

Title (en)

Method for producing a polymer coated copper-zinc alloy structure with improved adherence

Title (de)

Verfahren zur Herstellung einer polymerbeschichteten Kupfer-Zink-Legierungsstruktur mit besserer Haftung

Title (fr)

Procédé de production d'une structure en alliage de cuivre/zinc revêtu de polymère doté d'une adhérence améliorée

Publication

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Application

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Priority

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Abstract (en)

[origin: EP2468422A1] The present invention relates to a method of coating polymers on Cu-Zn alloy substrates with improved adhesion. According to first aspect of the invention the alloy is treated in a plasma reactor with a two-step procedure in order to remove the impurities from the surface and also to improve the surface oxide characteristics. The first step is carried out under vacuum with an inert gas plasma wherein organic and inorganic contamination becomes volatile and is eventually removed. The second step of the method involves treatment of the alloy with oxygen plasma for modifying and selectively oxidizing its surface. By virtue of the superior adhesion performance of maleic anhydride grafted polymers with the above treated alloy, the method of the invention further comprises the step of coating maleic anhydride grafted polymers onto the surface of so treated alloy. Satisfactory and good results were obtained when said polymer is a maleic anhydride grafted polypropylene or polyethylene.

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