

Title (en)

PRETREATMENT OF ALUMINUM SURFACES WITH CHROME-FREE SOLUTIONS

Title (de)

VORBEHANDLUNG VON ALUMINIUMOBERFLÄCHEN DURCH CHROMFREIE LÖSUNGEN

Title (fr)

TRAITEMENT PREALABLE DE SURFACES D'ALUMINIUM A L'AIDE DE SOLUTIONS EXEMPTES DE CHROME

Publication

EP 1200641 B1 20031217 (DE)

Application

EP 00925252 A 20000429

Priority

- DE 19921842 A 19990511
- EP 0003900 W 20000429

Abstract (en)

[origin: US6562148B1] In a method for the pretreatment of work pieces having a surface made of aluminium or aluminium alloys, for non-cutting shaping and/or the connection by welding or gluing to work pieces as well as for a subsequent permanent corrosion-preventing treatment, the work pieces are subjected to a three-stage treatment by a) rinsing with an aqueous, acidic solution containing a mineral acid, b) rinsing with water, c) bringing them into contact with an aqueous, acidic solution which is chromium-free and polymer-free and contains Ti and Zr as complex fluorides in a weight ratio of Ti:Zr of 2:1 to 1:2, in such a way that, after the subsequent drying off, a layer weight of 2 to 15 mg/m² (calculated as Ti/Zr metal) results, wherein depending on the type of application, solutions having different concentrations and different pH values are used.

IPC 1-7

C23C 22/34

IPC 8 full level

C23C 22/34 (2006.01)

CPC (source: EP US)

C23C 22/34 (2013.01 - EP US); **C23G 1/125** (2013.01 - EP)

Cited by

RU2750923C1; US8993119B2; US10400337B2; US10125424B2; US10920324B2; WO2017046139A1; EP1870489B2

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