

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

Publication  
**EP 3129517 A1 20170215 (EN)**

Application  
**EP 15769522 A 20150324**

Priority  
• NO 20140383 A 20140327  
• NO 2015000005 W 20150324

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.

IPC 8 full level  
**C22F 1/05** (2006.01); **C22C 21/02** (2006.01); **C22C 21/08** (2006.01)

CPC (source: EP US)  
**B21B 3/00** (2013.01 - US); **B22D 17/00** (2013.01 - EP US); **B22D 21/007** (2013.01 - EP US); **B22D 27/20** (2013.01 - EP US); **C22C 21/02** (2013.01 - EP US); **C22C 21/08** (2013.01 - EP US); **C22F 1/043** (2013.01 - EP US); **C22F 1/05** (2013.01 - EP US); **B21B 2003/001** (2013.01 - US)

Cited by  
EP3350355A4

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)  
**WO 2015147648 A1 20151001**; EP 3129517 A1 20170215; EP 3129517 A4 20170927; EP 3129517 B1 20181003; US 2017009322 A1 20170112

DOCDB simple family (application)  
**NO 2015000005 W 20150324**; EP 15769522 A 20150324; US 201515124726 A 20150324