504140125 12/12/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NATURE OF CONVEYANCE:		NEW ASSIGNMENT	NEW ASSIGNMENT	
		ASSIGNMENT		
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
MICHAEL J. RUST			12/09/2016	
JOSEPH T. PAPU			07/07/2015	
ANDREW W. BROWNE			07/29/2016	
RECEIVING PARTY DA	TA			
Name:	WESTER	RN NEW ENGLAND UNIVERSITY		
Street Address:	1215 WI	1215 WILBRAHAM ROAD		
City:	SPRING	SPRINGFIELD		
State/Country:	MASSAC	CHUSETTS		
Postal Code:	01119			
PROPERTY NUMBERS	Total: 1			
Property Type		Number		
Application Number:	1	5006326		
		3000320		
CORRESPONDENCE D		360)286-0115		
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ASSIGNMENT

WHEREAS I, Professor Michael J. Rust of Wilbraham in the State of Massachusetts (hereinafter referred to as "<u>I</u>", "<u>You</u>" or "<u>Me</u>") am a faculty member at **Western New England University, a Massachusetts 501(c)(3) Nonprofit Corporation**, having an address at 1215 Wilbraham Road, Springfield, MA 01119, USA, (hereinafter referred to as "<u>WNE</u>").

WHEREAS, I have invented certain new and useful improvements in:

CENTRIFUGE

WHEREAS WNE is desirous of acquiring an interest in the United States and all foreign countries, in and to the Work Product (as defined herein) including any Letters Patent to be obtained therefor;

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, I, have assigned and transferred, and hereby assign and transfer unto WNE, My entire right, title and interest in all inventions (whether patentable or not), works (whether copyrightable or not), improvements (other than improvements conceived or created by Me (i) following the expiration of My appointment as a faculty member of WNE and (ii) without use of any WNE facilities, resources or materials), concepts, techniques, processes, discoveries, ideas, know-how trademarks or service marks conceived, created or otherwise developed by Me, either solely or jointly with others, during the course of and in conjunction with the Project, and all intellectual property rights related thereto (collectively, the "<u>Work Product</u>") in the United States and foreign countries including any priority rights.

I do hereby authorize and request the Commissioner of Patents to issue any Letters Patent on related to the Project, and any and all Letters Patent that may be issued upon any and all revivals, refilings, continuations, continuations-in-part, divisions and reissues thereof, to WNE, an assignee of the entire right, title and interest in and to the same, for the sole use and benefit of WNE, its successors and assigns; and I do hereby agree that WNE, may apply for foreign Letters Patent on said invention and that I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by the said WNE, its successors or assigns, and

Page 1 of 3

WNE0020US2

that I will, at the cost and expense of the said WNE fully assist and cooperate in all matters in connection with the United States and foreign applications and patents issuing thereon.

To the extent that any Work Product represents copyrightable subject matter, such copyrightable subject matter and the copyrights subsisting therein shall be considered "works made for hire" under the copyright law of the United States, and the equivalent of works made for hire as recognized under the copyright laws of other countries. To the extent that any Work Product represents copyrightable subject matter that is not deemed a work made for hire, I hereby assign to WNE, at the time of the creation, conception or development of the Work Product, without any requirement of further consideration, all of my right, title, and interest in and to all such Work Product and all intellectual property rights related thereto.

I will provide any and all necessary assistance and execute all documents necessary to effectuate and record such assignments and agree that upon the request and at the expense of WNE, I will communicate to WNE or its representatives or nominees any facts known to Me respecting said Work Product (including any inventions and improvements contained therein) and testify in any legal proceeding; sign all lawful papers; execute all copyright applications; execute all divisional, continuation, reexamination and reissue patent applications; make all rightful oaths and generally do everything possible to aid WNE, its successors, assigns, and nominees to obtain and enforce proper intellectual property protection (including patent, copyright and trademark protection) for said Work Product in all countries.

Should I fail or refuse to provide such assistance and/or execute any such document or should WNE be unable to contact Me to provide such assistance after making reasonable efforts to do so, I hereby irrevocably appoint the General Counsel and Dean of the School of Engineering of WNE as Attorney-in-Fact to prepare and/or execute such documents in my name and on my behalf, and to institute and prosecute any proceedings as WNE may deem necessary or appropriate to secure, protect, or enforce the Work Product.

This Agreement shall be governed by and construed in accordance with the internal laws of the Commonwealth of Massachusetts in the United States of America without reference to the conflict of laws provisions thereof. Disputes relating to the

Page 2 of 3

interpretation, execution or enforcement of this Agreement or arising from the dealings between the WNE and me shall be dealt with under the exclusive jurisdiction and venue of the courts of the Commonwealth of Massachusetts, or the U.S. Federal Court for the District of Massachusetts, and I irrevocably submit for all purposes to the jurisdiction of each such court.

The terms and conditions of this Assignment shall inure to the benefit of WNE, its successors, assigns, and other legal representatives, and are binding upon Me and my successor, assigns and other legal representatives.

Signature:

Professor Michael J. Rust

Witnessed by: <u>Arnu Hilmou</u> Signature

Date: 12/9/16Date: 12/9/2016

JENME GILMORE

Page 3 of 3

PATENT REEL: 040705 FRAME: 0934

ASSIGNMENT

WHEREAS I, Joseph T. Papu of Port Jefferson Station in the State of New York (hereinafter referred to as "I", "You" or "Me") am a faculty member at Western New England University, a Massachusetts 501(c)(3) Nonprofit Corporation, having an address at 1215 Wilbraham Road, Springfield, MA 01119, USA, (hereinafter referred to as "<u>WNE</u>").

WHEREAS, I have invented certain new and useful improvements in:

<u>CENTRIFUGE</u>

WHEREAS WNE is desirous of acquiring an interest in the United States and all foreign countries, in and to the Work Product (as defined herein) including any Letters Patent to be obtained therefor;

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, I, have assigned and transferred, and hereby assign and transfer unto WNE, My entire right, title and interest in all inventions (whether patentable or not), works (whether copyrightable or not), improvements (other than improvements conceived or created by Me (i) following the expiration of My appointment as a faculty member of WNE and (ii) without use of any WNE facilities, resources or materials), concepts, techniques, processes, discoveries, ideas, know-how trademarks or service marks conceived, created or otherwise developed by Me, either solely or jointly with others, during the course of and in conjunction with the Project, and all intellectual property rights related thereto (collectively, the "<u>Work Product</u>") in the United States and foreign countries including any priority rights.

I do hereby authorize and request the Commissioner of Patents to issue any Letters Patent on related to the Project, and any and all Letters Patent that may be issued upon any and all revivals, refilings, continuations, continuations-in-part, divisions and reissues thereof, to WNE, an assignee of the entire right, title and interest in and to the same, for the sole use and benefit of WNE, its successors and assigns; and I do hereby agree that WNE, may apply for foreign Letters Patent on said invention and that I will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by the said WNE, its successors or assigns, and WNE0020US2

that I will, at the cost and expense of the said WNE fully assist and cooperate in all matters in connection with the United States and foreign applications and patents issuing thereon.

To the extent that any Work Product represents copyrightable subject matter, such copyrightable subject matter and the copyrights subsisting therein shall be considered "works made for hire" under the copyright law of the United States, and the equivalent of works made for hire as recognized under the copyright laws of other countries. To the extent that any Work Product represents copyrightable subject matter that is not deemed a work made for hire, I hereby assign to WNE, at the time of the creation, conception or development of the Work Product, without any requirement of further consideration, all of my right, title, and interest in and to all such Work Product and all intellectual property rights related thereto.

I will provide any and all necessary assistance and execute all documents necessary to effectuate and record such assignments and agree that upon the request and at the expense of WNE, I will communicate to WNE or its representatives or nominees any facts known to Me respecting said Work Product (including any inventions and improvements contained therein) and testify in any legal proceeding; sign all lawful papers; execute all copyright applications; execute all divisional, continuation, reexamination and reissue patent applications; make all rightful oaths and generally do everything possible to aid WNE, its successors, assigns, and nominees to obtain and enforce proper intellectual property protection (including patent, copyright and trademark protection) for said Work Product in all countries.

Should I fail or refuse to provide such assistance and/or execute any such document or should WNE be unable to contact Me to provide such assistance after making reasonable efforts to do so, I hereby irrevocably appoint the General Counsel and Dean of the School of Engineering of WNE as Attorney-in-Fact to prepare and/or execute such documents in my name and on my behalf, and to institute and prosecute any proceedings as WNE may deem necessary or appropriate to secure, protect, or enforce the Work Product.

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Page 2 of 3

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The terms and conditions of this Assignment shall inure to the benefit of WNE, its successors, assigns, and other legal representatives, and are binding upon Me and my successor, assigns and other legal representatives.

Joseph T. Papu Signature:

Witnessed by: Signature

TRISTAN NOUNK

Printed Name of Witness

Date: 7/7/15

Date: 7/7/2015

Page 3 of 3

PATENT REEL: 040705 FRAME: 0937

<u>ASSIGNMENT</u>

WHEREAS I, Andrew W. Browne of Worthington in the State of Ohio (hereinafter referred to as "<u>I</u>", "<u>You</u>" or "<u>Me</u>") am a faculty member at **Western New England University, a Massachusetts 501(c)(3) Nonprofit Corporation**, having an address at 1215 Wilbraham Road, Springfield, MA 01119, USA, (hereinafter referred to as "<u>WNE</u>").

WHEREAS, I have invented certain new and useful improvements in:

CENTRIFUGE

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Should I fail or refuse to provide such assistance and/or execute any such document or should WNE be unable to contact Me to provide such assistance after making reasonable efforts to do so, I hereby irrevocably appoint the General Counsel and Dean of the School of Engineering of WNE as Attorney-in-Fact to prepare and/or execute such documents in my name and on my behalf, and to institute and prosecute any proceedings as WNE may deem necessary or appropriate to secure, protect, or enforce the Work Product.

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interpretation, execution or enforcement of this Agreement or arising from the dealings between the WNE and me shall be dealt with under the exclusive jurisdiction and venue of the courts of the Commonwealth of Massachusetts, or the UIS. Federal Court for the District of Massachusetts, and I irrevocably submit for all purposes to the jurisdiction of each such court.

The terms and conditions of this Assignment shall inure to the benefit of WNE, its successors, assigns, and other legal representatives, and are binding upon Me and my successor, assigns and other legal representatives.

Signature: (and U, fan-Andrew W. Brow

Witnessed by: <u>Meloc</u> Kline

Date: $\frac{7/29/14}{29/14}$

Mehnaz Khen Printed Name of Witness

Page 3 of 3

PATENT REEL: 040705 FRAME: 0940