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(71) Applicant (for all designated States except US): **LAM RESEARCH CORPORATION** [US/US]; 4650 Cushing Parkway, Fremont, California 94538 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **O'NEILL, Robert Griffith** [US/US]; 1401 Red Hawk Circle, L302, Fremont, California 94538 (US). **LUQUE, Jorge** [ES/US]; 1404 Oak Avenue, Redwood City, California 94061 (US). **CHOU, Shang-I** [CN/US]; 1211 Gehrig Avenue, San Jose, California 95132 (US). **SINGH, Harmeet** [IN/US]; 759 Praderia Circle, Fremont, California 94539 (US).

(74) Agent: **KONTRUS, Gerhard**; SEZ-Strasse 1, A-9500 Villach (AT).

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Declarations under Rule 4.17:

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR CENTERING WAFER ON CHUCK

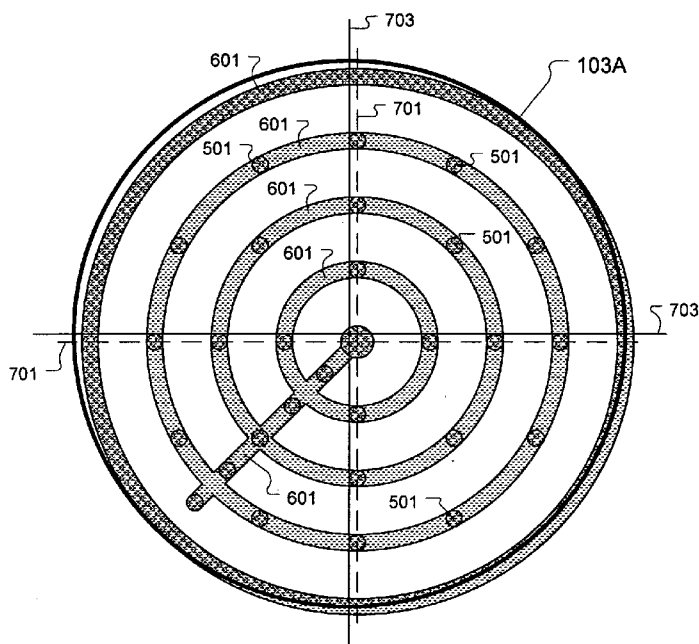


Fig. 7C

(57) Abstract: A wafer handling mechanism is operated to place a wafer on a chuck. A chucking force is then applied to the wafer, whereby wafer support features of the chuck transfer a defect pattern onto a surface of the wafer. The surface of the wafer is analyzed by a defect metrology tool to obtain a mapping of the defect pattern transferred onto the surface of the wafer. A center coordinate of the chuck within a coordinate system of the wafer is determined by analyzing the defect pattern as transferred to the surface of the wafer. A spatial offset between the center coordinate of the chuck and the center of the wafer is determined. The spatial offset is used to adjust the wafer handling mechanism so as to enable alignment of the center of the wafer to the center coordinate of the chuck.



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