

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jeffrey A. Chapman</td> <td>04/16/2012</td> </tr> <tr> <td>John E. Gunning</td> <td>03/27/2012</td> </tr> <tr> <td>Daniel F. Hollenbach</td> <td>03/23/2012</td> </tr> <tr> <td>Larry J. Ott</td> <td>04/02/2012</td> </tr> </tbody> </table>		Name	Execution Date	Jeffrey A. Chapman	04/16/2012	John E. Gunning	03/27/2012	Daniel F. Hollenbach	03/23/2012	Larry J. Ott	04/02/2012
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Jeffrey A. Chapman	04/16/2012										
John E. Gunning	03/27/2012										
Daniel F. Hollenbach	03/23/2012										
Larry J. Ott	04/02/2012										
RECEIVING PARTY DATA											
Name:	UT-Battelle, LLC										
Street Address:	One Bethel Valley Road										
Internal Address:	4500N, MS-6258										
City:	Oak Ridge										
State/Country:	TENNESSEE										
Postal Code:	37831-6258										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13288168</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13288168						
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Application Number:	13288168										
CORRESPONDENCE DATA											
Fax Number:	(865)574-0381										
Phone:	(865) 574-4179										
Email:	bowmanke@ornl.gov										
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>											
Correspondent Name:	Colin L. Cini										
Address Line 1:	One Bethel Valley Road										
Address Line 2:	4500N, MS-6258										
Address Line 4:	Oak Ridge, TENNESSEE 37831-6258										
ATTORNEY DOCKET NUMBER:	2457.1										
NAME OF SUBMITTER:	Karen E. Vance										

CH \$40.00 13288168

Total Attachments: 6

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RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)
 Jeffrey A. Chapman
 John E. Gunning
 Daniel F. Hollenbach
 Larry J. Ott

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
 Name: UT-Battelle, LLC
 Internal Address: 4500N, MS-6258
 Street Address: One Bethel Valley Road
 City: Oak Ridge
 State: TN
 Country: USA Zip: 37831-6258

Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance/Execution Date(s):
 Execution Date(s) 04/16/2012

Assignment Merger
 Security Agreement Change of Name
 Joint Research Agreement
 Government Interest Assignment
 Executive Order 9424, Confirmatory License
 Other _____

4. Application or patent number(s): This document is being filed together with a new application.

A. Patent Application No.(s)
13/288,168

B. Patent No.(s)

Additional numbers attached? Yes No

5. Name and address to whom correspondence concerning document should be mailed:
 Name: Colin L. Cini
 Internal Address: UT-Battelle, LLC
 Street Address: One Bethel Valley Road
4500N, MS-6258
 City: Oak Ridge
 State: TN Zip: 37831-6258
 Phone Number: (865) 574-4179
 Fax Number: (865) 574-0381
 Email Address: cinicl@ornl.gov

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00

Authorized to be charged by credit card
 Authorized to be charged to deposit account
 Enclosed
 None required (government interest not affecting title)

8. Payment Information

a. Credit Card Last 4 Numbers _____
 Expiration Date _____

b. Deposit Account Number 13-1958
 Authorized User Name Karen E. Bowman

9. Signature: _____ /Colin L. Cini/ _____ 04/16/2012
 Signature Date

Colin L. Cini, Reg. No. 51,563
 Name of Person Signing

Total number of pages including cover sheet, attachments, and documents: 6

ASSIGNMENT

WHEREAS, we the below-named inventors whose residences are as stated below, have an interest in an invention entitled:

X-Ray Backscatter Imaging of Nuclear Materials

(hereinafter referred to as "Subject Invention") for which are described in United States Patent Application No. 13/288,168 filed on November 3, 2011, and

WHEREAS, UT-BATTELLE, LLC, a limited liability company of the State of Tennessee, having an office at One Bethel Valley Road, P. O. Box 2008, Oak Ridge, Tennessee 37831-6258, hereinafter referred to as "ASSIGNEE," is desirous of acquiring our entire right, title and interest of the undersigned in the same;

NOW, THEREFORE, in accordance with the terms of our employment agreement with ASSIGNEE and for good and valuable consideration, the receipt of which is hereby acknowledged, we hereby assign and transfer to ASSIGNEE and its successors in interest our entire right, title and interest in the Subject Invention to all rights of priority thereto pursuant to the International Convention for the Protection of Industrial Property, and in any Letters Patent on the Subject Invention that may be granted in the United States of America and in any and all foreign countries, including any and all Letters Patent that are divisions, reissues, continuations, substitutions or extensions of any Letters Patent or patent applications therefor on the Subject Invention.

We hereby authorize and request the Commissioner of the United States Patent and Trademark Office and the officials of any and all foreign countries to issue any and all of said Letters Patent, when granted, to the ASSIGNEE.

Further, we hereby agree to communicate to said ASSIGNEE or its representatives any facts known to us respecting said Subject Invention, to testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, substitution, renewal and reissue applications, to execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, and to make all rightful oaths and generally do everything possible to aid said ASSIGNEE and its representatives to obtain and enforce proper protection for said Subject Invention in the United States of America and in any and all foreign countries.

We further agree that the terms, covenants and conditions of this assignment shall inure to the benefit of ASSIGNEE, its successors, assigns, and legal representatives, and shall be binding on us, our heirs, legal representatives, and assigns.

Full Name of First Inventor: Jeffrey A. Chapman

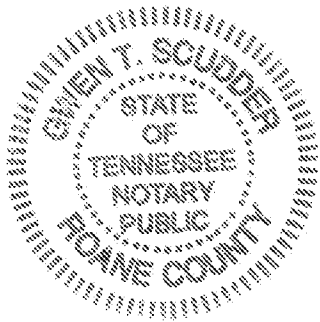
Signature: Jeffrey A. Chapman Date: 4-16-2012

Residence: 392 Axton Drive, Knoxville, Tennessee 37934

State of Tennessee)
County of Roane)

On this 16 day of April, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared **JEFFREY A. CHAPMAN** to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.



Green J. Scudder
Notary Public

SEAL

My Commission Expires:

My Commission Expires Thursday, August 14, 2012.

Full Name of First Inventor: John E. Gunning

Signature: _____

Date: 2012/03/27

Residence: _____

107 Greywood Place, Oak Ridge, Tennessee 37830

State of Tennessee)
County of)

On this 27th day of March, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared **JOHN E. GUNNING** to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

Elizabeth Warfield
Notary Public



SEAL

My Commission Expires:

My Commission Expires Sunday, May 31, 2016

Full Name of First Inventor: Daniel F. Hollenbach

Signature: Daniel F. Hollenbach Date: 3/23/2012

Residence: 221 Briarcliff Avenue, Oak Ridge, Tennessee 37830

State of Tennessee)
County of)

On this 23 day of March, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared **DANIEL F. HOLLENBACH** to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.

Pamela Sue Stegall
Notary Public



My Commission Expires:
3/25/2015

Full Name of First Inventor: Larry J. Ott

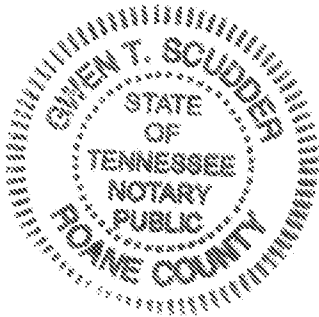
Signature: *Larry J. Ott* Date: 2 April 2012

Residence: 608 Ensley Drive, Knoxville, Tennessee 37920-9118

State of Tennessee)
County of Roane)

On this 2 day of April, 2012, before me, a Notary Public in and for the County and State aforesaid, appeared **LARRY J. OTT** to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as his free and voluntary act and for the uses and purposes therein expressed.

WITNESS my hand and seal the day and year last above given.



Owen T. Scudder
Notary Public

SEAL

My Commission Expires:

My Commission Expires Thursday, August 14, 2012.