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(54) Title: ELECTROSTATIC CHUCK WITH REDUCED CHARGE INJECTION INTO DIELECTRIC LAYER

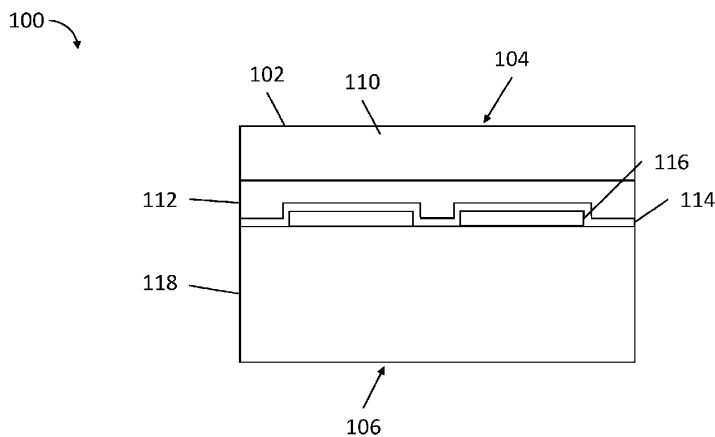


FIG. 2

(57) Abstract: An electrostatic chuck device having reduced charge injection may include a dielectric layer, a bonding layer, an electrode layer, and an isolator layer, the bonding layer being located between the dielectric layer and the electrode layer, the electrode layer being located between the bonding layer and the isolator layer, and the electrode layer does not directly contact the dielectric layer. The bonding layer comprises a nonelectrically conductive polymeric material that covers the electrode layer such that a surface roughness of an upper surface of the bonding layer is less than a surface roughness of an upper surface of the electrode layer. The electrostatic chuck device may also include a charge barrier layer located between the bonding layer and the electrode layer to further reduce a surface roughness of the bonding layer as compared to the electrode layer. The reduced surface roughness reduces charge injection from the electrode layer.

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