(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
24 August 2023 (24.08.2023)

WIPO | PCT

(10) International Publication Number
WO 2023/159012 A1

(51) International Patent Classification:
H01L 21/02 (2006.01) *C23C 16/40* (2006.01)
C23C 16/02 (2006.01) *C23C 16/455* (2006.01)

(21) International Application Number:
PCT/US2023/062571

(22) International Filing Date:
14 February 2023 (14.02.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/268,057 15 February 2022 (15.02.2022) US
63/365,475 27 May 2022 (27.05.2022) US

(71) Applicant: **LAM RESEARCH CORPORATION** [US/US]; 4650 Cushing Pkwy., Fremont, California 94538 (US).

(72) Inventors: **JEON, Eli**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **AGNEW, Douglas Walter**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **BHANDARI, Shiva Sharan**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **CURTIN, Ian John**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **ABEL, Joseph R.**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **VARNELL, Jason Alexander**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **BARNETT, Cody**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **IADANZA, Christopher Nicholas**; 4650 Cushing Pkwy., Fremont, California 94538 (US). **AUSTIN, Dustin Zachary**; 4650 Cushing Pkwy., Fremont, California 94538 (US).

(74) Agent: **MURRY, Price W.** et al.; WEAVER AUSTIN VILLENEUVE & SAMPSON LLP, P.O. Box 70250, Oakland, California 94612-0250 (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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG,

(54) Title: HIGH PRESSURE INERT OXIDATION AND IN-SITU ANNEALING PROCESS TO IMPROVE FILM SEAM QUALITY AND WER

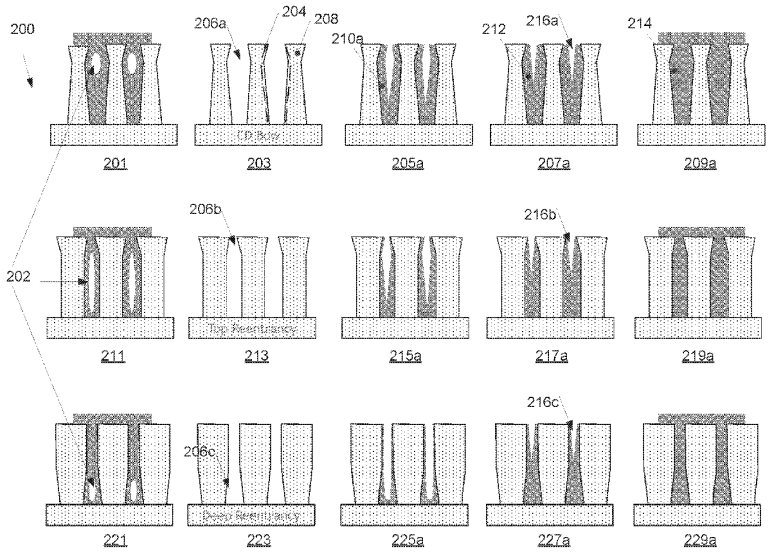


FIG. 2A

(57) Abstract: Methods of filling a gap with a dielectric material including using an inhibition plasma during deposition. The inhibition plasma increases a nucleation barrier of the deposited film. The inhibition plasma selectively interacts near the top of the feature, inhibiting deposition at the top of the feature compared to the bottom of the feature, enhancing bottom-up fill. A process chamber may have multiple pressure switches to enable a process after deposition at a higher pressure than the pressure during deposition.

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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.

(84) **Designated States** *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, CV, 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, ME, 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))*