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(54) Title: COMPOSITIONS AND METHODS FOR MODIFYING A SURFACE SUITED FOR SEMICONDUCTOR FABRICATION

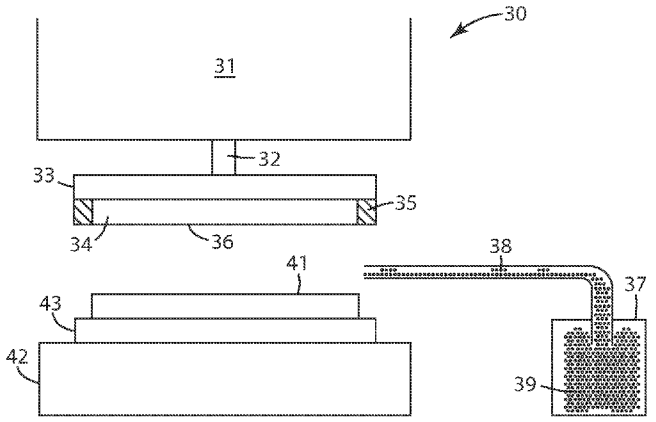


FIG. 3

(57) Abstract: The disclosure pertains to compositions and methods for modifying or refining the surface of a wafer suited for semiconductor fabrication. The compositions include working liquids useful in modifying a surface of a wafer suited for fabrication of a semiconductor device. In some embodiments, the working liquids are aqueous solutions of initial components substantially free of loose abrasive particles, the components including water, a surfactant, and a pH buffer exhibiting at least one pKa greater than 7. In certain embodiments, the pH buffer includes a basic pH adjusting agent and an acidic complexing agent, and the working liquid exhibits a pH from about 7 to about 12. In further embodiments, the disclosure provides a fixed abrasive article comprising a surfactant suitable for modifying the surface of a wafer, and a method of making the fixed abrasive article. Additional embodiments describe methods that may be used to modify a wafer surface.

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