

Title (en)  
POWDER MIXTURE COMPOSITION FOR THERMODIFFUSION GALVANIZATION OF ARTICLES MADE FROM ALUMINIUM ALLOYS, AND  
METHOD FOR THERMODIFFUSION GALVANIZATION OF ARTICLES MADE FROM ALUMINIUM ALLOYS

Title (de)  
PULVERMISCHUNGSZUSAMMENSETZUNG ZUR DURCH THERMODIFFUSION ERFOLGENDEN GALVANISIERUNG VON ARTIKELN AUS  
ALUMINIUMLEGIERUNGEN UND VERFAHREN ZUR DURCH THERMODIFFUSION ERFOLGENDEN GALVANISIERUNG VON ARTIKELN AUS  
ALUMINIUMLEGIERUNGEN

Title (fr)  
COMPOSITION DE MÉLANGE EN POUDRE POUR LE ZINGAGE PAR THERMO-DIFFUSION D'ARTICLES EN ALLIAGES D'ALUMINIUM, ET  
PROCÉDÉ DE ZINGAGE PAR THERMO-DIFFUSION D'ARTICLES EN ALLIAGES D'ALUMINIUM

Publication  
**EP 2966191 A1 20160113 (EN)**

Application  
**EP 13874224 A 20130809**

Priority  
RU 2013000696 W 20130809

Abstract (en)  
The present invention relates to thermochemical treatment by thermal-diffusion galvanizing of articles made of aluminum alloys. The powdered mixture composition comprises powdered zinc, an inert filler such as silicon, aluminum, iron, calcium oxides with clay and sand impurities, and an activating agent composed of a mixture of components, in % by mass: sodium fluoride 12-15, lithium chloride 20-25, ammonium chloride 10-15, zinc chloride 12-14, potassium chloride to balance, with the following proportion of the composition components, in % by mass: The process comprises pretreatment of the article surface with shots having the granularity of 0.3-0.4 mm and made of austenitic or austenitic-ferritic steel, loading the articles and a saturating mixture into a container preheated to 100-120°C, loading the container into a furnace preheated to 100-120°C, treating the articles at a temperature of 420-430°C for 1 hour at a container constant rotation rate of 1-2 rpm and at a constant pressure of 1.8-2.2 atm. inside the container, cooling the furnace to 100-120 °C, removing the articles from the container, cooling the articles in water and treating them with ceramic chips together with a passivating solution in a vibration stand, the claimed composition being used as the saturating powdered mixture.

IPC 8 full level  
**C23C 10/36** (2006.01)

CPC (source: EP)  
**C23C 10/36** (2013.01)

Cited by  
CN105887005A; CN105951038A

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**EP 2966191 A1 20160113; EP 2966191 A4 20160727**; RU 2559391 C1 20150810; WO 2015020557 A1 20150212

DOCDB simple family (application)  
**EP 13874224 A 20130809**; RU 2013000696 W 20130809; RU 2014125890 A 20130809