

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 B2 20140924 (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 18/16** (2006.01); **C23C 18/54** (2006.01); **C23C 18/36** (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)

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

Designated contracting state (EPC)  
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PT RO SE SI SK TR

DOCDB simple family (publication)  
**EP 1413646 A2 20040428; EP 1413646 A3 20080116; EP 1413646 B1 20110216; EP 1413646 B2 20140924**; AT E498707 T1 20110315; CN 100366795 C 20080206; CN 1497062 A 20040519; DE 10246453 A1 20040415; DE 50313472 D1 20110331; ES 2357943 T3 20110504; ES 2357943 T5 20151125; JP 2004124261 A 20040422; JP 4091518 B2 20080528; KR 101063851 B1 20110914; KR 20040031629 A 20040413; US 2004144285 A1 20040729; US 7846503 B2 20101207

DOCDB simple family (application)  
**EP 03013706 A 20030617**; AT 03013706 T 20030617; CN 03160241 A 20030928; DE 10246453 A 20021004; DE 50313472 T 20030617; ES 03013706 T 20030617; JP 2003346929 A 20031006; KR 20030068770 A 20031002; US 67860103 A 20031003