

Title (en)  
METHOD FOR MODIFYING THE SURFACE OF A METAL ZN-AL-MG-BASED PROTECTIVE LAYER APPLIED TO A FLAT STEEL PRODUCT,  
AND FLAT STEEL PRODUCT

Title (de)  
VERFAHREN ZUR MODIFIZIERUNG DER OBERFLÄCHE EINER AUF EINEM STAHLFLACHPRODUKT AUFGEBRACHTEN METALLISCHEN  
SCHUTZSCHICHT AUF ZN-AL-MG-BASIS UND STAHLFLACHPRODUKT

Title (fr)  
PROCÉDÉ DE MODIFICATION DE LA SURFACE D'UNE COUCHE DE PROTECTION MÉTALLIQUE À BASE DE ZN-AL-MG DÉPOSÉE SUR UN  
PRODUIT PLAT EN ACIER ET PRODUIT PLAT EN ACIER

Publication  
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Application  
**EP 20715013 A 20200325**

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• EP 2020058375 W 20200325

Abstract (en)  
[origin: WO2020193637A1] The invention relates to a method for modifying the surface of a metal Zn-Al-Mg-based protective layer applied to a flat steel product, which protective layer has magnesium-oxide- and/or aluminum-oxide-covered regions. According to the invention, in order to modify, by means of such a method, the surface of a metal Zn-Al-Mg-based protective layer applied to a flat steel product, in such a way that improved coating adhesion or adhesive bonding is achieved there, the surface of the metal protective layer is wetted with an aqueous phosphating solution, which contains at least phosphate. The wetting is carried out over a wetting duration that lasts at least until a reduction of the magnesium oxide and/or aluminum oxide proportion of the regions of the surface of the metal protective layer that are covered with magnesium oxide and/or aluminum oxide occurs. In addition, the wetting is concluded before a zinc phosphate layer forms on the regions of the surface of the metal protective layer that are covered with magnesium oxide and/or aluminum oxide.

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See references of WO 2020193637A1

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