

Title (en)

PRETREATMENT BEFORE PAINTING OF COMPOSITE METAL STRUCTURES CONTAINING ALUMINUM PORTIONS

Title (de)

VORBEHANDLUNG ZUM FÄRBEN VON KOMPOSITMATERIALIEN, DIE ALUMINIUMTEILE ENTHALTEN

Title (fr)

PRETRAITEMENT AVANT PEINTURE DE STRUCTURES DE METAL COMPOSITE RENFERMANT DES PORTIONS D'ALUMINIUM

Publication

**EP 1027170 B1 20081126 (EN)**

Application

**EP 98946801 A 19980904**

Priority

- US 9818001 W 19980904
- US 5848197 P 19970910

Abstract (en)

[origin: WO9912661A1] In a process for the chemical pretreatment before painting of composite metal structures that contain aluminum or aluminum alloy portions together with steel, galvanized steel and/or alloy-galvanized steel portions, in a first step the metal structure is treated with a zinc phosphating solution that forms a surface-covering crystalline zinc phosphate layer on steel and on galvanized or alloy-galvanized steel, but without forming a zinc phosphate layer on the aluminum portions, and then in a second step the metal structure is brought into contact with a treatment solution that does not excessively dissolve the crystalline zinc phosphate layer on steel, galvanized and/or alloy-galvanized steel, but forms a conversion layer on the aluminum portions.

IPC 8 full level

**B05D 3/00** (2006.01); **B05D 3/10** (2006.01); **B05D 1/18** (2006.01); **B05D 3/02** (2006.01); **C23C 22/00** (2006.01); **C23C 22/07** (2006.01); **C23C 22/12** (2006.01); **C23C 22/17** (2006.01); **C23C 22/18** (2006.01); **C23C 22/73** (2006.01); **C23C 22/83** (2006.01)

CPC (source: EP KR)

**C23C 22/12** (2013.01 - EP KR); **C23C 22/184** (2013.01 - EP KR); **C23C 22/73** (2013.01 - EP KR); **C23C 22/83** (2013.01 - EP KR)

Cited by

DE102010030697A1; CN109317382A; US9550208B2; US11518960B2; US10400337B2; US10125424B2; US10435806B2; US10920324B2; US11591707B2; WO2022101192A1

Designated contracting state (EPC)

BE DE ES FR GB IT NL

DOCDB simple family (publication)

**WO 9912661 A1 19990318**; AU 756876 B2 20030123; AU 9373898 A 19990329; BR 9812069 A 20000926; CA 2303183 A1 19990318; CA 2303183 C 20090901; CN 1157263 C 20040714; CN 1274305 A 20001122; DE 69840270 C5 20120802; DE 69840270 D1 20090108; EP 1027170 A1 20000816; EP 1027170 A4 20060816; EP 1027170 B1 20081126; ES 2316169 T3 20090401; JP 2001515959 A 20010925; KR 20010023902 A 20010326; PL 339252 A1 20001204; TR 200000657 T2 20000721; ZA 988202 B 19990309

DOCDB simple family (application)

**US 9818001 W 19980904**; AU 9373898 A 19980904; BR 9812069 A 19980904; CA 2303183 A 19980904; CN 98809943 A 19980904; DE 69840270 T 19980904; EP 98946801 A 19980904; ES 98946801 T 19980904; JP 2000510539 A 19980904; KR 20007002586 A 20000310; PL 33925298 A 19980904; TR 200000657 T 19980904; ZA 988202 A 19980908