

Title (en)  
PROCESS AND APPARATUS FOR THE ELECTROCHEMICAL GRAINING OF A METAL SURFACE

Publication  
**EP 0423555 B1 19930929 (DE)**

Application  
**EP 90119115 A 19901005**

Priority  
DE 3934683 A 19891018

Abstract (en)  
[origin: US5041198A] In order to perform the electrochemical roughening of the surface of preferably strip-like metal substrate for the production of printing plates or the like so that the surface is free of smuts and stripes with an even distribution of the roughness, there is a roughening station with three zones and in each zone the current density, the frequency, the temperature of the electrolyte, the type of electrolyte and the residence time may be individually set. Accordingly in the first zone it is possible to use a higher frequency and a higher current density than in the second zone in order to produce a large number of points of attack. In the second zone a longer residence time serves to enlarge the points of attack which have already been formed. In the third zone a particularly high frequency may be used to remove smuts.

IPC 1-7  
**B41N 3/03**; **C25F 3/04**

IPC 8 full level  
**B41N 3/03** (2006.01); **C25F 3/04** (2006.01)

CPC (source: EP US)  
**B41N 3/034** (2013.01 - EP US); **C25F 3/04** (2013.01 - EP US); **Y10S 204/09** (2013.01 - EP US)

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