

Title (en)
PROCESS FOR SEPARATING CESIUM IONS FROM AQUEOUS SOLUTIONS

Publication
EP 0073263 B1 19851204 (DE)

Application
EP 81106784 A 19810831

Priority
EP 81106784 A 19810831

Abstract (en)
[origin: EP0073263A1] 1. Process for separating cesium ions from aqueous solutions with an adduct compound consisting of a macrocyclic polyether and an inorganic, complex acid and their salts, respectively, comprising the following process steps (a) producing the adduct compound of a macrocyclic polyether consisting of at least one species of the structural elements see diagramm : EP0073263,P16,F1 see diagramm : EP0073263,P16,F2 see diagramm : EP0073263,P16,F3 in the polyether ring, where R=H, alkyl or aryl and n meaning either the figures 0, 1 or 2 with an inorganic complex acid and its salts, respectively, consisting of a multivalent element from the boron, antimoine, mercury, bismuth group as the central atom and several atoms of an element of the seventh main group or several phenyl and cyano radicals, respectively, as ligands in a polar organic solvent - except for producing an adduct of dibenzo-18-crown-6 with sodium tetraphenylborate (DB-18-C-6/NaTPB) ; (b) bringing the aqueous solution containing the cesium ions into contact with the adduct compound from (a) to extract the cesium from the aqueous solution into the organic phase ; and (c) separating the organic phase charged with cesium ions from the aqueous solution free of cesium or containing but little amounts of cesium.

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G21F 9/00

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