

PATENT ASSIGNMENT COVER SHEET

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 Stylesheet Version v1.2

EPAS ID: PAT7344530

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
XIAONING JIANG	03/06/2020
TRAEYANG KIM	03/09/2020
YONG ZHU	03/20/2020
RECEIVING PARTY DATA	
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City:	RALEIGH
State/Country:	NORTH CAROLINA
Postal Code:	27606
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	16808786
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<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>	
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NAME OF SUBMITTER:	RAGAN BUCKLEY
SIGNATURE:	/Ragan Buckley/
DATE SIGNED:	05/23/2022
Total Attachments: 5	
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**ASSIGNMENT
OF UTILITY PATENT APPLICATION**

WHEREAS, the following parties:

<u>Name</u>	<u>Address</u>
Xiaoning Jiang	1021 Main Campus Drive, 2nd Floor Raleigh, NC 27606
Traeyang Kim	1021 Main Campus Drive, 2nd Floor Raleigh, NC 27606
Yong Zhu	1021 Main Campus Drive, 2nd Floor Raleigh, NC 27606

hereinafter referred to as ASSIGNOR, has/have invented certain new and useful improvements ("invention(s)") as described and set forth in the below-identified utility application for United States Letters Patent entitled:

FLEXIBLE PIEZO-COMPOSITE SENSORS AND TRANSDUCERS,

which was:

- executed on even date herewith,
- filed with the United States Patent and Trademark Office (USPTO) on March 4, 2020, and assigned Serial No. 16/808,786, and
- further described in U.S. Utility application entitled "Flexible Piezo-Composite Sensors and Transducers", filed with the USPTO on March 5, 2019, and assigned Serial No. 62/813,896.

WHEREAS, **North Carolina State University**, having a place of business at Office of Research Commercialization, 1021 Main Campus Drive, 2nd Floor, Raleigh, NC 27606, hereinafter referred to as ASSIGNEE, is desirous of acquiring ASSIGNOR'S interest in and to said invention(s), said utility application, said provisional application, and any U.S. and foreign patents which are related to the same.

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged by ASSIGNOR, ASSIGNOR has sold, assigned and transferred and does hereby sell, assign and transfer unto ASSIGNEE, and ASSIGNEE'S successors and assigns, (a) the entire right, title and interest, for the United States of America, in and to said invention(s), said utility application, and said Provisional application and all the rights and privileges in any application and under any and all patents that may be granted in the U.S. for said inventions, including all corresponding provisional, continuation, continuation-in-part, divisional, reissue, and reexamination applications; and (b) the entire right, title and interest in and to said invention(s), said utility application, and said provisional application for all countries foreign to the U.S., including all rights of priority arising from them, and all the rights and privileges under any and all forms of protection, including patents, that may be granted in said countries foreign to the U.S. for them.

ASSIGNOR authorizes ASSIGNEE to make application for such protection in its own name and maintain such protection in any and all countries foreign to the U.S., and to invoke

and claim for any application for patent or other form of protection for said Inventions, without further authorization from ASSIGNOR, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

ASSIGNOR hereby consents that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of ASSIGNEE to apply for patent or other form of protection for said Inventions, said utility application, or said provisional application and to claim the aforesaid benefit of the right of priority.

ASSIGNOR requests that any and all patents for said inventions be issued to ASSIGNEE in the U.S. and to ASSIGNEE in all countries foreign to the U.S., or to such nominee as ASSIGNEE may designate.

ASSIGNOR covenants and agrees that, when requested, ASSIGNOR shall, without charge to ASSIGNEE but at ASSIGNEE'S expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable, or convenient in connection with the patent applications, patents, or other forms of protection of said invention(s), and for the defense and protection thereof if challenged in the court of law.

ASSIGNOR authorizes ASSIGNEE or its agents to insert, on ASSIGNOR's behalf, the filing date and/or serial number above pertaining to the utility application and/or the provisional application, if not known as of the date of execution of this document.



Xiaoning Jiang

Date: 3/6/20

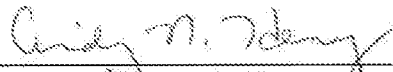
United States of America

State of North Carolina

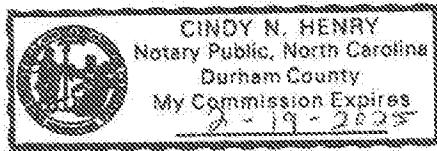
County of Wake

On this 6th day of March, 20 20, before me personally came **Xiaoning Jiang** to me known to be the individual described above and who executed the foregoing instrument, or acknowledged execution of the same.

(SEAL)



Notary Public



February 19, 2025

My Commission Expires (Date)

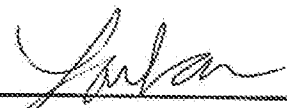
INVENTOR:  Date: 03-09-2020
Taeyang Kim

City/Country Seoul / South Korea

WITNESS 1:  Date: 03-09-2020

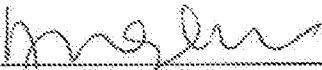
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City/Country Seoul / South Korea

WITNESS 1:  Date: 03-09-2020

Print Name: Youngbae Han

City/Country Seoul / South Korea

INVENTOR:  Date: 3/20/2020
Yong Zhu

WITNESS 1:  Date: 3/20/20

Print Name: XIAOLIN WANG