502336106 05/06/2013

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Sang Hoon CHOY	04/30/2013
Yong Tae LEE	04/30/2013
Hong Kyu PARK	04/30/2013
Sung-Kyun CHANG	05/01/2013

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:	13623570	

CORRESPONDENCE DATA

Fax Number: 7032058050

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 703-205-8000

Email: mailroom@bskb.com, tchau@bskb.com

Correspondent Name: BIRCH, STEWART, KOLASCH & BIRCH, LLP

Address Line 1: P.O. Box 747

Address Line 4: Falls Church, VIRGINIA 22040-0747

ATTORNEY DOCKET NUMBER:	5097-0340PUS1
NAME OF SUBMITTER:	THIEN HOANG-CHAU
Signature:	/thien hoang-chau/
	PATENT

REEL: 030354 FRAME: 0828

OP \$40,00 13623570

Date:	05/06/2013
Total Attachments: 6 source=2013-5-2 Declaration & Assignment	5097-0340PUS1#page2.tif 5097-0340PUS1#page3.tif 5097-0340PUS1#page4.tif 5097-0340PUS1#page5.tif

PATENT REEL: 030354 FRAME: 0829

BIRCH, STEWART, KOLASCH & BIRCH, LLP

P.O. Box 747 • Falls Church, Virginia 22040-0747 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	nF	Inven	Hot
TIME	α	miver	(IO)

¬ → CARBON-COATED LITHIUM IRON PHOSPHATE OF OLIVINE CRYSTAL STRUCTURE AND LITHIUM SECONDARY BATTERY USING THE SAME

As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:

Application not Attached

This declaration is directed to the application attached hereto. 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.

Duited States Application Number or PCT International Appln. No. 13/623,570

Enter Filing Date 🗢 filed on September 20, 2012

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.

Insert Name of Assignce

WHEREAS, LG CHEM, LTD.

Insert Address of Assignee

of 20, Yoido-dong, Youngdungpo-gu, Seoul 150-721,, 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

Check Box if Appropriate

in any foreign countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, 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, 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; 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.

BSKB-DECASSIGN(09-12)

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.

Additional inventors are being named on the 1 supplemental sheet(s) attached hereto.

LEGAL NAME OF INVENTOR

Inventor's Name	Sang Hoon CHOY	Date:	2013. 04. 30
Inventor's Signature ⇒ Signature:	ohrs		
	O/SB/14 or equivalent), including naming the entire inventiv nventor; or check the box below and complete the attached pa		

BSK8-DECASSIGN-SINGLE (09-12)

PATENT REEL: 030354 FRAME: 0831

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page $\underline{2}$ of $\underline{2}$

LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name *> Inventor: Young Tag LEE

Inventor's Name	P Inventor: Yong Tae LEE	Date: 2013/4/30
Inventor's Signature	Signature:	**************************************
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒ Inventor: Hong Kyu PARK	Date: 20/3, 04, 30
Inventor's Signature	Signature: My Cont	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor: Sung-Kyun CHANG	Date:
Inventor's Signature	*Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	◆Inventor:	Date:
Inventor's Signature	Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Liventor's Name	[⇔] Inventor:	Date:
Inventor's Signature	⇔Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇒Inventor:	Date:
Inventor's Signature	⇒Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	⇔Inventor:	Date:
Inventor's Signature	⇔Signature:	
	LEGAL NAME OF JOINT INVENTOR, IF ANY	
Inventor's Name	◆Inventor:	Date:
Inventor's Signature	⇒Signature:	

BSKB-DBCASSIGN\ (09-12)

PATENT REEL: 030354 FRAME: 0832

BIRCH, STEWART, KOLASCH & BIRCH, LLP

P.O. Box 747 • Falls Church, Virginia 22040-0747 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	CARBON-COATED LITHIUM IRON PHOSPHATE OF OLIVINE CRYSTAL STRUCTURE AND LITHIUM SECONDARY BATTERY USING THE SAME
	As a below named inventor (hereinafter designated as the undersigned), I hereby declare that:
Application not Attached	This declaration is directed to the application attached hereto. 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.	⇔ United States Application Number or PCT International Appln. No. 13/623,570
Enter Filing Date	⇒ filed on September 20, 2012
	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.
Insert Name of Assignee	♦ WHEREAS, LG CHEM, LTD.
Insert Address of Assignee	⇔ of 20, Yoido-dong, Youngdungpo-gu , Seoul 150-721,, Republic of Korea,
3	its heirs, successors, legal representatives and assigns (hereinafter designated as the Assignee) is desirou 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
Check Box if Appropriate	in any foreign countries.
	NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged 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, 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; and to any and all divisions, reissues, continuations, conversions and extensions thereof for the full term of terms for which the same may be granted.

BSKB-DECASSIGN(09-12)

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.

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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	Φ Inver	tor: Sang Hoon CHOY	Date:	
Inventor's Signatur	e⇔ Signa	ture:		
			naming the entire inventive entity, must accompany d complete the attached page(s) to list additional inve	
	l invento	s are being named on the 1 supplemental s	sheet(s) attached hereto.	

BSKB-DECASSIGN-SINGLE (09-12)

SUPPLEMENTAL SHEET FOR DECLARATION AND ASSIGNMENT

ADDITIONAL INVENTOR(S) Supplemental Sheet Page 2 of 2

LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name S Inventor: Yong Tae LEE Date: Inventor's Signature Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY inventor's Signature ⇒ Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY _____ Date: ____ 2013 . 5 . 1 Inventor's Name Inventor's Signature

⇒Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Date: Date: LEGAL NAME OF JOINT INVENTOR, IF ANY PInventor: Date: Inventor's Name LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name ⇒Inventor: Date: Inventor's Signature ⇔Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name ⇒Inventor: Date: Inventor's Signature Signature: LEGAL NAME OF JOINT INVENTOR, IF ANY Inventor's Name Date:

BSKB-DECASSIGN\(09-12)

PATENT REEL: 030354 FRAME: 0835

RECORDED: 05/06/2013