

## PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MICHAEL A. LILGA	03/24/2016
ASANGA B. PADMAPERUMA	03/24/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BATTELLE MEMORIAL INSTITUTE
<b>Street Address:</b>	P.O. BOX 999, K1-53
<b>City:</b>	RICHLAND
<b>State/Country:</b>	WASHINGTON
<b>Postal Code:</b>	99352
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	62136979
<b>Application Number:</b>	15078784
<b>CORRESPONDENCE DATA</b>	
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<b>ATTORNEY DOCKET NUMBER:</b>	30750-E
<b>NAME OF SUBMITTER:</b>	JAMES D. MATHESON
<b>SIGNATURE:</b>	/ JAMES D. MATHESON /
<b>DATE SIGNED:</b>	03/30/2016
<b>Total Attachments: 5</b>	
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## ASSIGNMENT OF PATENT RIGHTS

Michael A. Lilga  
Asanga B. Padmaperuma

To  
Battelle Memorial Institute

WHEREAS, we, Michael A. Lilga of Richland, County of Benton, State of Washington; and Asanga B. Padmaperuma of Richland, County of Benton, State of Washington; hereinafter INVENTORS, are the original inventors of certain inventions related to, SYSTEM AND PROCESS FOR ELECTROCHEMICAL UPGRADING OF BIO-OILS AND BIOCRUDES including those, described and claimed in various disclosures and patent applications including:

Provisional Application No. 62/136,979, filed March 23, 2015, Entitled: System and Process for Electrochemical Upgrading of Bio-Oils

U.S. Patent Application No. 15/078,784, filed March 23, 2016, Entitled: System and Process for Electrochemical Upgrading of Bio-Oils and Biocrudes

; collectively referred to hereinafter as INVENTIONS.

For which we hereby authorize to be made any and all applications for Patent in the United States and any other country for such 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, has by prior agreement acquired 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 do hereby reaffirm said assignment and do hereby confirm by these presents the sale, assignment 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.

We do further hereby acknowledge that any willful false statements made in this assignment is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years or both.

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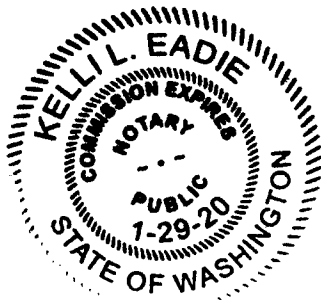
Executed at Richland, State of Washington, this 24 day of March, 2016.

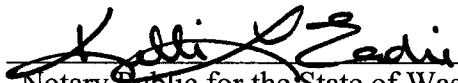
  
\_\_\_\_\_  
Michael A. Lilga

STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

This 24 day of March, 2016, before me personally came the above-named Michael A. Lilga, 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.

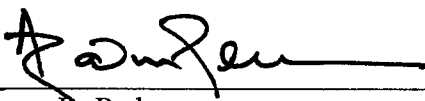
[SEAL]



  
\_\_\_\_\_  
Notary Public for the State of Washington  
My commission expires: 1/29/20

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Executed at Richland, State of Washington, this 24<sup>th</sup> day of March, 2016.


  
\_\_\_\_\_  
Asanga B. Padmaperuma

STATE OF Washington            )  
  )    ss.  
COUNTY OF Benton            )

This 24 day of March, 2016, before me personally came the above-named Asanga B. Padmaperuma, 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: 1/29/20