

Title (en)  
CLUSTER TOOL ARCHITECTURE FOR PROCESSING A SUBSTRATE

Title (de)  
CLUSTER-TOOL-ARCHITEKTUR ZUM VERARBEITEN EINES SUBSTRATS

Title (fr)  
ARCHITECTURE D'UN OUTIL MULTIPLE DE TRAITEMENT DE SUBSTRATS

Publication  
**EP 1842225 A2 20071010 (EN)**

Application  
**EP 05855441 A 20051221**

Priority  

- US 2005046877 W 20051221
- US 63910904 P 20041222
- US 11228105 A 20050422
- US 11293205 A 20050422

Abstract (en)  
[origin: WO2006069341A2] Embodiments generally provide an apparatus and method for processing substrates using a multi-chamber processing system (e.g., a cluster tool) that has an increased throughput, increased reliability, substrates processed in the cluster tool have a more repeatable wafer history, and also has a smaller system footprint. In one embodiment of the cluster tool, the cost of ownership is reduced by grouping substrates together and transferring and processing the substrates in groups of two or more to improve system throughput, and reduces the number of moves a robot has to make to transfer a batch of substrates between the processing chambers, thus reducing wear on the robot and increasing system reliability. Embodiments also provide for a method and apparatus that are used to increase the reliability of the substrate transfer process to reduce system down time.

IPC 8 full level  
**H01L 21/00** (2006.01)

CPC (source: EP KR)  
**H01L 21/00** (2013.01 - KR); **H01L 21/67167** (2013.01 - EP); **H01L 21/67173** (2013.01 - EP); **H01L 21/67178** (2013.01 - EP); **H01L 21/67184** (2013.01 - EP); **H01L 21/67742** (2013.01 - EP); **H01L 21/67754** (2013.01 - EP); **H01L 21/67766** (2013.01 - EP); **H01L 21/67781** (2013.01 - EP)

Citation (search report)  
See references of WO 2006069341A2

Designated contracting state (EPC)  
DE FR GB IE

DOCDB simple family (publication)  
**WO 2006069341 A2 20060629; WO 2006069341 A3 20061012**; EP 1842225 A2 20071010; JP 2008526032 A 20080717; JP 4990160 B2 20120801; KR 101006685 B1 20110110; KR 20080016782 A 20080222

DOCDB simple family (application)  
**US 2005046877 W 20051221**; EP 05855441 A 20051221; JP 2007548551 A 20051221; KR 20077016988 A 20051221