

Title (en)
PROCESS FOR A TWO-STEP HYDROPHILIZING AFTERTREATMENT OF ALUMINIUM OXIDE LAYERS WITH AQUEOUS SOLUTIONS, AND THEIR USE IN THE PRODUCTION OF SUPPORTS FOR OFF-SET PRINTING PLATES

Publication
EP 0154200 B1 19870527 (DE)

Application
EP 85101401 A 19850209

Priority
DE 3406101 A 19840221

Abstract (en)
[origin: US4689272A] The process for manufacturing materials, in the form of sheets, foils or webs, comprised of chemically, mechanically and/or electrochemically roughened and anodically oxidized aluminum or an aluminum alloy, which process is performed with two hydrophilizing post-treatment steps. In post-treatment step (a) a supported aluminum oxide layer is treated with an aqueous alkali metal silicate solution which optionally contains alkaline earth metal ions, and in step (b) the aluminum oxide layer is separately treated with an aqueous solution containing at least one organic polymer comprised of vinylphosphonic acid and/or vinylmethylphosphonic acid monomers, such as polyvinylphosphonic acid. Treatment of the aluminum oxide layer is accomplished by means of immersion and/or electrochemically. Materials prepared by this process are particularly useful as supports for offset printing plates, showing an improved resistance to alkali and a reduced tendency to adsorb dyestuff.

IPC 1-7
C25D 11/24; **C25D 11/08**; **C25F 3/04**; **B41N 1/08**; **B41N 3/00**

IPC 8 full level
B41N 1/08 (2006.01); **B41N 3/00** (2006.01); **B41N 3/03** (2006.01); **C25D 11/08** (2006.01); **C25D 11/20** (2006.01); **C25D 11/24** (2006.01); **C25F 3/04** (2006.01); **G03F 7/00** (2006.01)

CPC (source: EP US)
B41N 3/038 (2013.01 - EP US); **C25D 11/20** (2013.01 - EP US); **C25D 11/24** (2013.01 - EP US); **Y10T 428/31667** (2015.04 - EP US)

Cited by
EP0626273A1; EP0904954A3; EP0497351A1; EP0537633A1; US5314787A; EP0774692A3; EP0503602A1; US5230988A; EP0289844A3; WO2006021446A1

Designated contracting state (EPC)
DE FR GB IT NL

DOCDB simple family (publication)
EP 0154200 A1 19850911; **EP 0154200 B1 19870527**; BR 8500701 A 19851008; CA 1236045 A 19880503; CA 1239612 A 19880726; DE 3406101 A1 19850822; DE 3560202 D1 19870702; JP S60194096 A 19851002; US 4689272 A 19870825; ZA 851216 B 19851030

DOCDB simple family (application)
EP 85101401 A 19850209; BR 8500701 A 19850214; CA 474617 A 19850219; CA 474618 A 19850219; DE 3406101 A 19840221; DE 3560202 T 19850209; JP 3168585 A 19850221; US 70225785 A 19850215; ZA 851216 A 19850218