

Title (en)

PROCESS FOR THE TREATMENT OF METAL SURFACES, ESPECIALLY ALUMINIUM, ALUMINIUM ALLOY AND STEEL ONES, AND AQUEOUS BATH SOLUTIONS SUITABLE THEREFOR

Publication

EP 0111897 B1 19861112 (DE)

Application

EP 83112610 A 19831215

Priority

DE 3247729 A 19821223

Abstract (en)

[origin: ES8406563A1] The invention relates to a process for treating metal surfaces, preferably of aluminum, aluminum alloys and steel, for the subsequent application of organic coating compositions. The metal surfaces are wetted with an aqueous bath solution containing chromium(III)ions, fluoride ions and an organic film former which is soluble or homogeneously dispersible in water, after which the solution applied is dried and converted by heating into a water-insoluble film. The bath solution preferably contains the following constituents and approximate quantities thereof: 0.5 to 10 g/l of chromium(III)ions, 0.55 to 11 g/l of fluoride ions, 0.6 to 12.5 g/l of phosphate ions, and 0.15 to 5.0 g/l of organic film former. The organic film former preferably used is a polymer containing free carboxyl groups, more preferably a homopolymer and/or copolymer of acrylic and/or methacrylic acid.

IPC 1-7

C23C 22/36

IPC 8 full level

C23C 22/37 (2006.01); **C23C 22/34** (2006.01); **C23C 22/36** (2006.01); **C23C 22/38** (2006.01)

CPC (source: EP US)

C23C 22/34 (2013.01 - EP US); **C23C 22/36** (2013.01 - EP US); **C23C 2222/10** (2013.01 - EP US)

Citation (examination)

PATENT ABSTRACTS OF JAPAN, unexamined applications, C Field, Vol. 5, No. 180, 19. November 1981 THE PATENT OFFICE JAPANESE GOVERNMENT, Seite 130 C 79,Kokai-No. 56-105 486

Cited by

US5904786A; CN1066207C; EP3290543A1; NL2017398B1; WO2021233715A1; WO9617977A1

Designated contracting state (EPC)

AT BE DE FR GB IT NL SE

DOCDB simple family (publication)

EP 0111897 A1 19840627; **EP 0111897 B1 19861112**; AT E23573 T1 19861115; AU 2272983 A 19840628; AU 557724 B2 19870108; BR 8306981 A 19840731; CA 1219790 A 19870331; DE 3247729 A1 19840705; DE 3367629 D1 19870102; ES 528361 A0 19840801; ES 8406563 A1 19840801; GR 79449 B 19841030; JP H076071 B2 19950125; JP S59133373 A 19840731; MX 7298 E 19880426; NO 162623 B 19891016; NO 162623 C 19900124; NO 834243 L 19840625; US 4761189 A 19880802; ZA 839574 B 19840829

DOCDB simple family (application)

EP 83112610 A 19831215; AT 83112610 T 19831215; AU 2272983 A 19831221; BR 8306981 A 19831220; CA 442149 A 19831129; DE 3247729 A 19821223; DE 3367629 T 19831215; ES 528361 A 19831223; GR 830173277 A 19831219; JP 25241783 A 19831223; MX 1094683 U 19831221; NO 834243 A 19831118; US 5359887 A 19870520; ZA 839574 A 19831222