Form PTO-1595 (Rec. 09: 04) OMB No. 0651-0027 (exc. 6/30/2005)	U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office				
RECORDATION FOR					
PATENTS	SONLY				
To the Director of the U.S. Patent and Trademark Office: Please	To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.				
Name of conveying party(ies)/Execution Date(s):	2. Name and address of receiving party(ies)				
BYUNGJIN CHOI (11/27/2008), HYANG					
MOK LEE (11/27/2008), CHANG BUM AHN					
(11/27/2008), WOOYONG LEE (11/27/2008),	Names. LG CHEM, LTD.				
	Internal Address:				
Execution Date(s), in parentheses after inventor name	Street Address:				
Additional name(s) of conveying party(les) attached? X Yes No	300 7 7 10 10 10 10 10 10 10 10 10 10 10 10 10				
Wilderson St.	LG TWIN TOWERS				
3. Nature of Conveyance:	20. YEOUIDO-DONG YEONGDEUNGPO-GU				
X Assignment Merger					
Security Agreement Change of Name	City: SEOUL				
Govornment Interest Assignment	State:				
Executive Order 9424, Confirmatory License	Country: Republic of Korea Zip: 150-721				
Other	Additional name(s) & address(es) Yes X No				
Marian - Mar	attached:				
4. Application or patent number(s):	This document is being filed together with a new application.				
A. Patent Application No.(s)	B. Patent No.(s)				
12/225,982					
Additional numbers attached?	Yes X No				
5. Name and address to whom correspondence	6. Total number of applications and patents involved:				
concerning document should be mailed: Name: Kelly Y. Hwang	Parente III 017 007				
LERNER, DAVID, LITTENBERG,					
KRUMHOLZ & MENTLIK, LLP	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00				
Internal Address: Alty, Did.: LGCHEM 3.3-038	Authorized to be charged by credit card				
Street Address: 600 South Avenue West	x Authorized to be charged to deposit account				
	Enclosed				
	None required (government leterest not affecting tide)				
	There reduced (Bovernment regress not angoing use)				
City Westfield	8. Payment Information				
State: NJ Zip: 07090	a. Credit Card Last 4 Numbers				
Phone Number: (908) 518-6320	Expiration Oato				
Fax Number: (908) 654-0415	b. Deposit Account Number 12-1095				
Email Address khwang@ldlkm.com	Authorized User Namo Kelly Y. Hwang				
9. Signature:					
11/0/W(0)\$5=	November 24, 2009				
Signature	5ate				
Kelly Y. Hwang - 51,831 Name of Person Signing	Total number of pages including cover sheat, attachments, and documents.				

STORES CONTRACTOR

PATENT REEL: 023568 FRAME: 0913

Form PTO-1595	RECO	(continued)		
Additional Conveying Party(ies)/Execution Date(s) (1. Continued):				
Sung-Min Hwang (11/27/2008), and OhYoung Hyun (11/27/2008)				
Additional Assignees	s (2. Continued)):		
Assignee Name: Internal Address. Street Address:		**************************************		
City:		Country: Zip:		
Assignee Name: Internal Address: Street Address:				
City:	State	Country: Zip:		
Assignee Name: Internal Address: Street Address.				
City.	State:	Country: Zip:		
Additional Applications and/or Patents (4. Continued):				
Additional Patent Application N 4A. Continued.	łumbers	Additional Patent Numbers 48. Continued:		
	Additional numbe	ers attached? Yes No		

2

Docket No.: LGCHEM 3.3-038

former PTQ/S8/15 (8-00) Modified EDLK&M Docket Number (Optional) ASSIGNMENT OF UTILITY APPLICATION Whereas, I, Byungjin Choi: 101-504, Expo Apt., Jeonmin-dong, Yuseong-gu, Daejeon, REPUBLIC OF KOREA 305-761 hereafter referred to as assignor, have with others invented certain new and useful improvements in LITHIUM SECONDARY BATTERY IMPROVED SAFETY AND CAPACITY for which an application for a United States Letters Patent was filed on 9/30/08 Application Number 12/225/982 for which an application for a United States Letters Patent was executed by me on x for which an International Application was filed on March 28, 2007 , as PCT/KR2007/001510 , designating the United States. And Whereas, LG CHEM, LTD. a corporation of Korea, Republic of therein referred to as "assignee" whose mailing address is LG Twin Towers; 20, Yeouido-dong; Yeongdeungpo-gu; Scoul; REPUBLIC OF KOREA 150-721 is desirous of acquiring the entire right, title and interest in the same;), the receipt whereof NOW, THEREFORE, in consideration of the sum of one dollars (\$ <u>1.00</u> is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Paternts and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignce herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignce or its assigns, to communicate to said assignce or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominices to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee. And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application. when known. Byungjin Choi <u>Young Tak CLM</u> Typed Name of Witness

x *Total of 6 forms are submitted.

towner PTO/S8/15 (6-00) Modified UDI K&M

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)	
Whereas, I, _ Hyaлg Mok Lee	of	
720-4, Suyu 2-dong, Gangbuk-gu, Seoul, REPUBLIC O	F KOREA_142-888	
hereafter referred to as assigner, have with others invented cert	ain new and useful Improvements in	
LITHIUM SECONDARY BATTERY IMPROVED SAFE	ETY AND CAPACITY	
for which an application for a United States Letters Patent was filed on 9/30/08 Application Number 12/225,982		
for which an application for a United States Letters Pater	nt was executed by me on	
x for which an International Application was filed on	March 28, 2007 , as	
PCT/KR2007/001510 , designating the United And	States.	
Whereas. LG CHEM, LTD.		
a corporation of Korea, Republic of herein referred to as "assign		
LG Twin Towers; 20, Yeouido-dong; Yeongdeungpo-gu; Se		
is desirous of acquiring the entire right, title and interest in the sa	ame;	
NOW, THEREFORE, in consideration of the sum of one dollars (\$\frac{1.00}{1.00}\$), the receipt whereof is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any taw or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and coverant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominees to obtain patent protection for said improvements in all countries, the		
And I do hereby authorize my attorneys to insert on this deed the when known.		
108. 11. 27	her blog Mohi	
Date	Hyang Mok Lee	
1.4-2		
Witness		
Toung Tag KIM Typed Name of Wilness		
x *Total of 6 forms are submitted.		

1,10-515

REEL: 023568 FRAME: 0916

ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
Whereas, I, <u>Chang bum Ahn</u> 6-401, LG Chem Sawon Apt., 381-42, Doryong-dong, Yi KOREA 305-340	of Iseong-gu, Daejeon, REPUBLIC OF
hereafter referred to as assignor, have with others invented certa LITHIUM SECONDARY BATTERY IMPROVED SAFE	·
x for which an application for a United States Letters Pale Application Number 12/225,982	int was filed on 9/30/08
for which an application for a United States Letters Pater	t was executed by me on
x for which an International Application was filed on	March 28, 2007 , as
PCT/KR2007/001510 , designating the United And	States.
Whereas, LG CHEM, LTD.	• 1000 1000 (20)
a corporation of Korea, Republic of herein referred to as "assign	50
LG Twin Towers; 20, Yeouido-dong; Yeongdeungpo-gu; Sec is desirous of acquiring the entire right, title and interest in the sa	
is acknowledged, and other good and valuable consideration, assignee my entire right, title and interest for the United State invention and the aforesaid utility patent application and all of applications and patents applied for or granted therefor in the said invention, including without limitation all applications and patents applied for or granted therefor in the said invention, including without limitation all applications and patents and including the right to any law or treaty, an infringement with the right to sue for and collect the same for its legal representatives, and including the right to claim such prior Trademarks is hereby authorized and requested to issue all pasaid assignee herein, as assignee of the entire interest the representatives, heirs and assigns do hereby agree and covenar all original, divisional, continuation, reissue and other application assignments thereof to said assignee or its assigns, to communication to the undersigned respecting said improvements, whene legal proceedings in which any of said applications or patents may rightful oaths, and to do generally everything necessary to aid obtain patent protection for said improvements in all countries, stand paid by said assignee. And I do hereby authorize my attorneys to insert on this deed the	is of America and all other countries in and to said riginal, divisional, continuation, substitute or reissue United States of America and all other countries, for stents for said invention claiming priority or benefit of direction directions and the use of its successors, assigns and rity or benefit and the Commissioner of Patents and ents on said improvements or resulting therefrom to erein; and the undersigned for me and my legal t without further remuneration, to execute and deliver insert to said assignee or its representatives all facts ver requested, to testify in any interferences or other y become involved, to sign all lawful papers, make all assignee, its successors, assigns and nominees to be expenses incident to said applications to be borne
when known.	filing date and application number of sale application
Date	Chang bum Ahn
Witness	
Typed Name of Witness	
*Total of 6 forms are submitted.	

LDLKM

looner PTO/SB/15 (8-00) Modified UDLK&M Docket Number (Optional) ASSIGNMENT OF UTILITY APPLICATION Whereas, I, Wooyong Lee 202, Sinyeoliip, LG Chem Sawon Apt., 388-11, Doryong dong, Yuseong-gu, Daejeon, REPUBLIC OF KOREA 305-340 hereafter referred to as assignor, have with others invented certain new and useful improvements in LITHIUM SECONDARY BATTERY IMPROVED SAFETY AND CAPACITY x for which an application for a United States Letters Patent was filed on 9/30/08 Application Number 12/225,982 for which an application for a United States Letters Patent was executed by me on x for which an International Application was filed on March 28, 2007 , as PCT/KR2007/001510 , designating the United States. And Whereas, LG CHEM, LTD. a corporation of Korea, Republic of herein referred to as "assignee" whose mailing address is LG Twin Towers; 20. Yeouido-dong; Yeongdeungpo-gu; Secul; REPUBLIC OF KOREA 150-721 is desirous of acquiring the entire right, title and interest in the same;), the receipt whereof 1,00 NOW, THEREFORE, in consideration of the sum of one dollars (\$ is acknowledged, and other good and valuable consideration, I as assigner hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforeseid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful paths, and to do generally everything necessary to aid assignee, its successors, assigns and nominities to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee. And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known. Wooyong Lee

[x]	*Total of	G	forms are submitted.	,		
		w			,,	_

former PTO/SB/15 (8-00) Modified LDLK&M Docket Number (Optional) ASSIGNMENT OF UTILITY APPLICATION Whereas, t, Sung-Min Hwang A-5F., Yeongseong Juteek, 437-4, Hapjeong-dong, Mapo-gu, Seoul, REPUBLIC OF KOREA 121-887 hereafter referred to as assignor, have with others invented certain new and useful improvements in LITHIUM SECONDARY BATTERY IMPROVED SAFETY AND CAPACITY for which an application for a United States Letters Patent was filed on 9/30/08 Application Number 12/225,982 for which an application for a United States Letters Patent was executed by me on x for which an International Application was filed on March 28, 2007 , as PCT/KR2007/001510 , designating the United States. And Whereas, LG CHEM, LTD. a corporation of Korea, Republic of herein referred to as "assignee" whose mailing address is 4.G Twin Towers; 20, Yeouido-dong; Yeongdeungpo-gu; Seoul; REPUBLIC OF KOREA 150-721 is desirous of acquiring the entire right, title and interest in the same;), the receipt whereof NOW, THEREFORE, in consideration of the sum of one dollars (\$ is acknowledged, and other good and valuable consideration, I as assignor hereby sell, assign and set over to said assignee my entire right, title and interest for the United States of America and all other countries in and to said invention and the aforesaid utility patent application and all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States of America and all other countries, for said invention, including without limitation all applications and patents for said invention claiming priority or benefit of the aforesaid utility application pursuant to any law or treaty, and including all claims for damages by reason of past infringement with the right to sue for and collect the same for its own use and the use of its successors, assigns and legal representatives, and including the right to claim such priority or benefit and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said improvements or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for me and my legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all original, divisional, continuation, reissue and other applications for Letters Patent on said improvements and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said improvements, whenever requested, to testify in any interferences on other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to aid assignee, its successors, assigns and nominies to obtain patent protection for said improvements in all countries, the expenses incident to said applications to be borne and paid by said assignee. And I do hereby authorize my attorneys to insert on this deed the filing date and application number of said application when known. Sung-Min Hwang. Toury Tac Ky Typed Name of Witness 'Total of forms are submitted.

X X

	tormer PTO/58/15 (8-00) Modified LDLX&M
ASSIGNMENT OF UTILITY APPLICATION	Docket Number (Optional)
Whereas, I, OhYoung Hyun	of
128-304, Hanvit Apt., Eoeun-dong, Yuseong-gu, Daejec	n, REPUBLIC OF KOREA 305-755
hereafter referred to as assignor, have with others invented cert	·
LITHIUM SECONDARY BATTERY IMPROVED SAFE	0.10.0.10.0
X for which an application for a United States Letters Pate	Additional International Control
Application Number 12/225,982 for which an application for a United States Letters Pater	
x for which an International Application was filed on	March 28, 2007
PCT/KR2007/001510 , designating the United	States.
Whereas, LG CHEM, LTD.	
a corporation of <u>Korea, Republic of</u> herein referred to as "assign	<u>-</u>
LG Twin Towers; 20, Yeouido-dong; Yeongdeungpo-gu; Se is desirous of acquiring the entire right, title and interest in the sa	(mm) (m)
NOW, THEREFORE, in consideration of the sum of <u>one</u> is acknowledged, and other good and valuable consideration, I assigned my entire right, title and interest for the United Stati invention and the aforesaid utility patent application and all capplications and patents applied for or granted therefor in the said invention, including without limitation all applications and patent aforesaid utility application pursuant to any law or treaty, as infringement with the right to sue for and collect the same for its legal representatives, and including the right to claim such price. Trademarks is hereby authorized and requested to issue all passid assigned herein, as assigned of the entire interest the representatives, heirs and assigned of the entire interest the representatives, heirs and assigned or its assigns, to communicate the undersigned respecting said improvements, when the said assignments thereof to said assigned or its assigns, to communicate the undersigned respecting said improvements, when legal proceedings in which any of said applications or patents my rightful oaths, and to do generally everything necessary to aid obtain patent protection for said improvements in all countries, that paid by said assigned.	es of America and all other countries in and to said criginal, divisional, continuation, substitute or reissue. United States of America and all other countries, for atents for said invention claiming priority or benefit of ad including all claims for damages by reason of pasts own use and the use of its successors, assigns and only or benefit and the Commissioner of Patents and detects on said improvements or resulting therefrom to be erein; and the undersigned for me and my legal of without further remuneration, to execute and deliver ons for Letters Patent on said improvements and all incate to said assignee or its representatives all facts over requested, to testify in any interferences or other my become involved, to sign all lawful papers, make all assignee, its successors, assigns and nominees to the expenses incident to said applications to be borne.
And I do hereby authorize my attorneys to insert on this deed the when known.	
102 102 102 100 100 100 100 100 100 100	OhYoung Hyun
Date:	OhYoung Hyun
Wilness	
Toury Tar KIM Typed Name of Witness	

REEL: 023568 FRAME: 0920

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*Total of 6 forms are submitted.