

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT7037570

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
IAN M. MUNRO	11/09/2018
WESLEY R. MARIOTT	11/09/2018
NITIN BORSE	11/07/2018
MICHAEL D. AWE	05/21/2019
PHUONG A CAO	11/15/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	DOW GLOBAL TECHNOLOGIES LLC
<b>Street Address:</b>	2040 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>
<b>Application Number:</b>	15734615
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(989)636-3237
<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>	
<b>Phone:</b>	989-636-2884
<b>Email:</b>	FGLMFRR@dow.com
<b>Correspondent Name:</b>	DANNY CHILDS
<b>Address Line 1:</b>	2211 H.H. DOW WAY
<b>Address Line 2:</b>	SSC-1338
<b>Address Line 4:</b>	MIDLAND, MICHIGAN 48674
<b>ATTORNEY DOCKET NUMBER:</b>	81969-US-PCT
<b>NAME OF SUBMITTER:</b>	DANNY CHILDS
<b>SIGNATURE:</b>	/Danny Childs/
<b>DATE SIGNED:</b>	11/22/2021
<b>Total Attachments: 6</b>	

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source=Inventors to DGTL#page5.tif  
source=Inventors to DGTL#page6.tif

# ASSIGNEE ACCEPTANCE

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

hereby accept the ASSIGNMENT which is dated: November 9, 2018; November 9, 2018; November 7, 2018; May 21, 2019; and November 15, 2018, respectively

From, the ASSIGNORS: Ian M. Munro, 230 Abner Jackson Pkwy, Freeport, Texas 77566, United States of America; Wesley R. Mariott 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; Nitin Borse, 230 Abner Jackson Parkway, Lake Jackson, Texas 77566, United States of America; Michael D. Awe, 65 Backeland Avenue, Middlesex, New Jersey 08846, United States of America; and Phuong A. Cao, 65 Backeland Avenue, Middlesex, New Jersey 08846, United States of America

of the invention entitled:

**SPRAY-DRYED ZIEGLER-NATTA (PRO)CATALYST SYSTEMS**

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 13<sup>th</sup> day of June, 20 19

CORP.  
SEAL

**DOW GLOBAL TECHNOLOGIES LLC**

By: 

**STEVEN W. MORK**  
 Authorized Representative

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

This Assignment 110 is in the ENGLISH language and has the same meaning in other languages with the same 110 number and RFLite.  
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: **SPRAY-DRIED ZIEGLER-NATTA (PRO)CATALYST SYSTEMS**

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 LLC**  
2040 Dow Center  
Midland, Michigan 48674  
United States of America

an entity 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
62/684,343	June 13, 2018	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: LAKE JACKSON, TX  
this 9<sup>th</sup> day of NOVEMBER, 20 18  
Effective as of June 13, 2018  
Signature: [Signature]  
Full Name: Ian M. Munro  
Mailing Address: 230 Abner Jackson Pkwy  
Freeport, Texas 77566  
United States of America

At: LAKE JACKSON, TX, USA  
this 9<sup>th</sup> day of NOVEMBER, 20 18  
Effective as of June 13, 2018  
Signature: [Signature]  
Full Name: Wesley R. Marion  
Mailing Address: 230 Abner Jackson Pkwy  
Lake Jackson, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Nitin Horse  
Mailing Address: 230 Abner Jackson Parkway  
Lake Jackson, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Michael D. Awe  
Mailing Address: 65 Backland Avenue  
Middlesex, New Jersey 08846  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Phuong A. Cao  
Mailing Address: 65 Backland Avenue  
Middlesex, New Jersey 08846  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20 \_\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_

This Assignment 110 is in the English language and has the same meaning in other languages with the same 110 number and 110 text.

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FORM 110 (R 5/97)

# INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION

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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: **SPRAY-DRIED ZIEGLER-NATTA (PRO)CATALYST SYSTEMS**

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 LLC**  
2040 Dow Center  
Midland, Michigan 48674  
United States of America

an entity 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
62/684,343	June 13, 2018	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: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Ian M. Munro  
Mailing Address: 230 Abner Jackson Pkwy  
Freeport, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Wesley R. Mariott  
Mailing Address: 230 Abner Jackson Pkwy  
Lake Jackson, Texas 77566  
United States of America

At: Lake Jackson  
this 7 day of November, 2018  
Effective as of June 13, 2018  
Signature: [Signature]  
Full Name: Niin Borse  
Mailing Address: 230 Abner Jackson Parkway  
Lake Jackson, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Michael D. Awe  
Mailing Address: 65 Backland Avenue  
Middlessex, New Jersey 08846  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: Phuong A. Cao  
Mailing Address: 65 Backland Avenue  
Middlessex, New Jersey 08846  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
Signature: \_\_\_\_\_  
Full Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_

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FORM 110 (31.5897)

# 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: **SPRAY-DRIED ZIEGLER-NATTA (PRO) CATALYST SYSTEMS**

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 into:

**Dow Global Technologies LLC**  
2040 Dow Center  
Midland, Michigan 48674  
United States of America

an entity 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

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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 Notaral 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 June 13, 2018  
  
Signature: \_\_\_\_\_  
Full Name: Ian M. Munro  
Mailing Address: 230 Abner Jackson Pkwy  
Freeport, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
  
Signature: \_\_\_\_\_  
Full Name: Wesley R. Marriott  
Mailing Address: 230 Abner Jackson Pkwy  
Lake Jackson, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
  
Signature: \_\_\_\_\_  
Full Name: Nitin Borse  
Mailing Address: 230 Abner Jackson Parkway  
Lake Jackson, Texas 77566  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
Effective as of June 13, 2018  
  
Signature: \_\_\_\_\_  
Full Name: Michael D. Awe  
Mailing Address: 65 Backland Avenue  
Middlesex, New Jersey 08846  
United States of America

At: New York  
this 15 day of November, 2018  
Effective as of June 13, 2018  
  
Signature: Phuong Cao  
Full Name: Phuong A. Cao  
Mailing Address: 65 Backland Avenue  
Middlesex, New Jersey 08846  
United States of America

At: \_\_\_\_\_  
this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_  
  
Signature: \_\_\_\_\_  
Full Name: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_

# **SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

<b>Title of Invention</b>	SPRAY-DRIED ZIEGLER-NATTA (PRO)CATALYST SYSTEMS		
This statement is directed to:			
<input type="checkbox"/> The attached application, OR <input checked="" type="checkbox"/> United States application or PCT international application number <u>62/684,343</u> filed on <u>June 13, 2018</u>			
<b>LEGAL NAME of inventor to whom this substitute statement applies:</b>			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Michael D. Awe			
Residence (except for a deceased or legally incapacitated inventor):			
City	Middlesex	State	NJ
		Country	US
Mailing Address (except for a deceased or legally incapacitated inventor):			
65 Baekeland Avenue			
City	Middlesex	State	NJ
		Zip	08846
		Country	US
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
<input type="checkbox"/> Legal Representative (for deceased or legally incapacitated inventor only), <input type="checkbox"/> Assignee, <input checked="" type="checkbox"/> Person to whom the inventor is under an obligation to assign, <input type="checkbox"/> Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or <input type="checkbox"/> Joint Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

**SUBSTITUTE STATEMENT**

Circumstances permitting execution of this substitute statement:

- ☐ Inventor is deceased,
- ☐ Inventor is under legal incapacity,
- ☒ Inventor cannot be found or reached after diligent effort, or
- ☐ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.
- OR
- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

**WARNING:**

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

**PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

Name: **Steven W. Mork** Date (Optional): **May 21, 2019**

Signature: **APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:**

If the applicant is a juristic entity, list the applicant name and the title of the signer:

**DOW GLOBAL TECHNOLOGIES LLC**

Applicant Name:

Title of Person Executing This Substitute Statement: **Steven W. Mork, Authorized Representative**

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City **Midland** State **MI** Country **US**

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)

**2040 Dow Center**

City **Midland** State **MI** Zip **48674** Country **US**

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.