

**PATENT ASSIGNMENT**

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Paul F. Keusenkothen	08/23/2013
Frank Hershkowitz	08/23/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	ExxonMobil Chemical Patents Inc.
<b>Street Address:</b>	13501 Katy Freeway
<b>City:</b>	Houston
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77079
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13994476
<b>CORRESPONDENCE DATA</b>	
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<b>Address Line 1:</b>	P.O. Box 2149
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<b>ATTORNEY DOCKET NUMBER:</b>	2011EM029/2
<b>NAME OF SUBMITTER:</b>	Gerard J. Hughes, Reg. No. 41855
<b>Signature:</b>	/Gerard J. Hughes/
<b>Date:</b>	09/20/2013

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**Total Attachments: 4**

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ASSIGNMENT

INVENTOR(S):

Paul F. Keusenkothen

Frank Hershkowitz

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:

**“Method And Apparatus For Converting Hydrocarbons Into Olefins Using  
Hydroprocessing And Thermal Pyrolysis”**

and being further identified as USSN Application No.: 13/994,476; Atty. Docket No. 2011EM029/2, filed, June 14, 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 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.

ASSIGNMENT (Cont'd.)

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

DATE 8/23/13

  
Paul F. KEUSENKOTHEN (Inventor)

Juan Henao  
Witness (Print Name)

  
Witness (Signature)

DATE \_\_\_\_\_

\_\_\_\_\_  
Frank HERSHKOWITZ (Inventor)

\_\_\_\_\_  
Witness (Print Name)

\_\_\_\_\_  
Witness (Signature)

## ASSIGNMENT

INVENTOR(S):

Paul F. Keusenkothen

Frank Hershkowitz

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ASSIGNMENT (Cont'd.)

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

DATE \_\_\_\_\_

\_\_\_\_\_  
Paul F. KEUSENKOTHEN (Inventor)

\_\_\_\_\_  
Witness (Print Name)

\_\_\_\_\_  
Witness (Signature)

DATE

Aug 23, 2013

  
\_\_\_\_\_  
Frank HERSHKOWITZ (Inventor)

FEDERICO

BARRAN

\_\_\_\_\_  
Witness (Print Name)

  
\_\_\_\_\_  
Witness (Signature)