

Title (en)

MODIFICATION OF THE COMPOSITION OF THE FLUX SOLUTION FOR HOT-DIP BATCH GALVANIZING OF STEEL PARTS

Title (de)

VERÄNDERUNG DER ZUSAMMENSETZUNG EINER FLUSSMITTELLÖSUNG FÜR STÜCKFEUERVERZINKUNG VON STAHLTEILEN

Title (fr)

MODIFICATION DE LA COMPOSITION DE LA SOLUTION DE FLUX POUR LA GALVANISATION EN LOTS PAR TREMPAGE À CHAUD DE PIÈCES D'ACIER

Publication

**EP 2430206 B1 20130703 (EN)**

Application

**EP 10711936 A 20100217**

Priority

- IT 2010000052 W 20100217
- IT AL20090002 A 20090219

Abstract (en)

[origin: WO2010095154A1] The present invention aims at contributing to the solution of potential problems arising from the presence of ZnCl<sub>2</sub> in the galvanizing shop, by means of a procedure for the preparation of surface of pre-fabricated steel pieces to be hot-dip galvanized in a Zn-Al-alloy, according to which the concentration of ZnCl<sub>2</sub> into the flux solution is maintained below the limit prescribed by the law and preferably down to zero. According to this procedure, the steel pieces, after pickling are immersed into an aqueous solution containing ZnCl<sub>2</sub>, NH<sub>4</sub>Cl and Bi<sub>2</sub>O<sub>3</sub>. Using the flux solution according to the present invention it is possible to coat in a batch galvanizing bath containing a Zn-Al-alloy, carbon steels and steels with high Si content, and/or Mn, and/or P (i.e. steels commercially known as Sandelin or Iper-sandelin steels), usually considered difficult steels for galvanizing, obtaining coatings with uniform thickness, with no surface defects and with a smooth surface without non-homogeneous areas.

IPC 8 full level

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