

Title (en)
EXTRUDED PRODUCT OF ALLOY 6XXX SUITABLE FOR FREE-CUTTING AND WITH A LOW ROUGHNESS AFTER ANODIZING

Title (de)
EXTRUDIERTES PRODUKT AUS LEGIERUNG 6XXX GEEIGNET FÜR AUTOMATENDREHEN UND MIT EINER GERINGEN RAUHIGKEIT NACH DER ANODISIERUNG

Title (fr)
PRODUIT FILÉ EN ALLIAGE 6XXX APTE AU DÉCOLLETAGE ET PRÉSENTANT UNE FAIBLE RUGOSITÉ APRÈS ANODISATION

Publication
EP 3122912 B1 20240515 (FR)

Application
EP 15711658 A 20150320

Priority
• FR 1400703 A 20140324
• EP 2015000614 W 20150320

Abstract (en)
[origin: CA2942426A1] The invention relates to extruded products suitable for turning, made from aluminium alloy with a composition (in weight %) of: 0.4 - 0.8 Si; 0.8 - 1.2 Mg; 0.20 - 0.4 Cu; 0.05 - 0.4 Fe; Mn = 0.10; Ti < 0.15; Cr = 0.10; Bi = 0.8; Pb = 0.4; other elements < 0.05 each and < 0.15 remainder being aluminium, characterised in that the granular structure thereof is essentially recrystallised. The invention also relates to the method for the production of said products. The invention further relates to anodised turned mechanical parts obtained from extruded products according to the invention and to the production method thereof. The products of the invention are particularly suitable for the production of brake pistons and gearbox elements.

IPC 8 full level
C22C 21/08 (2006.01); **C22F 1/047** (2006.01); **C25D 11/04** (2006.01)

CPC (source: CN EP US)
C22C 21/08 (2013.01 - CN EP US); **C22F 1/002** (2013.01 - CN); **C22F 1/047** (2013.01 - CN EP US); **C25D 11/08** (2013.01 - EP); **C25D 11/10** (2013.01 - EP); **B21C 23/14** (2013.01 - US); **C25D 11/16** (2013.01 - US)

Citation (examination)
• JP 2009068097 A 20090402 - TOCALO CO LTD
• CN 1382820 A 20021204 - UNIV TSINGHUA [CN]
• JP 2011047052 A 20110310 - TOCALO CO LTD
• WO 9805436 A1 19980212 - UNIV CONNECTICUT [US]
• JP 2005272853 A 20051006 - NSK LTD
• EP 2553131 B1 20190508 - NORSK HYDRO AS [NO]
• RINDERER BARBARA ED - PRASAD A ET AL: "The Metallurgy of Homogenisation", vol. 693, 1 January 2011 (2011-01-01), pages 264 - 275, XP009519269, ISBN: 978-3-03785-209-5, Retrieved from the Internet <URL:https://doi.org/10.4028/www.scientific.net/MSF.693?nosfx=y> [retrieved on 20110701], DOI: 10.4028/WWW.SCIENTIFIC.NET/MSF.693.264
• ASM HANDBOOK COMMITTEE: "Heat Treating of Aluminum Alloys Precipitation from Solid Solution", 1 January 1991 (1991-01-01), pages 841 - 879, XP055446965, Retrieved from the Internet <URL:https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=13&ved=0ahUKEwjisLX97ITZAhVDIVAKHeMxCyUQFghjMAw&url=https://materialsdata.nist.gov/bitstream/handle/11115/192/Heat%20Treating%20of%20Aluminum%20Alloys.pdf?sequence=3&isAllowed=y&usg=AOvVaw0R-bEoKiihR4bGLsSIPhZ6> [retrieved on 20180201], DOI: 10.1361/asmhba0001205

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

DOCDB simple family (publication)
FR 3018823 A1 20150925; **FR 3018823 B1 20180105**; CA 2942426 A1 20151001; CN 106133163 A 20161116; CN 106133163 B 20190723; EP 3122912 A2 20170201; EP 3122912 B1 20240515; US 10724123 B2 20200728; US 2018202026 A1 20180719; WO 2015144303 A2 20151001; WO 2015144303 A3 20160602

DOCDB simple family (application)
FR 1400703 A 20140324; CA 2942426 A 20150320; CN 201580016463 A 20150320; EP 15711658 A 20150320; EP 2015000614 W 20150320; US 201515127414 A 20150320