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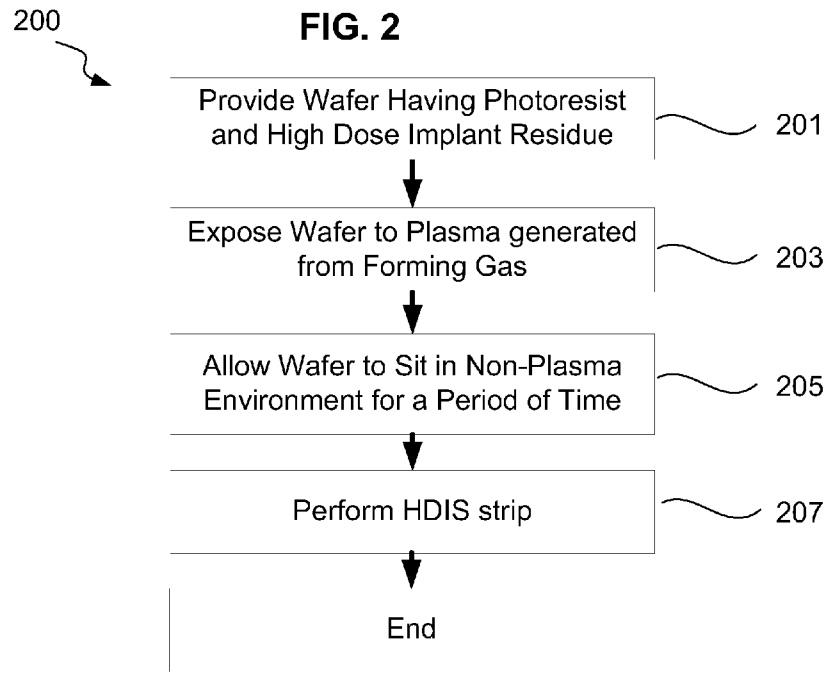
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(54) Title: ENHANCED PASSIVATION PROCESS TO PROTECT SILICON PRIOR TO HIGH DOSE IMPLANT STRIP



(57) Abstract: improved methods and apparatus for stripping photoresist and removing ion implant related residues from a work piece surface are provided. According to various embodiments, the workpiece is exposed to a passivation plasma, allowed to cool for a period of time, and then exposed to an oxygen-based or hydrogen-based plasma to remove the photoresist and ion implant related residues. Aspects of the invention include reducing silicon loss, leaving little or no residue while maintaining an acceptable strip rate. In certain embodiments, methods and apparatus remove photoresist material after high-dose ion implantation processes.

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