

Title (en)

PLATE, FOIL OR WEB-LIKE MATERIALS MADE OF MECHANICALLY AND ELECTROCHEMICALLY GRAINED ALUMINIUM, PROCESS FOR THEIR MANUFACTURE AND THEIR USE AS SUPPORTS FOR LITHOGRAPHIC PRINTING PLATES

Publication

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Application

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Priority

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Abstract (en)

[origin: US4655136A] Disclosed is a sheet, foil or strip material comprising aluminum or an alloy thereof, which is first mechanically and then electrochemically roughened on one or both surfaces to produce the following parameters: (a) from about 60 to 90% of the surface comprise a basic structure, in which the arithmetic mean of the distribution of diameters Da1 of the pits is in the range from about 1 to 5 microns, (b) from about 10 to 40% of the surface comprise a superimposed structure formed of elevations having an average base F from about 100 to 1,500 microns², in which the arithmetic mean of the distribution of diameters Da2 of the pits is in the range from about 0.1 to 1.0 micron, (c) the center line average roughnesses Ra of the entire surface are at least 0.6 micron, and (d) the contact area tpmi of the entire surface is not more than about 20% at a stylus working depth of 0.125 micron and not more than about 70% at a stylus working depth of 0.4 micron. Also disclosed is a process for the production of this material and offset-printing plates which comprise a layer of this material provided with a radiation-sensitive coating.

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Cited by

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