

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT2655836

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
<b>CONVEYING PARTY DATA</b>															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>HERMAN M. CHO</td> <td>12/19/2013</td> </tr> <tr> <td>NANCY M. WASHTON</td> <td>12/19/2013</td> </tr> <tr> <td>KARL T. MUELLER</td> <td>12/19/2013</td> </tr> <tr> <td>JESSE A. SEARS JR.</td> <td>12/19/2013</td> </tr> <tr> <td>MARK R. TOWNSEND</td> <td>12/19/2013</td> </tr> <tr> <td>R. JAMES EWING</td> <td>12/19/2013</td> </tr> </tbody> </table>		Name	Execution Date	HERMAN M. CHO	12/19/2013	NANCY M. WASHTON	12/19/2013	KARL T. MUELLER	12/19/2013	JESSE A. SEARS JR.	12/19/2013	MARK R. TOWNSEND	12/19/2013	R. JAMES EWING	12/19/2013
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R. JAMES EWING	12/19/2013														
<b>RECEIVING PARTY DATA</b>															
Name:	BATTELLE MEMORIAL INSTITUTE														
Street Address:	P.O. BOX 999, K1-53														
City:	RICHLAND														
State/Country:	WASHINGTON														
Postal Code:	99352														
<b>PROPERTY NUMBERS Total: 2</b>															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>61736935</td> </tr> <tr> <td>Application Number:</td> <td>14106441</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	61736935	Application Number:	14106441								
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Application Number:	61736935														
Application Number:	14106441														
<b>CORRESPONDENCE DATA</b>															
Fax Number:	(509)375-4487														
Phone:	509-375-3782														
Email:	ipdocket@pnnl.gov														
<i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>															
Correspondent Name:	JAMES D. MATHESON														
Address Line 1:	P.O. BOX 999, K1-53														
Address Line 4:	RICHLAND, WASHINGTON 99352														
ATTORNEY DOCKET NUMBER:	30245-E														

CH \$80.00 61736935

NAME OF SUBMITTER:	JAMES D. MATHESON
Signature:	/ James D. Matheson /
Date:	12/19/2013
<b>Total Attachments: 9</b> source=Assignment#page1.tif source=Assignment#page2.tif source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page6.tif source=Assignment#page7.tif source=Assignment#page8.tif source=Assignment#page9.tif	

## ASSIGNMENT OF PATENT RIGHTS

Herman M. Cho  
Nancy M. Washton  
Karl T. Mueller  
Jesse A. Sears, Jr.  
Mark R. Townsend  
R. James Ewing

To  
Battelle Memorial Institute

WHEREAS, we, Herman M. Cho of Richland, County of Benton, State of Washington; Nancy M. Washton of Richland, County of Benton, State of Washington; Karl T. Mueller of Richland, County of Benton, State of Washington; Jesse A. Sears, Jr. of Kennewick, County of Benton, State of Washington; Mark R. Townsend of Kennewick, County of Benton, State of Washington; and R. James Ewing of Kennewick, County of Benton, State of Washington; hereinafter INVENTORS, have made certain inventions related to, \* including those, described and claimed in various disclosures including:

U.S. Provisional Application No. 61/736,935, filed December 13, 2012, Entitled: Sealed NMR Probe for Spectroscopy of Hazardous Solids

U.S. Patent Application No. 14/106,441, filed December 13, 2013, Entitled: Sealed Magic Angle Spinning Nuclear Magnetic Resonance Probe and Process for Spectroscopy of Hazardous

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;

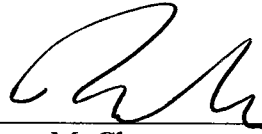
NOW, THEREFORE, be it known to all those who may be concerned, that for and in consideration of the sum of One Dollar (\$1.00) each, and other good and valuable considerations, the receipt of which is hereby acknowledged, We the INVENTORS have each sold, assigned, and transferred, and by these presents 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.

-----  
Execute at Richland, State of Washington, this 19<sup>th</sup> day of December, 2013.



\_\_\_\_\_  
Herman M. Cho

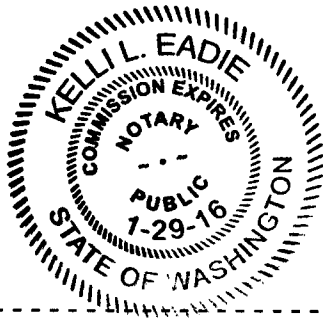
STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

This 19<sup>th</sup> day of December, 2013, before me personally came the above-named Herman M. Cho, 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.

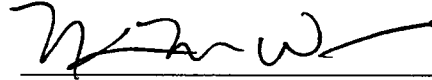


\_\_\_\_\_  
Notary Public for the State of Washington  
My commission expires: 1/29/16

[SEAL]



-----  
Executed at Richland, State of Washington, this 19 day of December, 2013.



\_\_\_\_\_  
Nancy M. Washton

STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

This 19<sup>th</sup> day of December, 2013, before me personally came the above-named Nancy M. Washton, 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.

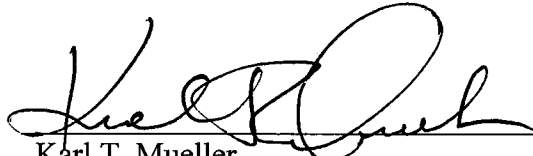


[SEAL]



\_\_\_\_\_  
Notary Public for the State of Washington  
My commission expires: 1/29/16

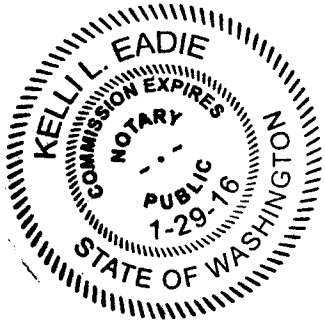
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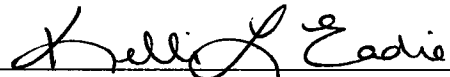
  
Karl T. Mueller

STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

This 19th day of December, 2013, before me personally came the above-named Karl T. Mueller, 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.

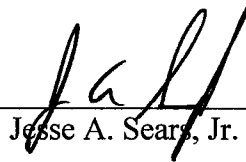
[SEAL]



  
Notary Public for the State of Washington  
My commission expires: 1/29/16



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Executed at Richland, State of Washington, this 19 day of December, 2013.


  
\_\_\_\_\_  
Jesse A. Sears, Jr.

STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

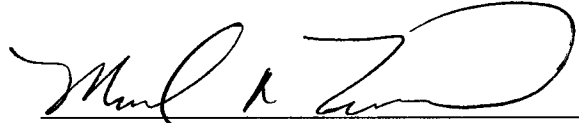
This 19th day of December, 2013, before me personally came the above-named Jesse A. Sears, Jr., who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.

[SEAL]



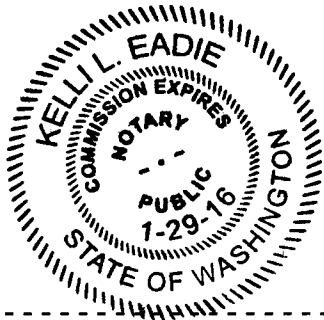
  
\_\_\_\_\_  
Notary Public for the State of Washington  
My commission expires: 1/29/16

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Executed at Richland, State of Washington, this 19 day of December, 2013.

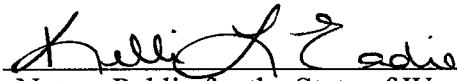
  
\_\_\_\_\_  
Mark R. Townsend

STATE OF Washington        )  
  )    ss.  
COUNTY OF Benton        )

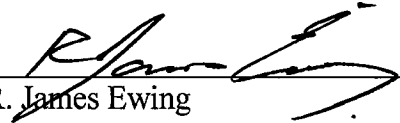
This 19<sup>th</sup> day of December, 2013, before me personally came the above-named Mark R. Townsend, who executed the foregoing instrument in my presence, and who acknowledged to me that he executed the same of his own free will for the purposes set forth therein.



[SEAL]

  
\_\_\_\_\_  
Notary Public for the State of Washington  
My commission expires: 1/29/16

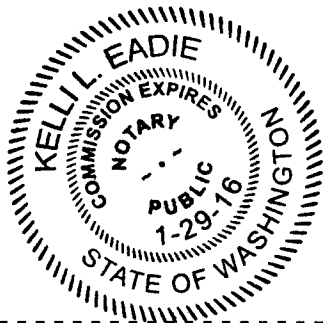
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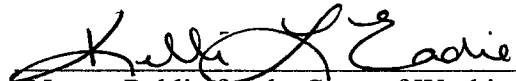
  
\_\_\_\_\_  
R. James Ewing

STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

This 19<sup>th</sup> day of December, 2013, before me personally came the above-named R. James Ewing, 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.

[SEAL]



  
\_\_\_\_\_  
Notary Public for the State of Washington  
My commission expires: 1/29/16