

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

Assignment ID: PATI146890

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Peter A. Dowben	01/03/2022
Xiaoshan Xu	01/04/2022
Guanhua Hao	10/18/2021
Thilini K. Ekanayaka	01/03/2022
Xuanyuan Jiang	01/19/2022
Andrew J. Yost	01/21/2022
<b>RECEIVING PARTY DATA</b>	
<b>Company Name:</b>	Board of Regents of the University of Nebraska
<b>Street Address:</b>	3835 Holdrege Street
<b>City:</b>	Lincoln
<b>State/Country:</b>	NEBRASKA
<b>Postal Code:</b>	68583-7045
<b>PROPERTY NUMBERS Total: 2</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	17583858
<b>Application Number:</b>	63141288
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	3522600123
<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>Phone:</b>	(352)505-2520
<b>Email:</b>	docketing@talemip.com
<b>Correspondent Name:</b>	TALEM IP LAW LLP
<b>Address Line 1:</b>	1204 NW 69TH TERRACE
<b>Address Line 2:</b>	SUITE A
<b>Address Line 4:</b>	GAINESVILLE, FLORIDA 32605
<b>ATTORNEY DOCKET NUMBER:</b>	MAR-UNL-106X
<b>NAME OF SUBMITTER:</b>	William Simmons
<b>SIGNATURE:</b>	William Simmons
<b>DATE SIGNED:</b>	04/05/2024

**Total Attachments: 6**

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## ASSIGNMENT

WHEREAS, WE,  
**Peter A. Dowben**, having a residence in Crete, Nebraska,  
**Xiaoshan Xu**, having a residence in Lincoln, Nebraska,  
**Guanhua Hao**, having a residence in Lincoln, Nebraska,  
**Thilini K. Ekanayaka**, having a residence in Lincoln, Nebraska,  
**Xuanyuan Jiang**, having a residence in Gainesville, Florida,  
**Andrew J. Yost**, having a residence in Stillwater, Oklahoma,

(hereinafter "ASSIGNOR") are original joint inventors of the subject matter ("INVENTION") disclosed and/or claimed in the Patent Application ("APPLICATION") which:

☐ will be filed. ASSIGNOR hereby authorizes and requests Talem IP Law to insert this APPLICATION's Application No., filing date, and Office, when known:  
filed on \_\_\_\_\_, Serial No. \_\_\_\_\_, in the United States  
Patent and Trademark Office;

☒ was filed on January 25, 2021, Serial No. 63/141,288, in the United States Patent and Trademark Office;

WHEREAS, by virtue of and pursuant to our employment, or other agreement, with the THE UNIVERSITY OF NEBRASKA, we have assigned and do hereby assign all rights in the INVENTION to BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA or its assignee or designee;

WHEREAS, BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, having an office at 3835 Holdrege Street, Lincoln, Nebraska 68583-7045 is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent which may be granted therefor in the United States and in any and all foreign countries;

NOW, THEREFORE, in view of good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, WE, the undersigned, confirm and ratify that WE have sold, assigned, and transferred, and by these presents do sell, assign, and transfer, unto said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, its successors and assigns, the full and exclusive right to the said INVENTION in the United States and its territorial possessions and in all foreign countries and the entire right, title, and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, and extensions thereof.

WE hereby authorize and request the Patent Office Officials in the United States and in any and all foreign countries to issue any and all of said Letters Patent, when granted, to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, as the assignee of the entire right, title and interest in and to the same, for the sole use and behalf of said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, its successors and assigns.

FURTHER, WE agree that WE will communicate to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, or its representatives, any facts known to me respecting said invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA; make all rightful oaths; and generally do everything possible to aid the said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and in any and all foreign countries.

I, the said **ASSIGNOR** have executed this Assignment this 3 day of January, 2022.

  
Peter A. Dowben

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Xiaoshan Xu

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
Guanhua Hao

I, the said **ASSIGNOR** have executed this Assignment this 3 day of January, 2022.

  
Thilini K. Ekanayaka

FURTHER, WE agree that WE will communicate to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, or its representatives, any facts known to me respecting said invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA; make all rightful oaths; and generally do everything possible to aid the said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and in any and all foreign countries.

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
**Peter A. Dowben**

I, the said **ASSIGNOR** have executed this Assignment this 4 day of January, 2022.

  
\_\_\_\_\_  
**Xiaoshan Xu**

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
**Guanhua Hao**

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

\_\_\_\_\_  
**Thilini K. Ekanayaka**

FURTHER, WE agree that WE will communicate to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, or its representatives, any facts known to me respecting said invention; testify in any legal proceedings; sign all lawful papers; execute all divisional, continuation, substitution, renewal, and reissue applications; execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA; make all rightful oaths; and generally do everything possible to aid the said BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA, its successors and assigns, to obtain and enforce proper protection for said invention in the United States and in any and all foreign countries.

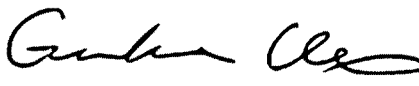
I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
**Peter A. Dowben**

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
**Xiaoshan Xu**

I, the said **ASSIGNOR** have executed this Assignment this 18th day of October, 2021.

  
\_\_\_\_\_  
**Guanhua Hao**

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

\_\_\_\_\_  
**Thilini K. Ekanayaka**

I, the said **ASSIGNOR** have executed this Assignment this 19 day  
of January, 2022.



\_\_\_\_\_  
**Xuanyuan Jiang**

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day  
of \_\_\_\_\_, 2022.

\_\_\_\_\_  
**Andrew J. Yost**

Agreed and accepted this \_\_\_\_\_ day of \_\_\_\_\_, 2022.

BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA

By: \_\_\_\_\_

Name & Title: \_\_\_\_\_

I, the said **ASSIGNOR** have executed this Assignment this \_\_\_\_\_ day  
of \_\_\_\_\_, 2022.

\_\_\_\_\_  
**Xuanyuan Jiang**

I, the said **ASSIGNOR** have executed this Assignment this 21 \_\_\_\_\_  
day of \_\_\_\_\_ January \_\_\_\_\_, 2022.

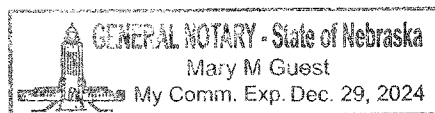
  
\_\_\_\_\_  
**Andrew J. Yost**

Agreed and accepted this 17<sup>th</sup> day of March, 2022.

BOARD OF REGENTS OF THE UNIVERSITY OF NEBRASKA

By: 

Name & Title: Robert Wilhelm  
Vice Chancellor for Research and Economic Development



*Mary M Guest*  
3/17/2022