PATENT ASSIGNMENT

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Kirk T Lowe	04/02/2009

RECEIVING PARTY DATA

Name:	University of Tennessee Research Foundation
Street Address:	1534 White Ave., Suite 403
City:	Knoxville
State/Country:	TENNESSEE
Postal Code:	37996

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12400081

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 2040.1 UTRF

NAME OF SUBMITTER: Karen E. Bowman

Total Attachments: 4

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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) Kirk T. Lowe	2. Name and address of receiving party(ies) Name: University of Tennessee Research Foundation Internal Address:				
Additional name(s) of conveying party(ies) attached? Yes No 3. Nature of conveyance/Execution Date(s): Execution Date(s) 4/2/2009 Assignment					
Additional numbers att	ached? Yes No				
5. Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved: 1				
Name: Joseph A. Marasco Internal Address: UT-Battelle, LLC	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				
Street Address: One Bethel Valley Road 4500N, MS-6258	EnclosedNone required (government interest not affecting title)				
City: Oak Ridge State: TN Zip:37831-6258	8. Payment Information a. Credit Card Last 4 Numbers Expiration Date				
Phone Number: (865) 574-4178 Fax Number: (865) 574-0381 Email Address: marascoja@ornl.gov	b. Deposit Account Number <u>13-1958</u> Authorized User Name <u>Joseph A. Marasco</u>				
9. Signature: /Joseph A. Marasco/ Signature Joseph A. Marasco, Reg. No. 32798 Name of Person Signing	4/7/2009 Date Total number of pages including cover sheet, attachments, and documents: 4				

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

ASSIGNMENT

WHEREAS, I the below-named inventor whose residence and post office is stated below, have invented certain new and useful improvements in;

HEREBY sell, assign and transfer to the University of Tennessee Research Foundation (UTRF), a non-profit corporation of Tennessee having a place of business at 1534 White Avenue, Suite 403, Knoxville, Tennessee 37996, its successors, assigns and legal representatives, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent which has been executed by the undersigned concurrently herewith, and which is entitled

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and in and to said application and all divisional, continuation, substitute, renewal, reissue, and other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements, including the right to claim in other countries the right of priority of any of said applications under the (Paris) International Convention; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements;

AGREE THAT said Assignee may apply for and receive Letters Patent for said improvements in its own name, and that when requested, without charge to but at the legal expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned will execute all divisional, continuation, substitute, renewal, reissue, and all other patent applications on any and all said improvements, execute all rightful oaths, Assignments, Powers of Attorney and other papers, communicate to said Assignee, its successors, assigns and all legal representatives, all facts known to the undersigned relating to said improvements and the history thereof and generally do everything possible which said Assignee, its successors, assigns and legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and for vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives;

COVENANT WITH said Assignee, its successors, assigns and legal representatives that no Assignment, grant, mortgage, license or other Agreement affecting the rights and property herein conveyed have been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned; and

AUTHORIZE Assignee, its employees, its successors, assigns and all legal representatives to enter in the blank spaces provided below the Serial Number an filing date of the United States Patent Application to which this document applies, when that information becomes known.

Docket	NΩ	2040	1
DUCKEL	INU.	404U	. 1

Patent Application Serial Number:	12/400,081	
Patent Application Filing Date:	3/9/2009	

Full name of inventor: Kirk T. Lowe

Inventor's Signature:

7. Z Date: 4/2/09

Resident: 2304 Cecil Avenue Knoxville TN 37917

Post Office Address: 2304 Cecil Avenue Knoxville TN 37917

Citizenship: United States

State of Tennessee County of Knox

This Z day of APRIL, 2009, before me, a Notary Public in and for the County and State aforesaid, KIRK T. LOWE appeared before me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he executed said instrument as my free and voluntary act and for the uses and purposes therein expressed.

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



RECORDED: 04/07/2009

Notary Public

My Commission Expires: Que 14, 201 D

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