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*C23C 14/50* (2006.01)

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[Continued on next page]

(54) Title: THIN HEATED SUBSTRATE SUPPORT

(57) Abstract: Embodiments of the present invention provide an apparatus heating and supporting a substrate in a processing chamber. One embodiment of the present invention provides a substrate support assembly. The substrate support assembly includes a heated plate having a substrate supporting surface on a front side and a cantilever arm extending from a back-side of the heated plate. The heated plate is configured to support and heat a substrate on the substrate supporting surface. The cantilever arm has a first end attached to the heated plate near a central axis of the heated plate, and a second end extending radially outwards from the central axis.

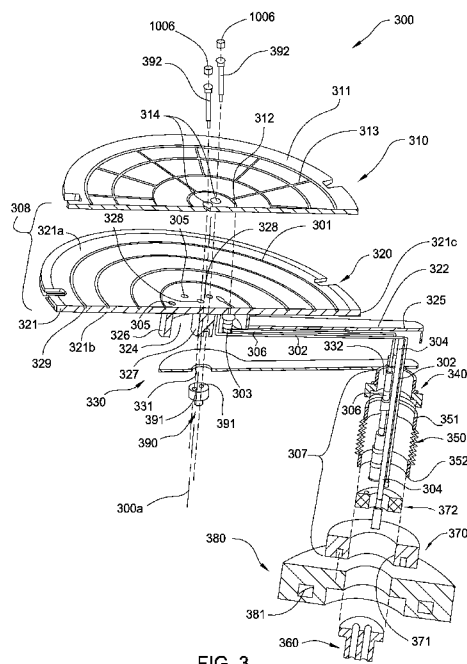


FIG. 3



LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK,  
SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,  
GW, ML, MR, NE, SN, TD, TG).

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## INTERNATIONAL SEARCH REPORT

International application No.  
**PCT/US2012/024524****A. CLASSIFICATION OF SUBJECT MATTER*****H01L 21/683(2006.01)i, C23C 14/50(2006.01)i, C23C 16/458(2006.01)i***

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

H01L 21/683; C23F 1/02; H01J 37/20; H01J 37/317; C23C 16/00

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Korean utility models and applications for utility models

Japanese utility models and applications for utility models

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

eKOMPASS(KIPO internal) &amp; Keywords:substrate,wafer,heat,chuck,susceptor,support,arm, cantilever,insulator

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y A	JP 62-272441 A (TOKYO ELECTRON LTD.) 26 November 1987 See page 2; figure 1.	1-2 3-15
Y A	US 05522937 A (CHEW, SANDY M. et al.) 04 June 1996 See column 4 line 66-column 5 line 10; figures 5,14.	1-2 3-15
A	US 6299691 B1 (ODA, HIROHISA et al.) 09 October 2001 See column 3 lines 49-55; column 6 lines 64-67.	1-15
A	US 05376213 A (UEDA, YOICHI et al.) 27 December 1994 See column 2 line 66-column 3 line 1; column 4 lines 11-19; figure 2.	1-15

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

\* Special categories of cited documents:

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"&amp;" document member of the same patent family

Date of the actual completion of the international search

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**INTERNATIONAL SEARCH REPORT**

Information on patent family members

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**PCT/US2012/024524**

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