

Title (en)
METHOD OF FABRICATION OF A WROUGHT PRODUCT OF AN ALLOY OF ALUMINIUM- MAGNESIUM-LITHIUM, WROUGHT PRODUCT AND USE OF THE PRODUCT

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES KNETPRODUKTES AUS EINER ALUMINIUM-MAGNESIUM-LITHIUM LEGIERUNG, KNETPRODUKT UND VERVERENDUNG DES KNETPRODUKTES

Title (fr)
PROCÉDÉ DE FABRICATION D'UN PRODUIT CORROYÉ EN ALLIAGE ALUMINIUM- MAGNÉSIUM-LITHIUM, PRODUIT CORROYÉ ET UTILISATION DU PRODUIT CORROYÉ

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Abstract (en)
[origin: WO2016051060A1] The invention relates to a wrought product made of aluminum alloy having the composition, in percentage by weight, of Mg: 4.0-5.0; Li: 1.0-1.8; Mn: 0.3-0.5; Zr: 0.05-0.15; Ag: ≤ 0.5; Fe: ≤ 0.1; Ti: <0.15; Si: ≤ 0.05; other elements ≤0.05 each and ≤0.15 in association; the remainder is aluminum. The invention further relates to a method for manufacturing such a wrought product, in which an unprocessed form of aluminum alloy is poured, which has the composition, in percentage by weight, of Mg: 4.0-5.0; Li: 1.0-1.8; Mn: 0.3-0.5; Zr: 0.05-0.15; Ag: ≤ 0.5; Fe: ≤ 0.1; Ti: <0.15; Si: ≤ 0.05; other elements ≤0.05 each and ≤0.15 in association; the remainder is aluminum. Optionally, said unprocessed form is homogenized; said unprocessed form is hot-worked to obtain a hot-worked product; optionally, said hot-worked product is placed in a solution at a temperature of 360°C to 460°C, preferably of 380°C to 420°C, for 15 minutes to 8 hours; said hot-worked product is quenched; optionally, said hot-worked and quenched product is straightened, optionally, the worked product is cold-worked under controlled conditions to obtain permanent cold working of 1 to 10 %, preferably 2 to 6%, most preferably 3 to 5%; said worked and quenched product is tempered. The invention also relates to the use of said wrought product to produce aircraft structural elements.

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