

Title (en)

ETCHING SOLUTION CONTAINING AMMONIUM SULFATE, AND PROCESS FOR REGENERATING IT

Publication

EP 0137123 B1 19880601 (DE)

Application

EP 84107605 A 19840630

Priority

DE 3324450 A 19830707

Abstract (en)

[origin: US4564428A] The addition of a small quantity of ammonium chloride to an ammonium sulfate etching solution results in shortening the regeneration time of the spent etching solution when air or oxygen is bubbled through it to reoxidize it, and it also results in accelerating the etching rate. The extent of this improvement deteriorates with increasing chlorine ion content, disappearing when the chlorine ion content substantially exceeds 0.4% by weight of the solution and still greater chlorine ion additions are distinctly undesirable. The electrolysis of the etching solution to remove etched-away metal cathodically produces enough oxygen at the anode to prevent any substantial evolution of chlorine from the electrolytic action on the small chlorine ion content.

IPC 1-7

C23F 1/34; C23F 1/46

IPC 8 full level

C25F 7/02 (2006.01); **C23F 1/32** (2006.01); **C23F 1/34** (2006.01); **C23F 1/46** (2006.01)

CPC (source: EP US)

C23F 1/34 (2013.01 - EP US); **C23F 1/46** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT NL SE

DOCDB simple family (publication)

DE 3324450 A1 19850117; DE 3471693 D1 19880707; EP 0137123 A2 19850417; EP 0137123 A3 19860507; EP 0137123 B1 19880601;
JP H07100875 B2 19951101; JP S6052600 A 19850325; US 4564428 A 19860114

DOCDB simple family (application)

DE 3324450 A 19830707; DE 3471693 T 19840630; EP 84107605 A 19840630; JP 13978884 A 19840707; US 62458584 A 19840626