

Title (en)

PLASMA ASSISTED PROCESSING CHAMBER WITH SEPARATE CONTROL OF SPECIES DENSITY

Title (de)

PLASMA-BEHANDLUNGSKAMMER MIT SEPARATER STEUERUNG DER SPEZIENDICHTE

Title (fr)

CHAMBRE DE TRAITEMENT AU PLASMA AVEC REGLAGE SEPRE DE LA DENSITE DES ESPECES

Publication

**EP 1055249 A1 20001129 (EN)**

Application

**EP 99905871 A 19990208**

Priority

- US 9902718 W 19990208
- US 2096098 A 19980209
- US 11941798 A 19980720

Abstract (en)

[origin: WO9940609A1] The present invention provides an apparatus and method, for plasma assisted processing of a workpiece, which provides for separate control of species density within a processing plasma. The present invention has a processing chamber (102) and at least one collateral chamber (104). The collateral chamber is capable of generating a collateral plasma and delivering it to the processing chamber. To control the densities of the particle species within the processing chamber the present invention may have: a filter (108) interposed between the collateral chamber and the processing chamber, primary chamber source power, several collateral chambers providing separate inputs to the processing chamber, or combinations thereof. Collateral plasma may be: filtered, combined with primary chamber generated plasma, combined with another collateral plasma, or combinations thereof to separately control the densities of the species comprising the processing plasma.

IPC 1-7

**H01J 37/32**

IPC 8 full level

**H01J 37/32** (2006.01); **H01L 21/302** (2006.01); **H01L 21/3065** (2006.01); **H05H 1/46** (2006.01)

CPC (source: EP)

**H01J 37/32871** (2013.01)

Citation (search report)

See references of WO 9940609A1

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

**WO 9940609 A1 19990812**; EP 1055249 A1 20001129; JP 2002503031 A 20020129

DOCDB simple family (application)

**US 9902718 W 19990208**; EP 99905871 A 19990208; JP 2000530929 A 19990208