

Title (en)  
ALUMINIUM STRIP FOR LITHOGRAPHIC PRESSURE PLATE CARRIERS AND ITS MANUFACTURE

Title (de)  
ALUMINIUMBAND FÜR LITHOGRAFISCHE DRUCKPLATTENTRÄGER UND DESSEN HERSTELLUNG

Title (fr)  
BANDE D'ALUMINIUM POUR SUPPORTS DE PLAQUES D'IMPRESSION LITHOGRAPHIQUES ET SA FABRICATION

Publication  
**EP 2220262 A1 20100825 (DE)**

Application  
**EP 08853549 A 20081124**

Priority

- EP 2008066086 W 20081124
- EP 07023245 A 20071130
- EP 08853549 A 20081124

Abstract (en)  
[origin: EP2067871A1] The strip is produced from rolled ingots. It is hot-rolled after optional homogenization to a thickness of 2-7 mm, to reach a final thickness of 0.15-0.5 mm. The composition expressed as percentages by weight is as follows. Fe 0.3-0.4, Mg 0.2-1.0, Si 0.05-0.25, Mn up to 0.1, optionally up to 0.05 and Cu up to 0.04. The rest is aluminum with inevitable impurities. These are present individually to a maximum of 0.05% and collectively to a maximum of 0.15%. During cold rolling, intermediate annealing is carried out at a thickness of 1.5-0.5 mm. The strip is cold-rolled to the final thickness. It is coiled in the hard-rolled state, for further processing to make the lithographic printing plate substrate. Further variant compositions are proposed, in accordance with the foregoing principles. Hot rolling takes place at 250[deg] C-550[deg] C, the hot firing temperature being 280[deg] C-450[deg] C. The tested flexural fatigue resistance, transverse to the rolling direction, is at least 1850 cycles. The longitudinal tensile strength is up to 200 MPa in the hard-rolled state. Following annealing, the tensile strength is 145 MPa in either the longitudinal or transverse direction. The printing plate sheet so produced, is also claimed. An independent claim is included for the corresponding aluminum strip.

IPC 8 full level  
**C22F 1/04** (2006.01); **B41N 1/08** (2006.01); **C22C 21/00** (2006.01); **C22C 21/06** (2006.01); **C22F 1/047** (2006.01)

CPC (source: EP US)  
**B41N 1/083** (2013.01 - EP US); **C22C 21/00** (2013.01 - EP US); **C22C 21/06** (2013.01 - EP US); **C22C 21/08** (2013.01 - EP US); **C22F 1/04** (2013.01 - EP US); **C22F 1/047** (2013.01 - EP US); **Y10T 428/12431** (2015.01 - EP US)

Citation (search report)  
See references of WO 2009068502A1

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

Designated extension state (EPC)  
AL BA MK RS

DOCDB simple family (publication)  
**EP 2067871 A1 20090610**; **EP 2067871 B1 20130220**; **EP 2067871 B2 20221019**; BR PI0819596 A2 20200825; BR PI0819596 B1 20210302; BR PI0819596 B8 20230110; CN 101883876 A 20101110; DE 202008018332 U1 20130207; EP 2220262 A1 20100825; EP 2220262 B1 20140108; ES 2407655 T3 20130613; ES 2407655 T5 20230223; ES 2456269 T3 20140421; JP 2011505493 A 20110224; JP 5319693 B2 20131016; SI 2067871 T1 20130628; SI 2067871 T2 20230131; US 11326232 B2 20220510; US 2017253952 A1 20170907; WO 2009068502 A1 20090604

DOCDB simple family (application)  
**EP 07023245 A 20071130**; BR PI0819596 A 20081124; CN 200880118588 A 20081124; DE 202008018332 U 20081124; EP 08853549 A 20081124; EP 2008066086 W 20081124; ES 07023245 T 20071130; ES 08853549 T 20081124; JP 2010535350 A 20081124; SI 200731221 T 20071130; US 201715494285 A 20170421