

Title (en)

NUCLEAR REACTOR AND METHOD OF CONTROLLING A NUCLEAR REACTION IN A NUCLEAR REACTOR

Title (de)

KERNREAKTOR UND VERFAHREN ZUR STEUERUNG EINER KERNREAKTION IN EINEM KERNREAKTOR

Title (fr)

RÉACTEUR NUCLÉAIRE ET PROCÉDÉ DE CONTRÔLE D'UNE RÉACTION NUCLÉAIRE DANS UN RÉACTEUR NUCLÉAIRE

Publication

**EP 3072369 B1 20210428 (EN)**

Application

**EP 14863685 A 20141121**

Priority

- US 201361907169 P 20131121
- US 2014066803 W 20141121

Abstract (en)

[origin: WO2015077554A1] Provided are a plurality of embodiments, including, but not limited to, a device for generating efficient low and high average power output Gamma Rays via relativistic particle bombardment of element targets using an efficient particle injector and accelerator at low and high average power levels suitable for element transmutation and power generation with an option for efficient remediation of radioisotope release into any environment. The devices utilize diamond or diamond-like carbon materials and active cooling for improved performance. Also provided are a nuclear reactor and a decontamination device using such a device.

IPC 8 full level

**H05H 9/00** (2006.01); **G21H 1/04** (2006.01)

CPC (source: EP)

**G21H 1/04** (2013.01); **H05H 9/005** (2013.01)

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

DOCDB simple family (publication)

**WO 2015077554 A1 20150528**; EP 3072369 A1 20160928; EP 3072369 A4 20170816; EP 3072369 B1 20210428; JP 2017501390 A 20170112; JP 6653650 B2 20200226

DOCDB simple family (application)

**US 2014066803 W 20141121**; EP 14863685 A 20141121; JP 2016532006 A 20141121