

ACCELERATED PLASMA CLEAN

ABSTRACT OF THE DISCLOSURE

A method and apparatus that reduces the time required to clean a processing chamber employing a reactive plasma cleaning process. A plasma is formed in an Astron fluorine source generator from a flow of substantially pure inert-source gas. After formation of the plasma, a flow of a fluorine source gas is introduced therein such that the fluorine source flow accelerates at a rate no greater than 1.67 standard cubic centimeters per second² (scc/s²). In this fashion, the plasma contains a plurality of radicals and dissociated inert-source gas atoms, defining a cleaning mixture. The ratio of inert-source gas to fluorine source is greater than 1:1.

Fig. 3



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PA 158254 v1



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