

Title (en)
HIGH-STRENGTH 6XXX EXTRUSION ALLOYS

Title (de)
HOCHFESTE 6XXX-STRANGPRESSLEGIERUNGEN

Title (fr)
ALLIAGES D'EXTRUSION DE SÉRIE 6XXX À HAUTE RÉSISTANCE

Publication
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Application
EP 20904763 A 20201222

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Abstract (en)
[origin: WO2021133792A1] Some embodiments of the present disclosure relate to a 6xxx aluminum alloy having: silicon (Si) in an amount of 0.70 wt% to 1.1 wt % based on a total weight of the 6xxx aluminum alloy; magnesium (Mg) in an amount of 0.75 wt% to 1.15 wt% based on the total weight of the 6xxx aluminum alloy; a weight ratio of Mg to Si in the 6xxx aluminum alloy from 0.68:1.0 to 1.65:1.0; and copper (Cu) in an amount of 0.30 wt% to 0.8 wt% based on the total weight of the 6xxx aluminum alloy. Some embodiments of the present disclosure further relate to a method including steps of: casting an exemplary 6xxx aluminum alloy, homogenizing the exemplary 6xxx aluminum alloy; extruding the exemplary 6xxx aluminum alloy; and aging the 6xxx aluminum alloy.

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