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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 April 2004 (08.04.2004)

PCT

(10) International Publication Number
WO 2004/030050 A2

(51) International Patent Classification[7]: H01L 21/00

(21) International Application Number:
PCT/US2003/030117

(22) International Filing Date:
18 September 2003 (18.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
10/256,251 25 September 2002 (25.09.2002) US

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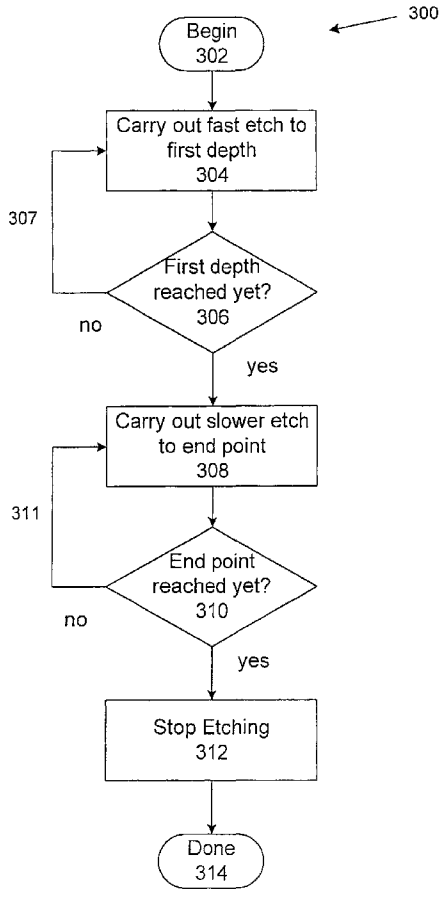
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(81) Designated States *(national)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, 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 *(regional)*: ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),

[Continued on next page]

(54) Title: APPARATUS AND METHOD FOR CONTROLLING ETCH DEPTH



(57) Abstract: An apparatus and method for etching a feature in a wafer with improved depth control and reproducibility is described. The feature is etched at a first etching rate and then at a second etching rate, which is slower than the first etching rate. An optical end point device is used to determine the etching depth and etching is stopped so that the feature has the desired depth. Two different etching rates provides high throughput with good depth control and reproducibility. The apparatus includes an etching tool in which a chuck holds the wafer to be etched. An optical end point device is positioned to measure the feature etch depth. An electronic controller communicates with the optical end point device and the etching tool to control the tool to reduce the etch rate part way through etching the feature and to stop the etching tool, so that that the feature is etched to the desired depth.

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European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report*

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