

Title (en)

LITHOGRAPHIC SHEET MANUFACTURING WITH HIGH COLD ROLL PASS REDUCTION

Title (de)

LITHO BANDFERTIGUNG MIT HOHER KALTWALZSTICHABNAHME

Title (fr)

FABRICATION DE BANDE LITHOGRAPHIQUE AVEC UNE HAUTE RÉDUCTION PAR PASSE DE LAMINAGE A FROID

Publication

EP 3445887 A1 20190227 (DE)

Application

EP 17717202 A 20170419

Priority

- EP 16166182 A 20160420
- EP 2017059261 W 20170419

Abstract (en)

[origin: WO2017182506A1] The invention relates to a method for producing an aluminum strip for lithographic printing plate carriers made of an aluminum alloy, wherein the aluminum alloy has the following alloy components in wt. %: $0.05\% \leq \text{Si} \leq 0.25\%$, $0.2\% \leq \text{Fe} \leq 1\%$, Cu max. 400 ppm, $\text{Mn} \leq 0.30\%$, $0.10\% \leq \text{Mg} \leq 0.50\%$, $\text{Cr} \leq 100$ ppm, $\text{Zn} \leq 500$ ppm, $\text{Ti} < 0.030\%$, residual Al, and maximally 0.03% of individual unavoidable impurities, in sum maximally 0.15%, said method having at least the following steps: - casting a rolling ingot from an aluminum alloy, - homogenizing the rolling ingot, - hot-rolling the rolling ingot to a final hot strip thickness, and - cold-rolling the hot strip to a final thickness, wherein the final thickness ranges between 0.1 mm and 0.5 mm after the cold-rolling process. The aim of the invention is to provide a method for producing an aluminum strip for lithographic printing plate carriers in order to produce aluminum strips for lithographic printing plate carriers while simultaneously allowing a reduction of costs for producing the printing plate carriers. This is achieved in that during the cold-rolling process of the hot strip, the product of the relative final thicknesses of the aluminum strip after the first and after the second cold-rolling pass of the aluminum strip is 15% to 24%.

IPC 8 full level

C22F 1/04 (2006.01); **B41N 1/08** (2006.01); **C22C 21/00** (2006.01)

CPC (source: EP US)

B41C 1/1075 (2013.01 - US); **B41N 1/083** (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **B21B 2003/001** (2013.01 - US)

Citation (search report)

See references of WO 2017182506A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017182506 A1 20171026; BR 112018070957 A2 20190129; BR 112018070957 B1 20220830; CN 109072389 A 20181221; CN 109072389 B 20200519; EP 3445887 A1 20190227; EP 3445887 B1 20190911; ES 2748106 T3 20200313; JP 2019518606 A 20190704; JP 6629992 B2 20200115; US 10696040 B2 20200630; US 2019047279 A1 20190214

DOCDB simple family (application)

EP 2017059261 W 20170419; BR 112018070957 A 20170419; CN 201780024753 A 20170419; EP 17717202 A 20170419; ES 17717202 T 20170419; JP 2018554528 A 20170419; US 201816165424 A 20181019