

**(43) International Publication Date**  
**31 March 2022 (31.03.2022)**



**(10) International Publication Number**  
**WO 2022/066503 A1**



**(51) International Patent Classification:**

|                              |                              |
|------------------------------|------------------------------|
| <i>H01L 21/02</i> (2006.01)  | <i>C23C 16/44</i> (2006.01)  |
| <i>H01L 21/033</i> (2006.01) | <i>C23C 16/505</i> (2006.01) |
| <i>C23C 16/26</i> (2006.01)  | <i>H01J 37/32</i> (2006.01)  |

**(21) International Application Number:**

PCT/US2021/050681

**(22) International Filing Date:**

16 September 2021 (16.09.2021)

(25) **Filing Language:** English

(26) **Publication Language:** English

**(30) Priority Data:**

17/035,107 28 September 2020 (28.09.2020) US

(71) Applicant: **APPLIED MATERIALS, INC.** [US/US];  
3050 Bowers Avenue, Santa Clara, California 95054 (US).

(72) **Inventors:** SINGH, Anup Kumar; c/o Applied Materials, Inc., Law Dept., M/S 1269, 3050 Bowers Avenue, Santa Clara, California 95054 (US). KUSTRA, Rick; 5068 Kingston Way, San Jose, California 95130 (US). HASSAN, Vinayak Vishwanath; c/o Applied Materials, Inc., Law Dept., M/S 1269, 3050 Bowers Avenue, Santa Clara, California 95054 (US). KUMAR, Bhaskar; c/o Applied Materials, Inc., Law Dept., M/S 1269, 3050 Bowers Avenue,

Santa Clara, California 95054 (US). **NITTALA, Krishna**; 2094 Mahuran Circle, San Jose, California 95133 (US). **MANNA, Pramit**; c/o Applied Materials, Inc., Law Dept., M/S 1269, 3050 Bowers Avenue, Santa Clara, California 95054 (US). **ALAYAVALLI, Kaushik Comandoor**; c/o Applied Materials, Inc., Law Dept., M/S 1269, 3050 Bowers Avenue, Santa Clara, California 95054 (US). **BALASUBRAMANIAN, Ganesh**; c/o Applied Materials, Inc., Law Dept., M/S 1269, 3050 Bowers Avenue, Santa Clara, California 95054 (US).

(74) **Agent:** **HAMMACK, Marcus W.** et al.; Patterson + Sheridan LLP, 24 Greenway Plaza, Suite 1600, Houston, Texas 77046 (US).

**(81) Designated States** (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

**(54) Title:** METHOD OF USING DUAL FREQUENCY RF POWER IN A PROCESS CHAMBER

**(57) Abstract:** Embodiments of the present disclosure generally relate to methods of depositing carbon film layers greater than 3,000 Å in thickness over a substrate and surface of a lid of a chamber using dual frequency, top, sidewall and bottom sources. The method includes introducing a gas to a processing volume of a chamber. A first radiofrequency (RF) power is provided having a first frequency of about 40 MHz or greater to a lid of the chamber. A second RF power is provided having a second frequency to a bias electrode disposed in a substrate support within the processing volume. The second frequency is about 10 MHz to about 40 MHz. An additional third RF power is provided having lower frequency of about 400 kHz to about 2 MHz to the bias electrode.

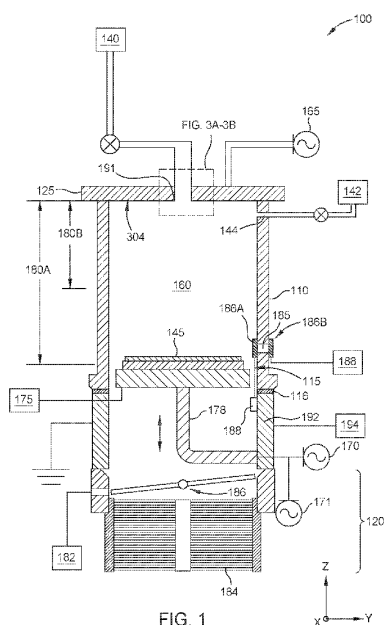


FIG. 1

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**(84) Designated States** (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, 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, KM, ML, MR, NE, SN, TD, TG).

**Published:**

— with international search report (Art. 21(3))