

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5517023

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
LI ZHANG	04/22/2019
ZHIQIANG CHEN	04/22/2019
SEN WANG	04/22/2019
XIAOFEI XU	04/22/2019
YUANJING LI	04/22/2019
XIN JIN	04/20/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TSINGHUA UNIVERSITY
<b>Street Address:</b>	TSINGHUA PARK
<b>Internal Address:</b>	HAIDIAN DISTRICT
<b>City:</b>	BEIJING
<b>State/Country:</b>	CHINA
<b>Postal Code:</b>	100084
<b>Name:</b>	NUCTECH COMPANY LIMITED
<b>Street Address:</b>	2ND FLOOR, BLOCK A, TONGFANG BUILDING SHUANGQINGLU
<b>Internal Address:</b>	HAIDIAN DISTRICT
<b>City:</b>	BEIJING
<b>State/Country:</b>	UNITED STATES
<b>Postal Code:</b>	100084
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16137547
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<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>	
<b>Email:</b>	request@slwip.com
<b>Correspondent Name:</b>	SCHWEGMAN LUNDBERG & WOESSNER P.A.
<b>Address Line 1:</b>	PO BOX 2938
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402-0938
<b>PATENT</b>	

<b>ATTORNEY DOCKET NUMBER:</b>	5228.010US1
<b>NAME OF SUBMITTER:</b>	KERRI WRIGHT
<b>SIGNATURE:</b>	/KERRI WRIGHT/
<b>DATE SIGNED:</b>	05/10/2019

**Total Attachments: 9**

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RECORDATION FORM COVER SHEET  
PATENTS ONLY

Atty Ref/Docket No.: 5228.010US1

Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Li Zhang, Zhiqiang Chen, Sen Wang, Xiaofei Xu,  
Yuanjing Li, Xin Jin

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other

Execution Date: April 22, 2019, April 22, 2019, April 22, 2019, April 22, 2019, April 22, 2019, April 20, 2019

2. Name and address of receiving party(ies):

Name: Tsinghua University

Street Address: Tsinghua Park  
Haidian District

City: Beijing, 100084

Country: China

Additional name(s) & address(es) attached? ☒ Yes ☐ No

Name: Nuctech Company Limited

Street Address: 2nd Floor, Block A, TongFang Building  
Shuangqinglu  
Haidian District

City: Beijing, 100084

Country: China

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is:

A. Patent Application No.(s)

Serial No. 16/137,547

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Aaron R. Wininger

Address:

Schwegman Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, Minnesota 55402

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$ 0.00

☐ Enclosed

☐ Authorized to be charged to deposit account 19-0743

8. Please charge any additional fees or credit any over payments to our Deposit Account No.: 19-0743


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9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Aaron R. Wininger/Reg. No. 45,299

Name of Person Signing



Signature

2019-05-10

Date

Total number of pages including cover sheet: 9

Mail documents to be recorded with required cover sheet information to:

Commissioner of Patents and Trademarks  
Mail Stop Assignment Recordation Services  
P.O. Box 1450  
Alexandria, VA 22313-1450

PATENT  
REEL: 049139 FRAME: 0205

#### ASSIGNMENT

WHEREAS, Li Zhang, Zhiqiang Chen, Sen Wang, Xiaofei Xu, Yuanjing Li and Xin Jin (hereinafter the "Undersigned") have made one or more inventions and other subject matter (hereinafter collectively referred to as the "Invention"); as described in the patent application filed on September 21, 2018, assigned US application serial number 16/137,547, and titled DATA PROCESSING METHOD AND DEVICE as described in a patent application filed on February 10, 2017 assigned PCT application serial number PCT/CN2017/073206, and titled DATA PROCESSING METHOD AND DATA PROCESSING APPARATUS; and as described in a patent application filed on August 3, 2016 assigned Chinese application serial number 201610630202.3, and titled DATA PROCESSING METHOD AND DEVICE.

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency, and adequacy of which are hereby acknowledged by the Undersigned, the Undersigned do hereby irrevocably and unconditionally:

CONVEY, ASSIGN, AND TRANSFER to Nucotech Company Limited (the "Assignee"), having a place of business at 2nd Floor, Block A, TongFang Building Shuangqinglu, Haidian District, Beijing 100084, China, and to Tsinghua University (jointly the "Assignee"), having a place of business at Tsinghua Park, Haidian District, Beijing 100084, China, the Undersigned's entire right, title, and interest for the United States and all foreign countries and jurisdictions in and to:

the Invention which is disclosed in the above-identified application or applications;

such application or applications, and all divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other applications for a patent or patents which have been or shall be filed in the United States (including all provisional and non-provisional applications), and in all foreign countries and jurisdictions based in whole or in part on any of such invention (including any application for a utility model or an innovation patent application);

all original and reissued patents which have been or shall be issued in the United States and all foreign countries and jurisdictions based in whole or in part on any of such invention;

including the right to claim priority to the above-identified patent application or applications in relation to subject matter based in whole or in part on the above-identified patent application or applications and any of the foregoing including the right to file foreign applications under the provisions of any convention or treaty;

and including the right to all causes of action, remedies, and other enforcement rights related to the above-identified application or applications, including without limitation the right to sue for past, present, or future infringement, misappropriation, or violation of any and all rights related to the above-identified patent application or applications and any of the foregoing, including the right to obtain and collect damages for past, present, or future infringement;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such invention to the Assignee;

AUTHORIZE AND REQUEST that any attorney associated with U.S. Patent and Trademark Office (USPTO) Customer No. 21186 may (directly or through his/her designee) delete, insert, or alter any information related to the above-identified patent application or applications or any of the foregoing, after execution of this Assignment;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or shall be made to others by the Undersigned, and that the full right to convey the same as herein expressed is possessed by the Undersigned;

COVENANT, that when requested and without compensation, but at the expense of the Assignee, in order to carry out in good faith the intent and purpose of this Assignment, the Undersigned shall (1) execute all provisional, non-provisional, divisional, continuing (including continuation-in-part), substitute, renewal, reissue, and all other patent applications for the Invention; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers for the Invention; (3) communicate to the Assignee all facts known to the Undersigned relating to the Invention and the history thereof; (4) cooperate with the Assignee in any interference, reexamination, reissue, opposition, dispute, or litigation involving any of the applications or patents for the Invention; and (5) take such further actions as the Assignee shall reasonably consider necessary or desirable for vesting title to such Invention in the Assignee, or for securing, maintaining and enforcing proper patent protection for the Invention;

COVENANT, that should any provision of this agreement be held unenforceable by an authority of competent jurisdiction, such a ruling shall not affect the validity and enforceability of the remaining provisions.

THIS AGREEMENT IS TO BE BINDING on the heirs, assigns, representatives, and successors of the Undersigned, and is to extend to the benefit of the successors, assigns, and nominees of the Assignee.

AGREED as of the date of my signature below:

**Assignment**


Assignors: Li Zhang et al.  
Title: DATA PROCESSING METHOD AND DEVICE  
Page 3 of 8

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Docket No: 5228 010US1  
Client Ref. No. 17PF1476US

**Assignor:**

(Signature):



Name: Li Zhang

City/State: Beijing, China

Date:

April 22, 2018

Assignment

Assignors: Li Zhang et al.

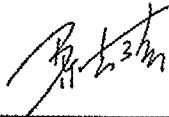
Title: DATA PROCESSING METHOD AND DEVICE

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Docket No: 5228.010US1  
Client Ref. No. 17PF1476US

Assignor:

(Signature):



Name: Zhigiang Chen

City/State: Beijing, China

Date:

April 22, 2019

Assignment

Assignors: Li Zhang et al.

Title: DATA PROCESSING METHOD AND DEVICE

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Docket No: 5228.010US1  
Client Ref. No. 17PF1476US

Assignor:

(Signature):

Sen Wang

Name: Sen Wang

City/State: Beijing, China

Date:

April 22, 2019



Assignment  
Assignors: Li Zhang et al.  
Title: DATA PROCESSING METHOD AND DEVICE  
Page 6 of 8

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Docket No: 5228.010US1  
Client Ref No: 17PF1476US

Assignor:

(Signature): Xiaofei Xu

Name: Xiaofei Xu

City/State: Beijing, China

Date: April 22, 2019

Assignment  
Assignors: Li Zhang et al.  
Title: DATA PROCESSING METHOD AND DEVICE  
Page 7 of 8

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Docket No: 5228.010US1  
Client Ref. No. 17PF1476US

Assignor:

(Signature):

Li Yuanjing

Name: Yuanjing Li

City/State: Beijing, China

Date:

Apr. 17, 2019

Assignment  
Assignors: Li Zhang et al.  
Title: DATA PROCESSING METHOD AND DEVICE  
Page 8 of 8

Docket No: 5228.010US1  
Client Ref. No. 17PF1476US

Assignor:

(Signature):

Xin Jin

Name: Xin Jin

City/State: Beijing, China

Date:

April 20, 2019

PATENT

RECORDED: 05/10/2019

REEL: 049139 FRAME: 0213