

## 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>Max M. Tirtowidjojo</td> <td>02/17/2010</td> </tr> <tr> <td>Debashis Chakraborty</td> <td>02/10/2010</td> </tr> <tr> <td>Kurt F. Hirsekorn</td> <td>02/08/2010</td> </tr> <tr> <td>William J. Kruper Jr.</td> <td>02/10/2010</td> </tr> </tbody> </table>		Name	Execution Date	Max M. Tirtowidjojo	02/17/2010	Debashis Chakraborty	02/10/2010	Kurt F. Hirsekorn	02/08/2010	William J. Kruper Jr.	02/10/2010
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Dow Global Technologies Inc.</td> </tr> <tr> <td>Street Address:</td> <td>2040 Dow Center</td> </tr> <tr> <td>City:</td> <td>Midland</td> </tr> <tr> <td>State/Country:</td> <td>MICHIGAN</td> </tr> <tr> <td>Postal Code:</td> <td>48674</td> </tr> </table>		Name:	Dow Global Technologies Inc.	Street Address:	2040 Dow Center	City:	Midland	State/Country:	MICHIGAN	Postal Code:	48674
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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>12900810</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	12900810						
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CORRESPONDENCE DATA											
<p>Fax Number: 8664966981  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 651-760-3250        Email: kim@ksjlaw.com        Correspondent Name: Kimberly S. Jordahl        Address Line 1: PO Box 517        Address Line 4: Willernie, MINNESOTA 48674</p>											
ATTORNEY DOCKET NUMBER:	69139-US-NP USINV TO DGTI										
NAME OF SUBMITTER:	Kimberly S. Jordahl										
Signature:	/Kimberly S. Jordahl/										

Date:

08/23/2013

**Total Attachments: 3**

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8 | 108 | 109 | 110 | 111 | 112 | 113 | 114 | 115 | 116 | 117 | 118 | 119 | 120 | 121 | 122 | 123 | 124 | 125 | 126 | 127 | 128 | 129 | 130 | 131 | 132 | 133 | 134 | 135 | 136 | 137 | 138 | 139 | 140 | 141 | 142 | 143 | 144 | 145 | 146 | 147 | 148 | 149 | 150

The Assignment ID is in the ENGLISH language and has the same meaning in other languages with the same ID number and Date

(with Priority Rights)

which invention was made and invented by me/us out of and in the course of my/our employment with my/our respective employers as stated below my/our name(s). I/we acknowledge that I/we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for our respective employers. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work, I/we sell, assign and transfer unto:

Dow Global Technologies Inc.  
2040 Dow Center  
Midland, Michigan 48674  
United States of America

a corporation organized and existing under the laws of the State of Delaware (hereinafter referred to as the "Assignee"); my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaties in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the Priority Number, Filing Date, and Filing Country

Priority Number	Filing Date	Filing Country
61/250,081	October 9, 2009	United States of America

of the application, on which the claim for priority will be based; and in and to any Letters Patent that may be issued for the invention in any and all countries. I/we do hereby agree to assist Assignee in the prosecution of the application(s) and in any interference, conflict, opposition or litigation which may arise involving the invention or the patent or patents thereon, and to execute for any and all countries any document relating to applications derived from, corresponding to or equivalent to the above identified application as Assignee may request.

I/we authorize Assignee or its designee to translate this Assignment into all languages necessary; and we request that any such Letters Patent be issued to Assignee; and consent to the recordal of this Assignment, or a Notarial True Copy thereof, being under covenant not only that I/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 Declared by me/us:

At: Freeport, TX  
this 17<sup>th</sup> day of February, 20 10  
Effective as of October 9, 2009  
Signature: Max M. Tirtowidjjo  
Full Name: Max M. Tirtowidjjo  
Residence: 110 Rosewood  
Lake Jackson, Texas 77566  
Country: United States of America  
Citizenship: United States of America  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

At: Freeport, TX 77541 USA  
this 10 day of February, 2010  
Effective as of October 9, 2009  
Signature: Debashis Chakraborty  
Full Name: Debashis Chakraborty  
Residence: 109 Northwood Drive  
Lake Jackson, Texas 77566  
Country: United States of America  
Citizenship: India  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of October 9, 2009

Signature: \_\_\_\_\_

Full Name: Kurt F. Hirsekorn  
Residence: 5631 Bloomfield Ct.  
Midland, Michigan 48640  
Country: United States of America  
Citizenship: United States of America  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of October 9, 2009

Signature: \_\_\_\_\_  
Full Name: William J. Kruper, Jr.  
Residence: 230 Barden Road  
Sanford, Michigan 48657  
Country: United States of America  
Citizenship: United States of America  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

☐ Additional names and signatures are attached.

This Assignment 110 is in the ENGLISH language and has the same meaning in other languages with the same 110 number and R/Date.

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FORM 110 (R. 5/97)

## INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION

(with Priority Rights)

I/we verily believe I am/we are the original, first and sole/joint inventor(s) of the subject matter which is embraced by and for which a patent is sought on the invention entitled: **PROCESS FOR THE PRODUCTION OF CHLORINATED AND/OR FLUORINATED PROPENES**

which invention was made and invented by me/us out of and in the course of my/our employment with my/our respective employers as stated below my/our name(s). I/we acknowledge that I/we hold the invention and all patent and other rights and powers obtainable or exercisable in respect thereof in trust for our respective employers. As trustee(s), and for good and valuable consideration and/or the remuneration received for my/our work, I/we sell, assign and transfer unto:

Dow Global Technologies Inc.  
2040 Dow Center  
Midland, Michigan 48674  
United States of America

a corporation organized and existing under the laws of the State of Delaware (hereinafter referred to as the "Assignee"); my/our entire right, title and interest throughout the world, in and to the invention and all rights and powers to make applications, including provisional applications when permitted by law, for Letters Patent in its own name, or in the name of its designee (or nominee(s)); and all rights and powers to file any corresponding or equivalent applications in any and all countries, including all rights to claim priority under all United States domestic laws, International Convention(s) and Treaties in the name of Assignee, and do hereby authorize Assignee or its designee to insert here the Priority Number, Filing Date, and Filing Country

Priority Number	Filing Date	Filing Country
61/250,081	October 9, 2009	United States of America

of the application, on which the claim for priority will be based; and in and to any Letters Patent that may be issued for the invention in any and all countries. I/we do hereby agree to assist Assignee in the prosecution of the application(s) and in any interference, conflict, opposition or litigation which may arise involving the invention or the patent or patents thereon, and to execute for any and all countries any document relating to applications derived from, corresponding to or equivalent to the above identified application as Assignee may request.

I/we authorize Assignee or its designee to translate this Assignment into all languages necessary; and we request that any such Letters Patent be issued to Assignee; and consent to the recording of this Assignment, or a Notarial True Copy thereof, being under covenant not only that I/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 Declared by me/us:

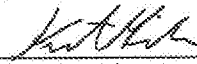
At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_  
Effective as of October 9, 2009

Signature: \_\_\_\_\_  
Full Name: Max M. Tirtowidjojo  
Residence: 110 Rosewood  
Lake Jackson, Texas 77566  
Country: United States of America  
Citizenship: United States of America  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

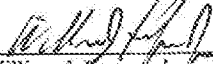
At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_  
Effective as of October 9, 2009

Signature: \_\_\_\_\_  
Full Name: Debashis Chakraborty  
Residence: 109 Northwood Drive  
Lake Jackson, Texas 77566  
Country: United States of America  
Citizenship: India  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

At: \_\_\_\_\_  
this 8th day of February, 20 10  
Effective as of October 9, 2009

Signature:   
Full Name: Kurt F. Hirsekorn  
Residence: 5631 Bloomfield Ct.  
Midland, Michigan 48640  
Country: United States of America  
Citizenship: United States of America  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

At: \_\_\_\_\_  
this 10 day of Feb, 20 10  
Effective as of October 9, 2009

Signature:   
Full Name: William J. Krupp, Jr.  
Residence: 230 Barden Road  
Sanford, Michigan 48657  
Country: United States of America  
Citizenship: United States of America  
P.O. Address: Same as Residence  
Employed By: The Dow Chemical Company  
Of Country: United States of America

( ) Additional names and signatures are attached.

This Assignee Acceptance 660 is in the ENGLISH language and has the same meaning in other languages with the same 660 number.

[illegible]

This Assignee Acceptance (SAC) is in the ENGLISH language and has the same meaning in other languages with the same SAC number.

FORM 550

## ASSIGNEE ACCEPTANCE

WE, the ASSIGNEE: **DOW GLOBAL TECHNOLOGIES INC.**  
**2040 Dow Center**  
**Midland, Michigan 48674**  
**United States of America**

hereby accept the ASSIGNMENT attached hereto which is dated: February 8, 2010 and February 10, 2010; February 17, 2010

From, the ASSIGNOR: Max M. Tirtowidjojo, 110 Rosewood, Lake Jackson, Texas 77566, United States of America, Citizen of United States of America; Debashis Chakraborty, 109 Northwood Dr., Lake Jackson, Texas 77566, United States of America, Citizen of India; Kurt F. Hirsekorn, 5631 Bloomfield Ct., Midland, Michigan 48640, United States of America, Citizen of United States of America; and William J. Kruper, Jr., 230 Barden Road, Sanford, Michigan 48657, United States of America, Citizen of United States of America

of the invention entitled:

# PROCESS FOR THE PRODUCTION OF CHLORINATED AND/OR FLUORINATED PROPENES

without any restrictions and with all rights and obligations deriving therefrom and declare that this confirmation of acceptance shall be deemed a part of the said ASSIGNMENT.

Signed at Midland, Michigan 48674, USA

this 2 day of March, 20 10

DOW GLOBAL TECHNOLOGIES INC.

CORP  
SEAL

By: John B. Treangen  
JOHN B. TREANGEN  
Authorized Representative

# NOTARIAL CERTIFICATE (Corporation)

UNITED STATES OF AMERICA )  
STATE OF MICHIGAN ) SS  
County/Parish of Midland )

On this 2 day of March, 2010, personally appeared before me, JOHN B. TREANGEN, Authorized Representative, 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 Corporation incorporated under the laws of the State of Delaware, United States of America.

I further certify that said authority, dated July 31, 2009, is based on

**A delegation of signature authority of said Corporation**

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

SEAR

*Kathy Sue Wertz*

## PATENT

**RECORDED: 08/23/2013**

NOTARY PUBLIC, MIDLAND COUNTY, MIDLAND, TEXAS  
MY COMMISSION EXPIRES APRIL 07, 2012