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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
1 December 2011 (01.12.2011)

PCT

(10) International Publication Number
WO 2011/148281 A3

(51) International Patent Classification:
H01L 21/02 (2006.01) *H01L 21/683* (2006.01)

(21) International Application Number:
PCT/IB2011/051923

(22) International Filing Date:
2 May 2011 (02.05.2011)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12/787,196 25 May 2010 (25.05.2010) US

(71) Applicant *(for all designated States except US)*: **LAM RESEARCH AG** [AT/AT]; SEZ-Strasse 1, A-9500 Villach (AT).

(71) Applicant *(for BZ only)*: **LAM RESEARCH CORPORATION** [US/US]; 4650 Cushing Parkway, Fremont, CA 94538 (US).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **GLEISSNER, Andreas** [AT/AT]; Millstätterstrasse 35, A-9545 Radenthein (AT). **OBWEGER, Rainer** [AT/AT]; Lind im Drautal 198, A-9753 Lind im Drautal (AT).

(74) Agent: **KONTRUS, Gerhard**; SEZ-Strasse 1, A-9500 Villach (AT).

(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, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PE, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

[Continued on next page]

(54) Title: CLOSED CHAMBER WITH FLUID SEPARATION FEATURE

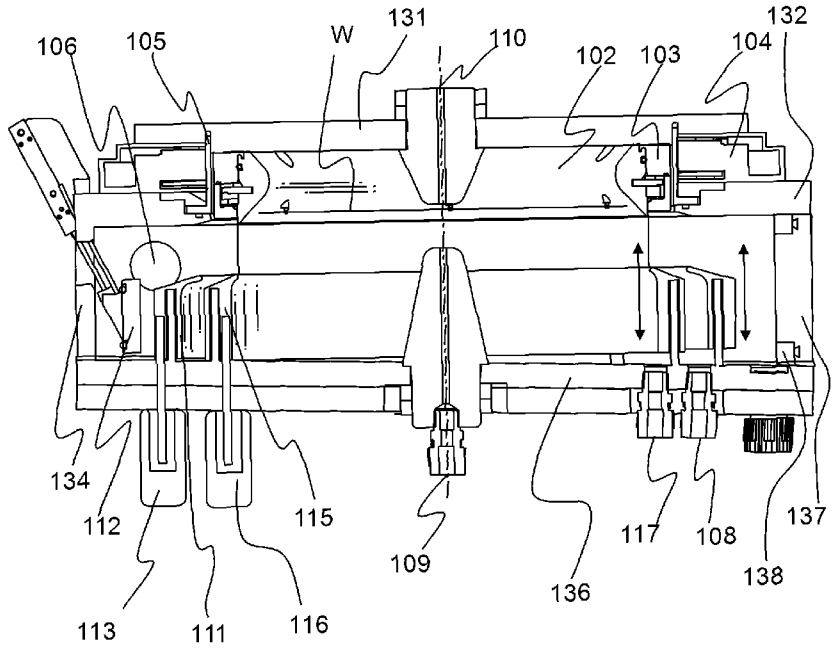


Fig. 1a

(57) Abstract: Selective recovery of excess process fluid from within a closed process chamber is achieved by providing a magnetically drive ring chuck and at least one process fluid collector within the closed process chamber, with the ring chuck and the fluid collector being vertically movable relative to each other.

WO 2011/148281 A3

— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

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))*

(88) Date of publication of the international search report:
12 April 2012