PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5904392

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| CHANGWOOK KIM | 12/19/2019 |
| SANGIN PARK | 12/19/2019 |
| SOOYOUN PARK | 12/20/2019 |
| YOUNG JIN PARK | 12/19/2019 |

RECEIVING PARTY DATA

| Name: | SAMSUNG SDI CO., LTD. | |
|-------------------|------------------------------|--|
| Street Address: | 150-20 GONGSE-RO, GIHEUNG-GU | |
| Internal Address: | GYEONGGI-DO | |
| City: | YONGIN-SI | |
| State/Country: | KOREA, REPUBLIC OF | |
| Postal Code: | 17084 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16630013 |

CORRESPONDENCE DATA

Fax Number: (703)288-5139

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: 7032885105

Email: PATENT@PARK-LAW.COM
Correspondent Name: H.C. PARK & ASSOCIATES, PLC
Address Line 1: 1894 PRESTON WHITE DRIVE
Address Line 4: RESTON, VIRGINIA 20191

| ATTORNEY DOCKET NUMBER: | P8863US00 |
|-------------------------|--|
| NAME OF SUBMITTER: | HAE-CHAN PARK |
| SIGNATURE: | /Hae-Chan Park/ |
| DATE SIGNED: | 01/10/2020 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 6

PATENT REEL: 051474 FRAME: 0843

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| source=P8863US00 Executed Assignment serving as Declaration#page1.tif |
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| source=P8863US00 Executed Assignment serving as Declaration#page6.tif |

PATENT REEL: 051474 FRAME: 0844

ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

As a below named inventor and Assignor, I declare that:

This assignment and declaration are directed to:

| The attached application entitled LITHIUI | M SECONDARY BATTERY |
|---|--------------------------------|
| having attorney docket number P8863US00 ("Applicatio | n"), which is a National Stage |
| Entry of International Application No. <u>PCT/KR2018/0078</u> claims priority from: | |
| Korean Patent Application No. <u>10-2017-0089189</u> , filed <u>J</u> | <u>uly 13, 2017</u> . |
| As amended on | (if applicable); |

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 hereby acknowledge 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.

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("Invention") disclosed in the Application,

Whereas, Assignor desires to convey all rights, titles, and interests in and to the same

Samsung SDI Co., Ltd.

to:

150-20 Gongse-ro, Giheung-gu 17084 Yongin-si Gyeonggi-do Republic of Korea

Samsung SDI Co., Ltd. herein further referred to as ("Assignee").

Now, for valuable consideration by Assignee to Assignor, the receipt of which is hereby acknowledged, and for other good and valuable consideration, Assignee and Assignor hereby agree as follows:

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.



Docket No. P8863US00

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

Assignor further covenants that Assignee will, upon Assignee's request, be provided promptly with all pertinent facts and documents relating to the Invention, Patent, Application and any patents granted thereon, as may be known and accessible to Assignor, and Assignor will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to Assignee or Assignee's legal representative any and all papers, instruments or affidavits required to apply for, protect, obtain, maintain, issue, defend and enforce the Application, Patent, Invention, whether in the US or any and all foreign countries and any patents granted thereon and/or for obtaining any reissue or reissues of any patent which may be granted for the invention and perform such further acts which may be necessary or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

| First Inventor's and Assignor's Name: | Eunsung LEE |
|---|---|
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea |
| First Inventor's and Assignor's Signature: | |
| Date: | |
| | |
| Second Inventor's and Assignor's Name: | Changwook KIM |
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea |
| Second Inventor's and Assignor's Signature: | |
| Date: | 12/17/2019 |

Third Inventor's and Assignor's Name:



Docket No. <u>P8863US00</u>

| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea | : |
|---|---|---|
| Third Inventor's and Assignor's Signature: | | |
| Date: | | *************************************** |
| | | |
| Fourth Inventor's and Assignor's Name: | Sooyoun PARK | |
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea | |
| Fourth Inventor's and Assignor's Signature: Date: | 20 Dec. 2019 | |
| Fifth Inventor's and Assignor's Name | Young Jin PARK | |
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea | |
| Fifth Inventor's and Assignor's Signature: | | |
| Date: | | |
| | | |

Sangin PARK

Page 3 of 3

ASSIGNMENT SERVING AS DECLARATION PER 37 C.F.R. § 1.63(e)

As a below named inventor and Assignor, I declare that:

This assignment and declaration are directed to:

| Entry of Interr claims priority | The attached application entitled LITHIUM SECONDAR by docket number <u>P8863US00</u> ("Application"), which is a National Application No. <u>PCT/KR2018/007801</u> , filed on <u>Jul</u> from: t Application No. <u>10-2017-0089189</u> , filed <u>July 13, 2017</u> . | National Stage |
|------------------------------------|---|--------------------|
| | As amended on | _ (if applicable); |
| | | |

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 hereby acknowledge 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.

Whereas, Assignor has invented certain new and useful processes, machines, articles of manufacture, compositions of matter, and/or improvements thereof ("Invention") disclosed in the Application,

Whereas, Assignor desires to convey all rights, titles, and interests in and to the same

Samsung SDI Co., Ltd.

to:

150-20 Gongse-ro, Giheung-gu 17084 Yongin-si Gyeonggi-do Republic of Korea

Samsung SDI Co., Ltd. herein further referred to as ("Assignee").

Now, for valuable consideration by Assignee to Assignor, the receipt of which is hereby acknowledged, and for other good and valuable consideration, Assignee and Assignor hereby agree as follows:

Assignor hereby conveys, assigns, sells and transfers to Assignee all rights, title and interests in and to the Invention disclosed in said application and in and to any Letters Patent of the United States (US), any continuation, division, renewal, or substitute thereof, and hereby grant to Assignee the right to apply in its own name for patents or Inventor's certificates and related rights heretofore or hereafter filed for the Invention in any and all countries, including (without limitation) all rights to claim priority based thereon, all patents granted thereon and all reissues, extensions and renewals thereof.



First Inventor's and Assignor's Name:

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

Assignor further covenants that Assignee will, upon Assignee's request, be provided promptly with all pertinent facts and documents relating to the Invention, Patent, Application and any patents granted thereon, as may be known and accessible to Assignor, and Assignor will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to Assignee or Assignee's legal representative any and all papers, instruments or affidavits required to apply for, protect, obtain, maintain, issue, defend and enforce the Application, Patent, Invention, whether in the US or any and all foreign countries and any patents granted thereon and/or for obtaining any reissue or reissues of any patent which may be granted for the invention and perform such further acts which may be necessary or desirable to carry out the intent of this agreement as the Assignee thereof shall hereafter require and prepare at assignee's expense.

IN WITNESS WHEREOF, Inventor and Assignor has hereunto set hand and seal.

Eunsuna LEE

| J | |
|--|---|
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea |
| First Inventor's and Assignor's Signature: | |
| Date: | |
| Second Inventor's and Assignor's Name: Address: | Changwook KIM 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea |
| Second Inventor's and Assignor's Signature: | |
| Date: | |



Docket No. <u>P8863US00</u>

| Third Inventor's and Assignor's Name: | Sangin PARK | |
|--|---|-------------|
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea | |
| Third Inventor's and Assignor's Signature: | | |
| Date: | 2019. 12.19 | |
| Fourth Inventor's and Assignor's Name: | Sooyoun PARK | |
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea | |
| Fourth Inventor's and Assignor's Signature: | | |
| Date: | | |
| Fifth Inventor's and Assignor's Name | Young Jin PARK | |
| Address: | 150-20 Gongse-ro, Giheung-gu Gyeonggi-do Yongin-si 17084 Republic of Korea | |
| Fifth Inventor's and Assignor's Signature: | tiabanic oi tota | |
| ാന്റെ സ്വാസ്ത്ര മാന്ത്ര നായാല്ലായ വിദ്വായവാശ്യ | : | |
| Date: | <u> </u> | |

Page 3 of 3