

Title (en)

BAKE-HARDENABLE ALUMINIUM ALLOY SHEETS AND PROCESS FOR MANUFACTURING SAME

Publication

**EP 0121620 B1 19860625 (EN)**

Application

**EP 83302017 A 19830411**

Priority

EP 83302017 A 19830411

Abstract (en)

[origin: EP0121620A1] A bake-hardenable aluminium alloy sheet for can bodies, ends and/or tabs, containing 0.05 to 0.5% of Cu, 0.5 to 2.5% of Mg and 0.5 to 2.0% of Mn and having an average crystal grain width less than 25 microns after cold rolling. There is also disclosed a process for producing such a bake-hardenable aluminium alloy sheet, which comprises: smelting and casting an aluminium alloy containing 0.05 to 0.5% of Cu, 0.5 to 2.5% of Mg and 0.5 to 2% of Mn; hot rolling the resulting ingot after a soaking treatment at a temperature higher than 500 DEG C; heating the hot-rolled alloy or cold rolled alloy after hot rolling to a temperature in the range of 400 to 600 DEG C at a heating speed higher than 100 DEG C/min immediately after the heating or after heat retention for a time period shorter than 10 minutes, cooling the alloy at a cooling speed higher than 100 DEG C/hr while maintaining in solid solution the alloy elements which contribute to the bake-hardening effect; and cold-rolling said alloy at a reduction rate greater than 10%.

IPC 1-7

**C22C 21/06**

IPC 8 full level

**C22C 21/06** (2006.01)

CPC (source: EP)

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Cited by

US5362341A; EP0154702A3; US5362340A; FR2564962A1; EP0485949A1; US5192378A; EP0666330A3; EP0504077A1; CN105039878A; US10022773B2

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