

Title (en)
HIGH STRENGTH ALUMINUM ALLOYS

Title (de)
HOCHFESTE ALUMINIUMLEGIERUNGEN

Title (fr)
ALLIAGES D'ALUMINIUM À HAUTE RÉSISTANCE

Publication
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Application
EP 15760680 A 20150311

Priority

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Abstract (en)
[origin: WO2015138551A1] The invention is a class of new 6XXX series high strength aluminum alloys with a fine grain structure and methods of manufacture and extrusion. Aluminum alloys of the invention comprise from about 0.90 percent to about 1.2 percent by weight silicon, up to about 0.5 percent by weight iron, from about 0.05 percent to about 0.3 percent by weight copper, up to about 0.75 percent by weight manganese, from about 0.70 percent to about 1.0 percent by weight magnesium, up to about 0.25 percent by weight chromium, up to about 0.05 percent by weight zinc, up to about 0.1 percent by weight titanium, with the balance consisting essentially of aluminum. The alloys are cast and homogenized, then extruded, quenched and artificially aged to produce a fine grain crystallization in the final aluminum product exhibiting superior yield strength and elongation properties.

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C22C 21/00 (2006.01)

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