

Title (en)

HIGH STRENGTH ALUMINUM ALLOY FIN STOCK FOR HEAT EXCHANGER

Title (de)

AUSGANGSMATERIAL FÜR RIPPEN AUS HOCHFESTER ALUMINIUMLEGIERUNG FÜR WÄRMETAUSCHER

Title (fr)

MATERIEL DE BASE POUR AILETTES EN ALLIAGE D'ALUMINIUM HAUTE RÉSISTANCE, POUR ÉCHANGEUR DE CHALEUR

Publication

**EP 3030685 B1 20200219 (EN)**

Application

**EP 14752757 A 20140807**

Priority

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- US 2014050086 W 20140807

Abstract (en)

[origin: US2015041027A1] The present invention provides an aluminum alloy fin stock material with higher strength, and improved sag resistance for use in heat exchangers, such as automotive heat exchangers. The aluminum alloy fin stock material is produced from an aluminum alloy comprising about 0.8-1.4 wt % Si, 0.4-0.8 wt % Fe, 0.05-0.4 wt % Cu, 1.2-1.7 wt % Mn and 1.20-2.3 wt % Zn, with the remainder as Al. The aluminum alloy fin stock material is made by a process comprising direct chill casting the aluminum alloy into an ingot, preheating the ingot, hot rolling the preheated ingot, cold rolling the ingot and inter-annealing at a temperature of 275-400° C. After inter-annealing, the aluminum alloy fin stock material is a cold rolled in a final cold rolling step to achieve % cold work (% CW) of 20-35%.

IPC 8 full level

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CPC (source: EP US)

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