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(54) **Title:** CATALYTIC FORMATION OF BORON AND CARBON FILMS

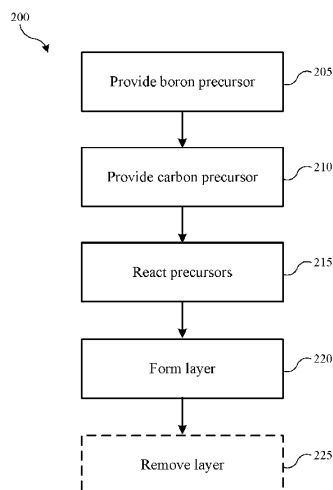


FIG. 2

(57) **Abstract:** Exemplary methods of semiconductor processing may include providing a boron-containing precursor to a processing region of a semiconductor processing chamber. A substrate may be disposed within the processing region of the semiconductor processing chamber. The methods may include providing a carbon-containing precursor to the processing region of the semiconductor processing chamber. The carbon-containing precursor may be characterized by a carbon-carbon double bond or a carbon-carbon triple bond. The methods may include thermally reacting the boron-containing precursor and the carbon-containing precursor at a temperature below about 650 °C. The methods may include forming a boron-and-carbon-containing layer on the substrate.

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