# 504113049 11/29/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4159719

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
JUERGEN EIFFLER	02/05/2010
HEINZ GROENEWALD	02/10/2010
MANFRED KOKOTT	02/05/2010
THOMAS U. LUEBBE	02/24/2010
MARCUS WOBSER	02/08/2010

### **RECEIVING PARTY DATA**

Name:	DOW DEUTSCHLAND GMBH & CO. OHG
Street Address:	WERK STADE
Internal Address:	POSTFACH 11 20
City:	BUTZFLETHERSAND
State/Country:	GERMANY
Postal Code:	21677

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

Property Type	Number
Application Number:	15204462

### **CORRESPONDENCE DATA**

**Fax Number:** (314)231-1776

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.

**Phone:** 314-889-8000

**Email:** ipdocket@polsinelli.com

Correspondent Name: POLSINELLI PC

Address Line 1: 100 SOUTH FOURTH STREET

Address Line 2: SUITE 1000

Address Line 4: ST. LOUIS, MISSOURI 63102-1825

ATTORNEY DOCKET NUMBER:	074785-548460
NAME OF SUBMITTER:	CHRISTINA M. SPENCER, PGA
SIGNATURE:	/Christina M. Spencer/
DATE SIGNED:	11/29/2016

PATENT 504113049 REEL: 040444 FRAME: 0952

# Total Attachments: 10 source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page1.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page2.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page3.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page4.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page5.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page6.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page7.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page8.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page9.tif source=Assignment - Inventors to Dow Deutschland GMBH & Co. OHG#page10.tif

PATENT REEL: 040444 FRAME: 0953

FORM 110 (8.5/97)

The Assignment IID is in the ENGLISH tanguage and has the same meaning in other languages with the rame 110 number and 10/Det

### 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: ADIABATIC PLUG FLOW REACTORS AND PROCESSES INCORPORATING THE SAME

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 Deutschland GmbH & Co. OHG Werk Stade Postfach 11 20 21677 Buiztlethersand Germany

a corporation organized and existing under the laws of the State of Germany (hereinafter referred to as the "Assignce"); 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
61/250,023	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. Incense, or other right heretofore given.

Subscribed and Declared by me/us:

SFace

this S day of <u>forticles</u> , 2016	this day of , 20
Effective as of October 9, 2009	Effective as of October 9, 2009
Signature: J.E.M.L.	Signature:
Full Name: Juergen Eiffler	Full Name: Heinz Groenewald
Residence: Ystadweg 4	Residence: Butendiek 18
21682 Stade	21714 Hammah
GERMANY	GERMANY
Country: Germany	Country: Germany
Citizenship: Germany	Citizenship: Germany
P.O. Address: Same as Residence	P.O. Address: Same as Residence
Employed By: Dow Deutschland GmbH & Co. OHG	Employed By: Dow Deutschland GmbH & Co. OHG
Of Country: Germany	Of Country: Germany
At: Shade , ,	
this <u>)</u> day of <u>Fill by (1884</u> , 20 <u>-18</u>	
Effective as of October 9, 2009	Effective as of October 9, 2009
Signature:	Signature:
Full Name: Manfred Kokott	Full Name: Thomas U. Luebbe
Residence: Vergissmeinnicht 13	Residence: Lemmermannweg 13
21682 Stade	21684 Stade
GERMANY	GERMANY
Country: Germany	Country: Germany
Citizenship: Germany	Citizenship: Germany
P.O. Address: Same as Residence	P.O. Address: Same as Residence
Employed By: Dow Deutschland GmbH & Co. OHG	Employed By: Dow Deutschland GmbH & Co. OHG
Of Country: Germany	Of Country: Germany

(X) Additional names and signatures are attached.

As: day of PolyMeters and Cottober 9, 2009  Signature:	(1)	
Effective as of Cotober 9, 2009  Signature: Residence: Haydrowg 1 2 1262 Stude GERMANY  Country: Germany Chizenship: Germany P.O. Address: Same as residence Employed By: Dow Deutschland GmbH & Co. OHG Off Country: Germany At: this day of		At:
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Employed By: Employed By:		
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Of Country:		

This Form 881 is in the ENGLISH language and has the same meaning in other languages with the same 881 number.

Form 881 is in the ENGLISH language and has the same meaning in other languages with the same 881 number.

FORM 881

Dow Case No. 69033

# SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

I,
Whose full post office address is: A loke to the think of the total of
Make oath and say that I was personally present and did see:
Juergen Eiffler
Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.
Signed at:
On this
Subscribing Witness

08/90

**PATENT** REEL: 046444 FRAME: 0956 This Form 381 is in the ENGLISH language and has the same meaning in other languages with the same 381 number.

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Form 881 is in the ENGLISH language and has the same meaning in other languages with the same 881 number.

FORM 881

Dow Case No. 69033

# SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

Υ.	

Whose full p	ost office address	is is:
	The same of the	Eiffler
		• •
	Ystadi	man 4
	24680	Strade

Make oath and say that I was personally present and did see:

## Manfred Kokott

Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.

Signed at:	<u> </u>		
On this	day of	February	, 20 <u>10</u>

08/90

Form 881 is in the ENGLISH language and has the same meaning in other languages with the same 881 number.

**FORM 881** 

Dow Case No. 69033

# SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

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Whose full post office address is:	Tirale	- Eililla
	Mstad	2 2
	24682	SHado

Make oath and say that I was personally present and did see:

Marcus Wobser

Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.

Signed at:	Stade		
On this	8 day of	February	, 20 <u>4 ()</u>

08/90

This Assignment 110 is in the ENGLISH surgarge and has the same organize to other languages with the same 110 number and ReDate FORM 110 (R 5/97)

# INDIVIDUAL ASSIGNMENT AND INVENTOR'S DECLARATION

(with Priority Rights)

I/we verily believe I any/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: ADIABATIC PLUG FLOW REACTORS AND PROCESSES INCORPORATING THE SAME

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 Deutschland GmbH & Co. OHG Werk Stade Postfach 11 20 21677 Butzflethersand Germany

a corporation organized and existing under the laws of the State of Germany (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
61/250,023	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 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:

Ati	At: 1/1/lehjen
this day of , 20	this 10, day of February 20, 10
Effective as of October 9, 2009	Effective as of October 9, 2009
	11 1/2 1/2 1/2
Signature:	Signature: A Chiely
Full Name: Juergen Eiffler	Full Name: Heinz Groenewald
Residence: Ystadweg 4	Residence: Butendiek 18
21682 Stade	21714 Flammah
GERMANY	GERMANY
Country: Germany	Country: Germany
Citizenship: Germany	Citizenship: Germany
P.O. Address: Same as Residence	P.O. Address: Same as Residence
Employed By: Dow Deutschland GmbH & Co. OHG	Employed By: Dow Deutschland GmbH & Co. OHG
Of Country: Germany	Of Country: Germany
At:	At: this day of, 20
this day of , 20, 20, 20, 2009	this day of, 20
Effective as of October 9, 2009	Effective as of October 9, 2009
6 communication of the communi	Signature:
Signature: Full Name: Manfred Kókott	Fish Name: Thomas U. Luebbe
	Residence: Lemmermannweg 13
Residence: Vergissmeinnicht 13 21682 Stade	2)684 Stade
GERMANY	GERMANY
	Country: Germany
Country: Germany Citizenship: Germany	Civizenship: Germany
P.O. Address: Same as Residence	P.O. Address: Same as Residence
	Employed By: Dow Deutschland GmbH & Co. OHG
Employed By: Dow Deutschland GmbH & Co. OHG	Of Country: Germany
Of Country: Germany	1 CA CARIBBY, OLIMAN

(X) Additional names and signatures are attached.

This form 881 is to the ENGLISH language and has the same meating in other languages with the same \$81 number.

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Form 883 is in the ENGLISH language and has the same meaning in other languages with the same 881 number.

Dow Case No. 69033 **FORM 881** 

# SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

Í,
Whose full post office address is:  Friedrich Ochard+  Hohen wedler weg 1  Stade  Make oath and say that I was personally present and did see:
Heinz Groenewald
Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.
Signed at: Ohien sen
On this 10, day of 46684669 . 2010
Subscribing Witness

08/90

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: ADIABATIC PLUG FLOW REACTORS AND PROCESSES INCORPORATING THE SAME

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 Deutschland GmbH & Co. OHG Werk Stade Postfach 11 20 21677 Butzflethersand Germany

a corporation organized and existing under the laws of the State of Germany (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
61/250,023	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:	At:
this day of , 20	this day of , 20
Effective as of October 9, 2009	Effective as of October 9, 2009
Signature:	Signature:
Full Name: Juergen Eiffler	Full Name: Heinz Groenewald
Residence: Ystadweg 4	Residence: Butendiek 18
21682 Stade	21714 Hammah
GERMANY	GERMANY
Country: Germany	Country: Germany
Citizenship: Germany	Citizenship: Germany
P.O. Address: Same as Residence	P.O. Address: Same as Residence
Employed By: Dow Deutschland GmbH & Co. OHG	Employed By: Dow Deutschland GmbH & Co. OHG
Of Country: Germany	Of Country: Germany
At:	At: Stade, 21677, Germany
this day of , 20	this 24 day of February ,20 10
Effective as of October 9, 2009	Effective as of October 9, 2009
Directive do de Goldon 5, 2005	Linective as of October 7, 2007
Signature:	Signature: Aceses Sulle
Full Name: Manfred Kokott	Full Name: Thomas U. Luebbe
Residence: Vergissmeinnicht 13	Residence: Lemmermannweg 13
21682 Stade	21684 Stade
GERMANY	GERMANY
Country: Germany	Country: Germany
Citizenship: Germany	Citizenship: Germany
P.O. Address: Same as Residence	P.O. Address: Same as Residence
Employed By: Dow Deutschland GmbH & Co. OHG	Employed By: Dow Deutschland GmbH & Co. OHG
Of Country: Germany	Of Country: Germany
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(X) Additional names and signatures are attached.

Form \$81 is to the ENGLISH lauguage and has the same meaning in other languages with the same 881 number

FORM 881

Dow Case No.

# SUBSCRIBING WITNESS AFFIDAVIT OF EXECUTION OF AN ASSIGNMENT

VAN DONG NGUYEN

Whose full post office address is: IM NEUWERK 21 21706 DROCHTERSEN GERMANY

Make oath and say that I was personally present and did see:

Thomas U. Luebbe

Who is/are personally known or identified to me to be the inventor(s) named in the attached assignment, duly sign and execute the same for the purposes therein stated.

Signed at:	Stade	2/677	<u>Germany</u>	
On this <u>24</u>	day of	February	<u> </u>	, 20 <i>10</i>

Subscribing Witness

08/90

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

# ASSIGNEE ACCEPTANCE

WE, the ASSIGNEE:

DOW DEUTSCHLAND GMBH & CO. OHG

Werk Stade Postfach 11 20

21677 Butzflethersand

Germany

Midland, Michigan 48674, USA

hereby accept the ASSIGNMENT attached hereto which is dated: February 5, 2010, February 8, 2010, February 10, 2010 and February 24, 2010

From, the ASSIGNOR: Juergen Eiffler, Ystadweg 4, 21682 Stade, Germany, Citizen of Germany; Heinz Groenewald, Butendiek 18, 21714 Hammah, Germany, Citizen of Germany; Manfred Kokott, Vergissmeinnicht 13, 21682 Stade, Germany, Citizen of Germany; Thomas U. Luebbe, Lemmermannweg 13, 21684 Stade, Germany, Citizen of Germany; and Marcus Wobser, Haydnweg 1, 21682 Stade, Germany, Citizen of Germany

of the invention entitled:

RECORDED: 05/29/2016

ADIABATIC PLUG FLOW REACTORS AND PROCESSES INCORPORATING THE SAME

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.

this	: 18th day of JUSY . 20 10
	DOW DEUTSCHLAND GMBH & CO. OHG  CORP. SEAL  By: MICHAEL L. GLENN  Authorized Representative
	NOTARIAL CERTIFICATE (Corporation)
ST Co On bei	ATE OF MICHIGAN ) SS unty/Parish of Midland ) this
I fo	rther certify that said authority, dated June 30, 2004, is based on
by:	authority of a Power of Attorney
the	ch I have seen, appointing the said individual Authorized Representative with full power to sign foregoing document on behalf of the said corporation and that the purposes for which said ument is granted are within the scope of the objects or activities of said corporation.  SEAL

Rebiscoa Svie Hollingshead signary public violund county, monsar siy coloriscion expres kovember 25, 2012