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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 July 2005 (21.07.2005)

PCT

(10) International Publication Number
WO 2005/065186 A3

(51) International Patent Classification[7]: C23C 16/00, 16/455, 16/503, H01L 21/306, 21/3065, 21/461, C23F 1/00

(21) International Application Number:
PCT/US2004/042100

(22) International Filing Date:
13 December 2004 (13.12.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/743,062 23 December 2003 (23.12.2003) US

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(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

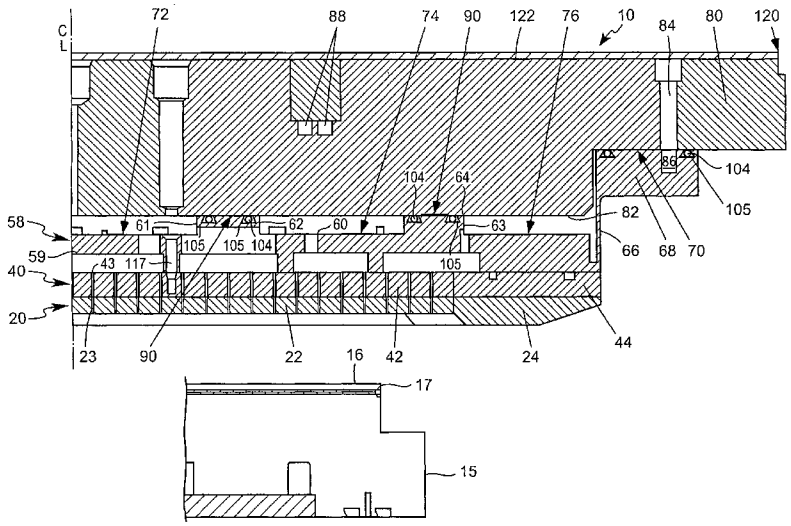
(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

(88) Date of publication of the international search report:
18 May 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SHOWERHEAD ELECTRODE ASSEMBLY FOR PLASMA PROCESSING APPARATUSES



(57) Abstract: A showerhead electrode assembly (10) of a plasma processing apparatus includes a thermal control plate (58) attached to a showerhead electrode (20), and a top plate (80) attached to the thermal control plate (58). At least one thermal bridge (61) is provided between opposed surfaces of the thermal control plate and the top plate to allow electrical and thermal conduction between the thermal control plate (58) and top plate (80). A lubricating material (90) between the thermal bridge (61) and the top plate minimizes (80) galling of opposed metal surfaces due to differential thermal expansion between the top plate (80) and thermal control plate (58). A heater supported by the thermal control plate (58) cooperates with the temperature controlled top plate (80) to maintain the showerhead electrode at a desired temperature.

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