#### 506134680 07/01/2020

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6181407

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
SEUL KI IM	03/21/2017
YONG HO LEE	04/03/2017
KI SOO LEE	03/21/2017
EUN JI SHIN	03/21/2017
JIN YOUNG PARK	03/21/2017
SEOK PIL SA	03/22/2017
YOON KI HONG	03/22/2017

## RECEIVING PARTY DATA

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

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	16916877

### **CORRESPONDENCE DATA**

(908)654-7866 Fax Number:

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: (908) 654-5000

Email: assignment@lernerdavid.com

LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTLIK, LLP **Correspondent Name:** 

Address Line 1: 20 COMMERCE DR.

Address Line 4: CRANFORD, NEW JERSEY 07016

ATTORNEY DOCKET NUMBER:	LGCHEM 3.3F-1409 DIV
NAME OF SUBMITTER:	KATHLEEN REYNOLDS
SIGNATURE:	/Kathleen Reynolds/

DATE SIGNED:	07/01/2020
Total Attachments: 10	
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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: LIGAND COMPOUND, ORGANIC CHROMIUM COMPOUND, CATALYST SYSTEM FOR OLEFIN OLIGOMERIZATION, AND METHOD FOR OLIGOMERIZING OLEFIN USING SAME

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 <a href="https://pct/kr2016/013720">PCT/kr2016/013720</a> , filed on <a href="https://pct/kr2016/013720">November 25, 2016</a> .
The above-id	entified application was made or authorized to be made by me (us).
	e that I am (we are) the original inventor (original joint inventors) of a claimed invention in entified application.
I (we) hereb under 18 U.S	y acknowledge that any willful false statement made in this declaration is punishable. C. 1001 by fine or imprisonment of not more than five (5) years, or both.
1 This fram re	equires the use of an Application Data Sheet.

LO CHEM Ref No. P2015-3186PCUS

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 1 of 5

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

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

LO CHEM Ref No. P2015-3186PCUS

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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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 LERNER, DAVID, LITTENBERG, KRUMHOLZ & MENTUK, 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.

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

LEGAL NAME OF		Full Name
FIRST INVENTOR/ASSIGNOR		Seul Ki IM
SIGNATURE	Q 471	DATE 03/24/2017

LG CHEM Ref No. P2015-3186PCUS

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 3 of 5

LEGAL NAME OF	Full Name	
SECOND INVENTOR/ASSIGNOR	Yong Ho LEE	
SIGNATURE	DATE	
LEGAL NAME OF	Full Name	
THIRD INVENTOR/ASSIGNOR	Ni Sao LEE	
SIGNATURE	5015 DATE 33/24/2017	
LEGAL NAME OF	Full Name	
FOURTH INVENTOR/ASSIGNOR	Eun Ji SHIN	
SIGNATURE	DATE 03/21 [2017	

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 4 of 5

LEGAL NAME OF		Full Name:	
FIFTH	(38) 1481000		
INVENTOR/ASSIGNOR	Jin Young PARK		
SIGNATURE		DATE	03/24/2013
LEGAL NAME OF		Full Name	
SIXTH INVENTOR/ASSIGNOR		Seok Pil SA	
SIGNATURE	11-19 TU	DATE	03/22/2017
LEGAL NAME OF		Full Name	
SEVENTH INVENTOR/ASSIGNOR		Yoon Ki HONG	
SIGNATURE	<u> </u>	DATE	63.72.749

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 5 of 5

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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:

The attached U.S. non-provisional patent application, or

### Section I. Declaration

This declaration is directed to:

	U.S. non-provisional patent application number, or	filed on
***	PCT international patent application number <a href="PCT/KR2016/013720">PCT/KR2016/013720</a> , <a href="pct/25,2016">25,2016</a> .	filed on <u>November</u>
The above-ide	entified application was made or authorized to be made by me (us).	
	that I am (we are) the original inventor (original joint inventors) of a intified application.	claimed invention in
	y acknowledge that any willful false statement made in this decla C. 1001 by fine or imprisonment of not more than five (5) years, or b	
I This form rec	pires the use of an Application Data Sheet.	

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 1 of 5

Attorney Ref No.

LG CHEM Ref No. P2015-3186PCUS

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

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

## Section II. Assignment

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

LG CHEM Ref No. P2015-3186PCUS

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 2 of 5

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).

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

LEGAL NAME OF	Full Name
FIRST INVENTOR/ASSIGNOR	Seul Ki IM
SIGNATURE	DATE

LG CHEM Ref No. P2015-3186PCUS

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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LEGAL NAME OF	Fúll Name
INVENTOR/ASSIGNOR	Yong Ho LEE
SIGNATURE	CCC22 DATE 03, April, 2017
LEGAL NAME OF	Full Name
THIRD INVENTOR/ASSIGNOR	Ki Soo LEE
SIGNATURE	DATE
LEGAL NAME OF	Full Name
FOURTH INVENTOR/ASSIGNOR	Eun Ji SHIN
SIGNATURE	DATE

Attorney Ref No.

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 4 of 5

LEGAL NAME OF	Full Name
FIFTH INVENTOR/ASSIGNOR	Jin Young PARK
SIGNATURE	DATE
LEGAL NAME OF	Full Name
INVENTOR/ASSIGNOR	
SIGNATURE	DATE
LEGAL NAME OF	Full Name
SEVENTH INVENTOR/ASSIGNOR	Yoon Ki HONG
SIGNATURE	DATE

Attorney Ref No.

COMBINED DECLARATION (37 CFR. 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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PATENT REEL: 053101 FRAME: 0054

**RECORDED: 07/01/2020**