

ABSTRACT

ZINC DIFFUSION COATING METHOD

A method for diffusion coating a surface of a metal substrate with zinc comprises the steps of: a₁) applying a suspension, comprising a liquid and zinc and/or a zinc alloy as a diffusion source or zinc donor, onto the surface of the substrate to be coated, or a₂) applying a liquid onto the surface of the substrate to be coated and subsequently applying zinc and/or a zinc alloy as a diffusion source or zinc donor onto the liquid; and b) drying the substrate obtained in step a₁) or a₂); c) carrying out a heat treatment of the substrate obtained in step b) at a temperature between 200 and 500°C, but below the melting temperature of the diffusion source in a shielding gas atmosphere; and d) removing the mixture applied in step a₁) or a₂).

No Figure.