Title (en)
WORK HARDENING ALUMINIUM ALLOY ON AN AL-MG-SI-BASIS

Title (de)
AUSHÄRTBARE ALUMINIUMLEGIERUNG AUF AL-MG-SI-BASIS

Title (fr)
ALLIAGE EN ALUMINIUM DURCISSABLE A BASE DE AL-MG-SI

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Application
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Abstract (en)
[origin: CA3011631A1] The invention relates to a hardenable AlMgSi-based aluminum alloy. In order to obtain a recycling-friendly, storage-stable and particularly thermosetting aluminum alloy, it is proposed that said aluminum alloy comprises 0.6 to 1 wt.% of magnesium (Mg), 0.2 to 0.7 wt.% of silicon (Si), 0.16 to 0.7 wt.% of iron (Fe), 0.05 to 0.4 wt.% of copper (Cu), a maximum 0.15 wt.% of manganese (Mn), a maximum of 0.35 wt.% of chromium (Cr), a maximum of 0.2 wt.% of zirconium (Zr), a maximum of 0.25 wt.% of zinc (Zn), a maximum of 0.15 wt.% of titanium (Ti), 0.005 to 0.075 wt.% of tin (Sn) and/or indium (In), and aluminum as the remainder as well as impurities which are unavoidable for production reasons, wherein the ratio of the weight percentages of Si/Fe is less than 2.5 and the content of Si is determined according to the equation wt.% Si = A + [0.3 * (wt.% Fe)], the parameter A being the range from 0.17 to 0.4 wt.%.

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