

Title (en)

AL-MG-SI ALLOY EXHIBITING SUPERIOR COMBINATION OF STRENGTH AND ENERGY ABSORPTION

Title (de)

AL-MG-SI-LEGIERUNG MIT ÜBERRAGENDER KOMBINATION VON FESTIGKEIT UND ENERGIEABSORPTION

Title (fr)

ALLIAGE AL-MG-SI PRÉSENTANT UNE COMBINAISON SUPÉRIEURE DE RÉSISTANCE ET D'ABSORPTION D'ÉNERGIE

Publication

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Application

EP 20183958 A 20200703

Priority

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Abstract (en)

The present invention relates to an aluminum 6XXX (Al-Mg-Si) alloy extrusion component exhibiting a superior combination of strength and energy absorption for crash management applications in automotive markets and for other applications where energy absorption is a critical property. These components provide yield strengths greater than 260 MPa, and preferably greater than 280 MPa, while simultaneously providing energy absorption per unit cross-sectional area of greater than 20 kJ/mm² using the defined crush testing parameters in the present specification.

IPC 8 full level

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C22F 1/043 (2013.01 - CN); **C22F 1/047** (2013.01 - CN); **C22F 1/05** (2013.01 - EP US)

Citation (search report)

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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

Designated extension state (EPC)

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DOCDB simple family (publication)

EP 3763844 A1 20210113; EP 3763844 B1 20230607; EP 3763844 C0 20230607; CN 112210699 A 20210112; EP 4249142 A2 20230927;
EP 4249142 A3 20231108; US 2021010109 A1 20210114

DOCDB simple family (application)

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