RE: Document ID Number: 70005429

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To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.	
Name of conveying party(ies):	Name and address of receiving party(ies)
Robert S. Wegeng	Name: Battelle Memorial Institute
Scot D. Rassat Ward E. TeGrotenhuis	Internal Address: P.O. Box 999
Kevin Drost	
Additional name(s) of conveying party(les) attached? 🗸 YesNo	
3. Nature of conveyance:	
Assignment Merger	COO Deffella Declarate
Security Agreement Change of Name	. Street Address: 902 Battelle Boulevard
Other	Diele de la constant
10/28/02	City: Richland State: WA Zip: 99352
Execution Date:	Additional name(s) & address(es) attached? Yes 🔽 No
4. Application number(s) or patent number(s):	
If this document is being filed together with a new application, the execution date of the application is:	
A. Patent Application No.(s) 10/135,891	B. Patent No.(s)
· · · · · · · · · · · · · · · · · · ·	
Additional numbers attached? Yes V No	
Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Stephen R. May	7. Total fee (37 CFR 3.41)\$
P.O. Box 999	Enclosed
	Authorized to be charged to deposit account
	Deposit account number:
Street Address: 902 Battelle Boulevard	
·	02-1275
City: Richland State: WA Zip: 99352	
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9. Signature.	
Stephen R. May	emandel Man 29 Sent none
Name of Person Signing	Signature Date
	er sheet, attachments, and documents: 9

Mall documents to be recorded with required cover sheet information to; Commissioner of Patents & Trademarks, Box Assignments Washington, D.C. 20231 .2003 8:09AM IP SERVICES NO.714 P.3

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Additional Names of Conveying Party(ies):

Vilayanur V. Vishwanathan

PATENT File No. 13025E-CIP

<u>ASSIGNMENT</u>

Robert S. Wegeng
Scot D. Rassat
Ward E. TeGrotenhuis
Kevin Drost
Vilayanur V. Vishwanathan

to

Battelle Memorial Institute

WHEREAS we, Robert S. Wegeng, of Richland, in the County of Benton, and State of Washington; Scot D. Rassat, of Benton City, in the County of Benton, and State of Washington; Ward E. TeGrotenhuis, of Kennewick, in the County of Benton, and State of Washington; Kevin Drost, of Corvallis, in the County of Benton, and State of Oregon; and Vilayanur V. Vishwanathan of Richland, in the County of Benton, and State of Washington; have made certain inventions in METHOD AND APPARATUS FOR THERMAL SWING ADSORPTION AND THERMALLY-ENHANCED PRESSURE SWING ADSORPTION, described and claimed in Application Serial Number 10/135,891, filed April 29, 2002; and

WHEREAS Battelle Memorial Institute, a corporation of Ohio, organized and existing under the laws of the State of Ohio, and having a place of business in the City of Richland, Washington, is desirous of acquiring an interest in the said invention and in any patent or patents to be obtained therefor;

NOW, THEREFORE, To All Whom It May Concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00) each, and other good and valuable considerations, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto the said Battelle Memorial Institute, the entire right, title, and interest in and to the invention shown, described, or claimed therein, and the full and exclusive right and title to the said application; and in and to any extensions, reissues, divisions, or renewals thereof; and we do hereby authorize and request the Commissioner of Parents or other proper Officer, to issue such Letters Patent, or any of them, to the said Battelle Memorial Institute, as the assignee of our entire right, title, and interest in and to the same for the sole use and benefit of the said Battelle Memorial Institute, and its successors or assigns.

And we further covenant and agree that we will, at the request and expense of the said Battelle Memorial Institute, execute such other and further assurances of title as may be necessary or proper to fully convey the interest herein sought to be conveyed; that we will, at the request and expense of the said Battelle Memorial Institute, execute such application papers as may be desired by the said Battelle Memorial Institute, for the filing of any division or renewal of the application herein conveyed, or for reissues or extensions, of any Letters Patent that may be granted upon said application, and will execute such Supplemental Oaths and Preliminary Statements, or other papers as desired by the said Battelle Memorial Institute.

And we further assign unto the said Battelle Memorial Institute, the whole right, title, and interest to the invention disclosed in the application throughout all countries foreign to the United States, and do hereby authorize the said Battelle Memorial Institute to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of the International Convention and do agree to execute applications for the said invention in the several countries where it is necessary that the same be executed by the inventors, and to execute assignments of such applications and the patents to be obtained therefor to the said Battelle Memorial Institute, the assignee herein, as well as all other necessary papers.

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this 25% day of July, 2002.

Robert S. Wegeng

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this 25th day of July, 2002.

Scot D Rassat

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IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this _/允什。day of July, 2002.
Ward E. TeGrotenhuis
IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal t Corvallis, Oregon, this day of July, 2002.
Kevin Drost

IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal t Richland, Washington, this <u>98th</u> day of July, 2002.
Vilayanur V. Vishwanathan

PATENT File No. 13025E-CIP

<u>ASSIGNMENT</u>

Robert S. Wegeng
Scot D. Rassat
Ward E. TeGrotenhuis
Kevin Drost
Vilayanur V. Vishwanathan

to

Battelle Memorial Institute

WHEREAS we, Robert S. Wegeng, of Richland, in the County of Benton, and State of Washington; Scot D. Rassat, of Benton City, in the County of Benton, and State of Washington; Ward E. TeGrotenhuis, of Kennewick, in the County of Benton, and State of Washington; Kevin Drost, of Corvallis, in the County of Benton, and State of Oregon, and Vilayanur V. Vishwanathan of Richland, in the County of Benton, and State of Washington; have made certain inventions in METHOD AND APPARATUS FOR THERMAL SWING ADSORPTION AND THERMALLY-ENHANCED PRESSURE SWING ADSORPTION, described and claimed in Application Serial Number 10/135,891, filed April 29, 2002; and

WHEREAS Battelle Memorial Institute, a corporation of Ohio, organized and existing under the laws of the State of Ohio, and having a place of business in the City of Richland, Washington, is desirous of acquiring an interest in the said invention and in any patent or patents to be obtained therefor;

NOW, THEREFORE, To All Whom It May Concern, be it known that, for and in consideration of the sum of One Dollar (\$1.00) each, and other good and valuable considerations, the receipt of which is hereby acknowledged, we have sold, assigned, and transferred, and by these presents do sell, assign and transfer unto the said Battelle Memorial Institute, the entire right, title, and interest in and to the invention shown, described, or claimed therein, and the full and exclusive right and title to the said application; and in and to any extensions, reissues, divisions, or renewals thereof; and we do hereby authorize and request the Commissioner of Patents or other proper Officer, to issue such Letters Patent, or any of them, to the said Battelle Memorial Institute, as the assignee of our entire right, title, and interest in and to the same for the sole use and benefit of the said Battelle Memorial Institute, and its successors or assigns.

And we further covenant and agree that we will, at the request and expense of the said Battelle Memorial Institute, execute such other and further assurances of title as may be necessary or proper to fully convey the interest herein sought to be conveyed; that we will, at the request and expense of the said Battelle Memorial Institute, execute such application papers as may be desired by the said Battelle Memorial Institute, for the filing of any division or renewal of the application herein conveyed, or for reissues or extensions, of any Letters Patent that may be granted upon said application, and will execute such Supplemental Oaths and Preliminary Statements, or other papers as desired by the said Battelle Memorial Institute.

And we further assign unto the said Battelle Memorial Institute, the whole right, title, and interest to the invention disclosed in the application throughout all countries foreign to the United States, and do hereby authorize the said Battelle Memorial Institute to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of the International Convention and do agree to execute applications for the said invention in the several countries where it is necessary that the same be executed by the inventors, and to execute assignments of such applications and the patents to be obtained therefor to the said Battelle Memorial Institute, the assignee herein, as well as all other necessary papers. IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this _____ day of July, 2002. Robert S. Wegeng IN TESTIMONY WHEREOF I have hereunto set my hand and affixed my seal at Richland, Washington, this _____ day of July, 2002. Scot D. Rassat

IN TESTIMONY WHEREOF I hat Richland, Washington, this day or	ave hereunto set my hand and affixed my seal f July, 2002.
	Ward E. TeGrotenhuis
IN TESTIMONY WHEREOF I has at Corvallis, Oregon, this 28th day of July,	ve hereunto set my hand and affixed my seal 2002. O 28/0 > Kevin Drost
IN TESTIMONY WHEREOF I hav at Richland, Washington, this day of Jo	e hereunto set my hand and affixed my seal uly, 2002.
	Vilayanur V. Vishwanathan

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