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(54) Title: TRANSFORMER COUPLED PLASMA SOURCE DESIGN FOR THIN DIELECTRIC FILM DEPOSITION

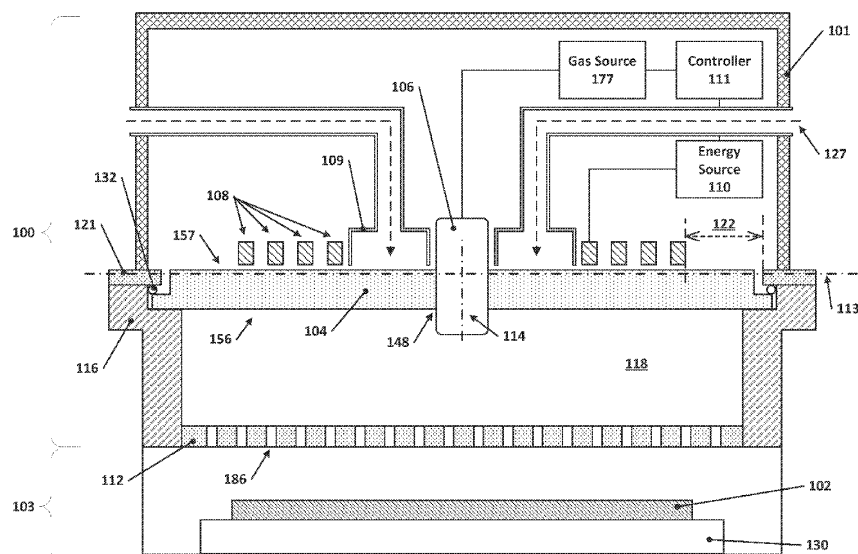


FIG. 1

(57) Abstract: An apparatus, comprising: a process chamber, wherein the process chamber comprises: a window, wherein the window comprises a dielectric material that is transmissive to radio frequency (RF) energy, wherein the window has a first side and a second side opposite the first side; a collar assembly having an aperture covered by the window, wherein the collar assembly supports the first side of the window; and one or more RF coils positioned above the second side of the window, wherein, when viewed along a first axis perpendicular to the window, a radial distance between an outermost portion of the one or more RF coils and an innermost portion of an electrically conductive portion of the collar assembly that intersects with a first reference plane that is perpendicular to the first axis and between the first side of the window and the one or more RF coils is greater than or equal to 40 mm.

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WO 2023/015296 A1

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