PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT6704513

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MOHAMED A. NOUR	05/06/2021
PETER C. PALIWODA	05/04/2021
BYOUNG-WOON B. MIN	05/05/2021
TOSHIAKI KIRIHATA	05/11/2021

RECEIVING PARTY DATA

Name:	GLOBALFOUNDRIES U.S. INC.	
Street Address:	400 STONEBREAK ROAD EXTENSION	
City:	MALTA	
State/Country:	NEW YORK	
Postal Code:	12020	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17317938

CORRESPONDENCE DATA

Fax Number: (410)630-1656

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: 410-705-6400

Email: baumann@gibbiplaw.com

Correspondent Name: GIBB & RILEY, LLC

Address Line 1: 550M RITCHIE HIGHWAY, #286 Address Line 4: SEVERNA PARK, MARYLAND 21146

ATTORNEY DOCKET NUMBER:	GF2020308-US-NP
NAME OF SUBMITTER:	PAMELA M. RILEY
SIGNATURE:	/Pamela M. Riley/
DATE SIGNED:	05/12/2021
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

source=GF2020308-US-NP_Declaration-Assignment_05-12-2021#page1.tif

PATENT REEL: 056209 FRAME: 0476 source=GF2020308-US-NP_Declaration-Assignment_05-12-2021#page2.tif source=GF2020308-US-NP_Declaration-Assignment_05-12-2021#page3.tif source=GF2020308-US-NP_Declaration-Assignment_05-12-2021#page4.tif

PATENT REEL: 056209 FRAME: 0477

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
Title of CHARACTERISTIC-BASED SENSING AND METHOD MEMORY WITH READ CIRCUIT FOR CURRENT-TO-VOLTAGE SLOP CHARACTERISTIC-BASED SENSING AND METHOD	
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 numberfiled 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 fine 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 hereby sell, assign, transfer, to GLOBALFOUNDRIES U.S. Inc., having a business address of 400 Stonebreak Road Extension, Malta, NY 12020 U.S.A., 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.	
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: Mohamed A. Nour Date: 5/6/2021	
Signature: Nohamel Nour	
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.	

PATENT REEL: 056209 FRAME: 0478

COMBINED DECLARATION and ASSIGNMENT (37 CFR L63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)
MEMORY WITH READ CIRCUIT FOR CURRENT-TO-VOLTAGE SLOPE Title of CHARACTERISTIC-BASED SENSING AND METHOD Invention
DECLARATION
As the below named inventor. I hereby declare that:
This declaration
United States application or PCT international application number Sled 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.
Thereby acknowledge that any willful false statement made in this declaration is populable under 18 U.S.C. 1001 by fine or imprisonment of not more than five Cityean, or both.
I have reviewed and understand the contents of the application and are aware of the duty to disclose to the US Patent and Trademark Office all information known to the to be material to patentiability as defined in 37 CFR \$ 1.56.
ASSIGNMENT
For good and valuable consideration, the receipt, sofficiency and adequacy of which are barely actions college. I have by self-accept, transfer to GLOBAL FOUNDRIES U.S. Inc., having a business address of 400 Statebreak Road presention. Maths, NY 1070 U.S.A. are successors and assigns, absolutely and forever, my entire right, title and interest to and to the invention is self-above, together with the Application, and and Patent that may accept to the United States and only presign countries, and any recome re-examinations, resewable continuations, continuation-in-parts, the sacoustic
are the result there is the result of a section and all right the and the est to the inventions considered in and $P_{BBD} = A_{BBD} = A$
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 to the recovery of Gamages or otherwise in respect of pass, 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
Invenor Peter C Patiwoda Due 5/4/2001
Sugnature PHILLOID
Note: An application data sheet (PTD/SB/14 or equivalent), including busining the entire inventive entity, must accompany this form. Use an additional form for each additional inventor.

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COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)	
Title of Invention MEMORY WITH READ CIRCUIT FOR CURRENT-TO-VOLTAGE SLOPE CHARACTERISTIC-BASED SENSING AND METHOD	
DECLARATION	
As the below named inventor, I hereby declare that:	
This declaration	
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 fine 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 hereby sell, assign, transfer, to GLOBALFOUNDRIES U.S. Inc., having a business address of 400 Stonebreak Road Extension, Malta, NY 12020 U.S.A., 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.	
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: Byoung-Woon B. Min Date: 05/05/2021 Signature: Hyperful Date: 05/05/2021	

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.

COMBINED DECLARATION and ASSIGNMENT (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)		
Title of Invention	MEMORY WITH READ CIRCUIT FOR CURRENT-TO-VOLTAGE SLOPE CHARACTERISTIC-BASED SENSING AND METHOD	
	DECLARATION	
As the below	named inventor, I hereby declare that:	
This declarati	8 / v ·	
	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 fine 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 hereby sell, assign, transfer, to GLOBALFOUNDRIES U.S. Inc., having a business address of 400 Stonebreak Road Extension, Malta, NY 12020 U.S.A., 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.		
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:	Toshiaki Kirihata Date: 5/11/2021	
Signature: Johio Li Wes		
	ication data sheet (PTO/SB/14 or equivalent), including naming the eatire inventive entity, must accompany this form. nal form for each additional inventor.	

PATENT REEL: 056209 FRAME: 0481

RECORDED: 05/12/2021