503255163 04/08/2015

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3301782

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MICHAEL E. FASSBENDER	04/07/2015
VALERY RADCHENKO	04/07/2015

RECEIVING PARTY DATA

Name:	LOS ALAMOS NATIONAL SECURITY, LLC
Street Address:	LOS ALAMOS NATIONAL LABORATORY
Internal Address:	P.O. BOX 1663 LC/IP MS A187
City:	LOS ALAMOS
State/Country:	NEW MEXICO
Postal Code:	87545

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14681320

CORRESPONDENCE DATA

Fax Number: (505)665-4424

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 505-665-3111

Email: SSHARRETT@LANL.GOV

Correspondent Name: LOS ALAMOS NATIONAL SECURITY, LLC Address Line 1: LOS ALAMOS NATIONAL LABORATORY

Address Line 2: P.O. BOX 1663 LC/IP MS A187

Address Line 4: LOS ALAMOS, NEW MEXICO 87545

ATTORNEY DOCKET NUMBER: S-133,074

NAME OF SUBMITTER: SAMUEL L. BORKOWSKY

SIGNATURE: /Samuel L. Borkowsky/

DATE SIGNED: 04/08/2015

Total Attachments: 2

source=S133074_ASG#page1.tif source=S133074_ASG#page2.tif

PATENT 503255163 REEL: 035358 FRAME: 0770

ASSIGNMENT

DOE S-133,074

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S),

- 1. Michael E. Fassbender
- 2. Valery Radchenko

hereby sells, assigns and transfers to ASSIGNEE, Los Alamos National Security, LLC, a Delaware Limited Liability Company, having its statewide administrative offices located at Los Alamos National Security, LLC, Los Alamos National Laboratory, P.O. Box 1663, MSA187, Los Alamos, New Mexico 87545, and the successors, assigns and legal representatives of the ASSIGNEE all of its right, title and interest for the United States and its territorial possessions and in all foreign countries in and to, any and all improvements which are disclosed in the invention titled:

SEPARATION OF PROTACTINIUM, ACTINIUM, AND OTHER RADIONUCLIDES FROM PROTON IRRADIATED THORIUM TARGET

and which	ch is fo	und in
(a)		U.S. patent application executed on, entitled as above and listing the above-named person(s) as inventor(s)
(p)	\boxtimes	U.S. application Serial No. <u>14/681,320</u> , filed on <u>April 8, 2015</u> .
(c)		U.S. Patent Noissued
(d)		U.S. provisional application Serial No filed on entitled as above and listing the above-named person(s) as inventor(s)

and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, division, continuation-in-part, extension or substitute thereof, and any reissue, reexamination or extension of said Letters Patent and all rights under all International Conventions for the Protection of Industrial Property;

ASSIGNOR(S) hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNOR(S) further covenants that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation, or proceeding relating thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue or enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. An attorney of record is authorized and requested by the execution of this assignment to insert into this assignment the filing date and serial number of said application when officially known.

PATENT REEL: 035358 FRAME: 0771 AND the ASSIGNOR(S) requests the Commissioner of Patents and Trademarks to issue said Letters Patent of the United States and any reissue or extension thereof to the ASSIGNEE, Los Alamos National Security, LLC.

executed this

7th day of April 2015 Zth day of April 2015

Signature of Inventor(s)