

Title (en)
Process for electroless plating of metals

Title (de)
Verfahren zur stromlosen Abscheidung von Metallen

Title (fr)
Procédé de dépôt sans courant de métaux

Publication
EP 1413646 A3 20080116 (DE)

Application
EP 03013706 A 20030617

Priority
DE 10246453 A 20021004

Abstract (en)
[origin: EP1413646A2] In an electrolyte for electroless plating with nickel films with residual compressive stress, containing a nickel base salt (I), reducing agent, chelant, accelerator and stabilizer, (I) is Ni acetate in an initial concentration of 12-26 g/l. An Independent claim is also included for the process for electroless plating with this electrolyte, in which uniform Ni films are deposited at a constant high rate of deposition of not less than 7-12 microns/hour, with a throughput of not less than 15-22 MTO (metal turn-over) = 70-110 g Ni/l.

IPC 8 full level
C23C 18/36 (2006.01); **C23C 18/54** (2006.01)

CPC (source: EP KR US)
C23C 18/1617 (2013.01 - EP US); **C23C 18/1662** (2013.01 - EP US); **C23C 18/36** (2013.01 - EP US); **C23C 18/54** (2013.01 - KR)

Citation (search report)

- [Y] DE 4005088 A1 19900830 - OMI INT CORP [US]
- [Y] US 3597267 A 19710803 - MALLORY GLENN O JR, et al
- [A] US 3597266 A 19710803 - LEIBOWITZ GARY, et al
- [A] US 2694017 A 19541109 - RESCHAN RAYMOND R, et al

Cited by
EP2270255A1; EP3255175A1; WO2011003116A2; WO2007088008A3; WO2011003116A3; EP3156517A1; EP2449148B1

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