

Title (en)

Process and device for treating solid organic wastes contaminated by tritium.

Title (de)

Verfahren und Vorrichtung zur Behandlung von mit Tritium kontaminierten festen organischen Abfällen.

Title (fr)

Procédé et installation de traitement de déchets organiques solides contaminés par du tritium.

Publication

EP 0307306 A1 19890315 (FR)

Application

EP 88402247 A 19880907

Priority

FR 8712510 A 19870909

Abstract (en)

[origin: JPH0199000A] PURPOSE: To reduce the radioactivity of tritium of a waste to 10 Ci/t or less by causing the waste to contact steam under the conditions where at least one portion of tritium in the waste is extracted into the steam. CONSTITUTION: First, a waste to be treated is placed on a lattice 17 of a drying container 1 and the pressure of the entire device is set to an atmospheric pressure or less by a group of vacuum pumps. Then, the water of a steam generator 7 is set to a desired temperature T and that of the drying container 1 is also adjusted to the same temperature T. Then, a pressure P of steam introduced into the drying container 1 is adjusted to be equal to or less than a steam pressure P of water 23 of the steam generator 7 by opening a valve 27. Then, a valve 10 of a conduit 9 is opened, steam is circulated in the drying container 1 for a desired period, and tritium is extracted from the waste. Then, steam is condensed in coolers 11 and 13 and stored in a tank 15, thus reducing the radioactivity of tritium of the waste to 10Ci/t or less.

Abstract (fr)

L'invention a pour objet un procédé et une installation de traitement de déchets organiques solides contaminés par du tritium. On met les déchets en contact avec de la vapeur d'eau dans l'enceinte (1) pour extraire dans la vapeur d'eau le tritium et l'on condense ensuite la vapeur d'eau (en 11, 13) pour récupérer le tritium des déchets sous forme d'eau tritiée.

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IPC 8 full level

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CPC (source: EP US)

G21F 9/30 (2013.01 - EP US); **Y10S 422/903** (2013.01 - EP US)

Citation (search report)

- [A] EP 0204634 A1 19861210 - COMMISSARIAT ENERGIE ATOMIQUE [FR]
- [A] FR 2279205 A1 19760213 - MAGYAR TUDOMANYOS AKADEMI IZOT [HU]
- [A] DE 2434876 A1 19750403 - ENGELHARD MIN & CHEM
- [A] FR 2317740 A1 19770204 - VER EDELSTAHLWERKE AG [AT]

Cited by

DE4029222C1; DE3930420C1; US5707592A

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EP 0307306 A1 19890315; **EP 0307306 B1 19921202**; CA 1333324 C 19941206; DE 3876345 D1 19930114; DE 3876345 T2 19930527; FR 2620262 A1 19890310; FR 2620262 B1 19891117; JP 2807237 B2 19981008; JP H0199000 A 19890417; US 4882093 A 19891121

DOCDB simple family (application)

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