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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
20 October 2011 (20.10.2011)

PCT

(10) International Publication Number
WO 2011/128811 A3

(51) **International Patent Classification**:
H01L 21/687 (2006.01) ***H01L 21/68*** (2006.01)
H01L 21/683 (2006.01) ***H01L 21/304*** (2006.01)

(21) **International Application Number**:
PCT/IB2011/051475

(22) **International Filing Date**:
6 April 2011 (06.04.2011)

(25) **Filing Language**: English

(26) **Publication Language**: English

(30) **Priority Data**:
12/761,713 16 April 2010 (16.04.2010) 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, California CA-94538 (US).

(72) **Inventors; and**
(75) **Inventors/Applicants** *(for US only)*: **BRUGGER, Michael** [AT/AT]; Dellach 18, A-9872 Millstatt (AT). **LACH, Otto** [AT/AT]; Eichholzstrasse 28, A-9521 Treffen (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,

[Continued on next page]

(54) **Title**: GROUNDED CHUCK

(57) **Abstract**: Improved reduction of static charge in spin chucks is achieved by providing one or more pin assemblies which are formed from chemically inert material and which include an electrically conductive inlay.

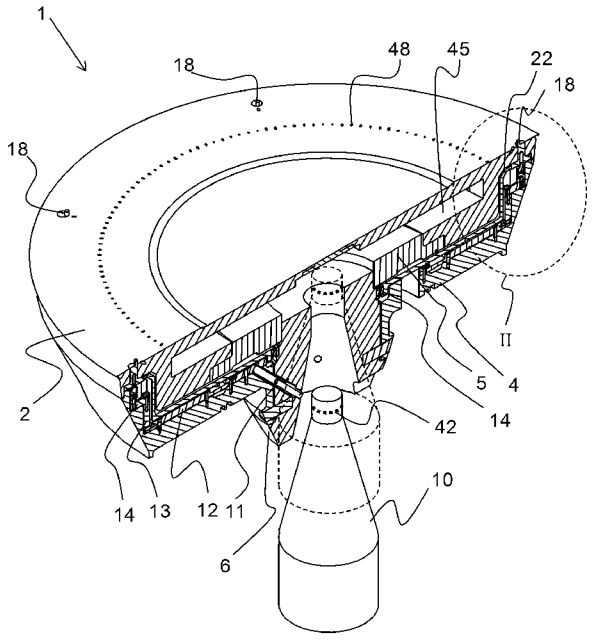


Fig. 1

WO 2011/128811 A3

SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

— *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:
23 February 2012