

Title (en)
PROCESS FOR IMMOBILIZING NUCLEAR WASTES IN A BOROSILICATE GLASS

Publication
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Application
EP 87400751 A 19870406

Priority
FR 8605009 A 19860408

Abstract (en)
[origin: US4772431A] The invention relates to a process for the immobilization of nuclear waste in a borosilicate glass. In the process, the following are mixed simultaneously: a silica-based gel precursor, a concentrated aqueous solution of a boron compound, and concentrated aqueous solutions of the other constituents of the final glass, i.e. a solution (solutions) of the waste to be treated and a solution of the vitrification adjuvant, with vigorous stirring, mixing taking place at between 20 DEG and 80 DEG C., preferably at 65 DEG -70 DEG C., in proportions corresponding to the desired composition of the glass, the said mixture having an acid pH, preferably a pH of between 2.5 and 3.5, and the said mixture is dried, calcined at between 300 DEG and 500 DEG C. and then melted. The invention is applied to the treatment of solutions of nuclear waste, especially to solutions of fission products.

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Cited by
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