

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
21 June 2018 (21.06.2018)



(10) International Publication Number
WO 2018/112159 A3

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

(21) International Application Number:
PCT/US2017/066332

(22) International Filing Date:
14 December 2017 (14.12.2017)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/435,447 16 December 2016 (16.12.2016) US
15/839,563 12 December 2017 (12.12.2017) 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, CZ, DE, DJ, DK, DM, DO,

DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
HR, HU, ID, IL, IN, IR, IS, JO, JP, KE, KG, KH, KN, KP,
KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME,
MG, MK, MN, 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, 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, RW, 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, 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))

(88) Date of publication of the international search report:
26 July 2018 (26.07.2018)

(54) Title: ROTATABLE ELECTROSTATIC CHUCK HAVING BACKSIDE GAS SUPPLY

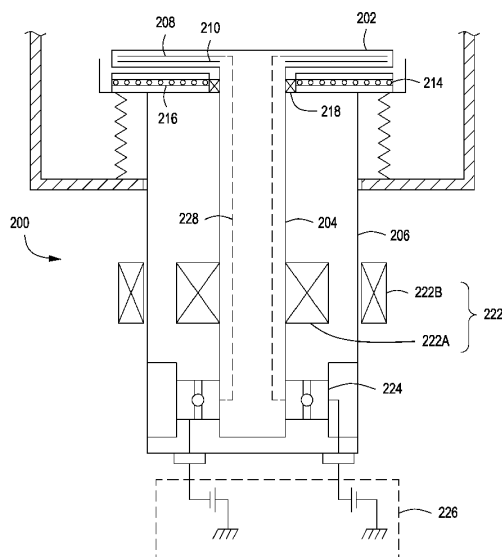


FIG. 2

(57) Abstract: Embodiments of a substrate support pedestal and an electrostatic chuck incorporating same are disclosed herein. In some embodiments, a substrate support pedestal includes: a body having an upper surface and a lower surface opposite the upper surface; one or more chucking electrodes disposed within the body; a plurality of substrate support elements protruding from the upper surface to support a substrate; a hole disposed in the lower surface at a center of and partially through the body; a plurality of gas holes disposed in the upper surface proximate the center of the body, wherein the plurality of gas holes is disposed above and fluidly coupled to the hole; and a plurality of gas distribution grooves formed in the upper surface and fluidly coupled to the plurality of gas holes.

WO 2018/112159 A3