

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4433713

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
FRANK KLEFENZ	08/08/2015
PETER HUSAR	08/06/2015
ADAM WILLIAMSON	05/12/2017
LARS SCHUMANN	10/29/2015
LARS HILLER	08/06/2015
INGO HOERSELMANN	08/26/2015
ANDREAS SCHOBER	10/02/2015
RECEIVING PARTY DATA	
Name:	FRAUNHOFER-GESELLSCHAFT ZUR FOERDERUNG DER ANGEWANDTEN FORSCHUNG E.V.
Street Address:	HANSASTRASSE 27C
City:	MUNICH
State/Country:	GERMANY
Postal Code:	80686
Name:	TECHNISCHE UNIVERSITAET ILMENAU
Street Address:	MAX-PLANCK-RING 14
City:	ILMENAU
State/Country:	GERMANY
Postal Code:	98693
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14799488
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	650-838-4300
Email:	patentprocurement@perkinscoie.com, jpallach@perkinscoie.com
Correspondent Name:	PERKINS COIE LLP
Address Line 1:	P.O. BOX 1247

PATENT

Address Line 4: SEATTLE, WASHINGTON 98111-1247	
ATTORNEY DOCKET NUMBER:	110971-9000.US01
NAME OF SUBMITTER:	JESSICA PALLACH
SIGNATURE:	/Jessica Pallach/
DATE SIGNED:	05/26/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 15 source=110971-9000-Declaration#page1.tif source=110971-9000-Declaration#page2.tif source=110971-9000-Declaration#page3.tif source=110971-9000-Declaration#page4.tif source=110971-9000-Declaration#page5.tif source=110971-9000-Declaration#page6.tif source=110971-9000-Declaration#page7.tif source=110971-9000-Declaration#page8.tif source=110971-9000-Declaration#page9.tif source=110971-9000-Declaration#page10.tif source=110971-9000-Declaration#page11.tif source=110971-9000-Declaration#page12.tif source=SubStmt-Williamson-110971-9000US01#page1.tif source=SubStmt-Williamson-110971-9000US01#page2.tif source=SubStmt-Williamson-110971-9000US01#page3.tif	

**DECLARATION (37 C.F.R. 1.63) FOR UTILITY OR DESIGN PATENT APPLICATION
USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT**

Title of Invention: ASYMMETRICAL MEMRISTOR

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

[X] United States application or PCT application number 14/799,488, filed on July 14, 2015.

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.

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Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the Attorney Docket Number provided above in the header of this document;

Whereas,

1. Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V., a corporation duly organized under and pursuant to the laws of the country of Germany, having its principal place of business at Hansastrasse 27c, 80686 Munich, Germany, and

2. Technische Universität Ilmenau, duly organized under and pursuant to the laws of the country of Germany, having its principal place of business at Max-Planck-Ring 1498693 Ilmenau, Germany,

are hereinafter referred to as "ASSIGNEES", are desirous of acquiring and each undersigned inventor desires to grant the entire right, title, and interest in the said invention and application and in any Letters Patent which may be granted with regard to the same.

Now, therefore, for one dollar (\$1.00) and good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor, hereinafter referred to as ASSIGNORS, hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to hereinafter referred to as ASSIGNEE's, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the Assignee, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by the Assignee, its successors, legal representatives, and assigns to the full end of the terms for which any and

all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute, without charge to said Assignee but at the Assignee's expense, any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the invention and all related patents and applications, in Assignee, its successors, legal representatives, and assigns, whenever requested by the Assignee, its successors, legal representatives, or assigns.

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Frank Klefenz
Frank KLEFENZ

8.8.2015
Date

Peter HUSAR

Date

Adam WILLIAMSON

Date

Lars SCHUMANN

Date

Lars HILLER

Date

Ingo HOERSELMANN

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Andreas SCHÖBER

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Frank KLEFENZ

Date

Peter Husar

06.08.15

Peter HUSAR

Date

Adam WILLIAMSON

Date

Lars SCHUMANN

Date

Lars HILLER

Date

Ingo HOERSELMANN

Date

Andreas SCHOBER

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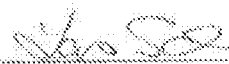
Date

Peter HUSAR

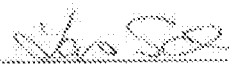
Date

Adam WILLIAMSON

Date



Lars SCHUMANN



Date 29.10.2015

Lars HILLER

Date

Ingo HOERSELMANN

Date

Andreas SCHOBER

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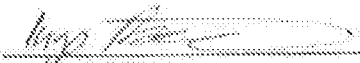
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Now, therefore, for one dollar (\$1.00) and good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor, hereinafter referred to as ASSIGNORS, hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to hereinafter referred to as ASSIGNEE's, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to the Assignee, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by the Assignee, its successors, legal representatives, and assigns to the full end of the terms for which any and

all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute, without charge to said Assignee but at the Assignee's expense, any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the invention and all related patents and applications, in Assignee, its successors, legal representatives, and assigns, whenever requested by the Assignee, its successors, legal representatives, or assigns.

ASSIGNOR(S) grants the attorney of record the power to insert on this Assignment any further identification that may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to the Assignee and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants the assignee, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment.

This Assignment may be executed in one or more counterparts, each of which shall be deemed an original and all of which may be taken together as one and the same Assignment.

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.

Frank KLEFENZ

Date

Peter HUSAR

Date

Adam WILLIAMSON

Date

Lars SCHUMANN

Date

Lars HILLER

Date

Ingo HOERSELMANN

Date



Andreas SCHÖBER

Date

02.10.18

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**SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY
OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)**

Title of Invention	ASYMMETRICAL MEMRISTOR		
This statement is directed to:			
<input type="checkbox"/> The attached application,			
OR			
<input checked="" type="checkbox"/> United States application or PCT international application number <u>14/799,488</u> filed on <u>07-14-2015</u>			
LEGAL NAME of inventor to whom this substitute statement applies:			
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)			
Adam WILLIAMSON			
Residence (except for a deceased or legally incapacitated inventor):			
City	State	Country	
Ilmenau		DE	
Mailing Address (except for a deceased or legally incapacitated inventor):			
Karl-Zink-Strasse 25			
City	State	Zip	Country
Ilmenau		98693	DE
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.			
The above-identified application was made or authorized to be made by me.			
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.			
Relationship to the inventor to whom this substitute statement applies:			
<input type="checkbox"/> Legal Representative (for deceased or legally incapacitated inventor only),			
<input type="checkbox"/> Assignee,			
<input checked="" type="checkbox"/> Person to whom the inventor is under an obligation to assign,			
<input type="checkbox"/> Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or			
<input type="checkbox"/> Joint Inventor.			

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:

- ☐ Inventor is deceased,
☐ Inventor is under legal incapacity,
☐ Inventor cannot be found or reached after diligent effort, or
☒ Inventor has refused to execute the oath or declaration under 37 CFR 1.63.

If there are joint inventors, please check the appropriate box below:

- ☒ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.

OR

- ☐ An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).

WARNING:

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

Name: Univ.-Prof. Dr. rer. nat. habil.
Dr. h.c. mult. Prof. h.c. mult. Date (Optional): 12. MAI 2017
 Signature: Peter Scharff
 Rektor

APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:

If the applicant is a juristic entity, list the applicant name and the title of the signer:

Applicant Name: Technische Universität Ilmenau

Title of Person Executing
This Substitute Statement:

The signer, whose title is supplied above, is authorized to act on behalf of the applicant.

Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City: Ilmenau State: Country: DE

Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):

City: State: Zip: Country: DE

Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the oath or declaration under 37 CFR 1.63.

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The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

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7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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