

Title (en)
METHOD FOR THE MANUFACTURING OF PRODUCTS WITH ANODIZED HIGH GLOSS SURFACES FROM EXTRUDED PROFILES OF AL-MG-SI OR AL-MG-SI CU EXTRUSION ALLOYS

Title (de)
VERFAHREN ZUR HERSTELLUNG VON PRODUKTEN MIT ELOXIERTEN HOCHGLANZOBERFLÄCHEN AUS EXTRUDIERTEN PROFILEN VON AL-MG-SI- ODER AL-MG-SI-CU-EXTRUSIONSLEGIERUNGEN

Title (fr)
PROCÉDÉ DE FABRICATION DE PRODUITS AYANT DES SURFACES ANODISÉES EXTRÊMEMENT BRILLANTES À PARTIR DE PROFILÉS EXTRUDÉS CONSTITUÉS D'ALLIAGES D'EXTRUSION D'AL-MG-SI OU D'AL-MG-SI-CU

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Application
EP 15769522 A 20150324

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Abstract (en)
[origin: WO2015147648A1] Method for the manufacturing of products with anodized high gloss surfaces from extruded profiles of Al-Mg-Si or Al-Mg-Si-Cu, where the alloys initially are cast to extrusion billet(s), containing in wt.% Si: 0,25-1,00 Mg: 0,25-1,00 Fe: 0,00-0,15 Cu: 0,00-0,30 Mn: 0,00 -- 0,20 Cr: 0,00-0,10 Zr: 0,00 -0,10 Sc: 0,00 -0,10 Zn: 0,00-0,10 Ti: 0,00-0,05., and Including incidental impurities and balance A.L a) where the billet is homogenised at a holding temperature between 480°C and 620°C and soaked at this temperature for 0-12 hours, where after the billet is subjected to cooling from the homogenisation temperature at a rate of 150°C/h or faster, b) the billet is preheated to a temperature between 400 and 540°C and extruded preferably to a solid shape profile and cooled rapidly down to room temperature, c) optionally artificially ageing the profile, d) deforming the profile more than 10% by a cold rolling operation, whereafter e) the profile is flash annealed with a heating time of maximum two minutes to a temperature of between 450 ~ 530 °C for not more than 5 minutes and subsequently quenched, and f) optionally the profile after flash annealing is further subjected to a cold deforming operation to remove residual stresses from cooling and adjusting dimensional tolerances, and g) the profile is finally aged.

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