



- (51) **International Patent Classification:**
C03C 25/68 (2006.01) *C23F 1/00* (2006.01)
- (21) **International Application Number:**
PCT/US2014/016479
- (22) **International Filing Date:**
14 February 2014 (14.02.2014)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
13/780,657 28 February 2013 (28.02.2013) 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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, 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, 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, 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))
- 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))

(54) **Title:** A SYSTEM AND METHOD FOR PERFORMING A WET ETCHING PROCESS

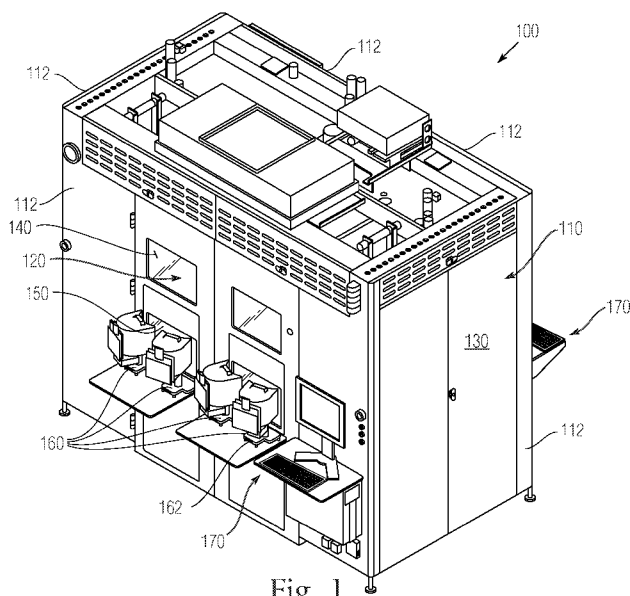


Fig. 1

(57) **Abstract:** A system and method for performing a wet etching process is disclosed. The system includes multiple processing stations accessible by a transfer device, including a measuring station to optically measure the thickness of a substrate, a controller to calculate an etch recipe for the substrate, in real time, and cause a single wafer wet etching station to etch the substrate according to the recipe. In addition, the system can measure the after etch thickness and calculate etch recipes, in real time, as a function of the final measurements of a previous substrate. The system can also include an in situ end point detection device for detecting the TSV reveal point while etching TSVs substrates. The system provides an automated solution to adjust etch recipe parameters in real time according to feedback concerning previously etched wafers and precisely control the TSV reveal height and etch duration using end point detection.