

Title (en)

SYSTEM AND METHOD FOR DEPOSITING INORGANIC/ORGANIC DIELECTRIC FILMS

Title (de)

SYSTEM UND VERFAHREN ZUM ABSCHIEDEN VON INORGANISCHEN/ORGANISCHEN DIELEKTRISCHEN FILMEN

Title (fr)

SYSTEME ET PROCEDE POUR DEPOSER DES PELLICULES DIELECTRIQUES INORGANIQUES/ORGANIQUES

Publication

**EP 1252358 A4 20080213 (EN)**

Application

**EP 00980511 A 20001117**

Priority

- US 0031694 W 20001117
- US 16666299 P 19991119

Abstract (en)

[origin: WO0136703A1] A system and method for depositing a dielectric film on the surface of a substrate is provided having a processing chamber with a substrate support for supporting a substrate and one or more gas inlets for conveying gases to the processing chamber. A first plasma source defining a first plasma zone within the chamber is provided, and a second plasma source defining a second plasma zone within said chamber is provided. Gases are separately ionized at different ionization levels in the first and second plasma zones, and these separately ionized gases react to form a dielectric film on the surface of the substrate.

IPC 8 full level

**C23C 16/00** (2006.01); **C23C 16/509** (2006.01); **C23C 16/40** (2006.01); **C23C 16/448** (2006.01); **C23C 16/505** (2006.01); **C23F 1/02** (2006.01); **H01J 37/32** (2006.01); **H01L 21/31** (2006.01); **H01L 21/312** (2006.01); **H01L 21/316** (2006.01); **H01L 21/469** (2006.01); **H01L 21/314** (2006.01)

CPC (source: EP KR)

**C23C 16/00** (2013.01 - KR); **C23C 16/401** (2013.01 - EP); **C23C 16/402** (2013.01 - EP); **C23C 16/448** (2013.01 - EP); **C23C 16/505** (2013.01 - EP); **H01J 37/321** (2013.01 - EP); **H01J 37/32596** (2013.01 - EP); **H01L 21/02126** (2013.01 - EP); **H01L 21/02216** (2013.01 - EP); **H01L 21/02274** (2013.01 - EP)

Citation (search report)

- [XY] EP 0947603 A2 19991006 - NISSIN ELECTRIC CO LTD [JP]
- [YD] WO 9955526 A1 19991104 - SILICON VALLEY GROUP THERMAL [US]
- [X] SONG Y ET AL: "OPTICAL AND STRUCTURAL PROPERTIES OF LOW-TEMPERATURE PECVD ETMS SIOX THIN FILMS", THIN SOLID FILMS, ELSEVIER-SEQUOIA S.A. LAUSANNE, CH, vol. 334, no. 1/2, 4 December 1998 (1998-12-04), pages 92 - 97, XP000669262, ISSN: 0040-6090
- See references of WO 0136703A1

Designated contracting state (EPC)

DE FR GB IT NL

DOCDB simple family (publication)

**WO 0136703 A1 20010525**; AU 1776401 A 20010530; CN 1460130 A 20031203; EP 1252358 A1 20021030; EP 1252358 A4 20080213; JP 2003530481 A 20031014; KR 20020070436 A 20020909; TW I232243 B 20050511

DOCDB simple family (application)

**US 0031694 W 20001117**; AU 1776401 A 20001117; CN 00816928 A 20001117; EP 00980511 A 20001117; JP 2001538578 A 20001117; KR 20027006378 A 20020517; TW 89124488 A 20001118