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(54) Title: SYSTEMS AND METHODS FOR DYNAMIC ALIGNMENT BEAM CALIBRATION

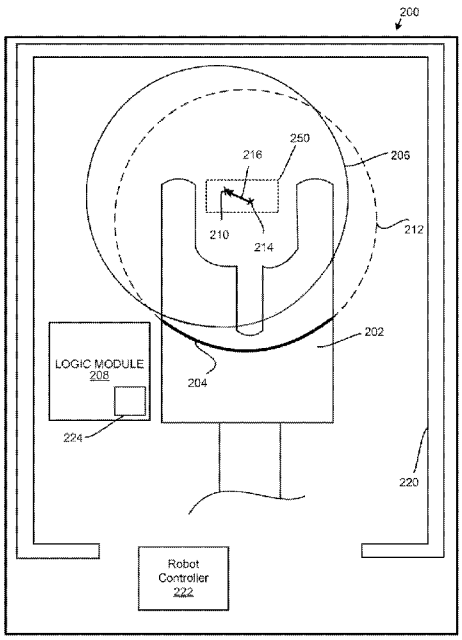


FIG. 2

(57) Abstract: A method for performing DA (Dynamic Alignment) beam calibration in a plasma processing system is provided. The method including acquiring a positional difference, the positional difference is acquired using an optical imaging approach. The optical imaging approach comprising of positioning the wafer on the end effector, taking a still image of the wafer on the end effector, processing the still image to ascertain the center of the wafer and an end effector-defined center defined by the end effector, and determining the positional difference between the center of the wafer and the end effector-defined center defined by the end effector. The method also includes centering a wafer with respect to an end effector by compensating for a positional difference between the wafer and the end effector with robot movement compensation. The method including moving the wafer and the end effector through DA beams associated with a plasma processing module. The method also includes obtaining a reference DA beam pattern by recording a break-and-make pattern of the DA beams. The break-and-make pattern occurring as the wafer and the end effector move through the DA beams.

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