

Title (en)

6XXX ALLOY HIGH STRENGTH EXTRUDED PRODUCTS WITH HIGH PROCESSABILITY

Title (de)

6XXX-LEGIERUNG EXTRUDIERTER PRODUKTE MIT HOHER STÄRKE UND HOHER VERFAHRENSFÄHIGKEIT

Title (fr)

PRODUITS EXTRUDÉS EN ALLIAGE 6XXX À HAUTE RÉSISTANCE À HAUTE APTITUDE A LA TRANSFORMATION

Publication

**EP 4095278 A1 20221130 (EN)**

Application

**EP 21175802 A 20210525**

Priority

EP 21175802 A 20210525

Abstract (en)

The invention concerns an improved alloy to obtain AA6xxx alloy extrusions with high strength, typically having an ultimate tensile strength higher than 390 MPa, and high processability, in particular with a high productivity, as well as high surface quality and high corrosion resistance. In particular, the alloy of the invention contains, in wt.%, Si 0.6 - 0.9, Mg 0.55- 0.76, Cu 0.65 - 0.9, Mn 0.4 - 0.7, Cr 0.05 - 0.2, Zr 0.10 - 0.19, Fe 0.05 - 0.5, Zn  $\leq$  1.0, V  $\leq$  0.10, Ti  $\leq$  0.10, other elements < 0.05 each and < 0.15 total, rest aluminium. The extruded profiles of the invention are advantageously used as automotive components such as crash boxes, a bumpers, a side impact beams or side sills.

IPC 8 full level

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CPC (source: EP)

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Citation (applicant)

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Citation (search report)

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