506902116 10/01/2021 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6948940

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA	·	
	Name	Execution Date
ARJURI RAGHURAMAN		04/03/2018
WILLIAM H HEATH		04/03/2018
SUKRIT MUKHOPADHYAY		10/25/2017
HEATHER A. SPINNEY		10/26/2017
DAVID R. WILSON		11/01/2017
ANTHONY P. GIES		10/25/2017
MANJIRI R. PARADKAR		10/26/2017
SONBINH T NGUYEN		11/27/2017
JUSTIN M NOTESTEIN		10/03/2017

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:	MIDL	AND, MICHIGAN 48674
ATTORNEY DOCKET NUMB	ER:	81156-US-PCT
NAME OF SUBMITTER:		DANNY CHILDS

506902116

SIGNATURE:	/Danny Childs/
DATE SIGNED:	10/01/2021
Total Attachments: 9	
source=Inventors to DGTL#page1.tif	
source=Inventors to DGTL#page2.tif	
source=Inventors to DGTL#page3.tif	
source=Inventors to DGTL#page4.tif	
source=Inventors to DGTL#page5.tif	
source=Inventors to DGTL#page6.tif	
source=Inventors to DGTL#page7.tif	
source=Inventors to DGTL#page8.tif	
source=Inventors to DGTL#page9.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: October 25, 2017: October 26, 2017; November 1, 2017; and April 3, 2018; respectively, with an effective date as of September 14, 2017

From, the ASSIGNORS: Arjun Raghuraman, with a mailing address of 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; William H. Heath, with a mailing address of 230 Abner Jackson Pkwy, Lake Jackson, Texas 77566, United States of America; Sukrit Mukhopadhyay, with a mailing address of 1776 Building, Midland, Michigan 48674, United States of America; Heather A. Spinney, with a mailing address of 1776 Building, Midland, Michigan 48642, United States of America; David R. Wilson, with a mailing address of 1776 Building, Midland, Michigan 48674, United States of America; Jeffery Goodwin, with a mailing address of 2301 N. Brazosport Blvd., Freeport, Texas 77541, United States of America; Anthony P. Gies, with a mailing address of 2301 N. Brazosport Blvd., Freeport, Texas 77541, United States of America; and Manjiri R. Paradkar, with a mailing address of 2301 N. Brazosport Blvd., Freeport, Texas 77541, United States of America

of the invention entitled:

PROCESS OF MANUFACTURING POLYOLS

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, 1	USA	
this TH	day of	April	, 20 10	
	ORP. EAL	DOW GI	LOBAL TECHNOLOGIES LLC	
			AN M. ZERULL horized Representative	

This Assignment 119 is in the ENGLISH language and has the some meaning in other languages with the same 110 number and B/Date

entities interine int

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 POLYOLS

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:

Bow 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
62/558,409	September 14, 2017	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
this 3rd day of April , 2018	this day of arrit , 20 18
Effective as of September 14, 2017	Effective as of September 14, 2017
Signatures //14/L	Signature: 2/sl/2/2~
pignature.	
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: Midland, Michigan 48674 USA	At: Midland, Michigan 48674 USA
this day of ,20	this day of , 20
Effective as of September 14, 2017	Effective as of September 14, 2017
Signature:	Signature:
Full Name: Sukrit Mukhopadhyay	Full Name: Heather A. Spinney
Mailing Address: 1776 Building	Mailing Address: 1776 Building
Midland, Michigan 48674	Midland, Michigan 48674
United States of America	United States of America
At: Midland. Michigan 48674 USA	
At: <u>Midland, Michigan 48674 USA</u> this <u>day of , 20</u>	At: Freeport, Texas 77541 USA this 3rd day of Hep? 20 18
Effective as of September 14, 2017	This free day of the p. 1 20 7 at
Elective as of September 14, 2017	Effective as of September 14, 2017
Signature:	Signature: July Logal
Full Name: David R. Wilson	Full Name: Jeffery Goodwin
Mailing Address: 1776 Building	Mailing Address 2301 N. Brazosport Blvd.
Midland, Michigan 48674	Freeport, Texas 77541
United States of America	United States of America

(X) Additional names and signatures are attached.

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 POLYOLS

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
62/558,409	September 14, 2017	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
this day of, 20 Effective as of September 14, 2017	Effective as of September 14, 2017
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: Midland, Michigan 48674 USA	At:
this 15 day of October , 20 17	this 26 day of <u>Actionation</u> , 20 17
Effective as of September 14, 2017	Effective as of September 14, 2017
Signature: Subset Kalhopa lingary	Signature: Alattin April April 1
Full Name: Sukrit Mukhopadhyay	Full Name: Heather A. Spinney
Mailing Address: 1776 Building	Mailing Address: 1776 Building
Midland, Michigan 48674	Midland, Michigan 48674
United States of America	United States of America
At: Midland, Michigan 48674 USA	At: Freeport, Texas 77541 USA
this 51 day of 1/0/lader , 2013	this, 20,
Effective as of September 14, 2017	Effective as of September 14, 2017
Signature: DAMM M	Signature:
Full Name: David & Wilson	Full Name: Jeffery Goodwin
Mailing Address: 1776 Building	Mailing Address: 2301 N. Brazosport Blvd.
Midland, Michigan 48674	Freeport, Texas 77541
United States of America	United States of America

(X) Additional names and signatures are attached.

SP lz

names, addresses and signatures to be attact	hed to Form No.	110 INDIVIDUAL ASSIGNMEN	CASE NO 81
At Ereenort Texas 77541 USA	ied to roint no.	At: Freeport, T	avac 775/1110A
At: Freeport, Texas 77541 USA this 25 day of October	20 17	this day of	20
Effective as of Sentember 14 2017		this day of Effective as of September 14,	2017
Signature: 41-Voy			
Signature UM Roy 600		Signature Full Name: Manjiri R. Farad	
Full Name: Anthony P. Cies		Full Name: Manjiri R. Parad	kar
Mailing Address: 2301 N. Brazosport Blvd.		Mailing Address: 2301 N. B	razosport Blvd.
Freeport, Texas 77541 United States of America		United Sta	Texas 77541
United States of America			RES OF AMERICA
At	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	TAP-	
this day of	, 20	At:	,20
ware and the paragrammer and the second			200 00 00 00
Signature Full Name.	2005 2005	Signature:	
Full Name.		Full Name:	
Mailing Address:		Mailing Address:	
11 11 817886 86 111, ¹² 166868 86 168 16886868 168 18 18 18 18 18 18			e ees 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000 - 2000
At:	gaar o oooooo Doo oo	ΤΑτ	uar a a nan 119 198899 - 1889 1991 - A A A A A
this day of	. 20	At: this day of	, 20
		· · · · · · · · · · · · · · · · · · ·	······································
Signature:	:	Signature:	
Full Name:		Full Name:	
Mailing Address:		Mailing Address:	
a			
6660 - 6666 - 6666 - 666 - 666 - 666 - 666 - 666 - 666 - 666 - 666 - 666 - 666		At	
this day of	20	this day of	, 20
······		······································	······································
Signature:		Signature:	
Full Name:		Full Name:	
Mailing Address:		Mailing Address:	
		<u>0</u>	
At		At	
this day of	, 20	At:	. , 20
· · · · · · · · · · · · · · · · · · ·			
21 - W			
Signature:		Signature:	* 8
Full Name: Mailing Address.		Full Name: Mailing Address:	
Mannig Autoss.		Maning Address.	
At a s		At:	
this day of	, 20	this day of	; 20
		Cimmeter	
Signature: Full Name:		Signature: Full Name:	
Mailing Address:		Mailing Address:	
······································			
At:		At:	
this day of	, 20	this day of	, 20
97. 			
Signature:		Signature:	
Full Name:		Full Name:	
Mailing Address:		Mailing Address:	
At:		At:	~~
this day of	, 20	this day of	, 20
		8 I.a.	
Signature:		Signature:	
Signature: Full Name:		Signature: Full Name:	

CASE NO. 81154-US-PSP lz

names, addresses and signatures to be	e attached to Form No.	110 INDIVIDU	JAL ASSIGNMENT A	ND INVENTORS DECLARA
At: Freeport, Texas 77541	USA	At:	Freeport, Texas	77541 USA 2. Payrollogy port Blvd.
this day of Effective as of September 14, 2017	, 20	this &	day of OC	20 17, 20 17
Effective as of September 14, 2017		Effective as	of September 14, 201	
Signature:		Signature:	Maurin	2. Kovadkar
Signature: Full Name: Anthony P. Gies		Full Name:	Maniiri R. Paradka	White the second second second
Mailing Address: 2301 N. Brazosport B	lvd.	Mailing Ad	dress: 2301 N. Brazos	port Blvd.
Freeport, Texas 7754	1	Ŭ	Freeport, Texa:	77541
United States of Amer	rica	[Freeport, Texa: United States of	f America
٨				
At: day of	, 20	this	day of	, 20
Signature:		Signature:		<u></u>
Full Name:		Full Name:		<u></u>
Mailing Address:		Mailing Ad	dress:	
		l [
At: day of	***************	At:	******	,20
this day of	, 20	this	day of	, 20
Signature:		Signature:		
Full Name:		Full Name:		
Mailing Address:		Mailing Ad	idress:	
At: day of	20	At:	day of	, 20
	, 20		uay or	
Cia analysis		Cianatura		
Signature: Full Name:		Full Name:		*******
Mailing Address:		Mailing Ac		
тат <i>и</i> ,				·····
٨+٠		λt·		
At: day of	20	this	day of	, 20
una uny or				
Ci		Signature:		
Signature: Full Name:		Full Name		
Mailing Address:		Mailing Ad		
manning Address.				
		7 744		~~~~~
At: day of	. 20	At: this	day of	, 20
	······································		· · ·	
Signature:		Signature:		
Full Name:	*******	Full Name		
Mailing Address:		Mailing A		
		_I L		
At:		At:		
this day of	, 20	this	day of	, 20
Signature:		Signature:		······································
Full Name:		Full Name		
Mailing Address:		Mailing A	ddress:	
L				
At:		At:	day of	
1.4.1	, 20	this	day of	, 20
this day of				
this day of				
Signature:		Signature		
			3:	

Attorney Docket Nos. 81154-US-PSP and 81156-US-PSP NU Reference Nos. 2017-166-01 & -02

ASSIGNMENT

U.S. Serial No: 62/558,409 Filing Date: September 14, 2017 U.S. Serial No: 62/558,422 Filing Date: September 14, 2017 Inventors: Sonbinh T. Nguyen; Justin M. Notestein Title of U.S. Patent Applications: Process of Manufacturing Polyols

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 applications 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 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 applications listed above are or were 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 applications 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, liens, prior assignments. licenses, or other obligations or restrictions on the rights, titles and interests herein assigned.

Page 1 of 4

Attorney Docket Nos. 81154-US-PSP and 81156-US-PSP NU Reference Nos. 2017-166-01 & -02

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 reissue, 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.

Undersigned (ASSIGNORS):

Inventor Name: Sonbinh T. Nguyen

State of <u>*ILLENDIS*</u>88. County of *COOK*

NOTARY PUBLIC STATE OF & LINCIS My Commission Expires 01/21/2018

On this 2774 day of <u>NOVEMBER</u> 2017, 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.

Una & Wheather Seamon

My Commission Expires: 1 - 2/-20/8

(continued on next page)

Page 2 of 4

U.S. Serial No: 62/558,409 Filing Date: September 14, 2017 U.S. Serial No: 62/558,422 Filing Date: September 14, 2017 Inventors: Sonbinh T. Nguyen; Justin M. Notestein Title of U.S. Patent Applications: Process of Manufacturing Polyols

SS.

Undersigned (ASSIGNORS) continued:

10/ 3/13 DATE

Inventor Name: Justin M. Notestein

State of Illino:5

County of Cook

On this <u>3</u> day of <u>OCbber</u> <u>2017</u> 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.

MAG GAMOTARY PUBLIC

[NOTARY SEAL]

My Commission Expires: 10/23/2000

OFFICIAL SEAL MOLLY E SCANLON NOTARY PUBLIC, STATE OF ILLINOIS My Commission Expires Oct 23, 2020

Attorney Docket Nos. 81154-US-PSP and 81156-US-PSP NU Reference Nos. 2017-166-01 & -02

U.S. Serial No: 62/558,409 Filing Date: September 14, 2017 U.S. Serial No: 62/558,422 Filing Date: September 14, 2017 Inventors: Sonbinh T. Nguyen; Justin M. Notestein Title of U.S. Patent Applications: Process of Manufacturing Polyols

ASSIGNEE ACCEPTANCE: Northwestern University

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

Date: 50002017-Authorized Signature: Printed Name

Beverly R. Milligan, Invention Specialist or Nicole A. Janovick, Ph.D., J.D., Invention Manager

Department: Innovation and New Ventures Office (INVO)

Page 4 of 4

PATENT REEL: 057673 FRAME: 0771

RECORDED: 10/01/2021