

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Ward E. Tegrotenhuis</td> <td>06/05/2008</td> </tr> <tr> <td>Paul H. Humble</td> <td>06/05/2008</td> </tr> <tr> <td>Curt A. Lavender</td> <td>06/05/2008</td> </tr> <tr> <td>Dustin D. Caldwell</td> <td>06/05/2008</td> </tr> </tbody> </table>		Name	Execution Date	Ward E. Tegrotenhuis	06/05/2008	Paul H. Humble	06/05/2008	Curt A. Lavender	06/05/2008	Dustin D. Caldwell	06/05/2008
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Dustin D. Caldwell	06/05/2008										
RECEIVING PARTY DATA											
Name:	Battelle Memorial Institute										
Street Address:	P.O. Box 999										
Internal Address:	K1-53										
City:	Richland										
State/Country:	WASHINGTON										
Postal Code:	99352										
PROPERTY NUMBERS Total: 1											
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12133970</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12133970						
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Application Number:	12133970										
CORRESPONDENCE DATA											
Fax Number:	(509)375-2981										
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>											
Phone:	509-375-2981										
Email:	derek.maughan@pnl.gov										
Correspondent Name:	BATTELLE MEMORIAL INSTITUTE ATTN: IP SER										
Address Line 1:	P. O. BOX 999										
Address Line 2:	K1-53										
Address Line 4:	RICHLAND, WASHINGTON 99352										
ATTORNEY DOCKET NUMBER:	15779-E										
NAME OF SUBMITTER:	Derek H. Maughan										

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Total Attachments: 6

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ASSIGNMENT OF PATENT RIGHTS

Ward E. Tegrotenhuis
Paul H. Humble
Curt A. Lavender
Dustin D. Caldwell

To
Battelle Memorial Institute

WHEREAS, we, Warad E. Tegrotenhuis of Kennewick, County of Benton, State of Washington, Paul H. Humble of Kennewick, County of Benton, State of Washington, Curt A. Lavender of Richland, County of Benton, State of Washington, Dustin D. Caldwell of Richland, County of Benton, State of Washington; hereinafter INVENTORS, have made certain inventions related to, Enhanced Two Phase Flow in Heat Transfer Systems, including those described and claimed in various disclosures including:

U.S. Patent Application No. 12/133,970, filed June 5, 2008, Entitled: Enhanced Two Phase Flow in Heat Transfer Systems

For which we are about to make application for Letters Patent of the United States; collectively referred to hereinafter as INVENTIONS;

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 all right, title, and interest in the said INVENTIONS and in all patents or patent applications sought or obtained therefor;

NOW, THEREFORE, be it known to all those who may be concerned, 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 the INVENTORS have each 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 INVENTIONS shown, described, or claimed herein, and the full and exclusive right, title, and interest to any and all patents and patent applications that show, describe or claim said INVENTIONS including but not limited to those applications referenced herein, and in and to any extensions, continuations, including continuations in part, reissues, divisions, or renewals thereof; and We each 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 my 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.

We each further covenant and agree that we each 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; and that each of us 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 (including continuations or continuations in part applications), or 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.

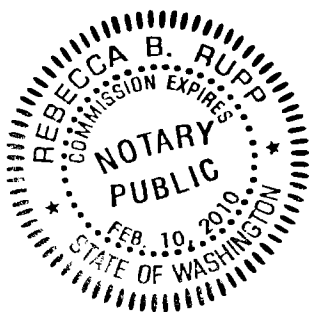
We each further assign unto the said Battelle Memorial Institute, the whole right, title, and interest to the invention disclosed in the application throughout all countries foreign to the United States, and do hereby authorize the said Battelle Memorial Institute to apply for patents therefor in its own name in countries where such procedure is proper and to claim the benefit of International Conventions and agree to execute applications of 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.

Executed at Richland, State of Washington, this 5 day
of June, 2008.

Ward E Tegrotenhuis
Ward E. Tegrotenhuis

STATE OF Washington)
) ss.
COUNTY OF Benton)

This 5 day of June, 2008, before me personally came the above-named Ward E. Tegrotenhuis, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.



Rebecca B Rupp
Notary Public for the State of Washington
My Commission Expires: 2/10/2010

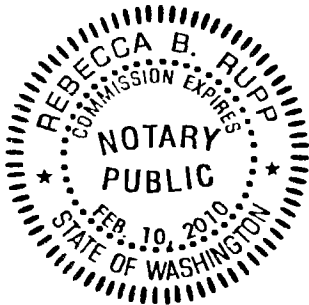
Executed at Richland, State of Washington this 5 day
of June, 2008.

Paul Humble
Paul H. Humble

STATE OF Washington)
) ss.
COUNTY OF Benton)

This 5 day of June, 2008, before me personally came the above-named Paul H. Humble, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.

Rebecca B Rupp
Notary Public for the State of Washington
My commission expires: 2/10/2010



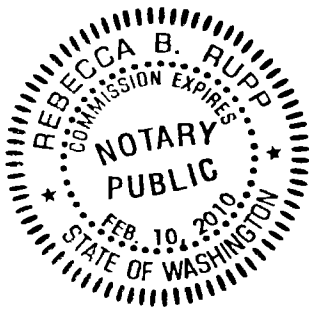
Executed at Richland, State of Washington, this 5 day
of June, 2008.

CAL

Curt A. Lavender

STATE OF Washington)
) ss.
COUNTY OF Benton)

This 5 day of June, 2008, before me personally came the above-named Curt A. Lavender, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.



Rebecca B Rupp

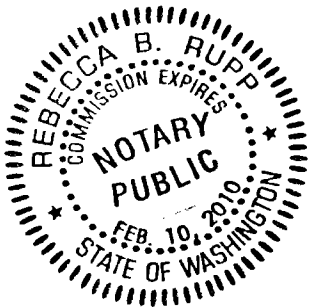
Notary Public for the State of Washington
My commission expires: 2/10/2010

Executed at Richland, State of Washington, this 5 day
of June, 2008.

Dustin D. Caldwell
Dustin D. Caldwell

STATE OF Washington)
) ss.
COUNTY OF Benton)

This 5 day of June, 2008, before me personally came the above-named Dustin D. Caldwell, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.



Rebecca B Rupp
Notary Public for the State of Washington
My commission expires: 2/10/2010