

## PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4366575

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	CARMAGEN ENGINEERING	05/05/2015
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	THE DOW CHEMICAL COMPANY	
<b>Street Address:</b>	2030 DOW CENTER	
<b>City:</b>	MIDLAND	
<b>State/Country:</b>	MICHIGAN	
<b>Postal Code:</b>	48674	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	15032401
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>	(937)449-6405	
<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>		
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<b>ATTORNEY DOCKET NUMBER:</b>	75034-US-PCT	
<b>NAME OF SUBMITTER:</b>	KATHERINE GHEARING	
<b>SIGNATURE:</b>	/Katherine Ghearing/	
<b>DATE SIGNED:</b>	04/13/2017	
<b>Total Attachments: 3</b>		
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This Assignment 440 is in the ENGLISH language and has the same meaning in other languages with the same 440 number.

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FORM 440

# ASSIGNMENT (with Priority Rights) and INVENTORSHIP DECLARATION

We, ASSIGNOR, of: **CARMAGEN ENGINEERING**  
4 West Main Street  
Rockaway, NJ 07866  
United States of America

an entity **organized and existing under the laws of the State of New Jersey, United States of America** do hereby claim and declare that we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof from the sole, true and first inventor(s):

Don F. Shaw, 7 Magnolia Ave, Denville, New Jersey 07834, United States of America and Richard E. Walter, 157 Black River Road, Long Valley, New Jersey 07853, United States of America

by an Assignment dated: January 28, 2014 and January 16, 2014, respectively of an invention relating to and entitled:

## CYCLONIC REACTOR VESSEL HAVING A LOW RESIDENCE TIME PLENUM

We do hereby declare, for good and valuable consideration effective as of October 29, 2013, received, sell, assign, and transfer unto:

WE, the ASSIGNEE: **THE DOW CHEMICAL COMPANY**  
**2030 Dow Center**  
**Midland, Michigan 48674**  
**United States of America**

an entity **organized and existing under the laws of the State of Delaware, United States of America** our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make application for Letters Patent in its own name, or in the name of its nominee; and all rights and powers to file any reissue, divisional, continuing or substitute application and any corresponding applications in any and all countries, including all rights to claim priority under all International Conventions and Treaties in the name of said Assignee, and do hereby authorize said Assignee to insert here the Priority Number, Filing Date, and Filing Country

Priority Number	Filing Date	Filing Country
61/896,682	October 29, 2013	United States of America

of the application on which the priority will be based; and in and to any Letters Patent that may be issued for said invention in any and all countries; and we do hereby agree to assist said Assignee in the prosecution of the said applications and in any interference, conflict, opposition or litigation which may arise involving said invention or the patent or patents thereon, and to execute any reissue, divisional, continuing or substitute application and assent to their making any applications in other countries corresponding to the above and below specifically identified application, as may be requested by said Assignee; and we do hereby authorize said Assignee to insert here the corresponding Application Number, Filing Date, and Filing Country

Application Number	Filing Date	Filing Country

of the corresponding application in any country where that patent property must be entered for recordal of this Assignment; and we do hereby authorize and request that any such Letters Patent be issued to said Assignee in accordance herewith, and consent to the recordal of this Assignment being under covenant, not only that we have full power to make the same, but also that such assigned rights are not encumbered by any grant, license, or other right heretofore given.

Subscribed and Sworn by us at **Rockway, NJ 07866**

this 5<sup>th</sup> day of May, 20 15

CORP.  
SEAL

**CARMAGEN ENGINEERING**

By: \_\_\_\_\_

**Lori Carucci**  
**VP Operations**

Attach Notarial Certificate

[illegible]

FORM 660

PATENT  
REEL: 041997 FRAME: 0368

FORM 550

UNITED STATES OF AMERICA )  
STATE OF NEW JERSEY ) SS  
County/Parish of Morris )

On this 5th day of May, 20 15, personally appeared  
before me, Lori Carucci, VP Operations, J

known or identified to me to be the individual described in and who executed the foregoing document and acknowledged the same as a free act and deed for uses and purposes therein expressed by authority of the said entity organized and existing under the laws of **the State of New Jersey, United States of America.**

which I have seen, appointing the said individual with full power to sign the forgoing document on behalf of the said entity and that the purposes for which said document is granted are within the scope of the objects or activities of said entity.

Brigitte Elmes  
NOTARY PUBLIC

PATENT  
REEL: 041997 FRAME: 0369