

Title (en)  
ELECTROLYTE FOR THE ELECTROCHEMICAL TREATMENT OF METAL PLATES, AND PROCESS FOR THE MANUFACTURE OF ANODISED METAL PLATES, ESPECIALLY FOR THE APPLICATION AS PRINTING PLATE SUPPORTS

Publication  
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Application  
**EP 85115292 A 19851202**

Priority  
US 68002984 A 19841210

Abstract (en)  
[origin: US4578156A] The invention provides an electrochemical process for applying a firmly bonded substantially insoluble metal oxide-organic complex on a metal surface by employing the metal as anode and a water-soluble polybasic organic acid plus a base as electrolyte. The polybasic acid may be a polyphosphonic acid, polyphosphoric and polycarboxyl acid, or polysulfonic acid and is advantageously polymeric. Polyvinyl phosphonic acid (PVPA) is a preferred electrolyte. Direct current is used. The insoluble metal oxide-organic complex formed is composed of anodic oxide combined with polyacid, which forms a protective layer on the metal of improved corrosion resistance. The metal oxide-organic complex is well-suited to bond light sensitive coatings thereto. The metal may be steel, aluminum or magnesium. The process is economical and the product novel. Sufficient base is added to give the electrolyte a pH in the range of from about 3 to about 10.

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Citation (search report)  
• [XD] US 4399021 A 19830816 - GILLICH THOMAS N [US], et al  
• [X] DE 3305354 A1 19840823 - HOECHST CO AMERICAN [US]  
• [X] US 3756826 A 19730904 - ZELLEY W

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DOCDB simple family (publication)  
**US 4578156 A 19860325**; DE 3576369 D1 19900412; EP 0184756 A2 19860618; EP 0184756 A3 19860723; EP 0184756 B1 19900307; JP S61139698 A 19860626

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