

Title (en)  
PROCESS AND APPARATUS FOR REGENERATING AN AMMONIACAL ETCHING SOLUTION

Publication  
**EP 0144742 B1 19870715 (DE)**

Application  
**EP 84113228 A 19841102**

Priority  
DE 3340342 A 19831108

Abstract (en)  
[origin: US4557811A] The intermittent electrolysis of a portion of the used ammoniacal etching solution generates oxygen at the anode which is mixed into the remainder of the circulated etching solution for reoxidation and regeneration before it is returned to the etching chamber. The portion of the solution which goes through the electrolysis cell, and has its metal content reduced, is returned to the beginning of the circulation loop rather than to the etching chamber, in order that the metal content of the circulated solution may be quickly reduced. This reduction is quickly picked up by a metal content measuring device in the branch supplying solution to the electrolysis cell. When the metal content is below a certain level, the solution in that branch is returned directly to the beginning of the circulation loop, but when the metal content exceeds the threshold, it is valved into and through the electrolysis cell until the metal content as measured in the line leading to the electrolysis cell drops below its lower threshold value.

IPC 1-7  
**C23F 1/46**

IPC 8 full level  
**C23F 1/00** (2006.01); **C23F 1/34** (2006.01); **C23F 1/46** (2006.01); **H05K 3/06** (2006.01)

CPC (source: EP US)  
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Cited by  
US5035765A; EP0448870A1; AT387590B; WO9005797A1

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DOCDB simple family (publication)  
**EP 0144742 A1 19850619; EP 0144742 B1 19870715**; DE 3340342 A1 19850515; DE 3464768 D1 19870820; JP H0536509 B2 19930531; JP S60116789 A 19850624; US 4557811 A 19851210

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