

Title (en)
METHOD OF IMMOBILISING NUCLEAR WASTE

Publication
EP 0149554 A3 19850828 (EN)

Application
EP 85300269 A 19850115

Priority
US 57121384 A 19840116

Abstract (en)
[origin: EP0149554A2] 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 DEG 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 DEG C to form a homogeneous melt. The melt is cooled, packaged, labeled, and transported to storage.

IPC 1-7
G21F 9/16

IPC 8 full level
G21F 9/16 (2006.01); **G21F 9/00** (2006.01); **G21F 9/06** (2006.01); **G21F 9/30** (2006.01)

CPC (source: EP KR)
G21F 9/04 (2013.01 - KR); **G21F 9/06** (2013.01 - EP); **G21F 9/305** (2013.01 - EP)

Citation (search report)
• [A] US 4094809 A 19780613 - ROSS WAYNE A
• [A] GB 2028295 A 19800305 - KRAFTWERK UNION AG
• [A] US 3557013 A 19710119 - DETILLEUX EMILE, et al

Cited by
FR2659784A1; EP0190764A1; FR2677798A1; FR2642565A1

Designated contracting state (EPC)
DE FR GB IT SE

DOCDB simple family (publication)
EP 0149554 A2 19850724; EP 0149554 A3 19850828; EP 0149554 B1 19880824; DE 3564635 D1 19880929; ES 539553 A0 19861201; ES 8702075 A1 19861201; JP S60159699 A 19850821; KR 850005716 A 19850828; PH 22647 A 19881028

DOCDB simple family (application)
EP 85300269 A 19850115; DE 3564635 T 19850115; ES 539553 A 19850114; JP 665985 A 19850116; KR 850000241 A 19850116; PH 31683 A 19850104