

Abstract**Process for removal of strontium ions from strong alkaline solutions**

Strontium cations are removed from strong alkaline aqueous solutions in a combined extraction and stripping process. Extraction is achieved by an liquid organic phase comprising a di-(2-ethylhexyl) phosphoric acid (hereinafter abbreviated D2EHPA) dissolved in immiscible in water alkyl hydrocarbons, aril hydrocarbons, higher alcohols and mixtures thereof. Concurrently strontium is stripped from the organic solvent by strong acidic aqueous solution, and preferably sulphuric acid solution, thus forming a precipitate of strontium sulphate. The liquid organic phase may be recycled to extract additional amounts of strontium ions and the strong alkaline aqueous solution may be saturated with D2EHPA.

(Fig. 1 is to be published.)

