PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Nagraj S. Kulkarni	03/05/2013
Miroslaw S. Gruszkiewicz	03/05/2013
Boyd M. Evans III	03/21/2013

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

Property Type	Number
Application Number:	13724489

CORRESPONDENCE DATA

Fax Number: 8655740381

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (865) 574-4178

Email: vanceke@oml.gov

Correspondent Name: Joseph A. Marasco

Address Line 1: One Bethel Valley Road

Address Line 2: 4500N, MS-6258

Address Line 4: Oak Ridge, TENNESSEE 37831-6258

ATTORNEY DOCKET NUMBER: 2623

NAME OF SUBMITTER: Karen E. Vance

Total Attachments: 5

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REEL: 030128 FRAME: 0593

PATENT

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> PATENT REEL: 030128 FRAME: 0594

Form **PTO-1595** (Rev. 07/05) OMB No. 0651-0027 (exp. 6/30/2008)

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) 2. Name and address of receiving party(ies) Nagraj S. Kulkarni Name: UT-Battelle, LLC Miroslaw S. Gruszkiewicz Internal Address: 4500N, MS-6258 Boyd M. Evans, III Additional name(s) of conveying party(ies) attached? 🔲 Yes 🗹 No 3. Nature of conveyance/Execution Date(s): Street Address: One Bethel Valley Road Execution Date(s) 03/21/2013 Merger ✓ Assignment City: Oak Ridge State: TN Government Interest Assignment Country: USA Zip:37831-6258 Executive Order 9424, Confirmatory License Other Additional name(s) & address(es) attached? L Yes V No 4. Application or patent number(s): This document is being filed together with a new application. A. Patent Application No.(s) B. Patent No.(s) 13/724,489 Additional numbers attached? Yes V No 5. Name and address to whom correspondence 6. Total number of applications and patents concerning document should be mailed: involved: 1 Name: Joseph A. Marasco **7. Total fee** (37 CFR 1.21(h) & 3.41) \$ 40.00 Internal Address: UT-Battelle, LLC Authorized to be charged to deposit account **Enclosed** Street Address: One Bethel Valley Road None required (government interest not affecting title) 4500N, MS-6258 8. Payment Information City: Oak Ridge a. Credit Card Last 4 Numbers _____ State: TN Zip:37831-6258 Expiration Date Phone Number: (865) 574-4178 b. Deposit Account Number 13-1958 Fax Number: (865) 574-0381 Authorized User Name Karen E. Bowman Email Address: marascoja@ornl.gov 9. Signature: 04/02/2013 /Joseph A. Marasco/ Signature Date Total number of pages including cover Joseph A. Marasco, Reg. No. 32,798 sheet, attachments, and documents: Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

REEL: 030128 FRAME: 0595

ASSIGNMENT

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

Method and Apparatus for Controlling Stoichiometry in Multicomponent Materials

(hereinafter referred to as "Subject Invention") for which are described in United States Patent Application No. 13/724,489 filed on December 21, 2012, 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.

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County of RORNE)	
whose name is subscribed to as his free and voluntary act a	f Narch, 2013, before me, a Notary Public in and for the County NAGRAJ S. KULKARNI to me personally known to be the same person the foregoing instrument, and acknowledged that he executed said instrument and for the uses and purposes therein expressed.
Wistensoniy nana	and scal the day and year last above given.
	Notary Public
SEAL	
My Commission Expires:	My Commission Espires Monday, September 12, 2018.

9635 Cedar Valley Way, Knoxville, Tennessee 37931

Full Name of Inventor: "Wagraj-S. Kulkarni

Signature:

Residence:

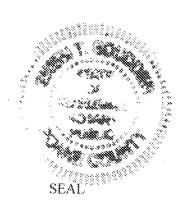
State of Tennessee

Full Name of Inventor, Miroslaw S. Gruszkiewicz
Signature:
Residence: 1600 Cheney Road, Knoxville, Tennessee 37922
State of Tennessee) County of Nosse)
On this
WITNESS my hand and seal the day and year last above given.
Notary Public
SEAL
My Commission Expires: System Market 12, 2018.

Signature:	IM. Evans in	Date: _ 3-21-20/3
Residence:	949 West Outer Drive, Oa	ak Ridge, Tennessee 37830

On this <u>Q</u> day of <u>March</u>, 2013, before me, a Notary Public in and for the County and State aforesaid, appeared **BOYD M. EVANS, III** 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.



County of ROSNE

Notary Public

My Commission Expires:

My Constitute Capital Monday Saplambar 17 9018