

Title (en)  
Al-Mg-Si based aluminum alloy extrusion

Title (de)  
Stranggepresste Al-Mg-Si Legierung auf Aluminium Basis

Title (fr)  
Extrusion d'un alliage de Al-Mg-Si à base d'aluminium

Publication  
**EP 0997547 A1 20000503 (EN)**

Application  
**EP 99120845 A 19991026**

Priority  
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• JP 5636899 A 19990304

Abstract (en)  
An Al-Mg-Si based aluminum alloy extrusion having large strength, absorbable impact energy and resistance against compressing cracking, wherein the average size of Mg<sub>2</sub>Si precipitation in the  $\bar{A}1\ 0\ 0\bar{U}$  and  $\bar{A}0\ 1\ 0\bar{U}$  directions of the (1 0 0) plane inside grains is 20 nm or more, the distribution density of the Mg<sub>2</sub>Si precipitation in the  $\bar{A}0\ 0\ 1\bar{U}$  direction of the (1 0 0) plane is 100 or more per  $\mu m^2$ , and the size of precipitations on grain boundaries is 1000 nm or less. Alternatively, in the Al-Mg-Si based aluminum alloy extrusion, a tensile strength obtained from a tensile test performed at a strain rate of 1000 per second is from 150 to 400 N/mm<sup>2</sup> (both inclusive).

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• [X] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 05 30 June 1995 (1995-06-30)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 1995, no. 04 31 May 1995 (1995-05-31)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 01 31 January 1997 (1997-01-31)  
• [X] PATENT ABSTRACTS OF JAPAN vol. 1997, no. 03 31 March 1997 (1997-03-31)  
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