Title (en)

Cleaning of surfaces of anodised aluminium and its alloys.

Title (de)

Reinigung von Oberflächen aus anodisch oxidiertem Aluminium und dessen Legierungen.

Title (fr)

Nettoyage de surfaces en aluminium anodisé et ses alliages.

Publication

EP 0066117 A1 19821208 (DE)

Application

EP 82104011 A 19820508

Priority

DE 3119538 A 19810516

Abstract (en)

[origin: US4404039A] This invention relates to an improved process for cleaning an anodized surface of aluminum or an alloy thereof where a cleaning agent is applied to the anodized surface and then the cleaning agent is removed after a sufficient period of contact, wherein the improvement comprises applying to the anodized surface at ambient temperature a thin film of a cleaning composition comprising an acid solution consisting essentially of: (a) from about 3 to 30 percent by weight, based upon the total weight of the acid solution, of nitric acid, calculated as a 65% aqueous solution; (b) from about 0.1 to 20 percent by weight, based upon the total weight of the acid solution, of partial esters of phosphoric acid; (c) from about 0.3 to 30 percent by weight, based upon the total weight of the acid solution, of a phosphonocarboxylic acid with complexing action; (d) from about 0.5 to 30 percent by weight, based upon the total weight of the acid solution, of nonionic and/or anionic tensides; (e) from 0 to about 30 percent by weight, based upon the total weight of the acid solution, of solubilizers and/or organic solvents; and (f) from about 40 to 90 percent by weight, based upon the total weight of the acid solution, of water, said solution having a pH of less than 2, and then rinsing off the cleaning composition with water.

Abstract (de)

Die Reinigung erfolgt mit wäßrigen sauren Lösungen (pH <2) der Zusammensetzung: a) 5-20 Gew.% HNO3 (berechnet als 65% ige Lösung) b) 0,2-10 Gew.% Phosphorsäurepartialester c) 0,5-20 Gew.% komplexierend wirkende Phosphonsäure oder Phosphonocarbonsäure d) 1-20 Gew. % nichtionische und/oder anionische Tenside e) 0-30 Gew.% Lösungsvermittler und/oder organische Lösungsmittel f) 40-90 Gew.% Wasser Die Lösung wird als dünner Film aufgetragen und nach hinreichender Einwirkung mit Wasser abgespült. Vorteil: Wenig aufwendige Reinigung großflächiger Aluminiumteile, z.B. Fassadenverkleidungen ohne gravierende Veränderung der anodischen Oxidationsschicht.

IPC 1-7

C25D 11/18; C11D 7/08

IPC 8 full level

C11D 7/08 (2006.01); **C25D 11/18** (2006.01)

CPC (source: EP US)

C11D 7/08 (2013.01 - EP US); **C25D 11/18** (2013.01 - EP US)

Citation (search report)

- [AD] DE 2721573 B1 19780810 - METALLGESELLSCHAFT AG
- [A] DE 2436278 A1 19760212 - FARLEY ROBERT MALCOLM
- [A] US 3004879 A 19611017 - LAWRENCE WHITBY
- [A] CHEMICAL ABSTRACTS, Band 88, Nr. 24, 12. Juni 1978, Seite 310, Nr. 175223u, Columbus Ohio (USA);

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AT BE CH DE FR GB IT LU NL SE

DOCDB simple family (publication)

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DOCDB simple family (application)

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