### PATENT ASSIGNMENT

## Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Dong-Hyun KO	02/13/2013
Moon-Ho HONG	02/13/2013
Sung-Shik EOM	02/13/2013
Yong-Jin CHOE	02/13/2013
O-Hak KWON	06/07/2013
Dae-Chul KIM	02/13/2013
Jae-Hui CHOI	06/07/2013

### **RECEIVING PARTY DATA**

Name:	LG Chem, Ltd.
Street Address:	20 Yoido-dong Youngdungpo-gu
City:	Seoul
State/Country:	KOREA, REPUBLIC OF
Postal Code:	150-721

#### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13809565

### **CORRESPONDENCE DATA**

502391556

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1900 K Street NW Address Line 1: Address Line 2: IP Department

Washington, DISTRICT OF COLUMBIA 20006 Address Line 4:

ATTORNEY DOCKET NUMBER: 29137.00981.US00

REEL: 030649 FRAME: 0885

**PATENT** 

NAME OF SUBMITTER:	Mark R. Kresloff
Signature:	/Mark R. Kresloff#42,766/
Date:	06/20/2013
Total Attachments: 6 source=2913700981US00ASS#page1.tif source=2913700981US00ASS#page2.tif source=2913700981US00ASS#page3.tif source=2913700981US00ASS#page4.tif source=2913700981US00ASS#page5.tif source=2913700981US00ASS#page6.tif	

PATENT REEL: 030649 FRAME: 0886

# **Assignment of Application**

WHEREAS, I (WE)	KO, Dong-Hyun; HONG, Moo-Ho; EOM, Sung-Shik; CHOE, Yong-Jin; KWON, O-Hak; KIM, Dae-Chul; CHOI, Jae-Hui		
			, respectively,
have invented certain new a	and useful improvements in:		A consequence of the second se
	PRODUCTING ISO TYPE R LEFINS, AND METHOD FO USING THE APPARATU	R COI	
for which an application for	Letters Patent was executed o	on T	

(Application No.	13/809,565	, Filed	January 10, 2013	). and
WHEREAS,	LG CHEM, LTD.	**************************************	rakana (1917 - 2018). (1918 - 1918 -	
(hereinafter referre	d to as "ASSIGNEE")	having a place of	of business at:	**************************************
20 Yoido-dong Yo	oungdungpo-gu, Seou	l 150-721 Repu	blic 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 ASSIGNEE, 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 ASSIGNEE as the assignee of my (our) entire right, title and interest in and to the same, for the sole use and behalf of said ASSIGNEE, 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 ASSIGNEE 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 ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, 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 McKenna Long & Aldridge LLP. Attorneys at Law, 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: Feb. 13, 2013	Donglym Ko
	(Signature of Inventor)  KO, Dong-Hyun
Date: Treb. 13. 2013	m
	Signature of Inventor) HONG, Moo-Ho
Date: 13 , 20/3	(Signature of Inventor)
	EOM, Sung-Shik
Date: Feb. 13, 2013	C. Arrange
	(Signature of Inventor) CHOE, Yong-Jin
Date:	
	(Signature of Inventor)  KWON, O-Hak
Date Feb. 13, 2013	(Signature of Inventor)
	(Signature of Inventor) KIM, Dae-Chul
Date:	
	(Signature of Inventor)  CHOL Jae-Hui

McKenna Long & Aldridge LLP

Attorneys At Law 1900 K Street, N.W Washington, D.C. 20006

# **Assignment of Application**

WHEREAS, I (WE)	KO. Dong-Hyun: HONG. Moo-Ho; EOM, Sung-Shik; CHOE, Yong-Jin; KWON, O-Hak; KIM, Dae-Chul; CHOI, Jae-Hui		
	, respectively.		
have invented certain new a	nd useful improvements in:		
	PRODUCTING ISO TYPE REACTION PRODUCTS AND LEFINS, AND METHOD FOR COPRODUCTING THEM USING THE APPARATUS		
for which an application for	Letters Patent was executed on		

(Application No.	13/809,565	, Filed	January 10, 2013	), and
WHEREAS.	LG CHEM, LTD.			
1	ed to as "ASSIGNEE") l oungdungpo-gu, Seoul			

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Date:		
	(Signature of Inventor) KO, Dong-Hyun	
Date:	(Signature of Inventor)	
	HONG, Moo-Ho	
Date:	(Signature of Inventor)	
	EOM, Sung-Shik	
Date:		
	(Signature of Inventor) CHOE, Yong-Jin	
Date:		
	(Signature of Inventor)  KWON, O-Hak	
Date:		
	(Signature of Inventor) KIM, Dac-Chul	
Date: 27.07.	CT tool	
	(Signature of Inventor) CHOL Ine-Uni	

McKenna Long & Aldridge LLP

Attorneys At Law 1900 K Street, N.W. Washington, D.C. 20006

# **Assignment of Application**

WHEREAS, I (WE)	KO, Dong-Hyun, HONG, Moo-Ho, EOM, Sung-Shik, CHOE, Yong-Jin, KWON, O-Hak, KIM, Dae-Chul, CHOI, Jae-Hui		
on Makaraka sahar sama merdan, silikin 1900 1900 1921 1924 dayan birangga penyi penyi penyi penyi penyi mili menanda mendaman sah	k an organica anno anno anno anno anno anno anno an	, respectively.	
have invented certain new a	and useful improvements in:		
	PRODUCTING ISO TYPE RE LEFINS, AND METHOD FOR USING THE APPARATUS	COPRODUCTING THEM	
for which an application for	Letters Patent was executed or		

Appropriate Control	(Application No.	13/809,565	, Filed	January 10, 2013	). and	
***************************************	WHEREAS,	LG CHEM, LTD.				
	(hereinafter referred to as "ASSIGNEE") having a place of business at.					
	20 Yoido-dong Youngdungpo-gu, Seoul 150-721 Republic of Korea					

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PATENT REEL: 030649 FRAME: 0891

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Date.	
	(Signature of Inventor) K(), Dong-Hyun
Date:	(Signature of Inventor) HONG, Moo-Ho
Date	(Signature of Inventor) EOM, Sung-Shik
Date:	(Signature of Inventor) CHOE, Yong-Jin
Date. 1/2/1/29 1/2 3 4 1/3	(Signature of Inventor) KWON, O-Hak
Date:	(Signature of Inventor) KIM, Dae-Chul
Date	(Signature of Inventor) ('HOI, Jae-Hui

McKenna Long & Aldridge LLP Attorneys At Law 1900 K Street, N W

Washington, D.C 20006

**PATENT** REEL: 030649 FRAME: 0892

**RECORDED: 06/20/2013**