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**Method of Immobilising nuclear waste.**

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Method of immobilizing nuclear waste in an aqueous slurry which contains sodium sulfate. The water evaporated from the slurry and the resulting concentrate is mixed with from 50 to 200% by weight based on the sodium sulfate weight of a destabilizing compound which contains a metal which forms an unstable sulfate and from 5 to 20% by weight based on a total weight of the sodium sulfate in the destabilizing compound of a reducing agent. The mixture is heated at from 700 to 900 °C to decompose the sulfate and evolve the resulting sulfurous gases. After cooling, glass formers are added to the concentrate in a weight ratio of from 1 to 2. The concentrate is heated to from 1050 to 1200 °C to form a homogeneous melt. The melt is cooled, packaged, labeled, and transported to storage.

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## EUROPEAN SEARCH REPORT

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Application number

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DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
A	US-A-4 094 809 (US DEPARTMENT OF ENERGY) * Claims 1,2 *	1,2,6	G 21 F 9/16
A	GB-A-2 028 295 (KRAFTWERK UNION) * Claims 1,2 *	1,5,6	
A	US-A-3 557 013 (DETILLEUX)		
			TECHNICAL FIELDS SEARCHED (Int. Cl.4)
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The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 23-04-1985	Examiner NICOLAS H.J.F.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	