

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT3979080

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TODD R. HART	06/28/2016
DOUGLAS C. ELLIOTT	07/11/2016
ANDREW J. SCHMIDT	07/11/2016
RICHARD T. HALLEN	07/19/2016
<b>RECEIVING PARTY DATA</b>	
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<b>City:</b>	RICHLAND
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<b>Postal Code:</b>	99354
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15195553
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<b>ATTORNEY DOCKET NUMBER:</b>	23-95996-01
<b>NAME OF SUBMITTER:</b>	GILLIAN GARDNER
<b>SIGNATURE:</b>	/Gillian Gardner/
<b>DATE SIGNED:</b>	07/26/2016
<b>Total Attachments: 5</b>	
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### ASSIGNMENT

WHEREAS, we, Todd R. Hart, of Kennewick, Washington, Douglas C. Elliott, of Richland, Washington, Andrew J. Schmidt, of Richland, Washington, and Richard T. Hallen, of Richland, Washington, have invented a certain invention, which invention is at least partially disclosed in the following patent application:

U.S. Patent Application No. 15/195,553, filed on June 28, 2016, entitled **CATALYTIC HYDROTHERMAL LIQUEFACTION FOR BIO-OIL PRODUCTION**, the invention and application collectively referred to hereinafter as "the Invention;" and

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

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, we, Todd R. Hart, Douglas C. Elliott, Andrew J. Schmidt, and Richard T. Hallen, hereby sell, assign, and transfer to Battelle Memorial Institute, the full and exclusive right, title, and interest in and to the Invention, patent application, and patent rights throughout the world, including foreign patent priority rights, the right to file and prosecute International Applications under the Patent Cooperation Treaty, and the right to file and prosecute applications under the European Patent Convention; the Invention, patent application, and letters patent in this or any foreign country, and all corresponding non-provisional applications, divisions, continuations, continuations-in-part, reissues, and extensions thereof, all to be held and enjoyed by Battelle Memorial Institute, for its own use and benefit, and for its successors and assigns to the full end of the term for which letters patent may be granted by the United States or any foreign country, as fully and entirely as the same would have been held by us had this assignment and sale not been made, and covenant that we have full right so to do, and agree that we will communicate to Battelle Memorial Institute, or its successors and assigns, any facts known to us respecting the Invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, and reissue applications, make all rightful oaths, and do everything possible to aid Battelle Memorial Institute, its successors, and assigns to obtain and enforce proper patent protection for the Invention in the United States or any foreign country.

We confirm that, at the time the Invention was made, we were under an obligation to assign the Invention to Battelle Memorial Institute.

We hereby grant the law firm of Klarquist Sparkman, LLP, the power to insert on this Assignment any further information that may be necessary or desirable in order to comply with all applicable legal requirements, including but not limited to the rules of the United States Patent and Trademark Office, for submitting and recording this document in the United States and in all jurisdictions outside of the United States.

Executed at the place and date opposite our respective signatures below.

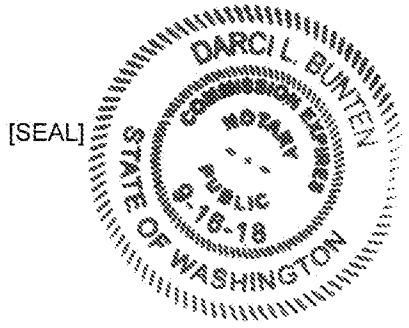
Todd R. Hart  
Todd R. Hart

At Richland, WA  
(City and State)  
on this 28 day of June, 2016.

STATE OF Washington )  
COUNTY OF Benton ) ss.

This 28 day of June, 2016, before me personally came the above-named Todd R. Hart, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Todd R. Hart's own free will for the purpose set forth therein.

Darci L. Bunter  
Notary Public For State of WA  
My commission expires: 9/16/18



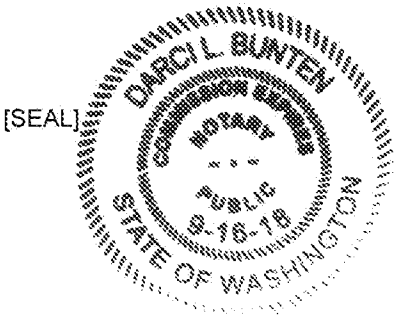
Douglas C Elliott  
Douglas C. Elliott

At Richland, WA  
(City, and State)  
on this 11 day of July, 2016.

STATE OF Washington )  
  )  
COUNTY OF Benton                      )  
  )      ss.

This 11 day of July, 2016, before me personally came the above-named Douglas C. Elliott, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Douglas C. Elliott's own free will for the purpose set forth therein.

Darci L. Bunter  
Notary Public For State of WA  
My commission expires: 9/06/18



Andrew J. Schmidt  
Andrew J. Schmidt

At Richland, WA  
(City and State)  
on this 11 day of July, 2016.

STATE OF Washington )  
COUNTY OF Benton ) ss.

This 11 day of July, 2016, before me personally came the above-named Andrew J. Schmidt, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Andrew J. Schmidt's own free will for the purpose set forth therein.

Darcil L. Buntin  
Notary Public For State of WA  
My commission expires: 9/16/18

[SEAL]



*Richard T. Hallen*  
Richard T. Hallen

At Richland, WA  
(City and State)  
on this 19 day of July, 2016.

STATE OF Washington )  
COUNTY OF Benton ) ss.

This 19 day of July, 2016, before me personally came the above-named Richard T. Hallen, who executed the foregoing instrument in my presence, and who acknowledged to me that this instrument was executed by Richard T. Hallen's own free will for the purpose set forth therein.

*Darci K. Buntzen*  
Notary Public For State of WA  
My commission expires: 9/16/18

[SEAL]

