506447916 01/13/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6494685

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| YOUNG JIN MOON | 10/29/2020 |

RECEIVING PARTY DATA

| Name: | SK HYNIX INC. | |
|-----------------|------------------------------------|--|
| Street Address: | 2091, GYEONGCHUNG-DAERO, BUBAL-EUB | |
| City: | ICHEON-SI GYEONGGI-DO | |
| State/Country: | KOREA, REPUBLIC OF | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 17148075 |

CORRESPONDENCE DATA

Fax Number: (630)323-0335

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.

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Address Line 4: HINSDALE, ILLINOIS 60521

| ATTORNEY DOCKET NUMBER: | PA4330-0 | |
|------------------------------------------------------------|-------------------|--|
| NAME OF SUBMITTER: | W. WILLIAM PARK | |
| SIGNATURE: | /W. William Park/ | |
| DATE SIGNED: | 01/13/2021 | |
| This document serves as an Oath/Declaration (37 CFR 1.63). | | |

Total Attachments: 1

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PATENT REEL: 054908 FRAME: 0531

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

| Title of Invention | SEMICONDUCTOR DEVICE AND DEVICE | OPERATION METHOD OF THE SEMICONDUCTOR | | | |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|--|--|--|
| Declaration | As the below named inventor(s), I hereby declare that: The declaration is directed to: The attached application, or United States application or PCT international application number PCT/KR#################################### | | | | |
| Assignment | I agree promptly upon request of the assignee(s), its heirs, successors, assigns and legal representatives of the assignee(s) to communicate any facts known to it respecting the patent and the invention set forth therein, and to execute and deliver without further compensation any power of attorney. Assignment, application, whether original, continuation, divisional or reissue, or other papers that may be necessary. I hereby covenant that no assignment, sale agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale. I further covenant that assignee(s) will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to me and will testify as to the same in any litigation related thereto and will promptly execute and deliver to assignee(s) or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof. | | | | |
| Legal Name | Inventor Name (First Middle LAST): Inventor Signature: | Young Jin MOON Young Jin Moon | | | |
| Of Inventor | Date: | October 29, 2020 | | | |

A total of _ supplemental sheet(s) are attached hereto for additional inventors, if any.

Page 1

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