

Title (en)
CONTAINER FOR THE PERMANENT STORING OF BURNT-UP REACTOR FUEL ELEMENTS

Publication
EP 0082467 B1 19850807 (DE)

Application
EP 82111612 A 19821214

Priority
DE 3149945 A 19811217

Abstract (en)
[origin: ES8404554A1] The invention is directed to a container for the long-term storage of radioactive materials such as irradiated nuclear reactor fuel elements. The container is made of a material such as steel, cast steel or the like. The container includes a vessel having an opening at one end for receiving the radioactive material stored therein and a cover which is welded to the vessel for closing the same. In this container, the base material provides the mechanical strength and stability. To make the entire container resistant to corrosion, the vessel and cover are provided with respective weld platings at the partition interface of the container. The weld platings are made of cold-weldable, corrosion resistant material and are applied by the surface layer welding process. Corrosion protective layers are formed on the outer surfaces of the cover and vessel, respectively, and cover the outer surfaces up to the region of the weld platings. The corrosion protective layers are preferably made of graphite, ceramic or enamel. After the weld platings and corrosion protective layers are applied, the cover and vessel can be placed in a hot cell wherein the vessel is filled with radioactive material. Thereafter, the cover is joined to the vessel with a weld made of cold-weldable material applied to the weld platings at the partition interface. A follow-up heat treatment is unnecessary and operations in the hot cell are kept simple and to a minimum.

IPC 1-7
G21F 5/00

IPC 8 full level
G21F 9/36 (2006.01); **G21F 5/00** (2006.01); **G21F 5/002** (2006.01); **G21F 5/005** (2006.01); **G21F 5/008** (2006.01); **G21F 5/12** (2006.01)

CPC (source: EP US)
G21F 5/12 (2013.01 - EP US); **Y10S 220/917** (2013.01 - EP US)

Cited by
EP0104398A1; EP0148776A1; US4700863A; GB2176925A; FR2583913A1

Designated contracting state (EPC)
BE CH DE FR GB LI SE

DOCDB simple family (publication)
EP 0082467 A1 19830629; **EP 0082467 B1 19850807**; BR 8207346 A 19831018; CA 1187632 A 19850521; DE 3149945 A1 19830721; DE 3265299 D1 19850912; ES 518748 A0 19840416; ES 8404554 A1 19840416; JP H0226760 B2 19900612; JP S58144800 A 19830829; US 4596688 A 19860624

DOCDB simple family (application)
EP 82111612 A 19821214; BR 8207346 A 19821216; CA 417925 A 19821216; DE 3149945 A 19811217; DE 3265299 T 19821214; ES 518748 A 19821217; JP 21935882 A 19821216; US 44956782 A 19821214