## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6084414

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
DA KYUNG HAN	03/13/2020
KWAN WOO NAM	03/09/2020
SEUNG HYUN LEE	03/13/2020
JE AN LEE	03/13/2020

### **RECEIVING PARTY DATA**

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

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number		
Application Number:	16759944		

#### **CORRESPONDENCE DATA**

**Fax Number:** (703)205-8050

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:** (703) 205-8000

Email: mailroom@bskb.com, anh-vu.dao@bskb.com
Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP.
Address Line 1: 8110 GATEHOUSE ROAD, SUITE 100E

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	6949-0125PUS1
NAME OF SUBMITTER:	ANH-VU DAO
SIGNATURE:	/anh-vu dao/
DATE SIGNED:	04/29/2020

#### **Total Attachments: 6**

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> PATENT REEL: 052528 FRAME: 0482

## BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East, Falls Church, Virginia 22042-1248 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

# DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

UNITED STATES PATENT RIGHTS, OR UNITED STATES PLUS ALL FOREIGN PATENT RIGHTS

Title of Invention ⇒ ELAME DETADDANT SEDADATOD FOR SECONDARY BATTERY

	FLAME RETARDANT SEPARATOR FOR SECONDART BATTERT
	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:
	This declaration is directed to the application attached hereto.
Application not Attached	If the application is not attached hereto, the application is as identified by the attorney docket number set forth above and/or the following:
Enter Appln. No.	→ United States Application Number or PCT International Appln. No. PCT/KR2019/005478
Enter Filing Date	⇒ filed on May 8, 2019
	The above-identified application was made or authorized to be made by me.
	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
	I have reviewed and understand the contents of the above-identified application, including the claims.
	I acknowledge the duty to disclose information which is material to patentability as defined in Title 3 Code of Federal Regulations $\S$ 1.56.
	WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.
Insert Name of Assignee	⇒ WHEREAS, LG CHEM, LTD.
insert Address of Assignee	⇒ of 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea,
<b>6</b> · · ·	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desiron of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent (that may be granted therefor in the United States of America and
Check Box if Appropriate	in any foreign countries.
	NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledge the undersigned has sold, assigned and transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, it territories, dependencies and possessions and the entire right, title and interest in and to any and all Lette Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; including all rights under the International Convention for the Protection of Industrial Property or similar agreements as well as the right to claim benefit from the priority of the above-mentioned application; and to any and all division reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

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PATENT LGChem Duffyingde REEL: 052528 FRAME: 0483

BSKB-DEC-ASSIGN (11-18)

BIRCH, STEWART, KOLASCH & BIRCH, LLP

Attorney Docket No. 6949-0125PUS1

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges 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.

In witness whereof, executed by the undersigned on the date opposite the undersigned name.

#### LEGAL NAME OF INVENTOR

Inventor's Name   ⇒ Inventor;	Da Kyung HAN	Date: 2020.03.13
Inventor's Signature ⇒ Signature:	HonMo	
An application data sheet (E Use a separate form for each i	TO/SB/14 or equivalent), including naming the entire involventor; or check the box below and complete the attached pa	ventive entity, must accompany this form. ge(s) to list additional inventors.
Additional inventors are b	eing named on the $\underline{1}$ supplemental sheet(s) attached hereto	),

BIRCH, STEWART, KOLASCH & BIRCH, LLP

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## Application No. 16/759,944 filed on April 28, 2020

Attorney Docket No. 6949-0125PUS1

# SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S)
Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	Ŷ	Inventor:	Kwan Woo NAM	Date: _	
Inventor's Signature	⇒	Signature:		<u> </u>	
		LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	<b></b>	Inventor:	Seung Hyun LEE	Date:	2020, 03. 13
Inventor's Signature	¢	Signature:	A.		
		LEGAL NA	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	0	Inventor:	Je An LEE	Date:	2020.03.13
Inventor's Signature	4	Signature:	mu p.		

BIRCH, STEWART, KOLASCH & BIRCH, LLP

Page 3

BSKB-DEC-ASSIGN (11-18)

## BIRCH, STEWART, KOLASCH & BIRCH, LLP

8110 Gatehouse Road, Suite 100 East, Falls Church, Virginia 22042-1248 Telephone: (703) 205-8000 • Facsimile: (703) 205-8050 • Email: mailroom@bskb.com

## DECLARATION AND ASSIGNMENT FOR PATENT AND DESIGN APPLICATIONS

LIMETER STATES DATEMEN DISTANCE OF

	United States Patent Rights, or United States Plus all Foreign Patent Rights
litle of Invention	⇒ FLAME RETARDANT SEPARATOR FOR SECONDARY BATTERY
	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:
	This declaration is directed to the application attached hereto.
Application not Attached	⇒ If the application is not attached hereto, the application is as identified by the attorney docket number as set forth above and/or the following:
Enter Appln, No.	<sup>™</sup> United States Application Number or PCT International Appln. No. PCT/KR2019/005478
Inter Filing Date	↑ filed on May 8, 2019
	The above-identified application was made or authorized to be made by me.
	I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.
	I have reviewed and understand the contents of the above-identified application, including the claims.
	I acknowledge the duty to disclose information which is material to patentability as defined in Title 37 Code of Federal Regulations § 1.56.
	WHEREAS, the undersigned has invented certain new and useful improvements described in the application identified.
nsert Name f Assignee	⇒ WHEREAS, LG CHEM, LTD.
nsert Address f Assignee	⇔ of 128, Yeoui-daero, Yeongdeungpo-gu, Seoul 07336, Republic of Korea,
	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent(s) that may be granted therefor in the United States of America and
heck Box if ppropriate	⇔ ☐ in any foreign countries.
ere o produce	NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged,

C

transferred, and by these presents does (do) sell, assign and transfer unto said Assignee the full and exclusive right to the said invention in the United States of America, its territories, dependencies and possessions and the entire right, title and interest in and to any and all Letters Patent(s) which may be granted therefor in the United States of America, its territories, dependencies and possessions, and if the box above is designated, in any and all foreign countries; including all rights under the International Convention for the Protection of Industrial Property or similar agreements as well as the right to claim benefit from the priority of the above-mentioned application; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term or terms for which the same may be granted.

BIRCH, STEWART, KOLASCH & BIRCH, LLP

BSKB-DEC-ASSIGN (11-18)

The undersigned agrees to execute all papers necessary in connection with this application and any continuing, divisional, conversion or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division, conversion or reissue thereof or Letters Patent(s) or reissue patent issued thereon and to cooperate with the Assignee in every way possible in obtaining and producing evidence and proceeding with such interference.

The undersigned agrees to execute all papers and documents and to perform any act which may be necessary in connection with claims or provisions of the International Convention for the Protection of Industrial Property or similar agreements.

The undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of (a) valid United States of America patent(s) or a grant of (a) valid United States of America and any foreign patent(s) to the Assignee and to vest all rights therein hereby conveyed to said Assignee as fully and entirely as the same would have been held by the undersigned if this Assignment and sale had not been made.

The undersigned hereby authorizes and requests the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patent(s) resulting from said application or any continuing, divisional conversion or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has the full right to convey the entire interest herein assigned, and that he has not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grants the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office.

The undersigned hereby covenants that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment.

The undersigned hereby acknowledges 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.

In witness whereof, executed by the undersigned on the date opposite the undersigned name.

#### LEGAL NAME OF INVENTOR

Inventor's Name	⇔ Inventor;	Da Kyung HAN	Date:	
Inventor's Signature	<sup>s⇔</sup> Signature			······
An application Use a separate	n data sheet form for each	(PTO/SB/14 or equivalent), inclu inventor; or check the box below a	uding naming the entire inventive entity, must accompany thand complete the attached page(s) to list additional inventors.	is form.
	inventors are	being named on the _1_ supplement	ental sheet(s) attached hereto.	

PATENT
REEL: 052528 FRAME: 0487

# SUPPLEMENTAL SHEET FOR **DECLARATION AND ASSIGNMENT**

## ADDITIONAL INVENTOR(S) Supplemental Sheet Page 1 of 1

LEGAL NAME OF JOINT INVENTOR, IF ANY

Inventor's Name	<sup>⇔</sup> Inventor:	Kwan Woo NAM	Date:	2020.03.09
Inventor's Signature	⇒ Signature:	4		
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
inventor's Name	⇒ Inventor:	Seung Hyun LEE	Date:	
Inventor's Signature	⇔ Signature:			
	LEGAL N	AME OF JOINT INVENTOR, IF ANY		
Inventor's Name	⇔Inventor:	Je An LEE	Date:	
Inventor's Signature	⇔Signature:			

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RECORDED: 04/29/2020

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**PATENT** 

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