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(54) Title: METHOD TO FABRICATE ADJACENT SILICON FINS OF DIFFERING HEIGHTS

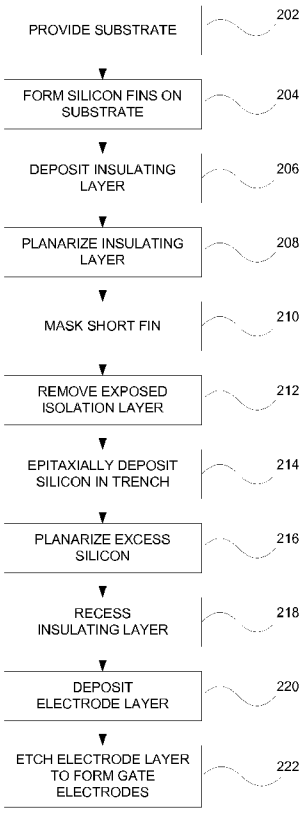



Fig. 2

(57) Abstract: A method to fabricate adjacent silicon fins of differing heights comprises providing a silicon substrate having an isolation layer deposited thereon, patterning the isolation layer to form first and second isolation structures, patterning the silicon substrate to form a first silicon fin beneath the first isolation structure and a second silicon fin beneath the second isolation structure, depositing an insulating layer on the substrate, planarizing the insulating layer to expose top surfaces of the first and second isolation structures, depositing and patterning a masking layer to mask the first isolation structure but not the second isolation structure, applying a wet etch to remove the second isolation structure and expose the second silicon fin, epitaxially depositing a silicon layer on the second silicon fin, and recessing the insulating layer to expose at least a portion of the first silicon fin and at least a portion of the second silicon fin.

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