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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
07 November 2024 (07.11.2024)

WIPO | PCT

(10) International Publication Number
WO 2024/228870 A1

(51) International Patent Classification:
H01L 21/02 (2006.01) *H01L 21/687* (2006.01)
H01L 21/67 (2006.01)

(21) International Application Number:
PCT/US2024/025877

(22) International Filing Date:
23 April 2024 (23.04.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/499,532 02 May 2023 (02.05.2023) US

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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-CHANNEL PRECURSOR DELIVERY SYSTEM

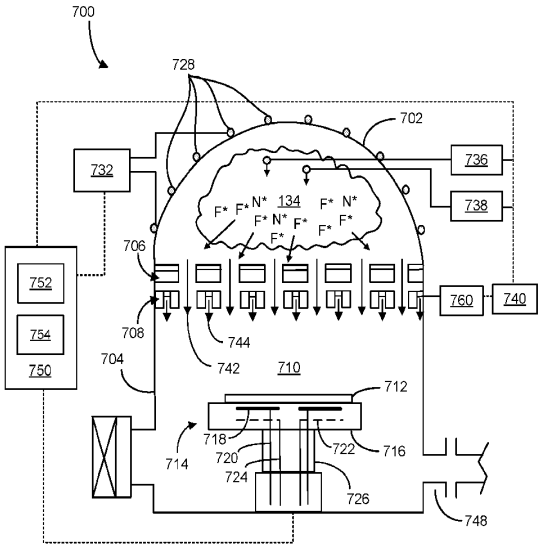

FIG. 7

(57) Abstract: A precursor delivery system for supplying a precursor to a process chamber includes a housing, and a detachable precursor dispensing assembly detachably coupled to the housing and configured to supply the precursor to the process chamber, wherein the detachable precursor dispensing assembly includes an ampoule, and a first valve assembly fluidly coupled to the ampoule, and including, a first valve, a second valve, a third valve, and a fourth valve. The precursor delivery system also includes a controller.

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[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))*