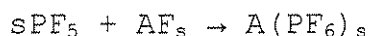


ABSTRACT OF THE DISCLOSURE

An object of the present invention is to provide a method of manufacturing phosphorus pentafluoride and
5 hexafluorophosphate, that can suppress the manufacturing cost and also can manufacture high-quality phosphorus pentafluoride from an inexpensive and low-quality raw material. The present invention relates to a method of manufacturing phosphorus pentafluoride, wherein a raw material which comprises at least
10 a phosphorus atom and a fluorine atom is brought into contact with a carrier gas, thereby a phosphorus pentafluoride is extracted and separated into the career gas. The present invention relates to a method of manufacturing hexafluorophosphate, comprising the step of: reacting fluoride
15 with phosphorus pentafluoride obtained by the method of manufacturing phosphorus pentafluoride according to the following chemical reaction scheme,



wherein s is in the range of $1 \leq s \leq 3$, and A is at least one member
20 selected from the group consisting of Li, Na, K, Rb, Cs, NH_4 , Ag, Mg, Ca, Ba, Zn, Cu, Pb, Al and Fe.