

Title (en)
METHOD AND APPARATUS FOR THE TREATMENT OF RADIOACTIVE WASTE

Title (de)
VERFAHREN UND ANORDNUNG ZUR AUFBEREITUNG VON RADIOAKTIVEN ABFÄLLEN

Title (fr)
PROCÉDÉ ET DISPOSITIF DE TRAITEMENT DES DÉCHETS RADIOACTIFS

Publication
EP 3493219 C0 20240228 (DE)

Application
EP 18206366 A 20181115

Priority
DE 102017128149 A 20171128

Abstract (en)
[origin: JP2019101035A] To provide a method and structure for preprocessing radioactive waste stored in a base material.SOLUTION: The method comprises the steps of: introducing radioactive waste contained in a container part into a reaction chamber in which a water vapor-containing atmosphere of 200°C or more is set; carrying out the pyrolysis; removing gases from the reaction chamber; and bringing the container part out of the reaction chamber. At least one of the following steps is carried out additionally: introducing oxygen and/or CO into the reaction chamber during pyrolysis in quasi-stoichiometric or maximum stoichiometric amount; adjusting water vapor to be introduced into the reaction chamber as a function of oxidizable substance in the exhaust gas; adjusting oxygen to be introduced into the reaction chamber and/or CO depending on oxidizable substance in the exhaust gas; stopping the pyrolysis depending on the oxidizable substance in the exhaust gas; introducing, in a targeted manner, water vapor and/or oxygen and/or CO into the radioactive waste or into a region thereof; and routing, in a targeted manner, water vapor and/or oxygen and/or CO into the reaction chamber.SELECTED DRAWING: Figure 1

IPC 8 full level
G21F 9/14 (2006.01); **G21F 9/16** (2006.01); **G21F 9/30** (2006.01); **G21F 9/32** (2006.01)

CPC (source: EP RU)
G21F 9/14 (2013.01 - EP RU); **G21F 9/167** (2013.01 - EP RU); **G21F 9/307** (2013.01 - EP RU); **G21F 9/32** (2013.01 - EP RU)

Cited by
CN111667937A

Designated contracting state (EPC)
AL 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 RS SE SI SK SM TR

Participating member state (EPC – UP)
AT BE BG DE DK EE FI FR IT LT LU LV MT NL PT SE SI

DOCDB simple family (publication)
EP 3493219 A1 20190605; EP 3493219 B1 20240228; EP 3493219 C0 20240228; DE 102017128149 A1 20190529; JP 2019101035 A 20190624; JP 6698796 B2 20200527; RU 2719289 C1 20200417

DOCDB simple family (application)
EP 18206366 A 20181115; DE 102017128149 A 20171128; JP 2018221280 A 20181127; RU 2018141374 A 20181126