

Title (en)  
6XXX ALUMINUM ALLOYS

Title (de)  
6XXX-ALUMINIUMLEGIERUNGEN

Title (fr)  
ALLIAGES D'ALUMINIUM 6XXX

Publication  
**EP 3891315 A4 20221026 (EN)**

Application  
**EP 19892594 A 20191203**

Priority  
• US 201862775746 P 20181205  
• US 2019064148 W 20191203

Abstract (en)  
[origin: WO2020117748A1] New 6xxx aluminum alloys having an improved combination of properties are disclosed. The new 6xxx aluminum alloy generally include 0.65 - 0.85 wt. % Si, 0.40 - 0.59 wt. % Mg, wherein (wt. % Mg) / (wt. % Si) is from 0.47 to 0.90, 0.05 - 0.35 wt. % Fe, 0.04 - 0.13 wt. % Mn, 0 - 0.20 wt. % Cu, 0 - 0.15 wt. % Cr, 0 - 0.15 wt. % Zr, 0 - 0.15 wt. % Ti, 0 - 0.10 wt. % Zn, 0 - 0.05 wt. % V, the balance being aluminum and impurities.

IPC 8 full level  
**C21D 8/02** (2006.01); **C21D 9/46** (2006.01); **C22C 21/02** (2006.01); **C22C 21/04** (2006.01); **C22F 1/043** (2006.01)

CPC (source: EP KR US)  
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Citation (search report)  
• [XYI] WO 2018011245 A1 20180118 - CONSTELLIUM NEUF-BRISACH [FR], et al  
• [XYI] US 2017121801 A1 20170504 - HASHIMOTO TAKAHIRO [JP], et al  
• [XYI] JP 2004027253 A 20040129 - FURUKAWA SKY KK, et al  
• [Y] JP 3590685 B2 20041117  
• [Y] US 2016201158 A1 20160714 - KAMAT RAJEEV G [US], et al  
• [A] OLAF ENGLER ET AL: "Texture control by thermomechanical processing of AA6xxx Al-Mg-Si sheet alloys for automotive applications—a review", MATERIALS SCIENCE, vol. 336, no. 1-2, 1 October 2002 (2002-10-01), AMSTERDAM, NL, pages 249 - 262, XP055496093, ISSN: 0921-5093, DOI: 10.1016/S0921-5093(01)01968-2  
• See references of WO 2020117748A1

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