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**(71) Applicant** *(for all designated States except US)*: **EUGENE TECHNOLOGY CO., LTD.** [KR/KR]; 209-3 Chugye-ri, Yangji-myeon, Cheoin-gu, Yongin-si, Gyeonggi-do 449-824 (KR).

**(72) Inventor; and**
**(75) Inventor/Applicant** *(for US only)*: **YANG, Il-Kwang** [KR/KR]; 603-104 Sanyang Maeul Prugio Apt., 691, Singal-dong, Giheung-gu, Yongin-si, Gyeonggi-do 446-588 (KR).

**(74) Agents: KIM, Inhan** et al.; P & K International Patent Office, 6F. Ilheung Bldg., 1490-25, Seocho-dong, Seocho-gu, Seoul 137-070 (KR).

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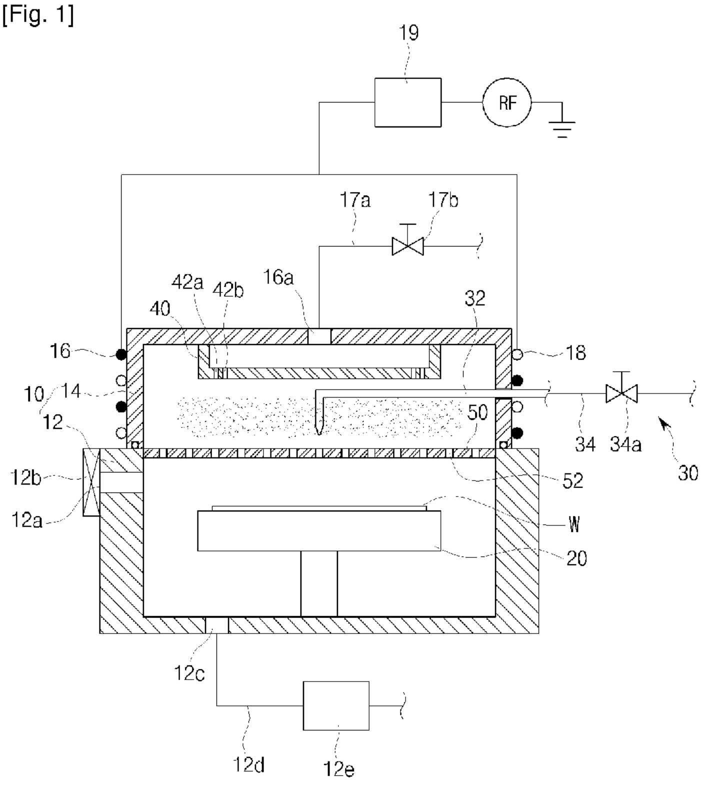
*[Continued on next page]*

# (54) Title: APPARATUS AND METHOD FOR PROCESSING SUBSTRATE

[Fig. 1]



**(57) Abstract**: A substrate processing apparatus includes a chamber defining a process space where a process is carried out with respect to a substrate, a first supply member configured to supply a first source gas toward the process space, a plasma source configured to generate an electric field in the process space to create radicals from the first source gas, and a second supply member located below the first supply member for supplying a second source gas toward the substrate. A support member is installed in the chamber. The second supply member has a supply nozzle disposed, such that a lower end of the supply nozzle corresponds to a center of the substrate placed on the support member, for supplying the second source gas toward the center of the substrate.

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### A. CLASSIFICATION OF SUBJECT MATTER

***H01L 21/20(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)
IPC : H01L 21/205, 21/28, 21/31, C23C16/507, 16/455, B23K 10/00

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 since 1975
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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
eKIPASS(KIPO Internal) & Keyword: plasma source, gas sourc and chamber

### C. DOCUMENTS CONSIDERED TO BE RELEVANT

| Category* | Citation of document, with indication, where appropriate, of the relevant passages | Relevant to claim No. |
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☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.

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"&" document member of the same patent family

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| Name and mailing address of the ISA/KR<br>Korean Intellectual Property Office<br>Government Complex-Daejeon, 139 Seonsa-ro, Seo-gu, Daejeon 302-701, Republic of Korea<br>Facsimile No. 82-42-472-7140 | Authorized officer<br>Hong, Sung Ui<br>Telephone No. 82-42-481-8496 |

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