

Title (en)

Method of non-chromate pretreatment for metal alloys

Title (de)

Chromatfreies Vorbehandlungsverfahren für Metallegierungen

Title (fr)

Procédé de prétraitement non-chromate pour alliages métalliques

Publication

**EP 1439243 A1 20040721 (EN)**

Application

**EP 03001023 A 20030117**

Priority

EP 03001023 A 20030117

Abstract (en)

A method of non-chromate pretreatment for metal alloys includes steps of degreasing, water rinsing and film treatment. The film treatment is to have the alloy surface coated with coating liquid which will carry out film coating reaction to the alloy surface and bond with the alloy surface to form a film thereon. In the process of the film treatment, it is impossible to produce industrial waste water containing heavy metallic ion, able to reduce environmental pollution to the minimum. <IMAGE>

IPC 1-7

**C23C 18/12**

IPC 8 full level

**C23C 18/12** (2006.01)

CPC (source: EP)

**C23C 18/122** (2013.01); **C23C 18/1241** (2013.01); **C23C 18/1295** (2013.01); **C23C 22/57** (2013.01); **C23C 22/73** (2013.01); **C23C 22/83** (2013.01)

Citation (search report)

- [X] EP 0358338 A2 19900314 - ALCAN INT LTD [CA]
- [A] PATENT ABSTRACTS OF JAPAN vol. 006, no. 090 (C - 104) 27 May 1982 (1982-05-27)
- [A] DATABASE WPI Section Ch Week 199011, Derwent World Patents Index; Class A32, AN 1990-080466, XP002249384

Cited by

CN107739929A; US8916020B2

Designated contracting state (EPC)

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**EP 1439243 A1 20040721**; **EP 1439243 B1 20080319**; AT E389738 T1 20080415; DE 60319795 D1 20080430; DE 60319795 T2 20090416; ES 2302873 T3 20080801

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