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(54) Title: ION IMPLANTATION FOR REDUCED HYDROGEN INCORPORATION IN AMORPHOUS SILICON

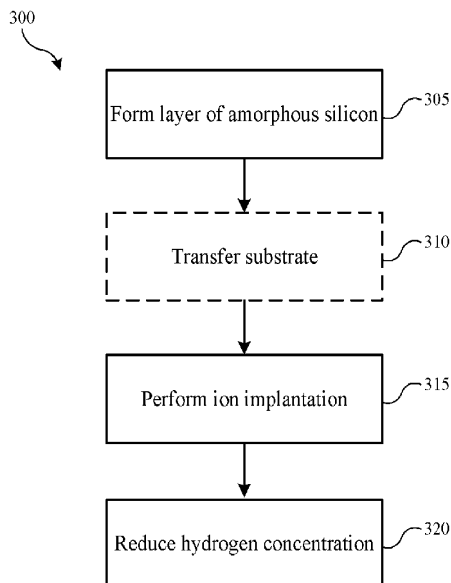


FIG. 3

(57) Abstract: Exemplary methods of semiconductor processing may include forming a layer of amorphous silicon on a semiconductor substrate. The layer of amorphous silicon may be characterized by a first amount of hydrogen incorporation. The methods may include performing a beamline ion implantation process or plasma doping process on the layer of amorphous silicon. The methods may include removing hydrogen from the layer of amorphous silicon to a second amount of hydrogen incorporation less than the first amount of hydrogen incorporation.

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