

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3341433

<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 L CATTO	07/08/2014
PHILIP JAMES SCALZO	07/08/2014
CARLETON DREW TAIT	07/08/2014
DOUGLAS M VANTHORRE	07/09/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	BIOMASS ENERGY ENHANCEMENTS LLC
<b>Street Address:</b>	993 S LAKE SUMMIT RD
<b>City:</b>	ZIRCONIA
<b>State/Country:</b>	NORTH CAROLINA
<b>Postal Code:</b>	28773
<b>PROPERTY NUMBERS Total: 15</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14305193
Application Number:	14305223
Application Number:	14305247
Application Number:	14305324
Application Number:	14623430
Application Number:	14623448
Application Number:	14623456
Application Number:	14623976
Application Number:	14624014
Application Number:	14624055
Application Number:	14624109
Application Number:	14624731
Application Number:	14624756
Application Number:	14625074
Application Number:	14624933
<b>CORRESPONDENCE DATA</b>	

**Fax Number:** (651)331-7040

***Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.***

**Phone:** 651-748-5998

**Email:** william@berggrenlaw.com

**Correspondent Name:** WILLIAM R BERGGREN

**Address Line 1:** 7090 43RD ST N

**Address Line 4:** OAKDALE, MINNESOTA 55128

<b>ATTORNEY DOCKET NUMBER:</b>	13005-8, 14001-11
--------------------------------	-------------------

<b>NAME OF SUBMITTER:</b>	WILLIAM R BERGGREN
---------------------------	--------------------

<b>SIGNATURE:</b>	/William R Berggren/
-------------------	----------------------

<b>DATE SIGNED:</b>	05/06/2015
---------------------	------------

**Total Attachments: 4**

source=ASSIGNMENT signed MLC 7-8-2014#page1.tif

source=ASSIGNMENTS signed by PJS and CDT 7-8-2014#page1.tif

source=ASSIGNMENTS signed by PJS and CDT 7-8-2014#page2.tif

source=ASSIGNMENT signed DVT 7-9-2014#page1.tif

**ASSIGNMENT OF INVENTION**

This Assignment is between Michael L Catto, 469 Bethlehem Church Road, Moore, SC 29369 ("INVENTOR"), and Biomass Energy Enhancements LLC, 993 S Lake Summit Rd, Zirconia, NC 28773 ("ASSIGNEE").

INVENTOR has invented products made with a beneficiated biomass feedstock containing less water-soluble salt than known equivalent biomass materials; subsequent processes to make beneficial items such as biochar, pyrolysis oil, biogas, pellets, briquettes, and blends with coal; processes to make these products; and processes to co-fire this biomass with coal, and ASSIGNEE wants to acquire INVENTOR'S entire interest therein.

In consideration of valuable consideration, (hereinafter referred to as "Consideration"), the receipt and sufficiency of which are hereby acknowledged, INVENTOR assigns to ASSIGNEE the entire interest of INVENTOR in the above-identified invention or inventions and all improvements and modifications thereof.

*INVENTOR HEREBY AGREES* (a) to communicate to ASSIGNEE, its successors and assigns, all information known or available to INVENTOR regarding the invention or inventions, improvements, and modifications whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, his successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, continuation-in-part, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, his successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

*INVENTOR HEREBY REPRESENTS AND WARRANTS* that INVENTOR has the full and unencumbered right to assign the interests assigned herein and that INVENTOR has not executed and will not execute any document or instrument in conflict herewith.

*INVENTOR HEREBY AUTHORIZES AND REQUESTS* the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, as owner of INVENTOR'S entire interest, for the sole use and benefit of ASSIGNEE, his successors and assigns.

*INVENTOR HEREBY GRANTS* to the law firm of Berggren Law Offices, LLC the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment. INVENTOR understands that the attorneys and agents of the law firm of Berggren Law Offices, LLC do not personally represent INVENTOR or INVENTOR'S legal interests; and INVENTOR acknowledges its right to seek its own independent legal counsel.

Executed this 8 day of July, 2014. By: Michael L. Catto  
Michael L. Catto

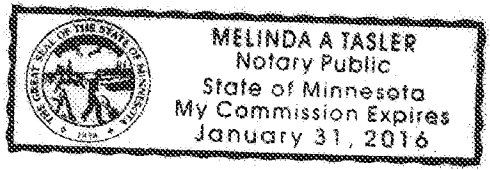
State of MN

County of Washington

On this 8th day of July, 2014, before me, a notary public in and for said county, appeared **Michael L Catto**, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he/she acknowledged that he or she signed, sealed, and delivered the said instrument as his or her free and voluntary act for the uses and purposes therein set forth.

Melinda Tasler  
Notary Public

My Commission Expires 1/31/16



**ASSIGNMENT OF INVENTION**

This Assignment is between Philip James Scalzo, 11259 Alisa Meadows Drive, South Jordan, UT 84095 ("INVENTOR"), and Biomass Energy Enhancements LLC, 993 S Lake Summit Rd, Zirconia, NC 28773 ("ASSIGNEE").

INVENTOR has invented a beneficiated biomass feedstock containing less water-soluble salt than known equivalent biomass materials; a process to make same; products made with subsequent processes to make beneficial items such as biochar, pyrolysis oil, biogas, pellets, briquettes; blends with coal; processes to make these products; and processes to co-fire this biomass with coal, and ASSIGNEE wants to acquire INVENTOR'S entire interest therein.

In consideration of valuable consideration, (hereinafter referred to as "Consideration"), the receipt and sufficiency of which are hereby acknowledged, INVENTOR assigns to ASSIGNEE the entire interest of INVENTOR in the above-identified invention or inventions and all improvements and modifications thereof.

*INVENTOR HEREBY AGREES* (a) to communicate to ASSIGNEE, its successors and assigns, all information known or available to INVENTOR regarding the invention or inventions, improvements, and modifications whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, his successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, continuation-in-part, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, his successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

*INVENTOR HEREBY REPRESENTS AND WARRANTS* that INVENTOR has the full and unencumbered right to assign the interests assigned herein and that INVENTOR has not executed and will not execute any document or instrument in conflict herewith.

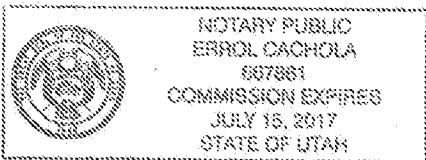
*INVENTOR HEREBY AUTHORIZES AND REQUESTS* the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, as owner of INVENTOR'S entire interest, for the sole use and benefit of ASSIGNEE, his successors and assigns.

*INVENTOR HEREBY GRANTS* to the law firm of Berggren Law Offices, LLC the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment. INVENTOR understands that the attorneys and agents of the law firm of Berggren Law Offices, LLC do not personally represent INVENTOR or INVENTOR'S legal interests; and INVENTOR acknowledges its right to seek its own independent legal counsel.

Executed this 8 day of July, 2014. By: Philip James Scalzo  
Philip James Scalzo

State of Utah  
County of SALT LAKE

On this 8 day of JULY, 2014, before me, a notary public in and for said county, appeared **Philip James Scalzo**, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he/she acknowledged that he or she signed, sealed, and delivered the said instrument as his or her free and voluntary act for the uses and purposes therein set forth.



[Signature]  
Notary Public  
My Commission Expires 7/15/17

**ASSIGNMENT OF INVENTION**

This Assignment is between Carleton Drew Tait, 265 Edgemont Drive, North Salt Lake, UT 84054 ("INVENTOR"), and Biomass Energy Enhancements LLC, 993 S Lake Summit Rd, Zirconia, NC 28773 ("ASSIGNEE").

INVENTOR has invented a beneficiated biomass feedstock containing less water-soluble salt than known equivalent biomass materials; a process to make same; products made with subsequent processes to make beneficial items such as biochar, pyrolysis oil, biogas, pellets, briquettes; blends with coal; processes to make these products; and processes to co-fire this biomass with coal, and ASSIGNEE wants to acquire INVENTOR'S entire interest therein.

In consideration of valuable consideration, (hereinafter referred to as "Consideration"), the receipt and sufficiency of which are hereby acknowledged, INVENTOR assigns to ASSIGNEE the entire interest of INVENTOR in the above-identified invention or inventions and all improvements and modifications thereof.

INVENTOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, all information known or available to INVENTOR regarding the invention or inventions, improvements, and modifications whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, his successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, continuation-in-part, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, his successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

INVENTOR HEREBY REPRESENTS AND WARRANTS that INVENTOR has the full and unencumbered right to assign the interests assigned herein and that INVENTOR has not executed and will not execute any document or instrument in conflict herewith.

INVENTOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, as owner of INVENTOR'S entire interest, for the sole use and benefit of ASSIGNEE, his successors and assigns.

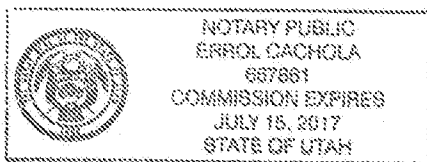
INVENTOR HEREBY GRANTS to the law firm of Berggren Law Offices, LLC the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment. INVENTOR understands that the attorneys and agents of the law firm of Berggren Law Offices, LLC do not personally represent INVENTOR or INVENTOR'S legal interests; and INVENTOR acknowledges its right to seek its own independent legal counsel.

Executed this 8 day of July, 2014. By: Carleton Drew Tait  
Carleton Drew Tait

State of Utah

County of SALT LAKE

On this 8 day of JULY, 2014, before me, a notary public in and for said county, appeared **Carleton Drew Tait**, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he/she acknowledged that he or she signed, sealed, and delivered the said instrument as his or her free and voluntary act for the uses and purposes therein set forth.



[Signature]  
Notary Public  
My Commission Expires 7/15/17

**ASSIGNMENT OF INVENTION**

This Assignment is between Douglas M Van Thorre, 5251 Humbolt Ave S, Minneapolis, MN 55419 ("INVENTOR"), and Biomass Energy Enhancements LLC, 993 S Lake Summit Rd, Zirconia, NC 28773 ("ASSIGNEE").

INVENTOR has invented products made with a beneficiated biomass feedstock containing less water-soluble salt than known equivalent biomass materials; subsequent processes to make beneficial items such as biochar, pyrolysis oil, biogas, pellets, briquettes, and blends with coal; processes to make these products; and processes to co-fire this biomass with coal, and ASSIGNEE wants to acquire INVENTOR'S entire interest therein.

In consideration of valuable consideration, (hereinafter referred to as "Consideration"), the receipt and sufficiency of which are hereby acknowledged, INVENTOR assigns to ASSIGNEE the entire interest of INVENTOR in the above-identified invention or inventions and all improvements and modifications thereof.

INVENTOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, all information known or available to INVENTOR regarding the invention or inventions, improvements, and modifications whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, his successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, continuation-in-part, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, his successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

INVENTOR HEREBY REPRESENTS AND WARRANTS that INVENTOR has the full and unencumbered right to assign the interests assigned herein and that INVENTOR has not executed and will not execute any document or instrument in conflict herewith.

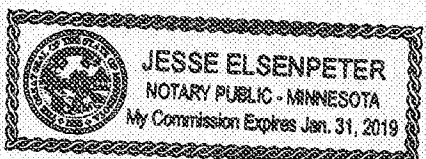
INVENTOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE, as owner of INVENTOR'S entire interest, for the sole use and benefit of ASSIGNEE, his successors and assigns.

INVENTOR HEREBY GRANTS to the law firm of Berggren Law Offices, LLC the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment. INVENTOR understands that the attorneys and agents of the law firm of Berggren Law Offices, LLC do not personally represent INVENTOR or INVENTOR'S legal interests; and INVENTOR acknowledges its right to seek its own independent legal counsel.

Executed this 9<sup>th</sup> day of July, 2014 By: Douglas M. Van Thorre  
Douglas M Van Thorre

State of MN  
County of Hennepin

On this 9<sup>th</sup> day of July, 2014, before me, a notary public in and for said county, appeared Douglas M Van Thorre, who is personally known to me to be the same person whose name is subscribed to the foregoing instrument, and he/she acknowledged that he or she signed, sealed, and delivered the said instrument as his or her free and voluntary act for the uses and purposes therein set forth.



Jesse Elsenpeter  
Notary Public  
My Commission Expires Jan. 31, 2019