Title (en)

PRE-TREATING ALUMINUM SURFACES WITH ZIRCONIUM- AND MOLYBDENUM-CONTAINING COMPOSITIONS

Title (de)

VORBEHANDLUNG VON ALUMINIUMOBERFLÄCHEN MIT ZIRKON- UND MOLYBDÄNHALTIGEN ZUSAMMENSETZUNGEN

Title (fr)

PRÉTRAITEMENT DE SURFACES EN ALUMINIUM AVEC DES COMPOSITIONS CONTENANT DU ZIRCON ET DU MOLYBDÈNE

Publication

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Application

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Priority

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Abstract (en)

[origin: CA2996465A1] The invention relates to a method for pre-treating workpieces with a surface made of aluminum or aluminum alloys for a forming process without machining and/or for a connection process by welding or adhering with identically pre-treated or optionally otherwise pre-coated workpieces or with optionally pre-coated parts made of steel and/or galvanized steel and/or alloy galvanized steel and for a subsequent permanently corrosion-protective treatment by means of a phosphating process, a non-chromate conversion treatment, a primer application process, or by painting. The workpiece is a) pickled with an aqueous acid solution containing mineral acid in an immersion or spraying process, b) rinsed with water, and c) brought into contact with an aqueous acid solution, which is free of chromate and contains Zr as complex fluoride and Mo as molybdate in a weight ratio (calculated as Zr/Mo metal) of Zr : Mo from 15 : 1 to 3.5 : 1, using an immersion or spraying application such that after the subsequent drying process, a layer weight of 2 to 5 mg/m2 of Zr and Mo results in each case, wherein the solution contains 100 to 800 mg/l of Zr and 30 to 100 mg/l of Mo (calculated as Zr/Mo metal) and has a pH value of 2.5 to 4.

IPC 8 full level

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CPC (source: EP KR RU US)

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