Title (en)

CLEANING OF A PLASMA PROCESSING SYSTEM SILICON ROOF

Title (de)

REINIGUNG DER SILIZIUM-DECKE EINES PLASMABEARBEITUNGSSYSTEMS

Title (fr)

NETTOYAGE AMELIORE D'UN TOIT EN SILICIUM D'UN SYSTEME DE TRAITEMENT AU PLASMA

Publication

EP 1274876 A2 20030115 (EN)

Application

EP 01923089 A 20010402

Priority

- US 0110791 W 20010402
- US 54117900 A 20000403

Abstract (en)

[origin: WO0175189A2] An apparatus for cleaning a silicon roof of a plasma chamber by etching the roof substantially without damage to the silicon structure. The etching is followed by cleaning the roof, using deionized water for rinsing the roof and determining the amount of particulate matter in the deionized water used for rinsing the roof. This is followed by determining qualitatively how much particulate matter of at least a certain size is in the deionized water. If the amount of particulate matter in the water is below a predetermined baseline, the particulate matter that will be deposited on material, such as a silicon wafer, being processed in the chamber is greatly reduced. The stability of the plasma processing with time is improved, with the time between roof cleanings rising from about 200 hours to nearly 300 hours.

IPC 1-7

C23C 16/44; H01J 37/32; B08B 7/00

IPC 8 full level

C23C 16/44 (2006.01); **H01J 37/32** (2006.01); **H01L 21/205** (2006.01)

CPC (source: EP KR)

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Citation (search report)

See references of WO 0175189A2

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