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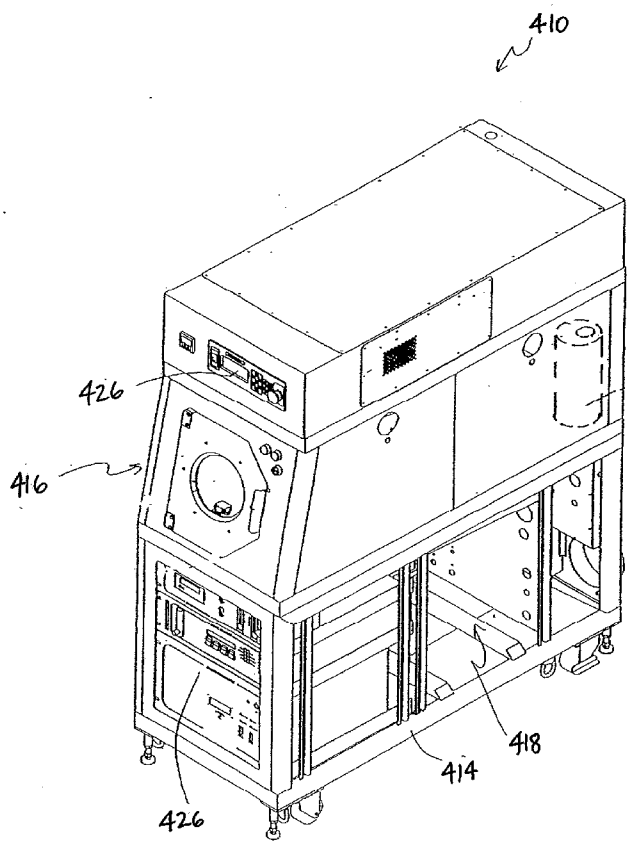
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(54) Title: SYSTEM FOR THINNING A SEMICONDUCTOR WORKPIECE



(57) Abstract: The present invention provides a system for use in processing semiconductor workpieces. A new apparatus and method allows for the production of thinner workpieces that at the same time remain strong. Particularly, a chuck is provided that includes a body, a retainer removeably attached to the body and a seal forming member. When a workpiece is placed on the chuck body and the retainer is engaged to the body, a peripheral portion of the back side of the workpiece is covered by the retainer while an interior region of the back side of the workpiece is exposed. The exposed back side of the workpiece is then subjected to a wet chemical etching process to thin the workpiece and form a relatively thick rim comprised of semiconductor material at the periphery of the workpiece. The thick rim or hoop imparts strength to the otherwise fragile, thinned semiconductor workpiece. The present invention provides for single workpiece thinning or thinning a batch of workpieces. Semiconductor workpieces made according to the present invention offer an improved structure for handling thinned wafers in conventional automated equipment. This results in improved yields and improved process efficiency.

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