Title (en)

IMPROVED ALUMINUM ALLOYS CONTAINING MAGNESIUM, SILICON, MANGANESE, IRON, AND COPPER, AND METHODS FOR PRODUCING THE SAME

Title (de)

VERBESSERTE ALUMINIUMLEGIERUNGEN MIT MAGNESIUM, SILIZIUM, MANGAN, EISEN UND KUPFER SOWIE VERFAHREN ZUR HERSTELLUNG DAVON

Title (fr)

ALLIAGES D'ALUMINIUM AMÉLIORÉS CONTENANT DU MAGNÉSIUM, DU SILICIUM, DU MANGANÈSE, DU FER ET DU CUIVRE, ET PROCÉDÉS DE PRODUCTION DE CEUX-CI

Publication

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Application

EP 13757630 A 20130221

Priority

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- US 2013027024 W 20130221

Abstract (en)

[origin: WO2013133978A1] New HT aluminum alloy bodies and methods of producing the same are disclosed. The new HT aluminum alloy bodies contain 0.20 - 2.0 wt. % Mg, 0.10 - 1.5 wt. % Si, 0.01 - 1.0 wt. % Fe, and, 0.10 - 1.0 wt. % Cu, wherein, when Si+Cu < 0.60 wt. %, then Fe+Mn <=1.5 wt. %, optionally with up to 1.5 wt. % Mn, optionally with up to 1.5 wt. % Zn, wherein at least one of the Mg, the Si, the Fe, the Cu, the optional Mn, and the optional Zn is the predominate alloying element of the aluminum alloy sheet other than the aluminum, and may be produced by preparing the aluminum alloy body for post-solutionizing cold work, cold working by at least 25%, and then thermally treating. The new HT aluminum alloy bodies may realize improved strength and other properties.

IPC 8 full level

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Cited by

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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

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