

Title (en)

MODULATED POWER FOR IONIZED METAL PLASMA DEPOSITION

Title (de)

PLASMA-GASPHASENABSCHIEDUNG MITTELS MODULIERTER SPULENZERSTÄUBUNGSLEISTUNG FÜR IONISERTE METALLPLASMAABSCHIEDUNG

Title (fr)

MODULATION DE COURANT POUR DEPOT AU PLASMA DE METAL IONISE

Publication

**EP 1007759 A1 20000614 (EN)**

Application

**EP 98939263 A 19980806**

Priority

- US 9816395 W 19980806
- US 90834197 A 19970807
- US 90834297 A 19970807

Abstract (en)

[origin: WO9907913A1] In a plasma deposition system for depositing a film of sputtered target material on a substrate, the output of an RF generator coupled to a coil for generating a plasma can be varied during the deposition process so that heating and sputtering of the RF coil can be more uniform by "time-averaging" RF voltage distributions along the RF coil. In another embodiment, RF energy applied to a coil positioned to sputter material onto a workpiece, is modulated to control the biasing of the coil. As a consequence, control of coil sputtering may be improved such that the uniformity of deposition may also be improved.

IPC 1-7

**C23C 14/40; H01J 37/34; H01J 37/32**

IPC 8 full level

**C23C 14/34** (2006.01); **C23C 14/35** (2006.01); **C23C 14/40** (2006.01); **H01J 27/16** (2006.01); **H01J 37/08** (2006.01); **H01J 37/32** (2006.01);  
**H01J 37/34** (2006.01); **H01L 21/203** (2006.01)

CPC (source: EP KR)

**C23C 14/345** (2013.01 - EP KR); **C23C 14/35** (2013.01 - EP KR); **C23C 14/358** (2013.01 - EP); **H01J 37/321** (2013.01 - EP);  
**H01J 37/3211** (2013.01 - KR); **H01J 37/32155** (2013.01 - KR); **H01J 37/32174** (2013.01 - EP); **H01J 37/32183** (2013.01 - KR);  
**H01J 37/34** (2013.01 - EP KR); **H01L 21/02365** (2013.01 - KR)

Citation (search report)

See references of WO 9907913A1

Designated contracting state (EPC)

DE GB NL

DOCDB simple family (publication)

**WO 9907913 A1 19990218;** EP 1007759 A1 20000614; EP 1128414 A1 20010829; JP 2001512887 A 20010828; KR 20010022684 A 20010326;  
TW 396384 B 20000701

DOCDB simple family (application)

**US 9816395 W 19980806;** EP 01201242 A 19980806; EP 98939263 A 19980806; JP 2000506393 A 19980806; KR 20007001279 A 20000207;  
TW 87112922 A 19980805