PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| John Di-Yi Ou | 05/11/2011 |
| April D. Ross | 05/25/2011 |
| Doron Levin | 05/23/2011 |
| Mohan Kalyanaraman | 05/09/2011 |
| Wenyih Frank Lai | 05/10/2011 |

RECEIVING PARTY DATA

| Name: | ExxonMobil Chemical Patents Inc. | |
|------------------------------------|----------------------------------|--|
| Street Address: 13501 Katy Freeway | | |
| City: | Houston | |
| State/Country: | TEXAS | |
| Postal Code: | 77079 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13081351 |

CORRESPONDENCE DATA

Fax Number: (281)834-1231

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 281-834-1883

Email: jennifer.s.lewis@exxonmobil.com

Correspondent Name: EXXONMOBIL CHEMICAL COMPANY

Address Line 1: LAW TECHNOLOGY
Address Line 2: P.O. BOX 2149

Address Line 4: BAYTOWN, TEXAS 77522-2149

ATTORNEY DOCKET NUMBER: 2010EM122/2

NAME OF SUBMITTER: Andrew B. Griffis

PATENT

REEL: 026368 FRAME: 0078

:H \$40.00 1308

501549981

Total Attachments: 10

source=2010EM122-2-ASG#page1.tif source=2010EM122-2-ASG#page2.tif source=2010EM122-2-ASG#page3.tif source=2010EM122-2-ASG#page4.tif source=2010EM122-2-ASG#page5.tif source=2010EM122-2-ASG#page6.tif source=2010EM122-2-ASG#page7.tif source=2010EM122-2-ASG#page8.tif source=2010EM122-2-ASG#page9.tif source=2010EM122-2-ASG#page9.tif

> PATENT REEL: 026368 FRAME: 0079

INVENTOR(S):

| John Di-Yi OU | Doron LEVIN | |
|------------------|--------------------|--|
| April D. ROSS | Mohan KALYANARAMAN | |
| Wenvih Frank LAI | | |

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of and/or promise of payment which is hereby acknowledged, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Chemical Patents Inc., 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:

"XYLENE ISOMERIZATION PROCESS AND CATALYST THEREFOR"

and being further identified as USSN Application No.: <u>13/081,351</u>; Atty. Docket No. <u>2010EM122/2</u>, filed, <u>April 6, 2011</u>, 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 therefore 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's attorney to insert at paragraph 1, in this instrument the date on which the above-referenced patent application was filed, as well as the application number thereof when known.

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED'S NAME. John Di-Yi OU (Inventor) Witness (Signature) DATE April D. ROSS (Inventor) Witness (Print Name) Witness (Signature) DATE **Doron LEVIN** (Inventor) Witness (Print Name) Witness (Signature) DATE Mohan KALYANARAMAN (Inventor) Witness (Print Name) Witness (Signature) DATE Wenyih Frank LAI (Inventor)

Page 2 of 2

Witness (Signature)

Witness (Print Name)

INVENTOR(S):

| John Di-Yi OU | Doron LEVIN |
|---------------|--------------------|
| April D. ROSS | Mohan KALYANARAMAN |
| | Wenyih Frank LAI |

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of and/or promise of payment which is hereby acknowledged, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Chemical Patents Inc., 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:

"XYLENE ISOMERIZATION PROCESS AND CATALYST THEREFOR"

and being further identified as USSN Application No.: 13/081,351; Atty. Docket No. 2010EM122/2, filed, April 6. 2011, 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 therefore 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's attorney to insert at paragraph 1, in this instrument the date on which the above-referenced patent application was filed, as well as the application number thereof when known.

Page 1 of 2

IN WITNESS WHEREOF, this assignment has been executed by UNDERSIGNED on the date opposite UNDERSIGNED'S NAME. DATE John Di-Yi OU (Inventor) Witness (Signature) Witness (Print Name) 5/25/2011 April D. ROSS (Inventor) Chois Tweesille Witness (Print Name) DATE Doron LEVIN (Inventor) Witness (Print Name) Witness (Signature) DATE Mohan KALYANARAMAN (Inventor) Witness (Print Name) Witness (Signature) Wenyih Frank LAI (Inventor) Witness (Print Name) Witness (Signature)

I/IDPC/LAW/Prospectition/FMCC Procedulan/2010/2010FM122/US-2/2011-05-09-2010FM122-2US-Assignment doe

PATENT REEL: 026368 FRAME: 0083

Page 2 of 2

ASSIGNMENT INVENTOR(S):

| John Di-Yi QU | Doron LEVIN |
|---------------|--------------------|
| April D. ROSS | Mohan KALYANARAMAN |
| Wenyih | Frank LAI |

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of and/or promise of payment which is hereby acknowledged, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Chemical Patents Inc., a corporation of Delaware, its successors, legal representatives and assigns, herein referred to collectively as to UNDERSIGNED'S invention or improvement and to all patent applications and patents covering same which is described in a patent application entitled:

"XYLENE ISOMERIZATION PROCESS AND CATALYST THEREFOR"

and being further identified as USSN Application No.: 13/081,351; Atty. Docket No. 2010EM122/2, filed, April 6, 2011, 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 therefore 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
- 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 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's attorney to insert at paragraph 1, in this instrument the date on which the above-referenced patent application was filed, as well as the application number thereof when known.

E\DPC\1,AW\\Prosecution\EMCC Prosecution\2016\2016\EM122\US-2\2011-05-09-2010\EM122-2\US-Assignment.doc

Page 1 of 2

PATENT REEL: 026368 FRAME: 0084

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

| DATE | 8 15 | | | ₹ : | · |
|--|--|--|--|---------------|------------------|
| | | The same of the sa | | John Di | Yi OU (Inventor |
| | | | | | |
| | Witness (Print Name) | | Company of the second s | Wit | ness (Signature) |
| DATE | | | | | |
| | | POZZEŻA women pogration | HARIAGA AND AND AND AND AND AND AND AND AND AN | April D. | ROSS (Inventor) |
| | Witness (Print Name) | | | Witn | ess (Signature) |
| DATE | 5/23/2011 | | De: | | - Similar |
| Riche | ard C. Dougherts | | R | Dpron L. | EVIN (Inventor) |
| en e | Witness (Print Name) | MINE de contrares | | Witne | ss (Signature) |
| DATE | | | | | |
| | · Value · Valu | NI Prima mary pg (200 hiji) maranang | Mohan KA | LYANARAN | TAN (Inventor) |
| | N. C. | - | | | * |
| | Witness (Print Name) | | | Witnes | s (Signature) |
| DATE | | | | | · . |
| | When the service of t | | W | enyih Frank] | LAI (Inventor) |
| - | | BOOK! | | | |
| | Witness (Print Name) | | ************************************** | Witnes | s (Signature) |
| | | | | | |

EMPCVLAW/Proscention/EMCC Proscention/2010/2010/EM122/US-2/2011-05-09-2/010/EM122-2U8-Assignment.doc

Page 2 of 2

INVENTOR(S):

| John Di-Yi OU | Doron LEVIN | |
|------------------|--------------------|--|
| April D. ROSS | Mohan KALYANARAMAN | |
| Wenvih Frank LAI | | |

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of and/or promise of payment which is hereby acknowledged, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Chemical Patents Inc., 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:

"XYLENE ISOMERIZATION PROCESS AND CATALYST THEREFOR"

and being further identified as USSN Application No.: <u>13/081,351</u>; Atty. Docket No. <u>2010EM122/2</u>, filed, <u>April 6, 2011</u>, 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 therefore 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's attorney to insert at paragraph 1, in this instrument the date on which the above-referenced patent application was filed, as well as the application number thereof when known.

Page 1 of 2

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

| DATE | |
|---------------------------------------|--|
| | John Di-Yi OU (Inventor) |
| Witness (Print Name) | Witness (Signature) |
| DATE | April D. ROSS (Inventor) |
| | |
| Witness (Print Name) | Witness (Signature) |
| DATE | Doron LEVIN (Inventor) |
| Witness (Print Name) | Witness (Signature) |
| DATE May 9, 2011 | leyos |
| RICARDO ALVARADO Witness (Print Name) | Mohan KÅLYANARAMAN (Inventor) Kula Mula Witness (Signature) |
| DATE | Wenyih Frank LAI (Inventor) |
| Witness (Print Name) | Witness (Signature) |

INVENTOR(S):

| John Di-Yi OU | Doron LEVIN | |
|------------------|--------------------|--|
| April D. ROSS | Mohan KALYANARAMAN | |
| Wenyih Frank LAI | | |

In consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of and/or promise of payment which is hereby acknowledged, the undersigned person(s) named above, herein referred to as UNDERSIGNED, hereby agree(s) as follows:

1) UNDERSIGNED hereby assign(s) to ExxonMobil Chemical Patents Inc., 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:

"XYLENE ISOMERIZATION PROCESS AND CATALYST THEREFOR"

and being further identified as USSN Application No.: <u>13/081,351</u>; Atty. Docket No. <u>2010EM122/2</u>, filed, <u>April 6, 2011</u>, 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 therefore 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's attorney to insert at paragraph 1, in this instrument the date on which the above-referenced patent application was filed, as well as the application number thereof when known.

Page 1 of 2

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

| DATE | |
|----------------------|-------------------------------|
| | John Di-Yi OU (Inventor) |
| Witness (Print Name) | Witness (Signature) |
| DATE | April D. ROSS (Inventor) |
| Witness (Print Name) | Witness (Signature) |
| DATE | Doron LEVIN (Inventor) |
| Witness (Print Name) | Witness (Signature) |
| DATE | Mohan KALYANARAMAN (Inventor) |
| Witness (Print Name) | Witness (Signature) |
| DATE 5/10/2011 | WENTH Frank LAI (Inventor) |
| THEODORE DATE | La Al |
| Witness (Print Name) | Witness (Signature) |

Page 2 of 2