01/16/2018 504731054

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 **EPAS ID: PAT4777779**

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DONGSU SONG	01/09/2018
DAESUNG KIM	01/09/2018
WONJAE LEE	01/09/2018
YONGJIN CHOE	01/09/2018
HYUNJOO LEE	01/09/2018
MINSU KIM	01/09/2018

RECEIVING PARTY DATA

Name:	LG CHEM, LTD.
Street Address:	128, YEOUI-DAERO, YEONGDEUNGPO-GU
City:	SEOUL
State/Country:	KOREA, REPUBLIC OF
Postal Code:	07336
Name:	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY
Name: Street Address:	KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY 291, DAEHAK-RO, YUSEONG-GU
Street Address:	291, DAEHAK-RO, YUSEONG-GU

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15744687	

CORRESPONDENCE DATA

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: 202-496-7185

Email: MLAIP@DENTONS.COM

Correspondent Name: DENTONS US LLP Address Line 1: 1900 K. STREET, N.W. Address Line 4: WASHINGTON, D.C. 20006

> **PATENT** REEL: 044627 FRAME: 0846

504731054

ATTORNEY DOCKET NUMBER:	29137.02555.US00	
NAME OF SUBMITTER:	SONG K. JUNG	
SIGNATURE:	/SONG K. JUNG/	
DATE SIGNED:	01/16/2018	
Total Attachments: 4		
source=Assignment#page1.tif		
source=Assignment#page2.tif		
source=Assignment#page3.tif		
source=Assignment#page4.tif		

PATENT REEL: 044627 FRAME: 0847

Assignment of Application

WHEREAS,	I (WE)	SONG, Dongsu; I	KIM, Da	esu	ng ; LEE, Wonjae ;	
		CHOE, Yongjin;	LEE, Hy	un	joo and KIM, Minsu,	
respectively, have invented certain new and useful improvements in:						
HETEROGENEOUS CATALYST FOR PREPARING ACRYLIC ACID, AND ACRYLIC ACID PREPARATION METHOD USING SAME						
for which an application for Letters Patent was executed on						
(Application No.			, Filed		•), and
WHEREAS,	LG CHEM, LTD. (hereinafter referred to as "ASSIGNEE")					
having a place of business at: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 Republic of Korea,						
and KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (hereinafter referred to as "ASSIGNEE")						
having a place of business at: 291, Daehak-ro, Yuseong-gu, Daejeon 34141 Republic of Korea,						

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEES, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the assignees of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEES, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEES or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEES, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

The undersigned hereby grant(s) the firm of Dentons, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date:	
	(Signature of Inventor)
	SONG, Dongsu
	1.10-
Date: January 9, 2018	_ Levar
	(Signature of Inventor)
	KIM, Daesung
	· •
Date: January 9, 2018	122/10/10
Date: January 9, 2018	(Signature of Investor)
	LEE, Wonjae
	Line, wonac
Date:	
Date:	(Signature of Inventor)
	CHOE, Yongjin
Date:	
	(Signature of Inventor)
	LEE, Hyunjoo
Date:	
	(Signature of Inventor)
	KIM, Minsu

Dentons US LLP 1900 K Street, N.W. Washington, D.C. 20006

Assignment of Application

WHEREAS,	I (WE)	SONG, Dongsu; I	KIM, Da	esu	ng ; LEE, Wonjae ;	
		CHOE, Yongjin;	LEE, Hy	un	joo and KIM, Minsu,	
respectively, have invented certain new and useful improvements in:						
HETEROGENEOUS CATALYST FOR PREPARING ACRYLIC ACID, AND ACRYLIC ACID PREPARATION METHOD USING SAME						
for which an application for Letters Patent was executed on						
(Application No.			, Filed		•), and
WHEREAS,	LG CHEM, LTD. (hereinafter referred to as "ASSIGNEE")					
having a place of business at: 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336 Republic of Korea,						
and KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY (hereinafter referred to as "ASSIGNEE")						
having a place of business at: 291, Daehak-ro, Yuseong-gu, Daejeon 34141 Republic of Korea,						

is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;

NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I (WE), by these presents do sell, assign and transfer unto said ASSIGNEES, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries and the entire right, title and interest in and to any and all Letters patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.

I (WE) hereby authorize and request the Patent Office Officials in the United States and Its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEES as the assignees of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEES, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me (us) had this Assignment and sale not been made.

Further, I (WE) agree that I (WE) will communicate to said ASSIGNEES or its (his) representatives any facts known to me (us) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEES, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEES, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.

LGC Ref. P2015-1997PCUS

Docket No.:

The undersigned hereby grant(s) the firm of Dentons, 1900 K Street, N.W., Washington, D.C. 20006 the power to insert on this assignment any further identification, including the application number and filing date, which may be necessary or desirable in order to comply with the rules of the United States Patent and Frademark Office for recordation of this document.

Date!	
	(Signature of Inventor) SONG, Dongsu
Oate:	(Signature of Inventor) KIM, Dacsung
Umo.	Sufficience of Societies LEE, Wonjae
Date;	(Signature of the casse) CHOE, Yougjin
Date: January 9, 2018	LEE, Hyunjoo
Date: January 9, 2018	가 민수 (Signature of Investic) KIM, Minsu

Dentons US LLP 1900 K Street, N.W. Washington, D.C. 20006