507041833 12/22/2021

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7088670

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

CONVEYING PARTY DATA

| Name | Execution Date |
|------------------------|----------------|
| XINSHU CAI | 12/19/2021 |
| SHYUE SENG TAN | 12/19/2021 |
| VIBHOR JAIN | 12/21/2021 |
| JOHN J. PEKARIK | 12/21/2021 |
| ROBERT J. GAUTHIER JR. | 12/19/2021 |

RECEIVING PARTY DATA

| Name: | GLOBALFOUNDRIES SINGAPORE PTE. LTD. |
|-----------------|---|
| Street Address: | 60 WOODLANDS INDUSTRIAL PARK D STREET 2 |
| City: | SINGAPORE |
| State/Country: | SINGAPORE |
| Postal Code: | 738406 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 17559085 |

CORRESPONDENCE DATA

Fax Number: (703)848-2981

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.

Email: achernavtseva@rmsclaw.com
Correspondent Name: ANDREW M. CALDERON

Address Line 1: 7918 JONES BRANCH DRIVE, SUITE 500

Address Line 4: MCLEAN, VIRGINIA 22102

| NAME OF SUBMITTER: | ANDREW M. CALDERON |
|--------------------|--|
| SIGNATURE: | /Andrew M. Calderon/ |
| DATE SIGNED: | 12/22/2021 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 5

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PATENT 507041833 REEL: 058460 FRAME: 0454

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> PATENT REEL: 058460 FRAME: 0455

| COMBINE | D DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) | | |
|--|--|--|--|
| Title of Invention | BIPOLAR TRANSISTORS | | |
| | DECLARATION | | |
| As the below | named inventor, I hereby declare that: | | |
| This declarati | on The attached application, or | | |
| | United States application or PCT international application number filed on | | |
| The above-ide | entified 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. | | |
| | owledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine ent of not more than five (5) years, or both. | | |
| | ed and understand the contents of the application and am aware of the duty to disclose to the US Patent and ffice all information known to me to be material to patentability as defined in 37 CFR § 1.56. | | |
| | ASSIGNMENT | | |
| For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby sell, assign, transfer, to GlobalFoundries Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D Street 2, Singapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in and to the invention listed above, together with the Application, any and all Patents that may issue in the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents and Applications, for the United States and all foreign countries, and all the rights and privileges relating thereto including but not limited to the priority rights arising from said Applications, the right to recover and take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, present and future infringement, and the right to apply for, take and maintain patents on said inventions. | | | |
| | n of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect. | | |
| | | | |
| LEGAL NAM | ME OF INVENTOR | | |
| Inventor: | Xinshu CAI Date: 2021 DEC 19 | | |
| Signature: | Couse shu | | |
| Notes An appli | cation data sheet (PTO/SR/14 or equivalent), including naming the entire inventive entity, must accompany this form. | | |

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional form for each additional inventor.

| COMBINE | D DECLAR | | NMENT (37 CFR 1 PLICATION DATA | | TILITY OR DESIG 7 CFR 1.76) | N APPLICATION |
|--|--|---|---|--|--|--|
| Title of Invention | BIPOLAR | R TRANSISTOR: | S | | | |
| | | | DECLARATIO |)N | | |
| As the below | named inven | tor, I hereby declare | that: | | | |
| This declarati | VV | The attached applic | cation, or | | | |
| | | United States appli | cation or PCT intern | ational appli | cation number | filed on |
| The above-ide | entified applic | cation was made or a | authorized to be made | e by me. | | |
| I believe that | I am the origi | inal inventor or an or | riginal joint inventor | of a claimed | invention in the appli | cation. |
| | | any willful false stat ore than five (5) years | | eclaration is | punishable under 18 \ | U.S.C. 1001 by fine |
| | | | | | the duty to disclose to defined in 37 CFR § 1 | |
| | | | ASSIGNMEN | T | | |
| sell, assign, tr Street 2, Sing the invention any foreign of extensions the and Applicati but not limite may be neces | ransfer, to Glo apore, 73840 listed above, countries, and ereof that may ons, for the U ed to the prior ssary for the 1 | obalFoundries Singar 6, its successors and 7, together with the A 81 any reissues, re-ex 84 y be issued or grante 95 Juited States and all 1 96 rity rights arising fro | pore Pte. Ltd. having assigns, absolutely a application, any and aminations, renewal d, and all right, title foreign countries, and m said Applications or otherwise in res | a business a and forever, all Patents the s, continuation and interest the d all the right, the right to | which are hereby ackreddress of 60 Woodlan my entire right, title a hat may issue in the Usions, continuation-in-to the inventions contats and privileges relations recover and take all present and future in | ds Industrial Park D nd interest in and to United States and/or parts, divisionals or ained in said Patents ng thereto including such proceedings as |
| | | nbined Declaration in full force and ef | | eld unenforc | eable, then remainin | g portions hereof |
| | | | | | | |
| LEGAL NAM | ME OF INVE | NTOR | | | | |
| Inventor: | Shyue Seng | | | Date: | Dec 19 2021 | |
| Signature: | Jason | Tan | | | | |
| Note: An anni | ration data sh | eet (PTO/SR/14 or equi | ivalent), including nam | ing the entire | inventive entity, must ac | company this form |

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional form for each additional inventor.

| COMBINE | CD DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) | | | | |
|---|--|--|--|--|--|
| Title of Invention | BIPOLAR TRANSISTORS | | | | |
| | DECLARATION | | | | |
| As the below | named inventor, I hereby declare that: | | | | |
| | This declaration | | | | |
| | United States application or PCT international application number filed on | | | | |
| The above-id | entified 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. | | | | |
| | nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine then five (5) years, or both. | | | | |
| | red and understand the contents of the application and am aware of the duty to disclose to the US Patent and ffice all information known to me to be material to patentability as defined in 37 CFR § 1.56. | | | | |
| | ASSIGNMENT | | | | |
| sell, assign, t Street 2, Sing the invention any foreign extensions th and Applicat but not limite may be nece | I valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby ransfer, to GlobalFoundries Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D gapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in and to listed above, together with the Application, any and all Patents that may issue in the United States and/or countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or ereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents ions, for the United States and all foreign countries, and all the rights and privileges relating thereto including ed to the priority rights arising from said Applications, the right to recover and take all such proceedings as sary for the recovery of damages or otherwise in respect of past, present and future infringement, and the for, take and maintain patents on said inventions. | | | | |
| | on of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof neless remain in full force and effect. | | | | |
| | | | | | |
| LEGAL NAM | ME OF INVENTOR | | | | |
| Inventor: | Vibhor JAIN Date: 12/21/2021 | | | | |
| Signature: | Who Jin | | | | |
| N-4 A | igation data shoot (PTO/SP/IA or agrivalent), including naming the entire inventive entity, must aggomn any this form | | | | |

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional form for each additional inventor.

| COMBINE | CD DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) |
|--|---|
| Title of Invention | BIPOLAR TRANSISTORS |
| | DECLARATION |
| As the below | named inventor, I hereby declare that: |
| This declarat | |
| | United States application or PCT international application number filed on |
| The above-id | entified 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. |
| | nowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine tent of not more than five (5) years, or both. |
| | red and understand the contents of the application and am aware of the duty to disclose to the US Patent and affice all information known to me to be material to patentability as defined in 37 CFR § 1.56. |
| | ASSIGNMENT |
| sell, assign, to Street 2, Sing the invention any foreign of extensions the and Application but not limited may be necessity. | I valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I hereby ransfer, to GlobalFoundries Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park D gapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in and to listed above, together with the Application, any and all Patents that may issue in the United States and/or countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals or ereof that may be issued or granted, and all right, title and interest to the inventions contained in said Patents ions, for the United States and all foreign countries, and all the rights and privileges relating thereto including ed to the priority rights arising from said Applications, the right to recover and take all such proceedings as sary for the recovery of damages or otherwise in respect of past, present and future infringement, and the of for, take and maintain patents on said inventions. |
| | on of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof neless remain in full force and effect. |
| LEGAL NAM | ME OF INVENTOR |
| Inventor: | John J. PEKARIK Date: 21 December 2021 |
| Signature: | _ JJulale |
| | ication data sneet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. nal form for each additional inventor. |

PATENT REEL: 058460 FRAME: 0459

| COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) |
|--|
| BIPOLAR TRANSISTORS Title of Invention |
| DECLARATION |
| As the below named inventor, I hereby declare that: |
| This declaration The attached application, or is directed to: |
| United States application or PCT international application number filed on |
| 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 fin or imprisonment of not more than five (5) years, or both. |
| I have reviewed and understand the contents of the application and am aware of the duty to disclose to the US Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR § 1.56. |
| ASSIGNMENT |
| For good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I herebsell, assign, transfer, to GlobalFoundries Singapore Pte. Ltd. having a business address of 60 Woodlands Industrial Park Street 2, Singapore, 738406, its successors and assigns, absolutely and forever, my entire right, title and interest in and the invention listed above, together with the Application, any and all Patents that may issue in the United States and/only foreign countries, and any reissues, re-examinations, renewals, continuations, continuation-in-parts, divisionals of extensions thereof that may be issued or granted, and all right, title and interest to the inventions contained in said Paten and Applications, for the United States and all foreign countries, and all the rights and privileges relating thereto including but not limited to the priority rights arising from said Applications, the right to recover and take all such proceedings a may be necessary for the recovery of damages or otherwise in respect of past, present and future infringement, and the right to apply for, take and maintain patents on said inventions. |
| If any portion of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof shall nevertheless remain in full force and effect. |
| LEGAL NAME OF INVENTOR |
| Inventor: Robert J. GAUTHIER, JR. Date: |
| Signature: |
| Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |

PATENT

REEL: 058460 FRAME: 0460

RECORDED: 12/22/2021