# 506902179 10/01/2021

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6949003

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY DATA	·		
	Name	Execution Date	
ARJUN RAGHURAMAN		06/06/2018	
WILLIAM H HEATH		06/06/2018	
BRUCE D HOOK		06/06/2018	
WANGLIN YU		06/06/2018	
SUKRIT MUKHOPADHYAY		03/02/2018	
HEATHER A SPINNEY		03/02/2018	
DAVID R WILSON		03/02/2018	
JUSTIN M NOTESTEIN		06/28/2018	
SONBINH T NGUYEN		07/07/2018	

# **RECEIVING PARTY DATA**

Name:	DOW GLOBAL TECHNOLOGIES LLC
Street Address:	2040 DOW CENTER
City:	MIDLAND
State/Country:	MICHIGAN
Postal Code:	48674

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16644310

# **CORRESPONDENCE DATA**

	nt to the	636-3237 e-mail address first; if that is unsuccessful, it will be sent nat is unsuccessful, it will be sent via US Mail.
Phone:	989-6	36-2884
Email:	FGLN	/IFRR@dow.com
Correspondent Name:	DANI	NY CHILDS
Address Line 1:	2211	H.H. DOW WAY
Address Line 2:	SSC-	1338
Address Line 4:	MIDLAND, MICHIGAN 48674	
ATTORNEY DOCKET NUMBE	UMBER: 81156-US-PCT	
NAME OF SUBMITTER:	DANNY CHILDS	

506902179

SIGNATURE:	/Danny Childs/	
DATE SIGNED:	10/01/2021	
Total Attachments: 9		
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# ASSIGNEE ACCEPTANCE

WE, the ASSIGNEE:

DOW GLOBAL TECHNOLOGIES LLC 2040 Dow Center Midland, Michigan 48674 United States of America

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hereby accept the ASSIGNMENT which is dated: March 2, 2018 and June 6, 2018; respectively, with an effective date as of February 27, 2018

From, the ASSIGNORS: Arjun Raghuraman, having a mailing address of 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; William H. Heath, having a mailing address of 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; Bruce D. Hook, having a mailing address of 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; Wanglin Yu, having a mailing address of 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; Sukrit Mukhopadhyay, having a mailing address of 1776 Building, Midland, Michigan 48674, United States of America; Heather A. Spinney, having a mailing address of 1776 Building, Midland, Michigan 48642, United States of America; and David R. Wilson, having a mailing address of 1776 Building, Midland, Michigan 48674, United States of America; America

of the invention entitled:

#### PROCESS OF MANUFACTURING SURFACTANTS AND LUBRICANTS

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 4	18674, USA
this <u>31</u>	day of	July	, 20 (8
CORP SEAL		B	ow GLOBAL TECHNOLOGIES LLC

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

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 of Manufacturing Surfactants and Lubricants

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**. United States of America (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	
62/635,631	February 27, 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, Texas 77566 USA	At: Lake Jackson, Texas 77566 USA
At: Lake Jackson, Texas 77566 USA this 6 day of June , 2018	this day of 20 22
Effective as of February 27, 2018	Effective as of February 27, 2018
Signature: MML	Signature: Z/M/2/X
Full Name: Arjun Raghuraman	Full Name: William H. Heath
Mailing Address: 230 Abner Jackson Pkwy	Mailing Address: 230 Abner Jackson Pkwy
Lake Jackson, Texas 77566	Lake Jackson, Texas 77566
United States of America	United States of America
At: Lake Jackson, Texas 77566 USA	At. Lake Jackson, Texas 77566 USA
this $day of TUNC, 20 / F$	this day of June 20 (8
Effective as of February 27, 2018	Effective as of February 27, 2018
Street ve as of a condition of the condition	Litective as of rebroary 27, 2010
Signatura	Signature:
Full Name: Bruce D. Hook	Full Name: Wanglin Yu
Mailing Address: 230 Abner Jackson Pkwy	Mailing Address: 230 Abner Jackson Pkwy
Lake Jackson, Texas 77566	Lake Jackson, Texas 77566
United States of America	United States of America
At: Midland. Michigan 48674 USA	At Midland Michigan 48674 USA
Effective as of February 27, 2018	Effective as of February 27, 2018
Signature:	Signature:
Full Name: Sukrit Mukhopadhyay	Full Name: Heather A. Spinney
Mailing Address: 1776 Building	Mailing Address: 1776 Building
Midland, Michigan 48674	Midland, Michigan 48642
United States of America	United States of America

(X) Additional names and signatures are attached

~

Additional names, addresses and signatures to be attached to Form No.	CASE NO. 81794-US-PSP 12 110 INDIVIDUAL ASSIGNMENT AND INVENTORS DECLARATION
At: Midland, Michigan 48674 USA	At:
this day of , 20	this day of , 20
Effective as of February 27, 2018	
Signature	Signature:
Full Name, David R. Wilson	Full Name:
Mailing Address 1776 Building	Mailing Address:
Midland, Michigan 48674	
United States of America	

# 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 of Manufacturing Surfactants and Lubricants

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. United States of America (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	
	62/635,631	February 27, 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, Texas 77566 USA	At: Lake Jackson, Texas 77566 USA
this day of , 20	this day of, 20
Effective as of February 27, 2018	Effective as of February 27, 2018
Signature:	Signature:
Full Name: Arjun Raghuraman	Full Name: William H. Heath
Mailing Address: 230 Abner Jackson Pkwy	Mailing Address: 230 Abner Jackson Pkwy
Lake Jackson, Texas 77566	Lake Jackson, Texas 77566
United States of America	United States of America
At: Lake Jackson, Texas 77566 USA	At: Lake Jackson, Texas 77566 USA
this day of .20	this day of, 20
Effective as of February 27, 2018	Effective as of February 27, 2018
Signature:	Signature:
Full Name: Bruce D, Hook	Full Name: Wanglin Yu
Mailing Address: 230 Abner Jackson Pkwy	Mailing Address: 230 Abner Jackson Pkwy
Lake Jackson, Texas 77566	Lake Jackson, Texas 77566
United States of America	United States of America
At: Midland, Michigan 48674 USA	At: Midland, Michigan 48674 USA
this day of Man ch. , 20 / 8	this $\frac{1}{2}$ day of $\frac{1}{12} \frac{1}{12}$ $\frac{1}{2}$ $\frac{1}{2}$
Effective as of February 27, 2018	At: Midland, Michigan 48674 USA   this 2 day of M 1/1 S , 20 1X   Effective as of February 27, 2018 3 3 3 3
	Effective as of February 21, 2018
Signature: Aubert Hulliper Duyoy	Signature: Usthin Agumey
Full Name: Sukrit Mukhopadhyay	Full Name: Heather A. Spinney
Mailing Address: 1776 Building	Mailing Address: 1776 Building
Midland, Michigan 48674	Midland, Michigan 48642
United States of America	United States of America

(X) Additional names and signatures are attached.

#### CASE NO. 81794-US-PSP lz

-

Additional names,	addresses and signatures to be attached to Form No.	110 INDIVIDUAL ASSIGNMENT AND INVENTORS DECLARATION
At	Midland, Michigan 48674 USA	

At: § Midland, Michigan 48674 USA	IAC
this day of Marin 1,20	this day of , 20
Effective as of February 27, 2018	
Signature:	Signature:
Full Name: David R. Wilson	Full Name:
Mailing Address: 1776 Building	Mailing Address:
Midland, Michigan 48674	
United States of America	

#### ASSIGNMENT

#### U.S. Serial No: 62/635,631

Filing Date: February 27, 2018

Inventors: Justin M Notestein; Sonbinh T Ngayen

Title of U.S. Patent Application: Process of Manufacturing Surfactants and Labricants

For good and valuable consideration, the receipt and sufficiency of which are hereby agreed, each of the undersigned hereby assigns to Northwestern University, an Illinois not-for-profit corporation, having a place of business at 633 Clark Street, Evanston, Illinois 60208 and its successors and assigns ("Assignee") the entire right, title and interest in and to the inventions of such undersigned disclosed in the application listed above, and in any and all other applications anywhere in the world which the undersigned may file and/or be named as an inventor of, solely or jointly, on said inventions, in any and all patents which may be obtained on any of said applications and in any and all reissues, reexaminations, supplemental examinations, inter partes reviews, oppositions, post-grant reviews, supplementary protection certificates and/or extensions thereof, including without limitation, the right to bring suit and to claim and retain all damages and/or seek other remedies for the past, present and future infringement of any of the foregoing, the right of priority, including without limitation to claim priority benefit of or to said patent applications, and request the Commissioner for Patents in the United States and similar authorities outside the United States to issue said patents to and in the name of the Assignee.

Each of the undersigned states that the application listed above is or was made or authorized to be made by him or her. Each of the undersigned believes himself or herself to be the original inventor or a joint inventor with another undersigned of a claimed invention in the application listed above. Each of the undersigned acknowledges that any willful false statement made by him or her in this paragraph is punishable under 18 U.S.C. §1001 by fine or imprisonment of not more than five years, or both.

Except in favor of Assignee, each of the undersigned warrants that: (i) he or she is the owner of all its rights, titles and interests herein assigned and has the right to make this unconditional and irrevocable assignment to Assignee without obtaining any approval or permission of a third party; and (ii) there are no outstanding encumbrances, liena, prior assignments, licenses, or other obligations or restrictions on the rights, titles and interests herein assigned.

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Page 1 of 4

#### Attorney Docket No. 81794-US-PSP NU Reference No. 2018-107-01

Upon the request of Assignee and at no expense to the undersigned, each of the undersigned hereby agrees to execute any and all applications on said inventions, including without limitation for the relasue, reexamination, supplementary protection certificate or extension thereof and any oath, declaration or affidavit relating thereto that said Assignee may deem necessary or expedient, and to cooperate to the best of the ability of the undersigned with and perform any and all affirmative acts requested by Assignee to prepare, file, prosecute, maintain, defend, enforce and vest in Assignee the rights, titles and interests assigned herein, including without limitation, preparing and executing statements and giving and producing evidence in support thereof, whereby said rights, titles and interests will be held and enjoyed by said Assignee to the full end of the term for which said patents may be granted as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

Undersition (ASSIGNORS):

<u>612911</u>9 Information Ligtin VI. Notestein N. mais State of SS.

County of \_\_\_\_\_\_

NOTARYPUBLIC

(NOTARY SEAU)

My Commission Expires:

10/12/2020

oppicial seal MOLLY E SCANLON NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires Oct 29, 2020

(Continued on next page)

Attorney Docket No. 81794-US-PSP NU Reference No. 2018-107-01

U.S. Serial No: 62/635,631 Filing Date: February 27, 2018 Inventors: Justin M Notestein; Sonbinh T Nguyen Title of U.S. Patent Application: Process of Manufacturing Surfactants and Lubricants

Understaned (ASSIGNORS) continued:

Invegior Name: Sonbinh T. Nguyen

State of LLL/MOLS 88. County of

On this /772 day of JULY 20/8, before me, a Notary Public in and for the County and State aforesaid, appeared, to me personally known to be the same person whose name is subscribed to the foregoing instrument, and acknowledged that he or she executed said instrument as his or her free and voluntary act and for the uses and purposes therein expressed.

INDIANY PUBLIC - STATE OF LUNIOS

<u>MAA X. 41 Heatly - Gamon</u> NOTARY PUBLIC

My Commission Expires: / ^2/ ~22

#### Attorney Docket No. 81794-US-PSP NU Reference No. 2018-107-01

U.S. Serial No: 62/635,631 Filing Date: February 27, 2018 Inventors: Justin M Notestein; Sonbinh T Nguyen Thie of U.S. Patent Application: Process of Manufacturing Surfactants and Lubricants

#### ASSIGNEE ACCEPTANCE: Northwestern University:

On behalf of Northwestern University, Assignce, the authorized signatory below, hereby confirms Assignce's acceptance of all rights, privileges, titles and interests conveyed by this Assignment.

Authorized Signature:

Date:

2018

Printed Name

Lolita Buckingham, Invention Specialist or Heather Fletcher, Manager of INVO Docketing & Compliance

Department: "Innovation and New Ventures Office (INVO)

Page 4 of 4

# PATENT REEL: 057674 FRAME: 0224

### **RECORDED: 10/01/2021**