Title (en)

SMALL VOLUME SYMMETRIC FLOW SINGLE WAFER ALD APPARATUS

Title (de)

KLEINRÄUMIGE ALD-VORRICHTUNG FÜR EINZELWAFER MIT SYMMETRISCHEM FLUSS

Title (fr)

APPAREIL DE DEPOT DE COUCHE ATOMIQUE (ALD) A TRANCHE UNIQUE ET A ECOULEMENT SYMETRIQUE DE PETIT VOLUME

Publication

EP 1957688 A2 20080820 (EN)

Application

EP 06848792 A 20061122

Priority

- US 2006061201 W 20061122
- DE 102005056326 A 20051122
- US 82004206 P 20060721

Abstract (en)

[origin: WO2007076195A2] An ALD reactor chamber contains a vertically moveable heater-susceptor having an attached annular attached flow ring conduit at its perimeter, which conduit has an external surface at its edge that isolates the outer space of the reactor above a wafer and below the wafer to the bottom of the flow ring when the heater-susceptor is in its process position. When the susceptor is in the process position, the outer edge of the flow ring is placed in proximity to an annular ring attached to a Hd of the reactor and together the ring and conduit form a tongue-in-groove (TIG) configuration. In some cases, the TIG design may have a staircase contour (SC), thereby limiting diffusion-backflow of downstream gases to the outer space of the reactor.

IPC 8 full level

C23C 16/00 (2006.01)

CPC (source: EP KR)

C23C 16/45508 (2013.01 - EP KR); **C23C 16/45544** (2013.01 - EP KR); **C23C 16/45591** (2013.01 - EP KR); **C23C 16/458** (2013.01 - KR); **C23C 16/4585** (2013.01 - EP KR)

Citation (search report)

See references of WO 2007076195A2

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