

Title (en)

PROCESS FOR THE SURFACE TREATMENT OF METALS AND ITS USE FOR THE TREATMENT OF ALUMINIUM SURFACES

Publication

**EP 0015020 B1 19830223 (DE)**

Application

**EP 80200096 A 19800205**

Priority

DE 2905535 A 19790214

Abstract (en)

[origin: US4264378A] A chromium-free process for phosphatizing a metal surface provides for applying to the surface an aqueous acidic solution having pH 1.5 to 3.0 and containing phosphate; a metal cation of valence two or greater; molybdate, tungstate, vanadate, niobate or tantalate ions; and drying the solution on the surface without rinsing.

IPC 1-7

**C23F 7/08**

IPC 8 full level

**B05D 3/02** (2006.01); **C23C 22/08** (2006.01); **C23C 22/12** (2006.01); **C23C 22/18** (2006.01); **C23C 22/20** (2006.01); **C23C 22/22** (2006.01); **C23C 22/42** (2006.01); **C23C 22/44** (2006.01)

CPC (source: EP US)

**C23C 22/08** (2013.01 - EP US); **C23C 22/42** (2013.01 - EP US); **C23C 22/44** (2013.01 - EP US)

Cited by

WO9309266A1; EP0664348A1; EP1024905A4; AU778143B2; US5904786A; CN1066207C; EP0711849A1; EP0880410A4; EP0448130A1; EP0261597A3; FR2699935A1; EP0305560A1; US4885032A; EP0698675A1; US5688340A; EP0837954A4; EP1394288A3; EP0774535A1; US5728233A; CN1072279C; EP0407015A1; EP1106128A1; US5976272A; EP0337075A3; EP1086261A4; US6308349B2; US5356491A; EP0411606A3; US5421913A; EP0261519A1; EP1950325A3; EP1650327A4; WO9416120A3; WO9609422A1; WO9617977A1; WO9209720A1; WO9730192A1; US7842400B2; US8980016B2; US6869677B1; US6361622B1; USRE40406E; US6596414B1; US6193815B1; EP0321059B1; WO0075397A1; WO9634995A1; WO9745568A1; WO0073535A1; EP0787830B2

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