

Title (en)

CORROSION PROTECTION FOR GALVANISED AND ALLOY GALVANISED STEEL STRIPS

Title (de)

KORROSIONSSCHUTZ VON VERZINKTEN UND LEGIERUNGSVERZINKTEN STAHLBÄNDERN

Title (fr)

PROTECTION ANTI-CORROSION DE FEUILLARDS ACIER GALVANISES ET GALVANISES PAR ALLIAGE

Publication

EP 1029111 A1 20000823 (DE)

Application

EP 98959815 A 19981030

Priority

- DE 19749508 A 19971108
- EP 9806889 W 19981030

Abstract (en)

[origin: US6537387B1] A process for the corrosion protection of steel strips coated with zinc or zinc alloy, characterised in that the steel strips coated with zinc or zinc alloy are brought into contact with an aqueous treatment solution having a pH within the range of from 1.5 to 3.5, which contains 1 to 20 g/l manganese(II) ions and 1 to 150 g/l phosphate ions, and the solution is dried without intermediate rinsing. Optionally the solution may contain in addition: up to 10 g/l zinc ions, up to 10 g/l nickel ions, up to 20 g/l titanium ions, up to 50 g/l silicon ions in the form of silicon compounds, up to 30 g/l fluoride ions, up to 150 g/l of one or more polymers or copolymers of polymerisable carboxylic acids selected from acrylic acid, methacrylic acid and maleic acid, and esters thereof with alcohols having 1 to 6 carbon atoms. The present invention also relates to the correspondingly-treated metal strips.

IPC 1-7

C23C 22/18; **C23C 22/36**

IPC 8 full level

C23C 22/18 (2006.01); **C23C 22/36** (2006.01)

CPC (source: EP US)

C23C 22/18 (2013.01 - EP US); **C23C 22/182** (2013.01 - EP US); **C23C 22/364** (2013.01 - EP US)

Designated contracting state (EPC)

AT BE DE ES FI FR GB IT NL SE

DOCDB simple family (publication)

US 6537387 B1 20030325; AT E221144 T1 20020815; AU 1558399 A 19990531; AU 735849 B2 20010719; BR 9813180 A 20000822; CA 2309581 A1 19990520; CA 2309581 C 20070410; DE 19749508 A1 19990512; DE 59804925 D1 20020829; EP 1029111 A1 20000823; EP 1029111 B1 20020724; ES 2180217 T3 20030201; HU P0100106 A2 20010528; HU P0100106 A3 20040628; JP 2001522941 A 20011120; WO 9924638 A1 19990520; ZA 9810120 B 19990510

DOCDB simple family (application)

US 55403800 A 20000706; AT 98959815 T 19981030; AU 1558399 A 19981030; BR 9813180 A 19981030; CA 2309581 A 19981030; DE 19749508 A 19971108; DE 59804925 T 19981030; EP 9806889 W 19981030; EP 98959815 A 19981030; ES 98959815 T 19981030; HU P0100106 A 19981030; JP 2000519627 A 19981030; ZA 9810120 A 19981105