

Title (en)  
WATER-BASED LIQUID TREATMENT FOR ALUMINUM AND ITS ALLOYS

Title (de)  
AUF WASSER BASIERENDE FLÜSSIGKEITSBEHANDLUNG FÜR ALUMINIUM UND DESSEN LEGIERUNGEN

Title (fr)  
TRAITEMENT LIQUIDE A BASE AQUEUSE POUR L'ALUMINIUM ET SES ALLIAGES

Publication  
**EP 1017505 A4 20000816 (EN)**

Application  
**EP 98923440 A 19980521**

Priority  
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• US 9809902 W 19980521

Abstract (en)  
[origin: WO9852699A1] A chromium-free water-based surface treatment liquid which contains from 0.01 to 50 g/l of a total of dissolved manganic acid, permanganic acid, and salt(s) thereof and from 0.01 to 20 g/l of a total of dissolved titanium compounds and has a pH of from 1.0 to 6.0 reacts rapidly with aluminum and aluminum alloy surfaces to deposit thereon a protective coating that does not contain hexavalent chromium and has excellent corrosion resistance and paint film holding properties.

IPC 1-7  
**B05D 1/18**; C04B 9/02; C23C 22/48; C23C 22/56; C23C 22/34

IPC 8 full level  
**C23C 22/34** (2006.01); **C23C 22/56** (2006.01)

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**C23C 22/34** (2013.01); **C23C 22/56** (2013.01)

Citation (search report)  
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• [X] WO 9702369 A1 19970123 - HENKEL CORP [US], et al  
• [A] DE 1521715 A1 19700205 - COLLARDIN GMBH GERHARD  
• [PA] US 5707465 A 19980113 - BIBBER JOHN W [US]  
• [X] PATENT ABSTRACTS OF JAPAN vol. 006, no. 015 (C - 089) 28 January 1982 (1982-01-28)  
• [DX] PATENT ABSTRACTS OF JAPAN vol. 006, no. 114 (C - 110) 25 June 1982 (1982-06-25)  
• [A] PATENT ABSTRACTS OF JAPAN vol. 016, no. 029 (C - 0904) 24 January 1992 (1992-01-24)  
• [DA] PATENT ABSTRACTS OF JAPAN vol. 1996, no. 10 31 October 1996 (1996-10-31)  
• See references of WO 9852699A1

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