

Title (en)

METHOD FOR PREVENTING YELLOW DISCOLOURATION OF SURFACE OF ACID-CLEANED STEEL SHEET

Title (de)

VERFAHREN ZUR VERHINDERUNG DER VERGILBUNG EINER OBERFLÄCHE EINES SÄUREGEREINIGTEN STAHLBLECHS

Title (fr)

PROCÉDÉ POUR EMPÊCHER LA COLORATION JAUNE INDÉSIRÉE DE LA SURFACE D'UNE FEUILLE D'ACIER NETTOYÉE PAR ACIDE

Publication

**EP 2806051 A4 20150311 (EN)**

Application

**EP 13738039 A 20130116**

Priority

- JP 2012007739 A 20120118
- JP 2013050678 W 20130116

Abstract (en)

[origin: EP2806051A1] In a method for prevention of yellowing on a surface of a steel sheet subjected to re-pickling, washing with water and drying after a surface of a continuously annealed steel sheet is pickled to remove Si-containing oxide layer from a surface layer of the steel sheet, the surface of the steel sheet is held at a wet state between the pickling and the re-pickling and between the re-pickling and the washing, and more preferably the washing is carried out with water having an iron ion concentration decreased to not more than 20 g/L, whereby the yellowing on the surface of the steel sheet after the pickling is prevented. Thus, cold rolled steel sheets being excellent in not only the appearance quality but also the phosphatability and corrosion resistance after painting are manufactured stably.

IPC 8 full level

**C23G 1/08** (2006.01); **C22C 38/00** (2006.01); **C22C 38/06** (2006.01); **C23G 1/00** (2006.01)

CPC (source: EP US)

**C21D 8/02** (2013.01 - EP US); **C21D 8/0278** (2013.01 - EP US); **C21D 9/562** (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); **C23G 1/00** (2013.01 - EP US); **C23G 1/08** (2013.01 - EP US); **C23G 1/081** (2013.01 - EP US); **C23G 1/085** (2013.01 - EP US); **C23G 1/086** (2013.01 - EP US)

Citation (search report)

- [X] JP 2005314725 A 20051110 - SUMITOMO METAL IND, et al
- [X] EP 1460148 A1 20040922 - PARKER CORP [JP]
- [X] WO 2010056825 A2 20100520 - AK STEEL PROPERTIES INC [US], et al
- [E] EP 2692902 A1 20140205 - JFE STEEL CORP [JP]
- [A] JP 2011021240 A 20110203 - MITSUBISHI HITACHI METALS
- See references of WO 2013108785A1

Cited by

EP3604616A4

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 2806051 A1 20141126**; **EP 2806051 A4 20150311**; **EP 2806051 B1 20160406**; CN 104053820 A 20140917; CN 104053820 B 20160302; JP 5482968 B2 20140507; JP WO2013108785 A1 20150511; KR 101629592 B1 20160613; KR 20140099320 A 20140811; US 2015013716 A1 20150115; WO 2013108785 A1 20130725

DOCDB simple family (application)

**EP 13738039 A 20130116**; CN 201380005825 A 20130116; JP 2013050678 W 20130116; JP 2013523799 A 20130116; KR 20147018456 A 20130116; US 201314372912 A 20130116