

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

(19) World Intellectual Property  
Organization  
International Bureau

(43) International Publication Date  
08 May 2025 (08.05.2025)



(10) International Publication Number  
**WO 2025/096387 A1**

(51) International Patent Classification:

C23C 16/455 (2006.01) C23C 16/458 (2006.01)  
C23C 16/44 (2006.01) C23C 16/54 (2006.01)  
C23C 16/52 (2006.01)

(21) International Application Number:

PCT/US2024/053338

(22) International Filing Date:

29 October 2024 (29.10.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

18/500,690 02 November 2023 (02.11.2023) US  
18/500,707 02 November 2023 (02.11.2023) US  
18/500,724 02 November 2023 (02.11.2023) US

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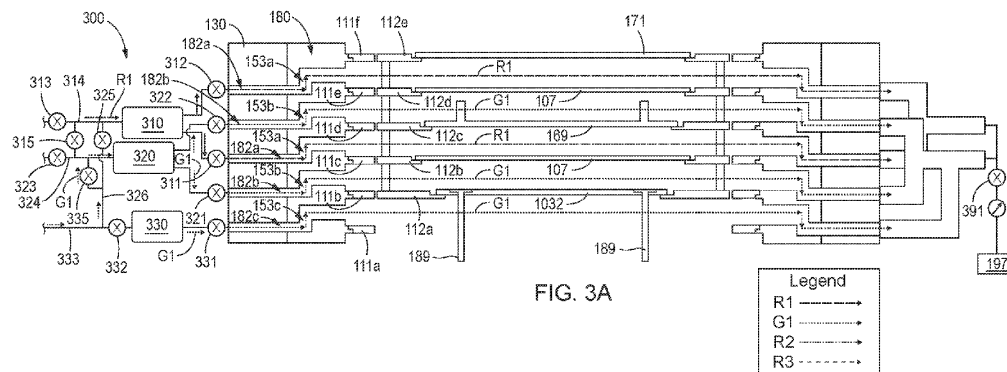
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(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ,  
CA, CH, CL, CN, CO, CR, CU, CV, CZ, DE, DJ, DK, DM,  
DO, DZ, EC, EE, EG, 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, MU, 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,

(54) Title: MULTI-FLOW GAS CIRCUITS, CHAMBER KITS, PROCESSING CHAMBERS, AND RELATED APPARATUS AND  
METHODS FOR SEMICONDUCTOR MANUFACTURING



(57) Abstract: Embodiments of the present disclosure relate to multi-flow gas circuits, chamber kits, processing chambers, and related apparatus and methods applicable for semiconductor manufacturing. In one or more embodiments, a processing chamber includes a chamber body, heat source(s), and a gas circuit in fluid communication with the chamber body. The gas circuit includes a first flow controller and a first set of valves in fluid communication with the first flow controller. The first set of valves are in fluid communication with a first set of inject passages. The gas circuit includes a second flow controller and a second set of valves in fluid communication with the second flow controller. The second set of valves is in fluid communication with a second set of inject passages. The second set of inject passages and the first set of inject passages alternate with respect to each other along the plurality of flow levels.

[Continued on next page]

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, SC, 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))