



(51) International Patent Classification:
B24B 37/32 (2012.01)

(21) International Application Number:
PCT/US2022/034175

(22) International Filing Date:
20 June 2022 (20.06.2022)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/202,827 25 June 2021 (25.06.2021) US

(71) Applicant: **GLOBALWAFERS CO., LTD.** [CN/CN];
No. 8, Gongye E. 2nd Rd., East District, Hsinchu City,
30075 (TW).

(72) Inventors: **HSU, Chih Yuan**; 501 Pearl Drive, St. Peters,
Missouri 63376 (US). **LIN, Jen Chieh**; 501 Pearl Drive, St.
Peters, Missouri 63376 (US). **HUANG, Wei Chang**; 501

Pearl Drive, St. Peters, Missouri 63376 (US). **YANG, Yau-Ching**; 501 Pearl Drive, St. Peters, Missouri 63376 (US).
ALBRECHT, Peter Daniel; 501 Pearl Drive, St. Peters,
Missouri 63376 (US).

(74) Agent: **MUNSELL, Michael G.** et al.; Armstrong Teasdale
LLP, 7700 Forsyth Blvd., Suite 1800, St. Louis, Missouri
63105 (US).

(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, IQ, IR, IS, IT, JM, 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, ST, SV, SY, TH, TJ, TM,

(54) Title: POLISHING HEAD ASSEMBLY HAVING RECESS AND CAP

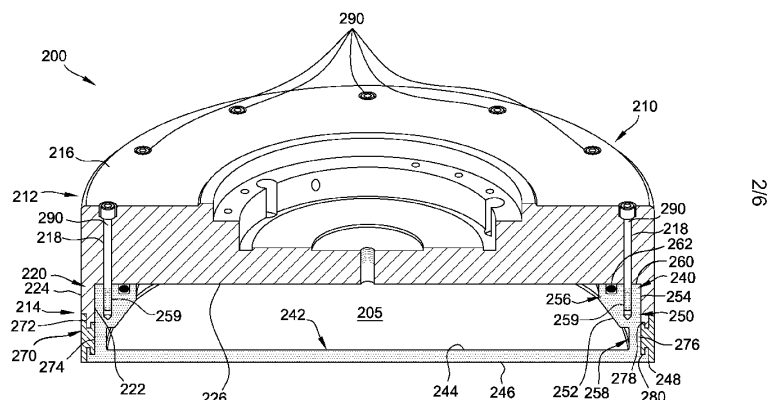


FIG. 2

(57) Abstract: A polishing head assembly for polishing of semiconductor wafers includes a polishing head and a cap. The polishing head has a top portion and a recess along a bottom portion. The recess has a recessed surface. Holes extend from the top portion through the recessed surface. The cap is positioned within the recess and the cap has an annular wall and a floor extending across the annular wall. The annular wall has apertures corresponding to the holes. The floor is spaced from the recessed surface to form a chamber therebetween. The polishing head assembly also includes a band that circumscribes a portion of the annular wall. The holes and the corresponding apertures receive fasteners to removably secure the annular wall to the recessed surface.

[Continued on next page]

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, 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))