PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7984423

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
SEQUENCE:	3

CONVEYING PARTY DATA

Name	Execution Date
ANDREAS BUTHE	10/06/2017
PING WANG	10/30/2017
SONGTAO WU	07/28/2017

RECEIVING PARTY DATA

Name:	REGENTS OF THE UNIVERSITY OF MINNESOTA	
Street Address:	200 OAK STREET SE	
Internal Address:	600 MCNAMARA ALUMNI CENTER	
City:	MINNEAPOLIS	
State/Country:	MINNESOTA	
Postal Code:	55455-2020	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	18327433

CORRESPONDENCE DATA

Fax Number: (248)647-5210

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: 2486476000

Email: patents@dinsmore.com

Correspondent Name: DINSMORE & SHOHL LLP

Address Line 1: 900 WILSHIRE DR

Address Line 2: SUITE 300

Address Line 4: TROY, MICHIGAN 48084

Tatal Attachments C	
DATE SIGNED:	06/01/2023
SIGNATURE: /Tamera Short/	
NAME OF SUBMITTER: TAMERA SHORT	
ATTORNEY DOCKET NUMBER:	22562-3536 (TTC-89214/08)

Total Attachments: 6

PATENT REEL: 063830 FRAME: 0498

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PATENT REEL: 063830 FRAME: 0499

ASSIGNMENT

WHEREAS, we, Andreas Buthe, residing at Billungerstr, 18, D-48565 Stein	furt.
Germany; Ping Wang, residing at 3 Ridge Road, North Oaks, Minnesota 55127, United State	es of
America; and Songtao Wu, residing at 3036 Appleridge Dr., Ann Arbor, Michigan 48	103.
United States of America, hereinafter the ASSIGNORS, invented certain new and us	seful
BIOACTIVE MATERIALS for which we executed an application for a United States Pa	atent
and for which said application for United States Patent was filed on November 13, 2017, un-	der

Patent Application No	
Attorney Docket No.	TTC-89206/08 / IP-A-751CON,2

WHEREAS, the ASSIGNORS hereby authorize and request the attorney(s) and/or agent(s) empowered to act on Regents of the University of Minnesota's behalf in the aforementioned application, to insert above the filing date and application number of said application, when known;

WHEREAS, Regents of the University of Minnesota, a Non-profit Corporation of the State of Minnesota, with a place of business at 600 McNamara Alumni Center; 200 Oak Street SE; Minneapolis, Minnesota 55455-2020, hereinafter called the ASSIGNEE, is desirous of acquiring ASSIGNOR entire right, title and interest in and to said application and the inventions therein disclosed and any Letters Patent that may issue thereon;

AND, WHEREAS, it is the intent of the ASSIGNORS to assign all rights to the above referenced application to the ASSIGNEE, including, but not limited to, all substantive rights in the above-referenced application as well as the right to claim priority, the right to be granted a patent in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States;

NOW, THEREFORE, for good and valuable consideration, receipt whereof is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, its successors and assigns, the entire right, title and interest, including the right to claim priority in and to said application, the inventions therein disclosed, and any improvements thereon, and in any and all Letters Patent that may be granted therefor in the United States and its territorial possessions and in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States, and in and to any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof;

ASSIGNORS hereby authorize and request the Patent Office Officials in the United States and its territorial possessions, and in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States, to issue, when granted, any Letters Patent thereon, and any and all divisions, continuations, substitutions, renewals, reexaminations, extensions and reissues thereof, to said ASSIGNEE, its successors and assigns, as the assignee of the entire right title and interest in and to the same, for the sole use and behalf of the ASSIGNEE and the ASSIGNEE'S successors and assigns, to the full end of the term for which



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the Letters Patent may be granted, including the term of any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof, as fully and entirely as the same would have been held by the ASSIGNORS had this assignment not been made;

ASSIGNORS hereby authorize said ASSIGNEE, its successors and assigns, to file in its own name applications for patent in foreign countries in connection with the inventions hereby transferred, under the International Convention claiming the priority of said United States application or otherwise, and to secure in its own name the Letters Patent issued thereon, including any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof; and

ASSIGNORS hereby agree that, upon request, ASSIGNORS will sign all papers, and make all rightful oaths, and do all acts which said ASSIGNEE, its successors or assigns, may consider necessary in connection with said United States application, and in connection with any other United States application or foreign applications that may be filed in connection with said inventions, and with any improvements thereon, and in connection with any Letters Patent issued thereon, including any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof.

Date:	101041177	Signature:	Andreas/Buthe
Date:		Signature:	Ping Wung
Date:	<u></u>	Signature:	Songtao Wu

ASSIGNMENT

WHEREAS, we, Andreas Buthe, residing at Billungerstr. 18, D-48565 Steinfur
Germany; Ping Wang, residing at 3 Ridge Road, North Oaks, Minnesota 55127, United States of
America; and Songtao Wu, residing at 3036 Appleridge Dr., Ann Arbor, Michigan 48103
United States of America, hereinafter the ASSIGNORS, invented certain new and usefu
BIOACTIVE MATERIALS for which we executed an application for a United States Pater
and for which said application for United States Patent was filed on November 13, 2017, under

	Patent Application No.	4
\mathbf{x}	Attorney Docket No.	TTC-89206/08 / IP-A-751CON.2

WHEREAS, the ASSIGNORS hereby authorize and request the attorney(s) and/or agent(s) empowered to act on Regents of the University of Minnesota's behalf in the aforementioned application, to insert above the filing date and application number of said application, when known;

WHEREAS, Regents of the University of Minnesota, a Non-profit Corporation of the State of Minnesota, with a place of business at 600 McNamara Alumni Center; 200 Oak Street SE; Minneapolis, Minnesota 55455-2020, hereinafter called the ASSIGNEE, is desirous of acquiring ASSIGNOR entire right, title and interest in and to said application and the inventions therein disclosed and any Letters Patent that may issue thereon;

AND, WHEREAS, it is the intent of the ASSIGNORS to assign all rights to the above referenced application to the ASSIGNEE, including, but not limited to, all substantive rights in the above-referenced application as well as the right to claim priority, the right to be granted a patent in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States;

NOW, THEREFORE, for good and valuable consideration, receipt whereof is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE, its successors and assigns, the entire right, title and interest, including the right to claim priority in and to said application, the inventions therein disclosed, and any improvements thereon, and in any and all Letters Patent that may be granted therefor in the United States and its territorial possessions and in any and all countries and Regional Patent Offices, including, without limitation, the PCT Contracting States, and in and to any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof;

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ASSIGNORS hereby agree that, upon request, ASSIGNORS will sign all papers, and make all rightful oaths, and do all acts which said ASSIGNEE, its successors or assigns, may consider necessary in connection with said United States application, and in connection with any other United States application or foreign applications that may be filed in connection with said inventions, and with any improvements thereon, and in connection with any Letters Patent issued thereon, including any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof.

Date:	Signature:	Andreas Buthe
Date: Oct 30, 2017	Signature:	Ping Wang Ping Wang
Date:	Signature:	Songtao Wu

ASSIGNMENT

WHEREAS, we, Andreas Buthe, residing at Billungerstr. 18, D-48565 Steinfurt,
Germany; Ping Wang, residing at 3 Ridge Road, North Oaks, Minnesota 55127, United States of
America; and Songtao Wu, residing at 3036 Appleridge Dr., Ann Arbor, Michigan 48103,
United States of America, hereinafter the ASSIGNORS, invented certain new and useful
BIOACTIVE MATERIALS for which we executed an application for a United States Patent
and for which said application for United States Patent was filed on November 13, 2017, under

	Patent Application No.	
x	Attorney Docket No.	TTC-89206/08 / IP-A-751CON.2

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the Letters Patent may be granted, including the term of any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof, as fully and entirely as the same would have been held by the ASSIGNORS had this assignment not been made;

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ASSIGNORS hereby agree that, upon request, ASSIGNORS will sign all papers, and make all rightful oaths, and do all acts which said ASSIGNEE, its successors or assigns, may consider necessary in connection with said United States application, and in connection with any other United States application or foreign applications that may be filed in connection with said inventions, and with any improvements thereon, and in connection with any Letters Patent issued thereon, including any and all divisions, continuations, substitutions, renewals, re-examinations, extensions and reissues thereof.

Date:		Signature:	
			Andreas Buthe
Date:	·	Signature:	Ping Wang
Date:	07/28/17	Signature:	Songtao Wu