

Title (en)  
ALUMINIUM ALLOYS CONTAINING LITHIUM, MAGNESIUM AND COPPER

Publication  
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Application  
**EP 85900122 A 19841122**

Priority  
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Abstract (en)  
[origin: WO8502416A1] Aluminium alloys containing essentially additions of Li, Mg and Cu, and optionally minor additions of Cr, Zr, Ti, Mn which have high specific mechanical characteristics, a low density and a good corrosion resistance. The alloys according to the invention contain in percentage by weight: 1.8 to 3.5 of Li; 1.4 to 6.0 Mg; 0.2 to 1.6 of Cu with Mg-Cu  $\geq$  1.5; Cr up to 0.3; Mn up to 1; Zr up to 0.2; Ti up to 0.1 and/or Be up to 0.02, Fe up to 0.20; Si up to 0.12; Zn up to 0.35. The homogenizing and soluting treatments must be sufficiently carried out to dissolve the quaternary intermetal phases (Al, Li, Mg, Cu) of a grain size larger than 5  $\mu$  m. These alloys present a mechanical characteristics/density compromise higher than that of known Al Cu Mg alloys and those containing Li.

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