503837813 05/23/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT3884461 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JERZY KLOSIN	02/20/2014
PHILIP P. FONTAINE	03/13/2014
RUTH FIGUEROA	03/05/2014
DAVID M. PEARSON	03/05/2014

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:	15032150

CORRESPONDENCE DATA

Fax Number: (860)286-0115

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.

using a lax number, if provided, if that is unsuccessful, it will be sent via 03 mail

Phone: 8602862929

Email: Inolan@cantorcolburn.com
Correspondent Name: CANTOR COLBURN LLP
Address Line 1: 20 CHURCH STREET

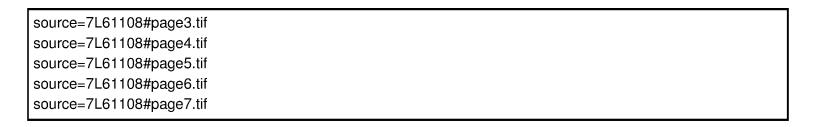
Address Line 2: 22ND FLOOR

Address Line 4: HARTFORD, CONNECTICUT 06103

ATTORNEY DOCKET NUMBER: DC140002US2	
NAME OF SUBMITTER:	J. MICHAEL BUCHANAN
SIGNATURE:	/J. Michael Buchanan/
DATE SIGNED:	05/23/2016

Total Attachments: 7 source=7L61108#page1.tif source=7L61108#page2.tif

PATENT 503837813 REEL: 038682 FRAME: 0168



TRUE COPY

TO ALL TO WHOM THESE PRESENTS SHALL COME,

I Do Hereby Certify that the annexed document(s) are TRUE COPIES of the original document(s) which I have compared. The original document(s) contains the authentic signature(s) from the inventor(s).

tMidland, Michigan 48674, USA
his 18^{49} day of $April$, 20 16
Toni, Kat. onde
Office Professional
THE DOW CHEMICAL COMPANY
NOTARIAL CERTIFICATE
UNITED STATES OF AMERICA) STATE OF MICHIGAN) SS County/Parish of Midland)
On this 18th day of 1914 2016, personally appeared before me,
Toni LaLonde
e 100° 8 a Y 1000 100 100° 100° 100° 100° 100° 100
known or identified to me to be the individual who executed the foregoing documen and acknowledged the same as a free act and deed for uses and purposes therein expressed.
SEAL Notary Public
Susan D Krotzer
NOTARY PUBLIC - STATE OF MICHIGAN

PATENT REEL: 038682 FRAME: 0170

MIDLAND COUNTY
MY COMMISSION EXPIRES: MARCH 07, 2022
ACTING IN MIDLAND COUNTY

• New 100 +

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: METAL-LIGAND COMPLEX, OLEFIN POLYMERIZATION CATALYST DERIVED THEREFROM, AND OLEFIN POLYMERIZATION METHOD UTILIZING THE CATALYST

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

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 faws. 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

Г			**************************************
- 1	Priority Number	Filing Date	Kilina Country
- 1	1 (11/14/13) 40(13/1/10)	Finite Date	riting Country
- 5			
- 1	61/918.309	December 19, 2013	United States of America
- 2		\$700 0418004 177, ±071,1	Office 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: Midland	, Michigan 48674 USA	At: Freeport, Texas 77541 USA
this day of	. 20	this day of
Effective as of December	19. 2013	Effective as of December 19, 2013
Signature:		Signature:
Full Name: Jerzy Klosin		Full Name: Philip P. Fontaine
Residence: 2209 Parkw	ood Drive	Residence: 922 W. 18th St.
Midland, Mi	chigan 48642	Houston, Texas 77008
Country: United States o	f America	Country: United States of America
Citizenship: Poland		Citizenship: United States of America
P.O. Address: Same as R	esidence	P.O. Address: Same as Residence
Employed By: The Dow	Chemical Company	Employed By: The Dow Chemical Company
Of Country: United State	s of America	Of Country: United States of America

At	Midland, Michigan 48674	USA
thi	s day of	. 20
Eff	fective as of December 19, 2013	70 ml 00 - 10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Sig	mature:	
Fu.	I Name: Ruth Figueroa	
Re	sidence: 1490 Riverchase	
	Midland, Michigan 48640	
-ICo	untry: United States of America	
Cit	izenship: United States of America	
[P.0	Address: Same as Residence	
En	ployed By: The Dow Chemical Company	,
Of	Country: United States of America	

this	day of	, 20
Effective :	ns of December 19, 2013	
Signature:		
Full Name	: Philip P. Fontaine	
Residence	: 922 W. 18th St.	
	Houston, Texas 77008	
Country: I	Inited States of America	
Citizenshi	p: United States of America	
P.O. Addn	ess: Same as Residence	
Employed	By: The Dow Chemical Compar	ny
Of Countr	y: United States of America	•

At: Freeport, Texas 77541 USA		
this 5 day of March , 20 14		
Effective as of December 19, 2013		
Signature:		
Full Name: David M. Fearson		
Residence: 109 Greenbriar Drive		
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		

(X) Additional names and signatures are attached.

Additional names, addresses and signatures to be attached to Form No. 110 INDIVIDUAL ASSIGNMENT AND INVENTORS DECLARATION At: Midland, Michigan 48674 USA this day of . 20 Effective as of December 19, 2013 At: day of . 20 Signature: _ Signature: Full Name: Todd D. Senecal Full Name: Residence: 400 Wilson Drive Residence: Midland, Michigan 48642 Country: United States of America Country: Citizenship: United States of America Citizenship: P.O. Address: P.O. Address: Same as Residence Employed By: The Dow Chemical Company Employed By: Of Country: Of Country: United States of America this day of this day of Signature: _ Signature: Full Name: Full Name: Residence: Residence: Country: Country: Citizenship: Citizenship: P.O. Address: P.O. Address: Employed By: Employed By: Of Country: Of Country: this _______day of ________. 20 ____ Signature: Signature: Full Name: Full Name: Residence: Residence: Country: Country: Citizenship: Citizenship: P.O. Address: P.O. Address: Employed By: Employed By: Of Country: Of Country: this day of .20 day of Signature: ___ Full Name: Signature: Full Name: Residence: Residence: Country: Country: Citizenship: Citizenship: P.O. Address: P.O. Address: Employed By: Employed By: Of Country: Of Country: this day of .20 day of Signature: Signature: Full Name: Full Name: Residence: Residence: Country: Country: Citizenship: Citizenship: P.O. Address: P.O. Address: Employed By: Employed By:

Of Country:

Of Country:

FORM 110 (k 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: METAL-LIGAND COMPLEX, OLEFIN POLYMERIZATION CATALYST DERIVED THEREFROM, AND OLEFIN POLYMERIZATION METHOD UTILIZING THE CATALYST

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

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		C-11- AV
	l Filing Date I	
·		Filing Country
61/918,309		
	December 19, 2013	
		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:	Midland, Michigan 4	-8674 USA
this	day of	. 20
Effective	as of December 19, 2013	***************************************
Signature	21	
Full Nam	e: Jerzy Klosin	
Residenc	e: 2209 Parkwood Drive	
	Midland, Michigan 4864	2
Country:	United States of America	
Citizensh	ip: Poland	
P.O. Add	ress: Same as Residence	
Employee	By: The Dow Chemical Cor	mpany
Of Countr	ry: United States of America	, ,

At:	Midland, Michigan 48674	USA
this	đay of	. 20
Effective	e as of December 19, 2013	
Signatur	e:	
Full Nan	ae: Ruth Figueroa	·
	e: 1490 Riverchase	
	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 Count	try: United States of America	•

At: Freeport, Texas 77541 USA		
this 13 day of March	, 20 14	
Effective as of December 19, 2013		
Signature: Mily 1. Tadio		
Full Name: Philip P Fontaine		
Residence: 922 W. 18th St.		
Houston, Texas 77008		
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, Texas 77	541 USA
this	day of	. 20
Effectiv	e as of December 19, 2013	777.7.7.7.1.
Signatui	e:	
Full Nar	ne: David M. Pearson	
Residen	ce: 109 Greenbriar Drive	
	Lake Jackson, Texas 7756	56
Country:	: United States of America	
Citizens	hip: United States of America	
P.O. Address: Same as Residence		
Employed By: The Dow Chemical Company		
Of Coun	try: United States of America	

(X) Additional names and signatures are attached.

hames, addresses and signatures to be attack. At: Midland, Michigan 48674. Uhis day of Effective as of December 19, 2013.	SA	At: this day of	
All der of	. 20	this day of	, 20
nis day 01			
bifective as of December 17, 2015			
Cionatura:		Signature:	
Signature:		Full Name:	
Residence: 400 Wilson Drive		Residence:	
Midland, Michigan 48642			
Midiand, Michigan 46042		Country:	
Country: United States of America		Citizenship:	
Citizenship: United States of America		P.O. Address:	
P.O. Address: Same as Residence		Employed By:	
Employed By: The Dow Chemical Company		Employed by:	
Of Country: United States of America		Of Country:	
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At: day of	50	At: this day of	. 20
this day of	, 20	luns	
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Signature:		Full Name:	
Full Name:			
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Citizenship:		Citizenship:	
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Signature:		Signature:	
Full Name:		Full Name:	
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FORM 110 (R. 5/97)

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(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: METAL-LIGAND COMPLEX, OLEFIN POLYMERIZATION CATALYST DERIVED THEREFROM, AND OLEFIN POLYMERIZATION METHOD UTILIZING THE CATALYST

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

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
61/918,309	December 19, 2013	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 Assignce; 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: Midland, Michigan 48674 USA	At: Freeport, Texas 77541 USA	
this 20 day of Februan, 2004	this day of	, 20
Effective as of December 19, 2013	Effective as of December 19, 2013	
Signature: Hay Alon	Signature:	
Full Name: Jerzy Klosip	Full Name: Philip P. Fontaine	
Residence: 2209 Parkwood Drive	Residence: 922 W. 18th St.	
Midland, Michigan 48642	Houston, Texas 77008	
Country: United States of America	Country: United States of America	
Citizenship: Poland	Citizenship: United States of America	
P.O. Address: Same as Residence	P.O. Address: Same as Residence	
Employed By: The Dow Chemical Company	Employed By: The Dow Chemical Company	
Of Country: United States of America	Of Country: United States of America	
At: Midland, Michigan 48674 USA	At: Freeport, Texas 77541 USA	
this 05 day of Marth , 2014	thisday of	, 20
	At: Freeport, Texas 77541 USA this day of Effective as of December 19, 2013	, 20
this 05 day of fract, , 2014 Effective as of December 19, 2013	thisday of	, 20
this 05 day of Marth , 2014	this day of Effective as of December 19, 2013	, 20
this of day of that , 2014 Effective as of December 19, 2013 Signature:	this day of	, 20
this of day of that , 2014 Effective as of December 19, 2013 Signature: The Full Name: Ruth Figueroa	this day of Effective as of December 19, 2013 Signature: Full Name: David M. Pearson	, 20
this of day of fract, , 2014 Effective as of December 19, 2013 Signature: The Full Name: Ruth Figueroa Residence: 1490 Riverchase	this day of Effective as of December 19, 2013 Signature: Full Name: David M. Pearson Residence: 109 Greenbriar Drive	, 20
this of day of fract, , 2014 Effective as of December 19, 2013 Signature: The Full Name: Ruth Figueroa Residence: 1490 Riverchase Midland, Michigan 48640	this day of Effective as of December 19, 2013 Signature: Full Name: David M. Pearson Residence: 109 Greenbriar Drive Lake Jackson, Texas 77566	, 20
this of day of fract, , 2014 Effective as of December 19, 2013 Signature: The Full Name: Ruth Figueroa Residence: 1490 Riverchase Midland, Michigan 48640 Country: United States of America	this day of Effective as of December 19, 2013 Signature: Full Name: David M. Pearson Residence: 109 Greenbriar Drive Lake Jackson, Texas 77566 Country: United States of America	, 20
this of day of fract, , 2014 Effective as of December 19, 2013 Signature: Full Name: Ruth Figueroa Residence: 1490 Riverchase Midland, Michigan 48640 Country: United States of America Citizenship: United States of America	this day of Effective as of December 19, 2013 Signature: Full Name: David M. Pearson Residence: 109 Greenbriar Drive Lake Jackson, Texas 77566 Country: United States of America Citizenship: United States of America	, 20
this of day of fract, , 2014 Effective as of December 19, 2013 Signature: Full Name: Ruth Figueroa Residence: 1490 Riverchase Midland, Michigan 48640 Country: United States of America Citizenship: United States of America P.O. Address: Same as Residence	this day of Effective as of December 19, 2013 Signature: Full Name: David M. Pearson Residence: 109 Greenbriar Drive Lake Jackson, Texas 77566 Country: United States of America Citizenship: United States of America P.O. Address: Same as Residence	, 20

(X) Additional names and signatures are attached.

names, addresses and signatures to be attached to Fo	No. 110 INDIVIDUAL ASSIGNMENT AND INVENTORS DECLARA
At Midland Michigan 48674 USA	At:
this Do day of February, 20 1	this day of, 20
Effective as of December 19, 2013	
Signature: Tal Sul	
Signature:	Signature:
Full Name: Todd D. Senecal Residence: 400 Wilson Drive	Full Name:
Residence: 400 Wilson Drive	Residence:
Midland, Michigan 48642	
Country: United States of America	Country:
Citizenship: United States of America	Citizenship:
P.O. Address: Same as Residence	P.O. Address:
Employed By: The Dow Chemical Company	Employed By:
Of Country: United States of America	Of Country:
At: this day of , 20	At: this day of , 20
this day of , 20	this day of, 20
Signature:	Signature:
Full Name:	Full Name:
Residence:	Residence:
Country:	Country:
Citizenship:	Citizenship:
P.O. Address:	P.O. Address:
Employed By:	Employed By:
Of Country:	Of Country:
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At: this day of ,20	At: this day of , 20
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Signature:	Signature:
Full Name:	Full Name:
Residence:	Residence:
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P.O. Address:	P.O. Address:
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	Ciamatara:
Signature:	Signature:
Full Name:	Full Name:
Residence:	Residence:
Country:	Country:
Citizenship:	Citizenship:
P.O. Address:	P.O. Address:
Employed By:	Employed By:
Of Country:	Of Country:
At:	At:
At: this day of , 20	this day of , 20
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Signature:	Signature:
Full Name:	Full Name:
Residence:	Residence:
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Of Country:	9 89 87 4 433797963V