

Title (en)

PROCESS FOR THE PRETREATMENT OF METAL SURFACES FOR ELECTROPHORETIC DIP PAINTING

Publication

EP 0015021 B1 19841003 (DE)

Application

EP 80200097 A 19800205

Priority

DE 2907094 A 19790223

Abstract (en)

[origin: US4265677A] A new composition and process provide improved phosphate treatment prior to cathodic electropainting. The surface is contacted with an aqueous acidic zinc phosphate solution having a weight ratio of Zn:PO₄ of 1:12-110 and 0.3 to 2.0 g/l fluoborate prior to electropainting.

IPC 1-7

C23F 7/08; **C23F 7/10**

IPC 8 full level

C23C 22/00 (2006.01); **C23C 22/36** (2006.01); **C23C 22/44** (2006.01); **C25D 13/20** (2006.01); **C25D 13/00** (2006.01)

CPC (source: EP US)

C23C 22/36 (2013.01 - EP US); **C23C 22/362** (2013.01 - EP US); **C23C 22/44** (2013.01 - EP US)

Cited by

EP0154367A3; US5904786A; EP0264811A1; GB2203453A; GB2203453B; EP0056881A1; EP0018841B1; EP0065950B1

Designated contracting state (EPC)

BE DE FR SE

DOCDB simple family (publication)

EP 0015021 A1 19800903; **EP 0015021 B1 19841003**; AU 531900 B2 19830908; AU 5580480 A 19800828; CA 1134246 A 19821026; DE 2907094 A1 19800904; DE 3069330 D1 19841108; ES 488871 A0 19811101; ES 8200408 A2 19811101; GB 2046312 A 19801112; IT 1141231 B 19861001; IT 8020102 A0 19800222; JP S55131177 A 19801011; JP S5914113 B2 19840403; US 4265677 A 19810505; ZA 80915 B 19810225

DOCDB simple family (application)

EP 80200097 A 19800205; AU 5580480 A 19800222; CA 346000 A 19800219; DE 2907094 A 19790223; DE 3069330 T 19800205; ES 48887180 A 19800222; GB 8005737 A 19800220; IT 2010280 A 19800222; JP 2214780 A 19800222; US 12450480 A 19800225; ZA 80915 A 19800218