

Title (en)
COMPOSITION AND PROCESS FOR TREATING THE SURFACE OF ALUMINIFEROUS METALS

Title (de)
ZUSAMMENSETZUNG UND VERFAHREN ZUR BEHANDLUNG ALUMINIUMHALTIGER METALLOBERFLÄCHEN

Title (fr)
COMPOSITION ET PROCEDE DE TRAITEMENT DE SURFACE DE METAUX ALUMINIFERES

Publication
EP 0846192 A4 19980916 (EN)

Application
EP 96924428 A 19960719

Priority
• JP 18560495 A 19950721
• US 9611537 W 19960719

Abstract (en)
[origin: WO9704145A1] A surface of aluminiferous metal is brought into contact at 25 to 65 C DEG for 2 to 100 seconds with a surface treatment bath with a pH of 1.0 to 6.0 that contains phosphate ions, dissolved titanium and/or zirconium compounds, dissolved fluorine-containing anions, and a water soluble polymer in the following weight proportions: 1 - 100:1 - 50:1 - 200:1 - 200. This is followed by a water rinse and drying. The water soluble polymer has a chemical structure conforming to formula (I), in which each of X<1> and X<2> represents a hydrogen atom, a C1 to C5 alkyl group, or a C1 to C5 hydroxyalkyl group; each of Y<1> and Y<2> represents a hydrogen atom or a moiety "Z" that conforms to formula (II) or (III), wherein each of R<1>, R<2>, R<3>, R<4>, and R<5> represents a C1 to C10 alkyl group or a C1 to C10 hydroxyalkyl group; the average value for the number of Z moieties substituted on each aromatic ring in the polymer molecules is from 0.2 to 1.0; n is an integer; and the average value of n for the total polymer is from 2 to 50.

IPC 1-7
C23C 22/34

IPC 8 full level
B05D 7/14 (2006.01); **C08G 8/00** (2006.01); **C08G 8/16** (2006.01); **C08G 8/20** (2006.01); **C09D 161/04** (2006.01); **C09D 161/12** (2006.01); **C23C 22/07** (2006.01); **C23C 22/10** (2006.01); **C23C 22/36** (2006.01)

CPC (source: EP)
C23C 22/361 (2013.01)

Citation (search report)
• [DA] DE 3900149 A1 19890713 - KAO CORP [JP] & JP H01177379 A 19890713 - KAO CORP
• [A] WO 9012902 A1 19901101 - HENKEL CORP [US]
• [A] WO 9504169 A1 19950209 - HENKEL CORP [US]
• [A] US 4795506 A 19890103 - SOKALSKI STANLEY M [US]
• [PA] WO 9528509 A1 19951026 - HENKEL CORP [US], et al
• [PA] WO 9528449 A1 19951026 - HENKEL CORP [US], et al
• [A] US 4457790 A 19840703 - LINDERT ANDREAS [US], et al
• [AD] WO 9119828 A1 19911226 - HENKEL CORP [US] & JP H0466671 A 19920303 - NIHON PARKERIZING
• See references of WO 9704145A1

Designated contracting state (EPC)
AT DE ES FR GB GR IT SE

DOCDB simple family (publication)
WO 9704145 A1 19970206; AT E216437 T1 20020515; BR 9609557 A 19990302; CA 2227509 A1 19970206; CZ 17198 A3 19980812; DE 69620767 D1 20020523; DE 69620767 T2 20020905; EP 0846192 A1 19980610; EP 0846192 A4 19980916; EP 0846192 B1 20020417; ES 2173302 T3 20021016; JP 3620893 B2 20050216; JP H0931404 A 19970204; MX 9800581 A 19980430; PL 325902 A1 19980817; ZA 966161 B 19970204

DOCDB simple family (application)
US 9611537 W 19960719; AT 96924428 T 19960719; BR 9609557 A 19960719; CA 2227509 A 19960719; CZ 17198 A 19960719; DE 69620767 T 19960719; EP 96924428 A 19960719; ES 96924428 T 19960719; JP 18560495 A 19950721; MX 9800581 A 19960719; PL 32590296 A 19960719; ZA 966161 A 19960719