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(54) **Title**: METHOD AND APPARATUS FOR HIGH ASPECT RATIO DIELECTRIC ETCH

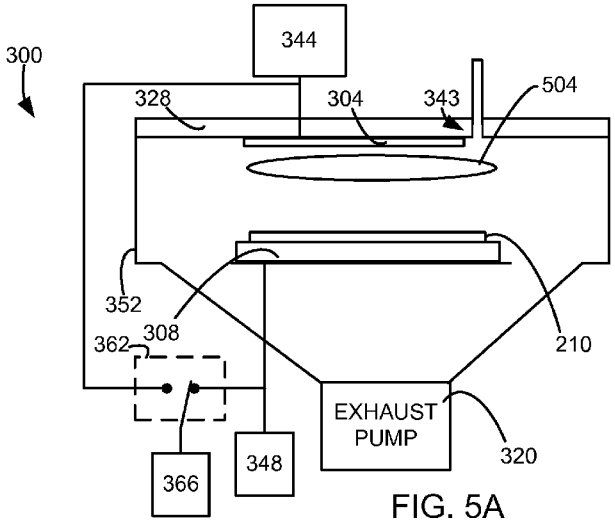


FIG. 5A

(57) **Abstract**: An apparatus for etching high aspect ratio features is provided. A plasma processing chamber is provided, comprising a chamber wall forming a plasma processing chamber enclosure, a lower electrode, an upper electrode, a gas inlet, and a gas outlet. A high frequency radio frequency (RF) power source is electrically connected to at least one of the upper electrode or lower electrode. A bias power system is electrically connected to both the upper electrode and the lower electrode, wherein the bias power system is able to provide a bias to the upper and lower electrodes with a magnitude of at least 500 volts, and wherein the bias to the lower electrode is pulsed to intermittently. A gas source is in fluid connection with the gas inlet. A controller is controllably connected to the gas source, the high frequency RF power source, and the bias power system.

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