

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4924805

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT

**CONVEYING PARTY DATA**

Name	Execution Date
JUN WYE LEE	02/09/2018
SEUNG YOUNG PARK	02/08/2018
JIN WOO LEE	02/08/2018
HYUN JU CHO	02/08/2018
JUNG MIN SOHN	04/18/2018
YOON JUNG KIM	02/08/2018
BO HYUN SEONG	02/12/2018
TAEK JUN JUNG	02/08/2018
YUN KI CHO	02/08/2018
YONG HEE AN	02/08/2018
SUNG-KYOUNG KIM	02/08/2018
HYUN MIN KIM	02/08/2018

**RECEIVING PARTY DATA**

<b>Name:</b>	LG CHEM, LTD.
<b>Street Address:</b>	128, YEOUNI-DAERO, YEONGDEUNGPO-GU
<b>City:</b>	SEOUL
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	07336

**PROPERTY NUMBERS Total: 1**

Property Type	Number
<b>Application Number:</b>	15769648

**CORRESPONDENCE DATA**

Fax Number: (202)496-7756

*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: 202-496-7500

Email: mlapto@mckennalong.com

Correspondent Name: DENTONS US LLP

Address Line 1: 1900 K. STREET, N.W.

Address Line 4: WASHINGTON, D.C. 20006

**PATENT**

<b>ATTORNEY DOCKET NUMBER:</b>	29137.02624.US00
<b>NAME OF SUBMITTER:</b>	SONG K. JUNG
<b>SIGNATURE:</b>	/Song K. Jung#35,210/
<b>DATE SIGNED:</b>	04/20/2018

**Total Attachments: 14**

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COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM<sup>1</sup>

The undersigned acknowledges that this document is being used both as an assignment of the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application.

WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

TITLE: **An Economical Method of Preparing a Resin Composition including  
Polyalkylene Carbonate with Improved Thermal Stability and Processability**

for which Assignor is about to make or has made United States or International application for patent.

WHEREAS, as a below named inventor(s), I/(we) hereby declare that:

**Section I. Declaration**

This declaration is directed to:

- The attached U.S. non-provisional patent application, or
- U.S. non-provisional patent application number \_\_\_\_\_, filed on \_\_\_\_\_, or
- PCT international patent application number PCT/KR2017/002521, filed on March 8, 2017.

The above-identified application was made or authorized to be made by me (us).

I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed invention in the above-identified application.

<sup>1</sup> This form requires the use of an Application Data Sheet.



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

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

I acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

### Section II. Assignment

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and assign(s) to

**LG CHEM, LTD.**

having an address at **128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea** (hereinafter designated as the Assignee(s)), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee(s), and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee(s) and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee(s) to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of

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LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
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Page 2 of 7

the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee(s) without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee(s), and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee(s).

The undersigned hereby grant(s) the law firm of **Dentons US LLP** the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM

Page 3 of 7



Section III. Inventor(s)/Assignor(s) Signature(s)

LEGAL NAME OF FIRST INVENTOR/ASSIGNOR	Full Name
	Jun Wye LEE
SIGNATURE	DATE <u>2018. 2. 9.</u>

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	Full Name
	Seung Young PARK
SIGNATURE	DATE <u>Feb. 8, 2018</u>

LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	Full Name
	Jin Woo LEE
SIGNATURE	DATE <u>Feb. 8, 2018.</u>

LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM

Page 4 of 7



LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	Full Name
	Hyun Ju CHO
SIGNATURE <u>Hyun Ju cho</u> DATE <u>Feb. 8th, 2018</u>	

LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	Full Name
	Jung Min SOHN
SIGNATURE _____ DATE _____	

LEGAL NAME OF SIXTH INVENTOR/ASSIGNOR	Full Name
	Yoon Jung KIM
SIGNATURE <u>Yoon Jung Kim</u> DATE <u>18.02.08</u>	

LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM

Page 5 of 7



LEGAL NAME OF SEVENTH INVENTOR/ASSIGNOR	Full Name
	Bo Hyun SEONG
SIGNATURE <u>Bo Hyun Seong</u> DATE <u>18.02.12</u>	

LEGAL NAME OF EIGHTH INVENTOR/ASSIGNOR	Full Name
	Taek Jun JUNG
SIGNATURE <u>Taek Jun Jung</u> DATE <u>2/8/2018</u>	

LEGAL NAME OF NINTH INVENTOR/ASSIGNOR	Full Name
	Yun KI CHO
SIGNATURE <u>Yun Ki Cho</u> DATE <u>2018.02.08</u>	

LG CHEM Ref No. F2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

Page 6 of 7





LEGAL NAME OF TENTH INVENTOR/ASSIGNOR	Full Name
	Yong Hee AN
SIGNATURE <u>Yonghee An</u> DATE <u>08.02.2018</u>	

LEGAL NAME OF Eleventh INVENTOR/ASSIGNOR	Full Name
	Sung-Kyoung KIM
SIGNATURE <u>Sung-Kyoung Kim</u> DATE <u>Feb. 8. 2018</u>	

LEGAL NAME OF Twelfth INVENTOR/ASSIGNOR	Full Name
	Hyun Min KIM
SIGNATURE <u>Hyun Min Kim</u> DATE <u>8. Feb. 2018</u>	

LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

Page 7 of 7



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WHEREAS, the undersigned, hereinafter referred to collectively as Assignor, has invented:

**TITLE: An Economical Method of Preparing a Resin Composition including  
Polyalkylene Carbonate with Improved Thermal Stability and Processability**

for which Assignor is about to make or has made United States or International application for patent.

WHEREAS, as a below named inventor(s), I/(we) hereby declare that:

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- U.S. non-provisional patent application number \_\_\_\_\_, filed on \_\_\_\_\_, or
- PCT international patent application number PCT/KR2017/002521, filed on March 8, 2017.

The above-identified application was made or authorized to be made by me (us).

I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed invention in the above-identified application.

<sup>1</sup> This form requires the use of an Application Data Sheet.

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

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

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**LG CHEM, LTD.**

having an address at **128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea** (hereinafter designated as the Assignee(s)), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee(s), and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee(s) and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee(s) to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of

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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
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Page 2 of 7

**PATENT**  
**REEL: 045595 FRAME: 0437**

the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee(s) without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee(s), and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee(s).

The undersigned hereby grant(s) the law firm of **Dentons US LLP** the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

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Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
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Page 3 of 7

**PATENT**  
**REEL: 045595 FRAME: 0438**

**Section III. Inventor(s)/Assignor(s) Signature(s)**

LEGAL NAME OF FIRST INVENTOR/ASSIGNOR	Full Name
	<b>Jun Wye LEE</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	Full Name
	<b>Seung Young PARK</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	Full Name
	<b>Jin Woo LEE</b>
SIGNATURE _____ DATE _____	

LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

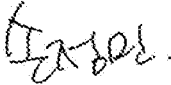
Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM

Page 4 of 7

**PATENT**  
**REEL: 045595 FRAME: 0439**

LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	Full Name
	<b>Hyun Ju CHO</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	Full Name
	<b>Jung Min SOHN</b>
SIGNATURE <u></u> DATE <u>2018.4.18</u>	

LEGAL NAME OF SIXTH INVENTOR/ASSIGNOR	Full Name
	<b>Yoon Jung KIM</b>
SIGNATURE _____ DATE _____	

LG CHEM Ref No. P2015-2191PCUS (Portfolio: CO2 plastic)

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
ASSIGNMENT FORM

Page 5 of 7

**PATENT**  
**REEL: 045595 FRAME: 0440**

LEGAL NAME OF SEVENTH INVENTOR/ASSIGNOR	Full Name
	<b>Bo Hyun SEONG</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF EIGHTH INVENTOR/ASSIGNOR	Full Name
	<b>Taek Jun JUNG</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF NINTH INVENTOR/ASSIGNOR	Full Name
	<b>Yun Ki CHO</b>
SIGNATURE _____ DATE _____	

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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND  
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Page 6 of 7

**PATENT**  
**REEL: 045595 FRAME: 0441**

LEGAL NAME OF TENTH INVENTOR/ASSIGNOR	Full Name
	<b>Yong Hee AN</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF Eleventh INVENTOR/ASSIGNOR	Full Name
	<b>Sung-Kyoung KIM</b>
SIGNATURE _____ DATE _____	

LEGAL NAME OF Twelfth INVENTOR/ASSIGNOR	Full Name
	<b>Hyun Min KIM</b>
SIGNATURE _____ DATE _____	

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Page 7 of 7