

Title (en)

METHOD FOR PRODUCING AL-MG-SI ALLOY EXCELLENT IN BAKE-HARDENABILITY AND HEMMABILITY

Title (de)

VERFAHREN ZUR HERSTELLUNG VON AL-MG-SI-LEGIERUNG MIT HERVORRAGENDER BAKE-HARDENABILITY UND FALZBARKEIT

Title (fr)

PROCEDE DE PRODUCTION D'UN ALLIAGE AL-MG-SI EXCELLENT EN MATIERE DE TREMPABILITE ET D'APTITUDE A OURLER

Publication

**EP 1702995 A1 20060920 (EN)**

Application

**EP 04806942 A 20041213**

Priority

- JP 2004018581 W 20041213
- JP 2003413885 A 20031211

Abstract (en)

[PROBLEMS] To provide a method for producing an aluminum alloy sheet excellent in bake-hardenability and hemmability at a low cost by the employment of a very short production process. [MEANS FOR SOLVING PROBLEMS] A method for producing an aluminum alloy sheet, which comprises providing an aluminum alloy melt having a chemical composition, in wt%, that Mg: 0.30 to 1.00 %, Si: 0.30 to 1.20 %, Fe: 0.05 to 0.50 %, Mn: 0.05 to 0.50 %, Ti: 0.005 to 0.10 %, optionally further one or more of Cu: 0.05 to 0.70 % and Zr: 0.05 to 0.40 %, and the balance: Al and inevitable impurities, casting the alloy melt into a slab having a thickness of 5 to 15 mm by the twin belt casting method with a cooling speed at 1/4 of the thickness of the slab of 40 to 150 °C/s, winding up a coil, subjecting the coil to a homogenizing treatment, cooling the resultant coil to a temperature of 250 °C or lower with a cooling speed of 500 °C/hr or more, followed by cold rolling, and then subjecting the resulting product to a solution treatment.

IPC 8 full level

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CPC (source: EP KR US)

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Citation (search report)

See references of WO 2005056859A1

Cited by

WO2018185425A1; FR3065013A1; EP2518171A4; US10294553B2; WO2016037922A1; US11649536B2; EP3839085A1; WO2021122621A1

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