

## PATENT ASSIGNMENT COVER SHEET

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Stylesheet Version v1.2

EPAS ID: PAT3239335

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
ANDERS CARLIUS	11/24/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	REAC FUEL AB
<b>Street Address:</b>	JOHN ERICSSONS VÄG 1
<b>City:</b>	LUND
<b>State/Country:</b>	SWEDEN
<b>Postal Code:</b>	223 63
<b>PROPERTY NUMBERS Total: 11</b>	
<b>Property Type</b>	<b>Number</b>
<b>PCT Number:</b>	SE2012051215
<b>Application Number:</b>	61557026
<b>Application Number:</b>	61556973
<b>PCT Number:</b>	SE2013051324
<b>PCT Number:</b>	SE2013050478
<b>PCT Number:</b>	SE2012050406
<b>Application Number:</b>	61475992
<b>Application Number:</b>	14356388
<b>Application Number:</b>	61640070
<b>Application Number:</b>	14397805
<b>Application Number:</b>	14111635
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(484)751-4014
<i>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.</i>	
<b>Phone:</b>	484-751-4066
<b>Email:</b>	travis.gasa@renmatix.com
<b>Correspondent Name:</b>	WENDY A. CHOI / BALLARD SPAHR LLP
<b>Address Line 1:</b>	999 PEACHTREE STREET
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<b>Address Line 4:</b>	ATLANTA, GEORGIA 30309

PATENT

<b>ATTORNEY DOCKET NUMBER:</b>	ANDERS CARLIUS
<b>NAME OF SUBMITTER:</b>	TRAVIS B. GASA
<b>SIGNATURE:</b>	/Travis B. Gasa/
<b>DATE SIGNED:</b>	02/24/2015

**Total Attachments: 5**

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**ASSIGNMENT & POWER OF ATTORNEY**

Dated: November 24, 2014

WHEREAS, I, the undersigned inventor(s):

Anders Carlus residing at Skyttelinjen 134, 226 49 Lund, Sweden;

(hereinafter referred to as the "ASSIGNOR"), has invented certain new and useful innovations and improvements as set forth in the following patent applications listed below in Schedule 1:

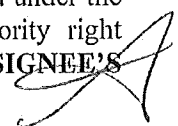
Schedule 1

Application No.	Country	Filing Date	Title
PCT/SE2012/051215	WO	Nov 8, 2012	LIQUEFACTION OF BIOMASS AT LOW PH
1151048-4	SE	Nov 8, 2011	FÖRVÄTSKNING AV BIOMASSA
61/557026	US	Nov 8, 2011	LIQUEFACTION OF BIOMASS
1151049-2	SE	Nov 8, 2011	KALLVATTENINJEKTION EFTER FÖRVÄTSKNING AV ETT BIOMASSAUTGÅNGSMATERIAL
61/556973	US	Nov 8, 2011	COLD WATER INJECTION AFTER THE LIQUEFACTION OF A BIOMASS FEEDSTOCK
PCT/SE2013/051324	WO	Nov 8, 2013	FLASH COOLING FOR QUENCHING A HYDROLYSIS REACTION OF A BIOMASS FEEDSTOCK
1350577-1	SE	May 8, 2013	FLASH COOLING FOR QUENCHING A HYDROLYSIS REACTION OF A BIOMASS FEEDSTOCK
PCT/SE2013/050478	WO	Apr 30, 2013	TWO STEP OPTIMIZATION FOR LIQUEFACTION OF BIOMASS
PCT/SE2012/050406	WO	Apr 13, 2012	METHOD OF TREATING ORGANIC MATERIAL TO PRODUCE METHANE GAS
61/475992	US	Apr 15, 2011	METHOD OF TREATING ORGANIC MATERIAL TO PRODUCE METHANE GAS
1150332-3	SE	Apr 15, 2011	FÖRFARANDE FÖR BEHANDLING AV ORGANISKT MATERIAL FÖR FRAMSTÄLLNING AV METANGAS
1150059-2	SE	Jan 27, 2011	FÖRFARANDE FÖR ITERATIV UPPLÖSNING AV BIOMASSASLURRY

TEXT REDACTED

(hereinafter referred to as the "INVENTIONS"); and

WHEREAS, **REAC FUEL AB**, a Swedish corporation having a principal place of business at John Ericssons väg 1, 223 63 Lund, Sweden (hereinafter referred to as the **ASSIGNEE**), is desirous of acquiring the entire right, title, and interest in, to, and under the **INVENTIONS** described in the patent applications, including the entire priority right derived from the applications, or is desirous of acquiring confirmation of **ASSIGNEE'S**



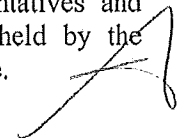
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present ownership of the entire right, title, and interest in, to, and under the **INVENTIONS** described in the patent applications, including the entire priority right derived from the applications, by virtue of an existing employment agreement, consulting agreement, or other agreement;

**NOW, THEREFORE**, for good and valuable consideration, the sufficiency and adequacy and receipt of which are hereby acknowledged, I, the **ASSIGNOR**:

1. Agree to assign, transfer, convey, and sell, hereby assign, transfer, convey, and sell and have assigned, transferred, conveyed, and sold to **ASSIGNEE**, the entire right, title, and interest in and to:

- (a) all intellectual property (including, without limitation, any innovation, information, invention, discovery, product, process, work, or design) disclosed, embodied, shown, or claimed in the above-referenced patent applications, implicitly or explicitly;
- (b) the above-referenced patent applications, the right to claim priority under the Paris Convention, Patent Cooperation Treaty, and other international treaties and conventions to the above-referenced patent applications, all applications based in whole or in part upon the above-referenced patent applications, including, without limitation, all applications that are a provisional, non-provisional, regional phase application, design, divisional, continuation, continuation-in-part, registration, utility model, petty patent application, industrial design, reissue, renewal, substitute, extension that may be filed in the U.S. and/or any country or jurisdiction foreign to the U.S., the patents that may issue thereon, and the patents as may be modified as the result of applicable procedures, including, but not limited to, *ex parte* reexaminations, *inter partes* reexaminations, post-grant reviews, *inter partes* reviews, supplemental examinations, and oppositions;
- (c) all patents (including, without limitation, all U.S. and non-U.S. patents, registrations, utility models, industrial designs, design patents, counterparts, continuations, continuations-in-part, divisionals, reissues, renewals, substitutes, extensions, *ex parte* reexaminations, *inter partes* reexaminations, post-grant reviews, *inter partes* reviews and supplemental examinations) that are granted or issued upon, or that claim priority to, any and all applications described in (b) of this paragraph or that disclose or claim intellectual property described in (a) of this paragraph, in whole or in part; and
- (d) all claims for damages by reason of past infringement of any rights under the applications or patents described in (a), (b) or (c) of this paragraph (including provisional rights to reasonable royalties pursuant to 35 U.S.C. §154(d)) and the right to sue for and collect such damages and royalties for **ASSIGNEE**'s own use, including the same for **ASSIGNEE**'s legal representatives and assigns, as fully and entirely as the same would have been held by the **ASSIGNOR** had this assignment, transfer, and sale not been made.



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2. Conveys to the **ASSIGNEE** the right to make applications in **ASSIGNEE**'s own behalf and name for protection of the invention in the U.S. and all countries or other jurisdictions foreign to the U.S.
3. Authorize and request the U.S. Patent and Trademark Office or any other U.S. or non-U.S. jurisdiction, authority, or agency to issue to the **ASSIGNEE** any and all patent(s), or other rights or documents, resulting from the intellectual property, patent applications and patents described in paragraph 1 of this **ASSIGNMENT**.
4. Agree to sign all papers and documents, including without limitation, applications, declarations, oaths and petitions, and, without further or additional consideration, but at the **ASSIGNEE**'s expense, perform any other acts that are necessary in connection with prosecution of patent applications or intellectual property described in paragraph 1 of this **ASSIGNMENT** and the enforcement of patents or other rights resulting from such patent applications or intellectual property.
5. Agree that the terms, covenants, and conditions of this **ASSIGNMENT** shall inure to the benefit of the **ASSIGNEE**, its successors, assigns and other legal representative, and shall be binding upon me/us, as well as my/our heirs, successors, legal representatives, and assigns.
6. Promise and affirm that I have not entered, and will not enter, into any assignment, sale, agreement, contract, writing, encumbrance, or understanding that conflicts with this **ASSIGNMENT**.

**ASSIGNOR** authorizes **ASSIGNEE** to correct any errors in this **ASSIGNMENT** or to insert in this **ASSIGNMENT** the number and filing date of the applications, if the number and filing date of the applications are not recited herein at the time of execution of this **ASSIGNMENT** by any or all of the parties thereto, as well as any subsequent application claiming priority directly or indirectly to the above-listed application(s) under 35 U.S.C. § 119(e), including any reissues, *ex parte* reexamination, *inter partes* reexaminations, divisionals, continuations, continuations-in-part, or extensions thereof, and all rights of priority under the Paris Convention, Patent Cooperation Treaty, and other international treaties and conventions;

**ASSIGNOR** authorizes **ASSIGNEE**, and any successor or assignee of **ASSIGNEE**, to insert into this **ASSIGNMENT** any patent application developed in connection with **ASSIGNOR**'S employment, consulting agreement, or other agreement with **ASSIGNEE**, which was inadvertently not included in Schedule 1 of this **ASSIGNMENT**;

**ASSIGNEE** acknowledges and accepts this assignment, as evidenced by the signature of an officer or authorized representative of **ASSIGNEE** below; and

**ASSIGNOR** hereby grants **ASSIGNEE**, and any successor assignee of **ASSIGNEE**, Power of Attorney, with right of substitution, to sign any document on **ASSIGNOR**'S behalf, as may be required by any intellectual property rights granting authority, relating to (1) any and all patent applications listed in Schedule 1, and (2) any patent application based in whole or in part on any patent application listed in Schedule 1, such as those types of applications or patents listed in paragraphs 1(b) and 1(c).

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IN WITNESS WHEREOF, ASSIGNOR has hereunder set his/her hand below.


  
\_\_\_\_\_  
Anders Carlus

**ATTESTATION OF SIGNATURE PURSUANT TO 28 U.S.C. § 1746**

The undersigned witnessed the signature of Anders Carlus to the above Assignment & Power of Attorney and makes the following statements:

1. I am over the age of 18 and competent to testify as to the facts in this Attestation block if called upon to do so.
2. Anders Carlus is personally known to me (or proved to me on the basis of satisfactory evidence) and appeared before me on November 24, 2014 to execute the above Assignment & Power of Attorney.
3. Anders Carlus subscribed to the above Assignment & Power of Attorney.

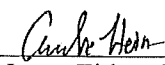
I declare under penalty of perjury under the laws of the United States of America that the statements made in the three (3) numbered paragraphs immediately above are true and correct.

Signature:   
Print Name: Jennie Hansen

Citizenship: Swedish

Address: Skyttelinjen 104, SE-226 49 Lund, Sweden  
Phone: +46 (0) 46-12 55 98

*[Instruction: Person attesting cannot be a current or former employee of REAC Fuel, an inventor named on any of REAC's patent applications, or a relative of the foregoing.]*

Assignee: REAC Fuel AB
By:  Name, Title: <u>ANDRE HEINZ</u> CHAIR, REAC FUEL AB

**ADDENDUM TO ANDERS CARLIUS ASSIGNMENT  
DATED NOVEMBER 24, 2014**

This document is an addendum to the Assignment of Anders Carlus dated November 24, 2014. This addendum adds patent applications inadvertently not included in Schedule 1 of the Assignment.

<b>Application No.</b>	<b>Country</b>	<b>Filing Date</b>	<b>Title</b>
14/356388	US	May 5, 2014	LIQUEFACTION OF BIOMASS AT LOW PH
1250429-6	SE	Apr 30, 2012	TVÅSTEGS OPTIMERING FÖR FÖRVÅTSKNING AV BIOMASSA
61/640,070	US	Apr 30, 2012	TWO STEP OPTIMIZATION FOR LIQUEFACTION OF BIOMASS
14/397805	US	Apr 30, 2013	TWO STEP OPTIMIZATION FOR LIQUEFACTION OF BIOMASS
14/111635	US	May 16, 2014	METHOD OF TREATING ORGANIC MATERIAL TO PRODUCE METHANE GAS