#### 501827316 02/21/2012

#### PATENT ASSIGNMENT

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

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
Yo-Han KWON	02/14/2012
Je-Young KIM	02/14/2012
Heon-Cheol SHIN	02/14/2012
Ki-Tae KIM	02/14/2012
Sang-Young LEE	02/14/2012

#### **RECEIVING PARTY DATA**

Name:	LG CHEM, LTD.	
Street Address:	20, Yoido-dong, Youngdungpo-gu	
City:	Seoul	
State/Country:	JAPAN	
Postal Code:	150-721	

### PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13399614

#### **CORRESPONDENCE DATA**

Fax Number: (703)205-8050 Phone: 703-205-8000

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via US Mail.

Correspondent Name: Birch, Stewart, Kolasch & Birch, LLP
Address Line 1: 8110 Gatehouse Road, Suite 100E
Address Line 4: Falls Church, VIRGINIA 22040

ATTORNEY DOCKET NUMBER:	3563-0171PUS1
NAME OF SUBMITTER:	Craig A. McRobbie

REEL: 027738 FRAME: 0310

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PATENT

### Total Attachments: 6

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PATENT REEL: 027738 FRAME: 0311

# BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

## **ASSIGNMENT**

Application No.	13/399,614	Filed	February 17, 2012	
Insert Name(s) of Inventor(s)	***(	Given Name FAMILY NAME (ALL C	CAPS))***	
Insert Title	LEE, Sang-Young useful improvements in:	(hereinafter designated as the under	SHIN, Heon-Cheol; KIM, Ki-Tae; rsigned) has (have) invented certain new and ay AND MANUFACTURING METHOD	
of Invention		n for Letters Patent of the United ne case of a provisional application	States of America has been executed by the	
Insert Date of Signing of	on	February 14, 2012	; and	
Application Insert Name of Assignee	WHEREAS, LG CHE	•		
Insert Address of Assignee	Of 20, Yoido-dong, Youngdungpo-gu, Seoul 150-721 Republic of Korea			
CHECK BOX IF APPROPRIATE	desirous of acquiring the	entire right, title and interest in an nted therefor in the United States of	Thereinafter designated as the Assignee) is ad to said invention and in and to any Letters of America and	
I ALTROMATE	paid, the receipt of whi undersigned has (have) transfer unto said Assign America, its territories, of any and all Letters Pate	ch is hereby acknowledged, and sold, assigned and transferred, a nee the full and exclusive right to dependencies and possessions and ent(s) which may be granted the	Dollars (\$10.00) to the undersigned in hand other good and valuable consideration, the nd by these presents does sell, assign and to the said invention in the United States of the entire right, title and interest in and to refor in the United States of America, its above is designated, in any and all foreign	
	and to any and all divisiterm or terms for which t		versions and extensions thereof for the full	

The undersigned agree(s) 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 agree (s) 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 Letter 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 agree(s) 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 agree(s) 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 authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents 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 (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this 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.

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

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

Date	2,14, 2012,	Name of Inventor A. Tww
		(signature) KWON, Yo-Han
Date _	2.14, 2012	Name of Inventor
		(signature) KIM, Je-Young
Date _		Name of Inventor
		(signature) SHIN, Heon-Cheol
Date _	2,14,2012	Name of Inventor
		(signature) KIM, Ki-Tae
Date _		Name of Inventor
		(signature) LEE, Sang-Young
Date _		Name of Inventor
_		(signature)

## BIRCH, STEWART, KOLASCH & BIRCH, LLP

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## **ASSIGNMENT**

Application No.	13/399,614	_ Filed _	February 17, 2012
Insert Name(s) of Inventor(s)	***(Given Nam	e FAMILY NAME (ALL CA	APS))***
	WHEREAS, KWON, Yo-Han	n; KIM, Je-Young;	SHIN, Heon-Cheol; KIM, Ki-Tae;
			signed) has (have) invented certain new and
	useful improvements in:		
Insert Title of Invention		CONDARY BATTERY	Y AND MANUFACTURING METHOD
oi invention	THEREOF	uu Datani afitha IYaliad C	Market of America Transfer and America
	undersigned (except in the case of		states of America has been executed by the
Insert Date	on February	14, 2012	; and
of Signing of Application			,
Insert Name	WHEREAS, LG CHEM, LTD		
of Assignee Insert Address	•	44	om
of Assignee	Of 20, Yoido-dong, Youngo	lungpo-gu, Seoul 15	0-721 Republic of Korea
СНЕСК ВОХ		ht, title and interest in and	nereinafter designated as the Assignee) is if to said invention and in and to any Letters of America and
IF APPROPRIATE	NOW THEREFORE in consider	ition of the sum of Ten I	Pollars (\$10.00) to the undersigned in hand
	paid, the receipt of which is here undersigned has (have) sold, assi transfer unto said Assignee the fu America, its territories, dependence any and all Letters Patent(s) whi	by acknowledged, and or gned and transferred, an ill and exclusive right to dies and possessions and ich may be granted ther	where good and valuable consideration, the d by these presents does sell, assign and the said invention in the United States of the entire right, title and interest in and to efor in the United States of America, its bove is designated, in any and all foreign
	and to any and all divisions, reiss		ersions and extensions thereof for the full

The undersigned agree(s) 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.

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The undersigned agree(s) 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 authorize(s) and request(s) the Patent and Trademark Office Officials in the United States of America and in any foreign countries to issue any and all Letters Patents 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 (they have) the full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the law firm of Birch, Stewart, Kolasch & Birch, LLP the power to insert on this 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.

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

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

Date	,	Name of Inventor		
			(signature)	KWON, Yo-Han
Date _	,	Name of Inventor	wii	
			(signature)	KIM, Je-Young
Date _	February 14,2012,	Name of Inventor		2.596
	$\circ$		(signature)	SHIN, Heon-Cheol
Date _		Name of Inventor		
			(signature)	KIM, Ki-Tae
Date _	. ,	Name of Inventor		
			(signature)	LEE, Sang-Young
Date _	,	Name of Inventor		
			(signature)	

## BIRCH, STEWART, KOLASCH & BIRCH, LLP

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

## ASSIGNMENT

	Application No.	13/399,614 Filed February 17, 2012
	Insert Name(s) of Inventor(s)	***(Given Name FAMILY NAME (ALL CAPS))***
	Insert Tifle of Invention	WHEREAS, KWON, Yo-Han; KIM, Je-Young; SHIN, Heon-Cheol; KIM, Ki-Tae; LEE, Sang-Young (hereinafter designated as the undersigned) has (have) invented certain new and useful improvements in:  ANODE OF CABLE-TYPE SECONDARY BATTERY AND MANUFACTURING METHOD THEREOF for which an application for Letters Patent of the United States of America has been executed by the undersigned (except in the case of a provisional application)
According to	Insert Date of Signing of Application Insert Name	on February 14, 2012 ; and
	of Assignee	wnerers, LO Chelvi, Linu.
	Insert Address of Assignce	Of 20, Yoido-dong, Youngdungpo-gu, Seoul 150-721 Republic of Korea
	CHECK BOX IF APPROPRIATE	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 [X] in any foreign countries.
		NOW. THEREFORE, in consideration of the sum of Ten Dollars (\$10,00) to the undersigned in hand paid, the receipt of which is hereby acknowledged, and other good and valuable consideration, the undersigned has (have) sold, assigned and transferred, and by these presents does 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,
		!

Page 1 of 2

PATENT REEL: 027738 FRAME: 0316 The undersigned agree(s) 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.

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

Date	Name of Inventor
The second secon	(signature) KWON, Yo-Han
Date	Name of Inventor
The state of the s	(signature) KIM, Je-Young
Date	Name of Inventor
	(signature) SHIN, Heon-Cheol
Date	Name of Inventor
- 1 0	(signature) KIM, Ki-Tae
Date 2, 14, 2012.	Name of Inventor  (Signature) LEB Sang-Young
	(signature) LEB Sang-Young
Date	Name of Inventor
	(signature)
	Page 7 of 7

PATENT REEL: 027738 FRAME: 0317

**RECORDED: 02/21/2012**