

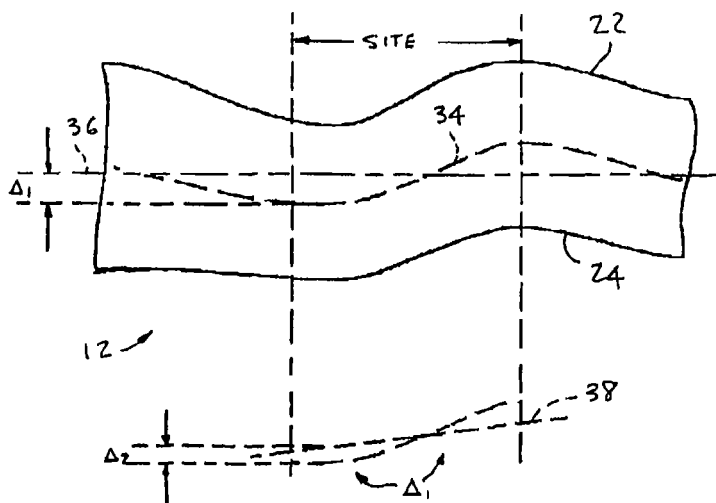


INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 : G01B 21/30	A1	(11) International Publication Number: WO 00/52420 (43) International Publication Date: 8 September 2000 (08.09.00)
(21) International Application Number: PCT/US00/03078 (22) International Filing Date: 7 February 2000 (07.02.00) (30) Priority Data: 09/264,230 5 March 1999 (05.03.99) US (71) Applicant: MEMC ELECTRONIC MATERIALS, INC. [US/US]; 501 Pearl Drive, P.O. Box 8, St. Peters, MO 63376 (US). (72) Inventor: WITTE, Dale, A.; MEMC Electronic Materials, Inc., 501 Pearl Drive, P.O. Box 8, St. Peters, MO 63376 (US). (74) Agents: HEJLEK, Edward, J. et al.; Senniger, Powers, Leavitt & Roedel, One Metropolitan Square, 16th Fl., St. Louis, MO 63102 (US).		(81) Designated States: CN, JP, KR, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>



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(54) Title: METHOD AND SYSTEM OF MEASURING WAVINESS IN SILICON WAFERS**(57) Abstract**

A method and system of measuring waviness of a silicon wafer. A memory stores data representative of the shape of the wafer at a plurality of positions on the wafer and a processor processes the data to determine a waviness parameter. The processor defines an inspection surface as a function of the data and calculates deviations between the inspection surface and a first reference plane at a plurality of positions on the inspection surface. The processor further defines a plurality of localized sites on the wafer and calculates deviations between the inspection surface and a second reference plane at a plurality of positions on the inspection surface for each site. The second reference plane is a function of the calculated deviations between the inspection surface for each site and the first reference plane. The processor then defines a waviness parameter for each site as a maximum variance of the calculated deviations between the inspection surface and the second reference plane.



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