

Title (en)

PROCESSING RADIOACTIVE MATERIALS WITH HYDROGEN ISOTOPE NUCLEI

Title (de)

VERARBEITEN RADIOAKTIVER MATERIALIEN MIT WASSERSTOFFISOTOPKERNEN

Title (fr)

TRAITEMENT DE MATERIAUX RADIOACTIFS AVEC DES NOYAUX D'ISOTOPE D'HYDROGENE

Publication

**EP 1509927 A4 20070404 (EN)**

Application

**EP 03736648 A 20030519**

Priority

- US 0315681 W 20030519
- US 38144302 P 20020517

Abstract (en)

[origin: WO03098640A2] A method for processing radioactive materials is disclosed. The method employs hydrogen isotope nuclei for the treatment of radioactive materials, such as uranium, and effectively increases the observed decay rate of such materials. Therefore, the disclosed method allows remediation of dangerous radioactive materials, such as uranium, without requiring long term, geologically-stable storage sites or costly, accelerator -based transmutation equipment.

IPC 8 full level

**G21G 1/10** (2006.01); **G21F 9/00** (2006.01); **G21G 1/00** (2006.01)

IPC 8 main group level

**G21F** (2006.01)

CPC (source: EP)

**G21F 9/00** (2013.01); **G21F 9/06** (2013.01); **G21F 9/30** (2013.01); **G21G 1/00** (2013.01); **G21G 1/10** (2013.01)

Citation (search report)

- [X] US 4664869 A 19870512 - MIRZADEH SAED [US], et al
- [Y] US 5789744 A 19980804 - SPENCE DAVID [US], et al
- [Y] WO 0163010 A1 20010830 - MILEY GEORGE H [US]
- [Y] EP 1128394 A2 20010829 - GEN ATOMICS [US]
- [XY] TAKADA H ET AL: "A CONCEPTUAL STUDY OF ACTINIDE TRANSMUTATION SYSTEM WITH PROTON ACCELERATOR TARGET NEUTRONICS CALCULATION", PROCEEDINGS OF THE INTERNATIONAL SYMPOSIUM ON ADVANCED NUCLEAR ENERGY RESEARCH-EVOLUTION BY ACCELERATORS, 24 January 1990 (1990-01-24), pages 375 - 380, XP009002609
- See references of WO 03098640A2

Designated contracting state (EPC)

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**WO 03098640 A2 20031127**; **WO 03098640 A3 20040819**; AU 2003237891 A1 20031202; AU 2003237891 A8 20031202; EP 1509927 A2 20050302; EP 1509927 A4 20070404

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