

Title (en)

COLD REDUCED ENAMELLING STEEL SHEET, METHOD FOR ITS PRODUCTION, AND USE OF SUCH STEEL

Title (de)

KALTGEWALZTES EMAILLIERTES STAHLBLECH, VERFAHREN ZU SEINER HERSTELLUNG, UND VERWENDUNG EINES SOLCHEN STAHL

Title (fr)

FEUILLE D'ACIER À ÉMAILLAGÉ RÉDUIT À FROID, SON PROCÉDÉ DE PRODUCTION ET UTILISATION D'UN TEL ACIER

Publication

EP 2986749 B1 20180321 (EN)

Application

EP 14717774 A 20140415

Priority

- EP 13001949 A 20130415
- EP 2014057601 W 20140415
- EP 14717774 A 20140415

Abstract (en)

[origin: WO2014170315A1] The invention relates to a cold reduced enamelling steel sheet comprising (in weight ppm unless otherwise indicated) $5 \leq C \leq 90$; $0.10 \leq Mn \leq 0.50$ (wt. %); $Al \leq 300$ (acid soluble Al); $O \leq 35$; $S \leq 350$; $30 \leq N \leq 110$; $B_{min} < B \leq B_{max}$; wherein $B_{min} = N \times 0.80 \times 10.8 / 14$ and $B_{max} = N \times 10.8 / 14 + 144 / 6$; $50 \leq P \leq 160$; in combination with $Cu \leq Cu_{max}$; wherein $Cu_{min} = P \times 1.00 \times 63.6 / 31$ and $Cu_{max} = P \times 2.00 \times 63.6 / 31$ and optionally $Si \leq 190$; the balance being Fe and unintentional and/or inevitable impurities, wherein the steel sheet has been continuous annealed, and wherein the steel sheet has a thickness between 0.10 mm and 0.36 mm. The invention also provides a process for producing such steel, and the use of such steel.

IPC 8 full level

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 38/16** (2006.01)

CPC (source: EP)

C21D 8/0273 (2013.01); **C21D 9/46** (2013.01); **C22C 38/001** (2013.01); **C22C 38/002** (2013.01); **C22C 38/004** (2013.01); **C22C 38/02** (2013.01); **C22C 38/04** (2013.01); **C22C 38/06** (2013.01); **C22C 38/16** (2013.01); **C21D 8/0278** (2013.01)

Cited by

WO2023057106A1

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)

WO 2014170315 A1 20141023; EP 2986749 A1 20160224; EP 2986749 B1 20180321; ES 2667198 T3 20180510

DOCDB simple family (application)

EP 2014057601 W 20140415; EP 14717774 A 20140415; ES 14717774 T 20140415