#### 10/10/2018 505135093

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5181856

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
DR. KARL-HEINZ KÖHLER	07/10/2017
DR. RICARDA LEIBERICH	10/10/2016
KASPAR HALLENBERGER	11/07/2016
DR. KORBINIAN KRÄMER	10/18/2016
DR. FLORIAN LIPSKI	10/30/2016
DR. HENNING KAHNIS	10/18/2016
GABRIEL DENECKER	06/06/2017
JOHAN VANDEN EYNDE	05/29/2017
WEERACHANAN SOMHOM	06/01/2017

# **RECEIVING PARTY DATA**

Name:	COVESTRO DEUTSCHLAND AG
Street Address:	KAISER-WILHELM-ALLEE 60
City:	LEVERKUSEN
State/Country:	GERMANY
Postal Code:	51373

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15309013

# **CORRESPONDENCE DATA**

Fax Number: (412)355-6501

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: (412)355-6323

Email: PIUSPatents@klgates.com

**Correspondent Name:** WILLIAM E. KUSS Address Line 1: 210 SIXTH AVENUE Address Line 2: **K&L GATES CENTER** 

Address Line 4: PITTSBURGH, PENNSYLVANIA 15222-2613

ATTORNEY DOCKET NUMBER:	160507PCTUS/BMS121081PCTU
NAME OF SUBMITTER:	WILLIAM E. KUSS

SIGNATURE:	/William E. Kuss/			
DATE SIGNED:	10/10/2018			
	This document serves as an Oath/Declaration (37 CFR 1.63).			
otal Attachments: 16				
urce=Combined_Dec_Assign#page1	tif			
ource=Combined_Dec_Assign#page2	tif			
ource=Combined_Dec_Assign#page3	tif			
ource=Combined_Dec_Assign#page4	tif			
ource=Combined_Dec_Assign#page5	tif			
source=Combined_Dec_Assign#page6	tif			
ource=Combined_Dec_Assign#page7	tif			
source=Combined_Dec_Assign#page8	tif			
source=Combined_Dec_Assign#page9	tif			
ource=Combined_Dec_Assign#page1	O.tif			
ource=Combined_Dec_Assign#page1	1.tif			
source=Combined_Dec_Assign#page12.tif				
ource=Combined_Dec_Assign#page1	3.tif			
ource=Combined_Dec_Assign#page1	4.tif			
ource=Combined_Dec_Assign#page1	5.tif			

source=Combined\_Dec\_Assign#page16.tif

Docket No.

### ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

#### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below, and

Whereas, 1 COVESTRO DEUTSCHLAND AG of 1 Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns, and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

### DECLARATION

s a below named inventor, I hereby declare that this assignment with declaration is directed to						
	The attached application,	OR	$\boxtimes$	United States Application or PCT International Application Number PCT/EP2015/059774 filed on 05-05-2015 (Confirmation No.		

### PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled.

METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon

### POST-AIA

The above identified application was made or was authorized to be made by me

I believe I am the original inventor or an original joint inventor of a claimed invention in the application

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

# Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1 14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

BMS121081 PCT-US [Page 1] **PATENT REEL: 047123 FRAME: 0734** 

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filling the Authorization to Permit Access to Application by Participating Office.

PULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	1. Dr. Karl-Heinz KÖHLER 52078 Aachen-Brand, DE An der Unterbahn 31, 52078 Aachen-Brand, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2. Dr. Ricarda LEIBERICH 63263 Neu-Isenburg, DE An der Auc 15, 63263 Neu-Isenburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Fein-Str. 24, 51375 Leverkusen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4, Dr. Korbinian KRÄMER 50733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE/DATE	5, Dr. Florian LIPSKI 40882 Ratingen, DE Peter-Kraft-Straße 74, 40882 Ratingen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS S0667 Köln, DE Siegfriedstr. 4, 50667 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE/DATE	7. Gabriel DENECKER 2920 Kalmihout, Vinkenlaan 18, 2920 Kalmihout
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	8. Johan VANDEN EYNDE 9052 ZWIJNAARDE, BE Hekers 81, 9052 ZWIJNAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CTIZENSHIP:	9. Weerachanan SOMHOM Uttaradit 53000 , TH 189/11 M.1 Tasao district , Uttaradit 53000, TH TH

[Page 2]

SIGNATURE / DATE

BMS121081 PCT-US

Docket No .:

# ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, 1. COVESTRO DEUTSCHLAND AG of 1. Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

# DECLARATION

KATION					
As a belo	ow named inventor, I hereby	decla	re that	this assignment with declaration is directed to:	
	The attached application,	OR		United States Application or PCT International Application Number PCT/EP2015/059774 filed on 05-05-2015 (Confirmation No).	
PR	E-AIA				

My residence, mailing address, and citizenship are as stated below next to my name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled:

### METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

### **POST-AIA**

The above identified application was made or was authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

### Authorization To Permit Access To Application by Participating Office

□ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

[Page 1]

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS; CITIZENSHIP: SIGNATURE / DATE	1. Dr. Karl-Heinz KÖHLER 52078 Aachen-Brand, DE An der Unterbahn 31, 52078 Aachen-Brand, DE DE
PULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2, Dr. Ricarda LEIBERICH 63150 Heusenstamm, DE Hubertusanlage 88, 63150 Heusenstamm, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Fein-Str. 24, 51375 Leverkusen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4. Dr. Korbinian KRÄMER 50733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE/DATE	Dr. Florian LIPSKI     40882 Ratingen, DE     Peter-Kraft-Straße 74, 40882 Ratingen, DE     DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS 50667 Köln, DE Slegfriedstr. 4, 50667 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	7. Gabriel DENECKER 2920 Kalmthout, Vinkenlaan 18, 2920 Kalmihout
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	8. Johan VANDEN EYNDE 9052 ZWUNAARDE, BE Hekens 81, 9052 ZWUNAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS:	9. Weerachanan SOMHOM Uttaradit 53000 , TH 189/11 M.1 Tasao district , Uttaradit 53000, TH

TH

CITIZENSHIP:

BMS121081 PCT-US

SIGNATURE/DATE

[Page 3] PATENT REEL: 047123 FRAME: 0737

#### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, 1. COVESTRO DEUTSCHLAND AG of 1. Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C., §261)

### DECLARATION

Asa	below n	amed	inventor.	Lhereb	v dec	lare ti	iai this	assignment	with	declaration	a is	directed	to
	CAMPAGE LE		TAX A PRESENT				****	variation		MACHINE WILLY		~ ~	

	25.35	2 You down at 100 and
The attached application,	1116	United States Application
e the antisonated solution extra	C. F. S. T.	Control Cutter ( Appropries
and the second of the second o		
		The first the second of the se

United States Application or PCT Internation	ul Application
Number PCT/EP2015/059774 filed on 05-05-	2015
(Confirmation No).	

# PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled:

METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CPR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

#### POST-AIA

The above identified application was made or was authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

# Authorization To Permit Access To Application by Participating Office

If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS; CITIZENSHIP; SIGNATURE / DATE	I. Dr. Karl-Heinz KÖHLER 52078 Aachen-Brand, DE An der Unterhahn 31, 52078 Aachen-Brand, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS; CITIZENSHIP; SIGNATURE / DATE	2. Dr. Ricarda LEIBERICH 63263 Neu-Isenburg, DE An der Aue 15, 63263 Neu-Isenburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Fein-Str. 24, 51375 Leverkusen, DE DE L. Hallen 02-15 Vev. 7, 201
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4. Dr. Korbinian KRÄMER 50733 Köln, DE Schwerinstr, 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE/DATE	5. Dr. Florian LIPSK! 40882 Ratingen, DE Peter-Kraft-Straße 74, 40882 Ratingen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHINIS 50667 Köln, DE Siegfriedstr. 4, 50667 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	7. Gabriel DENECKER 2920 Kalmihout, Vinkenlaan 18, 2920 Kalmihout
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE/DATE	8. Johan VANDEN EYNDE 9052 ZWIJNAARDE, BE Hekers 81, 9052 ZWIJNAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP; SIGNATURE / DATE	9. Weerachanan SOMHOM Littaradii 53000 , TH 189/11 M.1 Tasao district , Uttaradit 53000, TH TH

Docket No.:

# ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, 1. COVESTRO DEUTSCHLAND AG of 1. Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

### DECLARATION

As

a belo	ow named inventor, I hereby	decla	re tha	t this assignment with declaration is directed to:
	The attached application,	OR		United States Application or PCT International Application Number PCT/EP2015/059774 filed on 05-05-2015 (Confirmation No).

### PRE-AJA

My residence, mailing address, and citizenship are as stated below next to my name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled:

METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

### POST-AIA

The above identified application was made or was authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

### Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	1. Dr. Karl-Heinz KÖHLER 52078 Aachen-Brand, DE An der Unterbahn 31, 52078 Aachen-Brand, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2. Dr. Ricarda LEIBERICH 63263 Neu-Isenburg, DE An der Aue 15, 63263 Neu-Isenburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Fein-Str. 24, 51375 Leverkusen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4. Dr. Korbinian KRÄMER 50733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR; RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	5. Dr. Florian LIPSKI 40882 Ratingen, DE Peter-Kraft-Straße 74, 40882 Ratingen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS 50667 Köln, DE Siegfriedstr. 4, 50667 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	7. Gabriel DENECKER 2926 Kalmthout, Vinkenlaan 18, 2926 Kalmthout
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS; CITIZENSHIP; SIGNATURE / DATE	8, Johan VANDEN EYNDE 9052 ZWLINAARDE, BE Hekers 81, 9052 ZWLINAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS; CITIZENSHIP; SIGNATURE / DATE	9. Weerschanan SOMHOM Uitaradit 53000, TH 189/11 M.1 Tasao district, Uitaradit 53000, TH TH

BMS121081 PCT-US

#### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below, and

Whereas, 1 COVESTRO DEUTSCHLAND AG of 1 Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor,

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U S C §119, and I/we request the Director of the U S Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U S C §261)

#### DECLARATION

As

a belo	w named inventor, I hereby	decla	re tha	t this assignment with declaration is directed to
	The attached application,	OR		United States Application or PCT International Application Number PCT/EP2015/059774 filed on 05-05-2015 (Confirmation No)

#### PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled

METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1 56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon

### POST-AIA

The above identified application was made or was authorized to be made by me

I believe I am the original inventor or an original joint inventor of a claimed invention in the application

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both

# Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1 14(c) and (h) This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	I. Dr. Karl-Heinz KÖHLER 52078 Aachen-Brand, DE An der Unterbahn 31, 52078 Aachen-Brand, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2. Dr. Ricards LEIBERICH 63263 Neu-Isenburg, DE An der Auc 15, 63263 Neu-Isenburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	3. Kasper HALLENBERGER 51375 Leverkusen, DE Dechani-Fein-Sir. 24, 51375 Leverkusen, DB DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4. Dr. Korbinian KRÄMER S9733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	5, Dr. Florian LIPSKI 40882 Ratingen, DE Peter-Kraft-Straße 74, 40882 Ratingen, DE DE <u>LUPS</u> <u>30.40.20</u> 46
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS 50667 KSIn, DE Siegfriedstr. 4, 50667 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	7. Gabriel DENECKER 2920 Kalmthout, Vinkenlaan 18, 2920 Kalmthout
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	8, Johan VANDEN EYNDE 9032 ZWIJNAARDE, BE Hekers 81, 9052 ZWIJNAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	9. Weerachanan SOMHOM Uttaradit 53000 , TH 189/11 M.I Tasaci district , Uttaradit 53000, TH TH

BMS121081 PCT-US

PATENT PATENT REEL: 047123 FRAME: 0743

### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below, and

Whereas, 1 COVESTRO DEUTSCHLAND AG of 1. Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor,

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U S C §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns, and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U S C §261)

#### DECLARATION

As a below named inventor, I hereby declare that this assignment with declaration is directed to				
	The attached application,	OR		United States Application or PCT International Application Number <u>PCT/EP2015/059774</u> filed on <u>05-05-2015</u> (Confirmation No)

#### PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled

# METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1 56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true, and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon

### **POST-AIA**

The above identified application was made or was authorized to be made by me

I believe I am the original inventor or an original joint inventor of a claimed invention in the application

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both

# Authorization To Permit Access To Application by Participating Office

□ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1 14(c) and (h) This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	Dr. Karl-Heinz KÖHLER     52078 Aachen-Brand, DE     An der Unterbahn 31, 52078 Aachen-Brand, DE     DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2. Dr. Ricarda LEIBERICH 63263 Neu-Isenburg, DE An der Aue 15, 63263 Neu-Isenburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS; CITIZENSHIP; SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Fein-Str. 24, 51375 Leverkusen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4. Dr. Korbinian KRÁMER 50733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	5. Dr. Florian LIPSKI 40882 Ratingen, DE Peter-Kraft-Straße 74, 40882 Ratingen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS 50667 Kölm, DE 57% 78. Cola, DE Siegfriedstr. 4, 50607 Kpln. DE Obes Caudes (Jell 20, 20,78 DE January Williams 18, 10, 7016 (Jell), DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	7. Gabriel DENECKER 2920 Kalmthout Vinkenlaan 18, 2920 Kalmthout
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CTITZENSHIP: SIGNATURE / DATE	8, Johan VANDEN EYNDE 9052 ZWIJNAARDE, BE Hekers 81, 9052 ZWIJNAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP:	9. Weerschanan SOMHOM Uttaradit 53000 , TH 189/11 M.I Tasao district , Uttaradit 53000, TH TH

SIGNATURE / DATE

BMS121081 PCT-US

[Page 2] PATENT REEL: 047123 FRAME: 0745

#### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below, and

Whereas, 1 COVESTRO DEUTSCHLAND AG of 1 Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor,

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be gianted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U S C §119, and I/we request the Director of the U S Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns, and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U S C \$261)

### DECLARATION

As a bel	ow named inventor, I hereby	/ decla	re tha	t this assignment with declaration is directed to
	The attached application,	OR		United States Application or PCT International Application Number PCT/EP2015/059774 filed on 05-05-2015 (Confirmation No)

### PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled

METHOD FOR PRODUCING DIARYL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1 56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon

### POST-AIA

The above identified application was made or was authorized to be made by me

I believe I am the original inventor or an original joint inventor of a claimed invention in the application

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both

# Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1 14(c) and (h) This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	1. Dr. Karl-Heinz KÖHLER 52078 Aachen-Brand, DE An der Unterhahn 31, 52078 Aachen-Brand, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2. Dr. Ricarda LEIBERICH 63263 Neu-Isenburg, DE An der Aue 15, 63263 Neu-Isenburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Pein-Str. 24, 51375 Leverkusen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP; SIGNATURE/DATE	4. Dr. Korbinian KRÄMER 50733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE/DATE	5. Dr. Florian LIPSKI 40882 Rutingen, DE Peter-Krait-Straße 74, 40882 Ratingen, DE DE
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS 50667 Köln, DE Siegfriedstr. 4. 50667 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP; SIGNATURE / DATE	7. Gabriel DENECKER 2920 Kalmthout. S.E. Vigkenlaun 18, 2920 Kalmihout  6 6 6 5
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	8. Johan VANDEN EYNDE 9052 ZWIJNAARDE, BE Hekers 81, 9052 ZWIJNAARDE, BE BE 29/05/2813
PULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	9. Weerachanan SOMHOM Uttaradit 53000 , TH 189/11 M.1 Tasao district , Uttaradit 53000, TH TH

BMS121081 PCT-US

Docket No.:

# ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.62)

#### ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, 1. COVESTRO DEUTSCHLAND AG of 1. Kaiser-Wilhelm-Allee 60, 51373 Leverkusen, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt wheneof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignes, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention act forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facle evidence of execution under 35 U.S.C. §261)

#### DECLARATION

As a belo	ow named inventor, I hereby	decla	re tha	this assignment with declaration is directed to:
	The attached application,	OR		United States Application or PCT International Application Number PCT/EP2015/059774 filed on 05-03-2015 (Confirmation No).

### PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled;

### METHOD FOR PRODUCING DIARVIL CARBONATES

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

### POST-AIA

The above identified application was made or was authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

Thereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

### Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (IPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, IPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	Dr. Karl-Heinz KÖHLER     52078 Aschen-Brand, DE     An der Unterbahn 31, 52078 Aschen-Brand, DE     DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	2. Dr. Ricarda LEIBERICH 63263 Neu-Isanburg, DE As der Asse 15, 63263 Neu-Isanburg, DE DE
FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS; CITIZENSHIP; SIGNATURE / DATE	3. Kaspar HALLENBERGER 51375 Leverkusen, DE Dechant-Fein-Str. 24, 51375 Leverkusen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	4. Dr. Korbínian KRÅMER 50733 Köln, DE Schwerinstr. 25, 50733 Köln, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	5. Dr. Florian LIPSKI 40882 Ratingen, DE Peter-Kraft-Straße 74, 40882 Ratingen, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CUIZENSHIP: SIGNATURE / DATE	6. Dr. Henning KAHNIS 50667 K8la, DE Siegfriedstr. 4, 50667 K8in, DE DE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	7. Gabriel DENECKER 2920 Kalmithout, Vinkenixan 18, 2920 Kalmithout
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	8. Johan VANDEN EYNDE 9052 ZWIJNAARDE, BE Hekers 81, 9052 ZWIJNAARDE, BE BE
FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE	9. Weerachanan SOMHOM Uttaradit 53000 , TH 189/11 M.1 Tasan district , Uttaradit 53000, TH TH WAAAAAWWY J. Jon 1, 2017

BMS121081 PCT-US **RECORDED: 10/10/2018**  [Page 2] REEL: 047123 FRAME: 0749

**PATENT**