

Title (en)
METHOD FOR PRODUCING AMMONIUM HEXAFLUOROPHOSPHATES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON AMMONIUMHEXAFLUOROPHOSPHATEN

Title (fr)
PROCÉDÉ DE PRODUCTION DE D'HEXAFLUOROPHOSPHATES D'AMMONIUM

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Application
EP 08708305 A 20080128

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Abstract (en)
[origin: EP1950196A1] Preparing ammonium hexafluorophosphate compound (I) comprises: reacting quaternary ammonium compound (a) with a phosphate salt compound (b) in the presence of solvent to give (I), which is not a tiotropium hexafluorophosphate compound (II). Preparing ammonium hexafluorophosphate compound of formula (R₄>-N+>(R₃>-R₁>R₂> PF₆>-) (I) comprises: reacting quaternary ammonium compound of formula (R₄>-N+>(R₃>-R₁>R₂> X>) (a) with a phosphate salt compound of formula (Kat+>PF₆>-) (b) in the presence of solvent to give (I), which is not a tiotropium hexafluorophosphate compound of formula (II). R₁>, R₂>hydrocarbon, 1-10C-alkyl, 2-10C-alkenyl, 2-10C-alkinyl, 3-8C-cycloalkyl, 4-8C-cycloalkenyl, 6-8C-cycloalkinyl, 6-10C-aryl-1-6C-alkyl, 6-10C-aryl-2-6C-alkenyl, 6-10C-aryl-2-6C-alkinyl, 6-10C-aryl or heterocyclyl (optionally substituted); either R₃>, R₄>R₁>; or NR₃>R₄>mono-, di- or tricyclic, 4-10C optionally saturated carbocycle (optionally substituted by O or S); X : anion; and Kat+>cation of Na+>, K+> (both preferred), Li+>, Mg²⁺> or Ca²⁺>. An independent claim is included for the ammonium hexafluorophosphate compound (I), which is not a tiotropium hexafluorophosphate compound (II). [Image].

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