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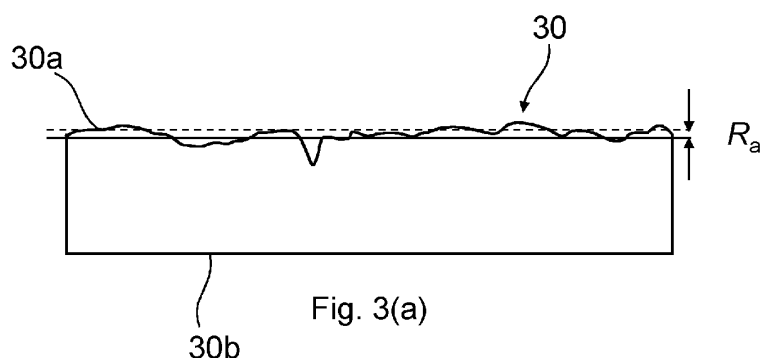
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(54) Title: METHOD OF PREPARING A SILICON CARBIDE WAFER



(57) Abstract: A method of preparing a silicon carbide wafer for subsequent epitaxial growth thereon is disclosed. The method comprises (a) placing the silicon carbide wafer onto a support table in a plasma processing chamber such that the surface of the silicon carbide wafer distal to the support table is unmasked; (b) establishing a flow of an etch gas mixture into the plasma processing chamber, wherein the etch gas mixture comprises molecular hydrogen, H₂; and (c) generating a plasma from the etch gas mixture within the plasma processing chamber and using the plasma to etch the unmasked surface of the wafer so as to reduce the roughness of the unmasked surface.



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