

Title (en)  
DEVICE FOR INCORPORATING RADIOACTIVE WASTE IN CONCRETE IN WASTE CONTAINERS

Publication  
**EP 0031879 B1 19840328 (DE)**

Application  
**EP 80106603 A 19801028**

Priority  
DE 2951375 A 19791220

Abstract (en)  
[origin: EP0031879A1] 1. Device for immobilizing in concrete radioactive wastes in waste drums, with the ingredients of the mixture being filled into the drum and concrete being produced directly after mixing of those ingredients in that drum ; with a shielded and alpha-tight cell to which the feed opening of the empty drum can be connected by means of an opening in the cell floor, which opening can be closed by means of a double lid, which can be swung out of the way ; with a hollow shielding cylinder extending into the cell from the top, the interior of which accommodates the mixing tools after their withdrawal from the drum, and from which they can be lowered into the drum for mixing and lifted back into the cylinder, respectively ; with a shielding plate (6) installed in the cylinder (2) in a vertical sliding bearing so that its top is sealed relative to the cylinder (2), which plate holds the driving mechanism (8, 9) for the mixing tools (3) ; with another driving mechanism (10) attached to the plate (6), by means of which a central section (7) turning in the plate (6) and accommodating the bearing fixture of the mixing tools can be turned around its center axis (17) ; with the guide ring (22) constituting the upper extension and bearing fixture of the plate (6) holding one end (30) of a bellows (13) around the driving mechanism, the other end (31) of which bellows is indirectly connected to the wall of the cell (1) and to the base plate (34), respectively, supporting the cylinder (2), the bellows (13) being attached to the upper inner rim (32) of a hollow sheet metal cap (33) open at the top and resting on the base plate (34) ; and with lifting elements (11) for lowering and lifting, respectively, the plate (6) holding the mixing tools (3), which are located above that plate, i.e., outside the shielding opposite the contaminated interior (27) of the cell (1).

IPC 1-7  
**G21F 9/16**

IPC 8 full level  
**B28B 13/02** (2006.01); **G21F 9/00** (2006.01); **G21F 9/16** (2006.01); **G21F 9/30** (2006.01); **G21F 9/36** (2006.01)

CPC (source: EP)  
**G21F 9/008** (2013.01); **G21F 9/165** (2013.01); **G21F 9/304** (2013.01)

Citation (examination)  
• FR 2428304 A1 19800104 - SGN SOC GEN TECH NOUVELLE [FR]  
• DE 2637859 A1 19780302 - KERNFORSCHUNG GMBH GES FUER

Cited by  
FR2557473A1; CN109378098A; FR2728719A1; EP0724271A1; EP0175615A1; FR2569994A1; US4671667A

Designated contracting state (EPC)  
AT CH LI NL SE

DOCDB simple family (publication)  
**EP 0031879 A1 19810715; EP 0031879 B1 19840328**; AT E6890 T1 19840415; DE 2951375 A1 19810702; DE 2951375 C2 19870611; JP H0140319 B2 19890828; JP S56160700 A 19811210

DOCDB simple family (application)  
**EP 80106603 A 19801028**; AT 80106603 T 19801028; DE 2951375 A 19791220; JP 18030180 A 19801218