Title (en)

PROCESS FOR PREPARING BODIES CONTAINING HIGHLY RADIOACTIVE WASTES

Publication

EP 0028670 B1 19830928 (DE)

Application

EP 80102963 A 19800528

Priority

DE 2945006 A 19791108

Abstract (en)

[origin: EP0028670A1] 1. Method for the production of high-level waste containing moulded materials by which the wastes and the glass, glass ceramic or ceramic matrix surrounding them are sintered by means of pressure and temperature, with 1) the wastes a) in the form of a dry or nearly dry powder being mechanically mixed in a conventional way with the glass, glass ceramic or ceramic matrix present as a granulate or powder; or b) in the form of a sludge being concentrated with glass, glass ceramic or ceramic powder, mechanically mixed and dried, and 2) the mixture, without previous encapsulation, being directly either c) cold pressed initially at a pressure of 50 MPa to 500 MPa and subsequently sintered below the matrix melting zone in the devitrification range at a temperature between 500 K and 800 K; or d) pressure sintered at a pressure of 10 to 50 MPa and a temperature in the range of 500 K to 800 K (hot isostatic pressing excepted).

IPC 1-7

G21F 9/34; G21F 9/16

IPC 8 full level

G21F 9/00 (2006.01); G21F 9/16 (2006.01); G21F 9/30 (2006.01)

CPC (source: EP

G21F 9/162 (2013.01); G21F 9/302 (2013.01); G21F 9/305 (2013.01)

Cited by

EP0156001A3; EP0136401A3; US4855082A; FR2525381A1; GB2121232A; CN110291593A; WO2018152290A1

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