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(54) Title: REACTOR BOX CHAMBER CLEANING USING MOLECULAR FLUORINE

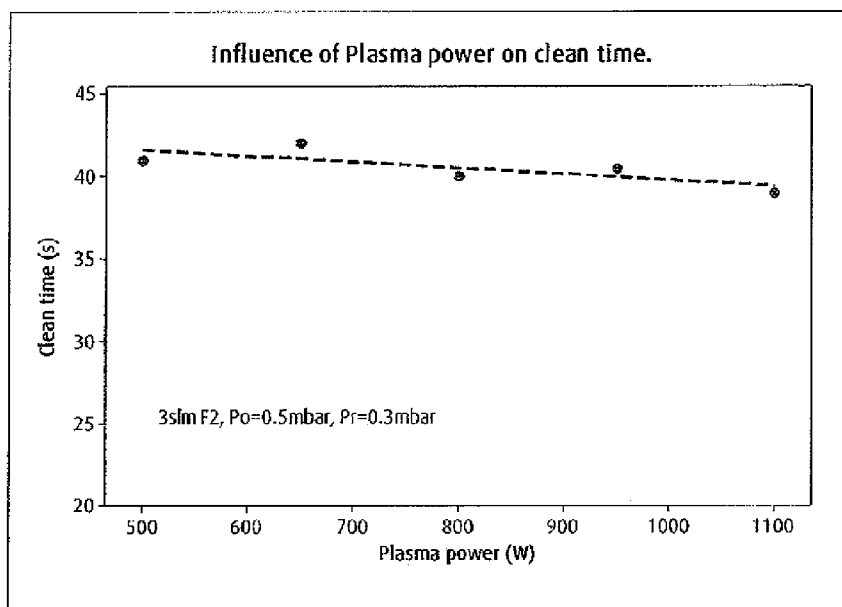


FIG. 2

(57) Abstract: Methods and apparatus for the cleaning reactor box chambers using molecular fluorine as the cleaning material. The molecular fluorine is dissociated in-situ in the chamber using the chamber RF power source. An exemplary method for cleaning a reactor box chamber may comprise the steps: introducing molecular fluorine to the chamber; dissociating the molecular fluorine to create fluorine radicals; allowing the fluorine radicals to react with unwanted deposits in the chamber; and removing the resultant gas from the chamber.



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