Title (en)

METHOD FOR THE MANUFACTURING OF EXTRUDED PROFILES THAT CAN BE ANODIZED WITH HIGH GLOSS SURFACES, THE PROFILES BEING EXTRUDED OF AN AGE HARDENABLE ALUMINIUM A 7XXX ALLOY THAT CAN BE RECRYSTALLIZED AFTER COLD DEFORMATION

Title (de)

VERFAHREN ZUR HERSTELLUNG VON EXTRUDIERTEN PROFILEN, DIE MIT HOCHGLÄNZENDEN OBERFLÄCHEN ANODISIERT WERDEN KÖNNEN, WÄHREND DIE PROFILE AUS AUSHÄRTBARER, NACH KALTUMFORMUNG REKRISTALLISIERBARER 7XXX-ALUMINIUMLEGIERUNG EXTRUDIERT WERDEN

Title (fr)

PROCÉDÉ DE FABRICATION DE PROFILÉS EXTRUDÉS POUVANT ÊTRE ANODISÉS COMPORTANT DES SURFACES À HAUT BRILLANT, LESDITS PROFILÉS ÉTANT EXTRUDÉS À PARTIR D'UN ALLIAGE 7XXX D'ALUMINIUM DURCISSABLE PAR VIEILLISSEMENT POUVANT ÊTRE RECRISTALLISÉ APRÈS DÉFORMATION À FROID

Publication

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Application

EP 16846935 A 20160420

Priority

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Abstract (en)

[origin: WO2017048130A1] Method for the manufacturing of extruded profiles that can be anodized with high gloss surfaces, the profiles being extruded of an age hardenable aluminium alloy that can be recrystallized after cold deformation, for example a 6xxx or 7xxx alloy, where the alloy initially is cast to extrusion billet(s), where the billets are homogenized at a holding temperature between 480°C and 620°C and soaked at this temperature for 0-12 hours, where after the billets are subjected to cooling from the homogenization temperature at a rate of 150°C/h or faster, a) the billets are preheated to a temperature between 400 and 540°C and extruded preferably to a solid shape profile and cooled rapidly down to room temperature, b) deforming the profile more than 10% by a cold rolling operation, where after c) the profile is flash annealed with a heating time of maximum two minutes to a temperature of between 400 - 530 °C and held at this temperature for not more than 5 minutes to obtain an average grain size of about 100 µm or less, and subsequently quenched, d) and the profile is finally aged.

IPC 8 full level

C22F 1/043 (2006.01); **B21C 23/00** (2006.01); **C22C 21/02** (2006.01); **C22C 21/06** (2006.01); **C22C 21/08** (2006.01); **C22C 21/10** (2006.01); **C22F 1/047** (2006.01); **C22F 1/053** (2006.01)

CPC (source: EP US)

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