR PI0709419 A 20070313; CA 2644459 A 20070313; CN 200780011206 A 20070313; DE 602007002064 T 20070313; EP 07719191 A 20070313; ES 07719191 T 20070313; JP 2009501786 A 20070313; KR 20087026118 A 20070313; MX 2008012494 A 20070313; PL 07719191 T 20070313; RU 2008142434 A 20070313; UA A200812701 A 20070313; US 29508407 A 20070313; ZA 200808424 A 20081002