

Title (en)  
ALUMINUM ALLOY FOR HEAT EXCHANGER FINS

Title (de)  
ALUMINIUMLEGIERUNG FÜR WÄRMETAUSCHERRIPPEN

Title (fr)  
ALLIAGE D'ALUMINIUM POUR AILETTES D'ÉCHANGEUR DE CHALEUR

Publication  
**EP 3847289 B1 20240501 (EN)**

Application  
**EP 19769682 A 20190903**

Priority  
• US 201862727806 P 20180906  
• US 2019049324 W 20190903

Abstract (en)  
[origin: US2020080172A1] An aluminum alloy fin stock material comprising about 0.9-1.4 wt. % Si, 0.3-0.6 wt. % Fe, 0.20-0.60 wt. % Cu, 1.0-1.7 wt. % Mn, 0.01-0.25 wt. % Mg, 0.01-3.0 wt. % Zn, up to 0.10 wt. % Ti, with remainder Al and impurities at ≤0.15 wt. %. The aluminum alloy fin stock material is produced by a process including the steps of direct chill casting an ingot, hot rolling the ingot after the direct chill casting, cold rolling the aluminum alloy to an intermediate thickness, inter-annealing the aluminum alloy cold rolled to an intermediate thickness at a temperature between 200 and 400° C., and cold rolling the material after inter-annealing to achieve % cold work (% CW) of 20 to 40%. The aluminum alloy fin stock material possesses an improved combination of pre- and/or post-braze strength, thermal conductivity, sag resistance and/or corrosion potential.

IPC 8 full level  
**C22C 21/02** (2006.01); **C22C 21/10** (2006.01); **C22F 1/043** (2006.01); **C22F 1/053** (2006.01)

CPC (source: EP US)  
**C22C 21/00** (2013.01 - EP); **C22C 21/02** (2013.01 - EP US); **C22C 21/10** (2013.01 - EP); **C22F 1/043** (2013.01 - US); **C22F 1/053** (2013.01 - EP); **F28F 21/084** (2013.01 - US)

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