

Title (en)
Method of immobilising nuclear waste.

Title (de)
Verfahren zum Festlegen von nuklearem Abfall.

Title (fr)
Procédé pour immobiliser les déchets radioactifs.

Publication
EP 0149554 A2 19850724 (EN)

Application
EP 85300269 A 19850115

Priority
US 57121384 A 19840116

Abstract (en)
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.

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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)

Cited by
EP0190764A1; FR2642565A1; FR2659784A1; FR2677798A1

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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

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