

Title (en)  
HIGH STRENGTH 7XXX SERIES ALUMINUM ALLOY PRODUCTS AND METHODS OF MAKING SUCH PRODUCTS

Title (de)  
HOCHFESTE ALUMINIUMLEGIERUNGSPRODUKTE DER 7XXX-SERIE UND VERFAHREN ZUR HERSTELLUNG SOLCHER PRODUKTE

Title (fr)  
PRODUITS EN ALLIAGE D'ALUMINIUM DE SÉRIE 7XXX ULTRA ÉPAIS À HAUTE RÉSISTANCE ET PROCÉDÉS DE FABRICATION DE TELS PRODUITS

Publication  
**EP 3101149 A1 20161207 (EN)**

Application  
**EP 16172536 A 20160601**

Priority  
US 201514727341 A 20150601

Abstract (en)  
The present invention is directed to a thick plate high strength 7xxx aluminum alloy product comprising 8.0 to 8.4 wt.% Zn, 1.5 to 2.0 wt.% Mg, 1.1 to 1.5 wt.% Cu, and 0.05 to 0.15 wt.% Zr, 4.0 to 5.3 of Zn/Mg weight percentage ratio, 0.14 to 0.19 of Cu/Zn weight percentage ratio, and 10.7 to 11.6 wt.% of Cu+Mg+Zn. This alloy can be fabricated to produce 3-10 inch thick plate, extrusion or forging products, and is especially suitable for aerospace structural components, especially large commercial airplane wing structure applications. The product provides high strength, high damage tolerance performance as well as better corrosion resistance performance suitable for aerospace application.

IPC 8 full level  
**C22F 1/053** (2006.01); **C22C 21/10** (2006.01)

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Citation (applicant)  
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DOCDB simple family (publication)  
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**EP 16172536 A 20160601**; BR 102016012355 A 20160531; CA 2928685 A 20160503; CN 201610375224 A 20160531; US 201514727341 A 20150601