Title (en)

HEAT TREATABLE ALUMINIUM ALLOY WITH IMPROVED MECHANICAL PROPERTIES AND METHOD FOR PRODUCING IT

Title (de)

WÄRMEBEHANDELBARE ALUMINIUMLEGIERUNG MIT VERBESSERTEN MECHANISCHEN EIGENSCHAFTEN UND VERFAHREN ZU IHRER HERSTELLUNG

Title (fr)

ALLIAGE D'ALUMINIUM APTE AU TRAITEMENT THERMIQUE À PROPRIÉTÉS MÉCANIQUES AMÉLIORÉES ET PROCÉDÉ POUR SA PRODUCTION

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Application

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Abstract (en)

[origin: WO2023041557A1] The present invention relates to a method for processing extrusion billets or billets produced from an aluminium 6xxx alloy to finished or semi-finished products such as profiles or blanks, comprising a) Homogenizing the extrusion ingot or billetb) soft annealing operation followed by preheating and extrusion of the billet to form aprofile or blank, whereafter the profile or blank is exposed to a solutionising operation,where the 6xxx alloy contains Mg in the range 0.85-1.15 wt % and Si in the range0.60-0.75 wt%, Fe in the range 0-0.5 wt%, Cu in the range 0-0.30 wt%, Cr in therange 0-0.10 wt%, Mn in the range 0-0.20 wt%, Zn in the range 0-0.5 wt%, Ti in therange 0-0.15 wt%, V in the range 0-0.15 wt% and other elements not specified belowin the range 0-0.05 wt%, with balance Al, the Mg/Sieff ratio of the alloy being above1.6, where Sieff = Si - ⅓ wt%(Fe+Cr+Mn+Zr).

IPC 8 full level

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