

Title (en)  
SURFACE TREATMENT OF METAL SUBSTRATES

Title (de)  
OBERFLÄCHENBEHANDLUNG VON METALLSUBSTRATEN

Title (fr)  
TRAITEMENT DE SURFACE DE SUBSTRATS MÉTALLIQUES

Publication  
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Application  
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Abstract (en)  
[origin: WO2016046401A1] The present invention is directed mainly towards a process for the surface treatment of metal substrates, comprising the steps of: (i) providing a metal substrate comprising surface hydroxyl groups, (ii) bringing the metal substrate into contact with a solution of at least one organophosphorus compound so as to allow the reaction of said surface hydroxyl groups of the metal substrate with said organophosphorus compound in order to form a monomolecular layer on the surface and a second layer of at least predominantly crystalline physisorbed organophosphorus molecules, the treated substrate obtained being coated with organophosphorus compound in monomolecular form and in at least predominantly crystalline physisorbed form. It is also moreover directed towards a treated metal substrate that can be obtained by means of this process, the corresponding solution and the use thereof for the treatment of metal substrates for the purpose of improving the tribological properties thereof during the shaping thereof, in particular by stamping.

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