Title (en)

METHOD FOR REDUCING OR AT LEAST PARTIALLY REMOVING SPECIFIC RADIOTOXIC AGENTS FROM A NUCLEAR PLANT

Title (de

VÉRFAHREN ZUR REDUZIERUNG ODER ZUMINDEST TEILWEISEN ENTFERNUNG SPEZIFISCHER RADIOTOXIKA AUS EINER KERNTECHNISCHEN ANLAGE

Title (fr)

PROCÉDÉ DE RÉDUCTION OU D'ÉLIMINATION AU MOINS PARTIELLE DE SUBSTANCES RADIOTOXIQUES SPÉCIFIQUES DANS UNE INSTALLATION NUCLÉAIRE

Publication

EP 2368254 B1 20121003 (DE)

Application

EP 09804242 A 20091209

Priority

- DE 2009001735 W 20091209
- DE 102008063941 A 20081219

Abstract (en)

[origin: WO2010069290A2] Within the context of the invention, a method was developed for the at least partial removal of a radiotoxic agent from a nuclear plant. During operation of said plant, at least one working fluid flows through it, the fluid being introduced into the plant through at least one supply line and discharged from the plant through at least one return line. The working fluid can in particular be a cooling fluid or a cooling gas. According to the invention, at least one corrosive agent is introduced through the supply line into the plant, either individually or in combination with the working fluid. The corrosive agent is then brought in contact with the radiotoxic agent in the plant and converts the radiotoxic agent at least partially into a chemical compound through a chemical reaction. The chemical reaction takes place substantially only on the outer and inner surfaces with which the corrosive agent comes in contact, including inner surfaces of pores in which the corrosive agent penetrates. The chemical compound is discharged from the plant at least partially by way of the return line.

IPC 8 full level

G21F 9/28 (2006.01); G21F 9/30 (2006.01)

CPC (source: EP)

G21F 9/28 (2013.01); G21F 9/30 (2013.01)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

WO 2010069290 A2 20100624; WO 2010069290 A3 20100826; DE 102008063941 A1 20100701; EP 2368254 A2 20110928; EP 2368254 B1 20121003

DOCDB simple family (application)

DE 2009001735 W 20091209; DE 102008063941 A 20081219; EP 09804242 A 20091209