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(71) Applicant (for all designated States except US):
SOLVAY SA [BE/BE]; Rue du Prince Albert, 33,
B-1050 Bruxelles (BE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DIANA, Olivier**
[IT/BE]; Meeuwenlaan, 101, B-1800 Vilvoorde (BE).
PREDIKANT, Peter M. [DE/DE]; Am kleinen Teich, 6,
30519 Hannover (DE). **MORELLE, Philippe** [BE/BE];
Ingendaellaan, 66, B-1652 Alsemberg (BE). **PAGANIN,**
Maurizio [IT/BE]; Avenue François Folie, 28, B-1180
Brussels (BE). **SOMMER, Christoph** [DE/DE];
Leipziger Strasse 11, 74172 Neckarsulm (DE).

(74) Agents: **MROSS, Stefan** et al.; SOLVAY SA, Intellectual
Property Department, Rue de Ransbeek, 310, B-1120
Bruxelles (BE).

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(54) Title: METHOD FOR THE PURIFICATION OF FLUORINE

(57) Abstract: Elemental fluorine is often manufactured electrochemically from a solution of KF in hydrogen fluoride and contains varying amounts of entrained electrolyte salt in solid form as impurity. The invention concerns a process for the purification of such impure elemental fluorine by contact with liquid hydrogen fluoride, e.g. in a jet gas scrubber or by bubbling the raw fluorine through liquid hydrogen fluoride. After this purification step, any entrained hydrogen fluoride is removed by adsorption, condensing it out or both. After passing through a filter with very small pores, the purified fluorine is especially suited for the semiconductor industry as etching gas or as chamber cleaning gas in the manufacture of semiconductors, TFTs and solar cells, or for the manufacture of micro-electromechanical systems ("MEMS").

