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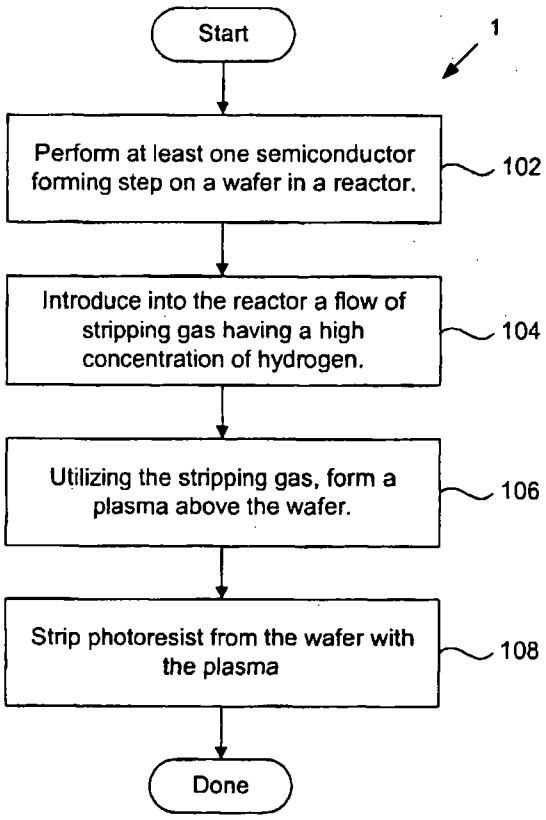
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(54) Title: PROCESS FOR THE POST ETCH STRIPPING OF PHOTORESIST WITH HYDROGEN



(57) Abstract: Method for stripping photoresist from a semiconductor wafer including a layer of organosilicate dielectric. The method introduces a flow of hydrogen-containing gas to the wafer, and uses the hydrogen-containing gas to form a plasma in proximity with at least a portion of the wafer. The plasma is used to strip at least a portion of the photoresist from the wafer. Where the stripping of the photoresist from the semiconductor wafer is performed subsequent to an etching step performed on the wafer in an etch apparatus, the present invention in turn enables the stripping of the photoresist in situ within the etch apparatus. A surprising result of the present invention is that dramatically elevated concentrations of hydrogen gas not only enable high throughput strip rates, but that the utilization of these highly concentrated hydrogen gas mixtures can be performed in safety.

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