

Title (en)

METHOD FOR THE ELECTROLYTIC DEPOSITION OF MAGNESIUM ON GALVANISED SHEET METAL

Title (de)

VERFAHREN ZUR ELEKTROLYTISCHEN ABSCHEIDUNG VON MAGNESIUM ODER MAGNESIUM-ZINK AUF VERZINKTEM BLECH

Title (fr)

PROCEDE DE DEPOT ELECTROLYTIQUE DE MAGNESIUM SUR UNE TOLE GALVANISEE

Publication

EP 1570115 B1 20060412 (DE)

Application

EP 03767590 A 20031121

Priority

- DE 10257737 A 20021210
- EP 0313055 W 20031121

Abstract (en)

[origin: WO2004053203A2] The invention relates to a method for the electrolytic deposition of magnesium on a substrate consisting of sheet metal (1) comprising a zinc or zinc alloy coating, especially a steel sheet. The electrolytic deposition is carried out in a solvent (3a) having a lower acidity than water, especially in an essentially aprotic solvent, and the coated substrate (1) is then subjected to a heat treatment in order to create a Mg-Zn alloy phase in the zinc layer. The inventive sheet metal (1) is characterised by improved corrosion resistance with the same high surface quality and machinability as galvanised sheet metal.

IPC 8 full level

C25D 3/42 (2006.01); **C25D 3/56** (2006.01); **C25D 5/10** (2006.01); **C25D 5/48** (2006.01); **C25D 5/50** (2006.01)

CPC (source: EP US)

C25D 5/10 (2013.01 - EP US); **C25D 5/48** (2013.01 - EP); **C25D 5/50** (2013.01 - EP); **C25D 3/42** (2013.01 - EP)

Cited by

US9744743B2; US9040167B2

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)

WO 2004053203 A2 20040624; WO 2004053203 A3 20041223; AT E323186 T1 20060415; AU 2003292060 A1 20040630;
AU 2003292060 A8 20040630; DE 10257737 B3 20040226; DE 50302990 D1 20060524; EP 1570115 A2 20050907; EP 1570115 B1 20060412;
ES 2261976 T3 20061116; PL 375788 A1 20051212

DOCDB simple family (application)

EP 0313055 W 20031121; AT 03767590 T 20031121; AU 2003292060 A 20031121; DE 10257737 A 20021210; DE 50302990 T 20031121;
EP 03767590 A 20031121; ES 03767590 T 20031121; PL 37578803 A 20031121