

Title (en)

Corrosion-resistant protective coating on aluminum substrate or surface and method of forming same

Title (de)

Korrosionsbeständiger Schutzüberzug auf Aluminiumsubstrat oder Oberfläche und Verfahren zur Herstellung derselben

Title (fr)

Revêtement protecteur résistant à la corrosion sur un substrat ou une surface d'aluminium et procédé de formation

Publication

EP 0460700 B1 19970416 (EN)

Application

EP 91109362 A 19910607

Priority

- US 53479690 A 19900607
- US 53480790 A 19900607

Abstract (en)

[origin: EP0460701A1] A corrosion-resistant protective coating on an aluminum substrate is capable of withstanding corrosion attack by process halogen gases and plasmas. The protective coating is formed by contacting an aluminum oxide layer on an aluminum substrate with one or more fluorine-containing gases at an elevated temperature. In a preferred embodiment, a high purity corrosion-resistant protective coating on an aluminum substrate capable of withstanding corrosion attack is formed by first forming a high purity aluminum oxide layer on the aluminum substrate and then contacting the aluminum oxide layer with one or more high purity fluorine-containing gases at an elevated temperature to form the high purity corrosion resistant protective coating thereon.

IPC 1-7

C25D 11/18; **C23C 8/10**

IPC 8 full level

C23C 8/34 (2006.01); **C23C 8/80** (2006.01); **C25D 11/18** (2006.01)

CPC (source: EP)

C23C 8/34 (2013.01); **C23C 8/80** (2013.01); **C25D 11/18** (2013.01)

Cited by

EP0760526A4; US7041391B2; EP1118692A1; DE10028772A1; DE10028772B4; EP0902101A1; EP1026281A3; US5811195A; EP0702098A1; US5756222A; KR101012812B1; US6280597B1; US6736147B2; US6406799B1; WO03067634A1; WO03036216A1; US6632325B2; US7713886B2

Designated contracting state (EPC)

DE FR GB NL

DOCDB simple family (publication)

EP 0460701 A1 19911211; **EP 0460701 B1 19980304**; DE 69125651 D1 19970522; DE 69125651 T2 19970904; DE 69128982 D1 19980409; DE 69128982 T2 19980827; EP 0460700 A1 19911211; EP 0460700 B1 19970416

DOCDB simple family (application)

EP 91109363 A 19910607; DE 69125651 T 19910607; DE 69128982 T 19910607; EP 91109362 A 19910607