

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT														
NATURE OF CONVEYANCE:	ASSIGNMENT														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Paul D. Oldenburg</td> <td>02/13/2013</td> </tr> <tr> <td>Virginia M. Roberts</td> <td>02/20/2013</td> </tr> <tr> <td>Michel Daage</td> <td>02/14/2013</td> </tr> <tr> <td>Paul J. Berlowitz</td> <td>02/15/2013</td> </tr> <tr> <td>David C. Long</td> <td>02/14/2013</td> </tr> <tr> <td>Halou Oumar-Mahamat</td> <td>02/14/2013</td> </tr> </tbody> </table>		Name	Execution Date	Paul D. Oldenburg	02/13/2013	Virginia M. Roberts	02/20/2013	Michel Daage	02/14/2013	Paul J. Berlowitz	02/15/2013	David C. Long	02/14/2013	Halou Oumar-Mahamat	02/14/2013
Name	Execution Date														
Paul D. Oldenburg	02/13/2013														
Virginia M. Roberts	02/20/2013														
Michel Daage	02/14/2013														
Paul J. Berlowitz	02/15/2013														
David C. Long	02/14/2013														
Halou Oumar-Mahamat	02/14/2013														
RECEIVING PARTY DATA															
<table border="1"> <tr> <td>Name:</td> <td>ExxonMobil Research and Engineering Company</td> </tr> <tr> <td>Street Address:</td> <td>1545 Route 22 East</td> </tr> <tr> <td>Internal Address:</td> <td>P.O. Box 900</td> </tr> <tr> <td>City:</td> <td>Annandale</td> </tr> <tr> <td>State/Country:</td> <td>NEW JERSEY</td> </tr> <tr> <td>Postal Code:</td> <td>08801-0900</td> </tr> </table>		Name:	ExxonMobil Research and Engineering Company	Street Address:	1545 Route 22 East	Internal Address:	P.O. Box 900	City:	Annandale	State/Country:	NEW JERSEY	Postal Code:	08801-0900		
Name:	ExxonMobil Research and Engineering Company														
Street Address:	1545 Route 22 East														
Internal Address:	P.O. Box 900														
City:	Annandale														
State/Country:	NEW JERSEY														
Postal Code:	08801-0900														
PROPERTY NUMBERS Total: 1															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13285743</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13285743										
Property Type	Number														
Application Number:	13285743														
CORRESPONDENCE DATA															
Fax Number:	9087303202														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	908-730-3202														
Email:	jocelyn.k.justice@exxonmobil.com														
Correspondent Name:	ExxonMobil Research & Engineering Co.														
Address Line 1:	1545 Route 22 East														
Address Line 2:	P.O. Box 900														
Address Line 4:	Annandale, NEW JERSEY 08801-0900														
ATTORNEY DOCKET NUMBER:	2010EM357 US2														

CH \$40.00 13285743

NAME OF SUBMITTER:

David M. Weisberg

Total Attachments: 4

source=2010EM357 US2 USSN 13-285743 ASSIGNMENT#page1.tif

source=2010EM357 US2 USSN 13-285743 ASSIGNMENT#page2.tif

source=2010EM357 US2 USSN 13-285743 ASSIGNMENT#page3.tif

source=2010EM357 US2 USSN 13-285743 ASSIGNMENT#page4.tif

ASSIGNMENT
INVENTOR or INVENTORS:

PAUL D. OLDENBURG VIRGINIA M. ROBERTS MICHEL DAAGE PAUL J. BERLOWITZ
DAVID C. LONG HALOU OUMAR-MAHAMAT

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

CATALYST RECOVERY IN HYDROTHERMAL TREATMENT OF BIOMASS

said application having been executed on the 13, 14, 18, & 20 day(s) of February 2013, and all rights of priority created by said application under provisions of international conventions or treaties.

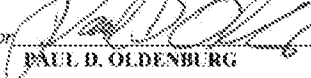

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date 2/13/13 Inventor  (LS) Witness 
PAUL D. OLDENBURG

Date _____ Inventor _____ (LS) Witness _____
VIRGINIA M. ROBERTS

Date _____ Inventor _____ (LS) Witness _____
MICHEL DAAGE

Date _____ Inventor _____ (LS) Witness _____
PAUL J. BERLOWITZ

Date _____ Inventor _____ (LS) Witness _____
DAVID C. LONG

Date _____ Inventor _____ (LS) Witness _____
HALOU OUMAR-MAHAMAT

Date _____ Inventor _____ (LS) Witness _____

ASSIGNMENT
INVENTOR or INVENTORS:

PAUL D. OLDENBURG VIRGINIA M. ROBERTS MICHEL DAAGE PAUL J. BERLOWITZ
DAVID C. LONG HALOU OUMAR-MAHAMAT

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

CATALYST RECOVERY IN HYDROTHERMAL TREATMENT OF BIOMASS

said application having been executed on the 13, 14, 18 & 20 day(s) of February 2013, and all rights of priority created by said application under provisions of international conventions or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date _____ Inventor PAUL D. OLDENBURG (LS) Witness _____

Date 2/20/2013 Inventor VIRGINIA M. ROBERTS (LS) Witness _____

Date 2/14/13 Inventor MICHEL DAAGE (LS) Witness Sedra M. Marshall

Date 2/13/13 Inventor PAUL J. BERLOWITZ (LS) Witness Sedra M. Marshall

Date _____ Inventor DAVID C. LONG (LS) Witness _____

Date _____ Inventor HALOU OUMAR-MAHAMAT (LS) Witness _____

Date _____ Inventor _____ (LS) Witness _____

ASSIGNMENT
INVENTOR or INVENTORS:

PAUL D. OLDENBURG VIRGINIA M. ROBERTS MICHEL DAAGE PAUL J. BERLOWITZ
DAVID C. LONG HALOU OUMAR-MAHAMAT

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

CATALYST RECOVERY IN HYDROTHERMAL TREATMENT OF BIOMASS

said application having been executed on the 13, 14, 18 & 20 day(s) of February 2013, and all rights of priority created by said application under provisions of international conventions or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date _____ Inventor PAUL D. OLDENBURG (LS) Witness _____

Date _____ Inventor VIRGINIA M. ROBERTS (LS) Witness _____

Date _____ Inventor MICHEL DAAGE (LS) Witness _____

Date _____ Inventor PAUL J. BERLOWITZ (LS) Witness _____

Date 2/14/13 Inventor David C. Long (LS) Witness Paul D. Long

Date _____ Inventor HALOU OUMAR-MAHAMAT (LS) Witness _____

Date _____ Inventor _____ (LS) Witness _____

ASSIGNMENT
INVENTOR or INVENTORS:

PAUL D. OLDENBURG VIRGINIA M. ROBERTS MICHEL DAAGE PAUL J. BERLOWITZ
DAVID C. LONG HALOU OUMAR-MAHAMAT

For good and valuable consideration, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Research and Engineering Company (formerly Exxon Research and Engineering Company), a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as ASSIGNEE, the entire right, title and interest, for the United States and all foreign countries, in and to UNDERSIGNED's invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled

CATALYST RECOVERY IN HYDROTHERMAL TREATMENT OF BIOMASS

said application having been executed on the 13, 14 18 & 20 day(s) of February 2013, and all rights of priority created by said application under provisions of international conventions or treaties.

2) UNDERSIGNED agree(s) upon the request of ASSIGNEE to execute any and all applications for and documents relating to obtaining patents and the prosecution thereof for said invention or improvement, and any continuations of such applications or substitutes therefor or registrations thereof, and any specific separate assignments of any of the above required for recording in the United States Patent and Trademark Office and any foreign patent office that ASSIGNEE may deem necessary or expedient.

3) UNDERSIGNED agree(s) that in the event of any application based on said assigned invention or improvement, or patent issued thereon, or any reissue or application for the reissue thereof, becoming involved in priority of invention proceedings, UNDERSIGNED will cooperate with ASSIGNEE to the best of the ability of UNDERSIGNED in the matter of preparing and executing all documents and giving and producing evidence in support thereof.

4) UNDERSIGNED agree(s) to perform upon ASSIGNEE's request any and all affirmative acts to obtain United States and foreign patents covering said invention or improvement and to vest all rights therein hereby conveyed to ASSIGNEE, as fully and as entirely as the same would have been held and enjoyed by UNDERSIGNED if this assignment and sale had not been made.

5) UNDERSIGNED hereby authorize(s) ASSIGNEE to insert in this instrument the date(s) on which UNDERSIGNED executed the Declaration for the above-referenced patent application.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED's NAME.

Date _____ Inventor PAUL D. OLDENBURG (LS) Witness _____

Date _____ Inventor VIRGINIA M. ROBERTS (LS) Witness _____

Date _____ Inventor MICHEL DAAGE (LS) Witness _____

Date _____ Inventor PAUL J. BERLOWITZ (LS) Witness _____

Date _____ Inventor DAVID C. LONG (LS) Witness _____

Date 2/14/2013 Inventor HALOU OUMAR-MAHAMAT (LS) Witness [Signature]

Date _____ Inventor _____ (LS) Witness _____