PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5415222

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| HONGLIANG SHEN | 02/28/2019 |
| GUOXIANG NING | 02/28/2019 |
| ERFENG DING | 02/28/2019 |
| DONGSUK PARK | 02/27/2019 |
| XIAOXIAO ZHANG | 02/28/2019 |
| LAN YANG | 03/04/2018 |

RECEIVING PARTY DATA

| Name: | GLOBALFOUNDRIES INC. |
|-------------------|----------------------|
| Street Address: | PO BOX 309 |
| Internal Address: | UGLAND HOUSE |
| City: | GRAND CAYMAN |
| State/Country: | CAYMAN ISLANDS |
| Postal Code: | KY1-1104 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16298309 |

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.

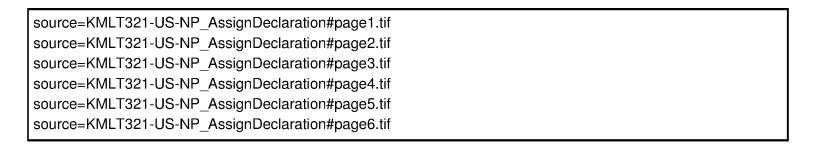
Email: sovando@rmsclaw.com Correspondent Name: ANDREW M. CALDERON

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: | 03/11/2019 |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |

Total Attachments: 6



| 1/6) | GF Ref. No.: KMLT321-US-NP |
|---|---|
| | ED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) |
| Title of Invention | DEVICE/HEALTH OF LINE (HOL) AWARE EBEAM BASED OVERLAY (EBO OVL) STRUCTURE |
| | DECLARATION |
| As the below | w named inventor, I hereby declare that: |
| This declara | (2_3) |
| is directed to | United States application or PCT international application number filed on |
| The above-i | dentified application was made or authorized to be made by me. |
| I believe tha | It am the original inventor or an original joint inventor of a claimed invention in the application. |
| | thowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine ment of not more than five (5) years, or both. |
| I have revie Trademark | wed and understand the contents of the application and am aware of the duty to disclose to the US Patent and Office all information known to me to be material to patentability as defined in 37 CFR § 1.56. |
| | ASSIGNMENT |
| hereby sell, HOUSE, G entire right, may issue i continuatio inventions a and privile; recover and present and | assign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO BOX 309, UGLAND RAND CAYMAN, CAYMAN ISLANDS KY1-1104 its successors and assigns, absolutely and forever, my title and interest in and to the invention listed above, together with the Application, any and all Patents that in the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, in-in-parts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the contained in said Patents and Applications, for the United States and all foreign countries, and all the rights ges relating thereto including but not limited to the priority rights arising from said Applications, the right to a take all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, future infringement, and the right to apply for, take and maintain patents on said inventions. Sion of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof theless remain in full force and effect. |
| CECAL N | |
| Invento | AME OF INVENTOR r: Hongliang SHEN Date: 2/28/2019 |
| Signatu | 767.1- |
| Note: An a Use an addi | pplication data sheet (PTO/SR/14 or equivalent), including naming the entire inventive entity, must accompany this form, tional form for each additional inventor. |
| - | |

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| I hereby ackn or imprisonme | 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. |
| I have reviewe Trademark Of | ed and understand the contents of the application and am aware of the duty to disclose to the US Patent and fice all information known to me to be material to patentability as defined in 37 CFR § 1.56. |
| | ASSIGNMENT |
| HOUSE, GRAentire right, the may issue in the continuation-in inventions con and privileges recover and tal present and fur | and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, I sign, transfer, to GLOBALFOUNDRIES Inc. having a business address of PO BOX 309, UGLAND UND CAYMAN, CAYMAN ISLANDS KY1-1104 its successors and assigns, absolutely and forever, my le and interest in and to the invention listed above, together with the Application, any and all Patents that the United States and/or any foreign countries, and any reissues, re-examinations, renewals, continuations, neparts, divisionals or extensions thereof that may be issued or granted, and all right, title and interest to the tained in said Patents and Applications, for the United States and all foreign countries, and all the rights relating thereto including but not limited to the priority rights arising from said Applications, the right to ke all such proceedings as may be necessary for the recovery of damages or otherwise in respect of past, the infringement, and the right to apply for, take and maintain patents on said inventions. |
| shall neverthe | less remain in full force and effect. |

Inventor: Guoxiang NING

Date: 2/28/2019

Signature: Graxima

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.

LEGAL NAME OF INVENTOR

| (3/6) | GF Ref. No.: KMLT321-US-NP |
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| EGAL MAR | |
| . | 3 OF INVENTOR |
| Inventor: E | 2/28/2019 Date: 2/28/2019 |
| orginature; | <u>.) ~/ 4</u> |

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| | ASSIGNMENT |
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| | n of this Combined Declaration or Assignment is held unenforceable, then remaining portions hereof eless remain in full force and effect. |
| LEGAL NAM | IE OF INVENTOR |
| Inventor: | Dongsuk PARK Date: Feb 21 2019 |
| Signature: | ication data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. |
| | nal form for each additional inventor. |

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LEGAL NAME OF INVENTOR

Inventor: Xiaoxiao ZHANG

PATENT

REEL: 048563 FRAME: 0211

3/4/2019 IMG_1217.jpg

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|--|---|
| DECLARATION As the below named inventor, I hereby declare that: This declaration | |
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| The attached application, or is directed to: United States application or PCT international application number | l on |
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| LEGAL NAME OF INVENTOR | |
| Inventor: Lan YANG Date: Man 4 2019 | |
| Signature: | |