

Title (en)

THERMAL PROCESSING SYSTEM WITH CROSS FLOW INJECTION SYSTEM WITH ROTATABLE INJECTORS

Title (de)

THERMISCHES VERARBEITUNGSSYSTEM MIT QUERFLUSS-INJEKTIONSSYSTEM MIT DREHBAREN INJEKTOREN

Title (fr)

SYSTEME DE TRAITEMENT THERMIQUE A SYSTEME D'INJECTION A DEBIT TRANSVERSAL A INJECTEURS ROTATIFS

Publication

EP 1676294 A2 20060705 (EN)

Application

EP 04784778 A 20040922

Priority

- US 2004031063 W 20040922
- US 50635403 P 20030925
- US 94684904 A 20040921

Abstract (en)

[origin: WO2005031803A2] An apparatus is provided for thermally processing substrates held in a carrier. The apparatus includes an injection system which provides for selectable injection of gases to the process chamber. The injection system comprises one or more elongated injection tubes having a plurality of injection ports or orifices distributed in the tubes for directing flow of reactant and other gases across the surface of each substrate. The elongated injection tubes are rotatable about an axis in 360 degrees.

IPC 1-7

H01L 21/00

IPC 8 full level

C23C 16/455 (2006.01); **C23C 16/458** (2006.01); **C23C 16/52** (2006.01); **C23F 1/00** (2006.01)

IPC 8 main group level

H01L (2006.01)

CPC (source: EP US)

C23C 16/45508 (2013.01 - EP US); **C23C 16/45578** (2013.01 - EP US); **C23C 16/4584** (2013.01 - EP US)

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 2005031803 A2 20050407; **WO 2005031803 A3 20061221**; **WO 2005031803 A9 20050526**; EP 1676294 A2 20060705; EP 1676294 A4 20071031; JP 2007515054 A 20070607; TW 200531174 A 20050916; TW I250586 B 20060301; US 2005121145 A1 20050609

DOCDB simple family (application)

US 2004031063 W 20040922; EP 04784778 A 20040922; JP 2006528134 A 20040922; TW 93128909 A 20040923; US 94684904 A 20040921