

Title (en)

IN SITU GETTER PUMP SYSTEM AND METHOD

Title (de)

IN-SITU GETTERPUMPSYSTEM UND VERFAHREN

Title (fr)

SYSTEME DE POMPE GETTER IN SITU ET METHODE

Publication

EP 1012478 A2 20000628 (EN)

Application

EP 98915555 A 19980415

Priority

- US 9807459 W 19980415
- US 84417897 A 19970418

Abstract (en)

[origin: WO9848168A2] A wafer processing system including a processing chamber, a low pressure pump coupled to the processing chamber for pumping noble and non-noble gases, a valve mechanism coupling a source of noble gas to the processing chamber, an in situ getter pump disposed within the processing chamber which pumps certain non-noble gases during the flow of the noble gas into the chamber, and a processing mechanism for processing a wafer disposed within the processing chamber. Preferably, the in situ getter pump can be operated at a number of different temperatures to preferentially pump different species of gas at those temperatures. A gas analyzer is used to automatically control the temperature of the getter pump to control the species of gasses that are pumped from the chamber. An alternate embodiment of the invention includes an in situ getter pump additionally provided within the transfer chamber of the semiconductor manufacturing equipment.

IPC 1-7

F04B 37/02

IPC 8 full level

B01D 53/04 (2006.01); **B01J 3/00** (2006.01); **B01J 3/02** (2006.01); **C23C 14/54** (2006.01); **C23C 14/56** (2006.01); **F04B 37/02** (2006.01); **H01L 21/00** (2006.01); **H01L 21/203** (2006.01); **H01L 21/677** (2006.01)

CPC (source: EP KR)

B01J 3/006 (2013.01 - EP); **C23C 14/564** (2013.01 - EP); **F04B 23/00** (2013.01 - KR); **F04B 37/02** (2013.01 - EP); **H01L 21/67017** (2013.01 - EP); **H01L 21/67109** (2013.01 - EP); **H01L 21/6719** (2013.01 - EP); **B01D 53/04** (2013.01 - EP); **B01D 53/0446** (2013.01 - EP); **B01D 2257/108** (2013.01 - EP); **B01D 2257/80** (2013.01 - EP); **B01D 2258/0216** (2013.01 - EP); **B01D 2259/416** (2013.01 - EP)

Citation (search report)

See references of WO 9848168A2

Designated contracting state (EPC)

DE FR GB IT

DOCDB simple family (publication)

WO 9848168 A2 19981029; WO 9848168 A3 20000224; CN 1252844 A 20000510; EP 1012478 A2 20000628; JP 2001524872 A 20011204; KR 20010006278 A 20010126

DOCDB simple family (application)

US 9807459 W 19980415; CN 98804253 A 19980415; EP 98915555 A 19980415; JP 54613198 A 19980415; KR 19997009362 A 19991011