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(54) **Title:** A CHAMBER CLEANING METHOD USING F₂ AND A PROCESS FOR MANUFACTURE OF F₂ FOR THIS METHOD

(57) **Abstract:** Elemental fluorine is often manufactured electrochemically from a solution of KF in hydrogen fluoride and contains varying amounts of HF as impurity. The present invention provides a method for chamber cleaning using F₂ which contains more than 0.1 % by weight and equal to or less than 10 % by weight of HF. Surprisingly, such an F₂ is very well suited for the purpose of chamber cleaning. In a preferred embodiment, the F₂ which contains more than 0.1 % by weight and less than 2.5 % by weight of HF is electrolytically produced, cleaned, delivered and used on site, without any pressurizing treatment. Omitting cleaning steps and process and using process conditions leaving a relatively high HF content in the F₂ allows at the same time to omit pressurizing steps. The advantage is that less cleaning steps.



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