

Title (en)  
CHROME-FREE PROCESS FOR THE NO-RINSE TREATMENT OF ALUMINIUM AND ITS ALLOYS, PLUS SOLUTIONS SUITABLE FOR USE IN THE PROCESS

Title (de)  
CHROMFREIES VERFAHREN ZUR NO-RINSE BEHANDLUNG VON ALUMINIUM UND SEINEN LEGIERUNGEN SOWIE HIERFÜR GEEIGNETE WÄSSRIGE BADLÖSUNGEN

Title (fr)  
PROCEDE SANS CHROME DE TRAITEMENT SANS RINCAGE DE L'ALUMINIUM ET DE SES ALLIAGES ET SOLUTIONS AQUEUSES APPROPRIEES

Publication  
**EP 0754251 B1 19980520 (DE)**

Application  
**EP 95915174 A 19950331**

Priority  
• DE 4412138 A 19940408  
• EP 9501197 W 19950331

Abstract (en)  
[origin: DE4412138A1] Described is a process using a no-rinse technique for the production of a chrome-free conversion layer on the surface of aluminium and its alloys by treating with an aqueous solution having a pH between 1 and 3.5 and containing titanium and/or zirconium plus an organic film-forming agent. The process is characterized in that the surface is brought into contact with a solution containing a) 2.2 to 22.0 g/l of Zr(IV) and/or 1.4 to 14.0 g/l of Ti(IV), b) 2.4 to 24.0 g/l of orthophosphate, c) 3.0 to 30.0 g/l of fluoride, d) 0.15 to 1.5 g/l of an organic film-forming agent which is soluble in or forms a homogeneous dispersion with water and, after a contact time between 1 and 40 seconds, the wet surface is allowed to dry off, without rinsing, at a temperature between 50 and 125 DEG C. Also described are aqueous concentrates for use in the process.

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**C23C 22/36**

IPC 8 full level  
**C23C 22/36** (2006.01)

CPC (source: EP US)  
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DE102008019761B3; DE102008009371A1; DE102008034105A1; DE102008023276A1; US9039854B2

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