

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4670722

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MARKO B. POPOVIC	10/31/2017
MATTHEW PAUL BOWERS	10/31/2017
THANE ROBERT HUNT	10/31/2017
LYNN ROBERT KOESTERMAN	10/31/2017
MICHAEL PICKETT	10/30/2017
RICHARD MATTHEW RAFFERTY	10/30/2017
SAIVIMAL SRIDAR	10/30/2017
SEIICHIRO UEDA	10/31/2017
VARUN VISNUDAS VERLENCAR	10/29/2017
AMAID ZIA	10/29/2017
ANANTH JONNAVITTULA	10/30/2017
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	WORCESTER POLYTECHNIC INSTITUTE
<b>Street Address:</b>	100 INSTITUTE ROAD
<b>City:</b>	WORCESTER
<b>State/Country:</b>	MASSACHUSETTS
<b>Postal Code:</b>	01609
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15616038
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(617)310-6001
<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>	6173106000
<b>Email:</b>	bosipmail@gtlaw.com
<b>Correspondent Name:</b>	ROMAN FAYERBERG
<b>Address Line 1:</b>	GREENBERG TRAURIG, LLP
<b>Address Line 2:</b>	ONE INTERNATIONAL PLACE, SUITE 2000
<b>Address Line 4:</b>	BOSTON, MASSACHUSETTS 02110

PATENT

<b>ATTORNEY DOCKET NUMBER:</b>	110697-012501/US
<b>NAME OF SUBMITTER:</b>	ROMAN FAYERBERG
<b>SIGNATURE:</b>	/Roman Fayerberg, Reg. No. 60,507/
<b>DATE SIGNED:</b>	11/02/2017

**Total Attachments: 55**

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## ASSIGNMENT

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### **BIOLOGICALLY-INSPIRED JOINTS AND SYSTEMS AND METHODS OF USE THEREOF**

and identified as:

**Application No.: 15/616,038**

**Filed: June 7, 2017**

and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

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enjoyed by the said assignees, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the

same would have been held and enjoyed by the undersigned if this assignment had not been made.

Date: 10/31/2017

Marko Popovic  
Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: [Signature]

Witness Name: KATHERINE CRIGTON

Witness Date: 10/31/17

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 3

Date: \_\_\_\_\_

Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

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Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Seichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 5

Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_



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same would have been held and enjoyed by the undersigned if this assignment had not been made.

Date: \_\_\_\_\_

Name of Inventor: Marko B. Popovic

**WITNESS**

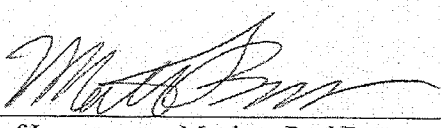
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Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

ck

Date: 10/31/17

  
Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: 

Witness Name: Simone Rodriguez

Witness Date: 10/31/17

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Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Seiichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

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**Application No.: 15/616,038**

**Filed: June 7, 2017**

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Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 2

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Date: \_\_\_\_\_

Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

BOS 48419536v1

Date: 10-31-2017

Thane Hunt  
Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: 

Witness Name: Carlos Martinez Luna

Witness Date: 2017 - Oct - 31

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Michael Pickett

**WITNESS**

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Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_



Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

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Name of Inventor: Saivimal Sridar

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Name of Inventor: Seiichiro Ueda

**WITNESS**

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Name of Inventor: Varun Visnudas Verlencar

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Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

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Name of Inventor: Ananth Jonnavittula

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Date: \_\_\_\_\_

Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

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\_\_\_\_\_  
Name of Inventor: Thane Robert Hunt


**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: 10/31/2017 \_\_\_\_\_

  
\_\_\_\_\_  
Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

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Name of Inventor: Saivimal Sridar

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Witness Date: \_\_\_\_\_

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Name of Inventor: Seiichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

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Name of Inventor: Ananth Jonnavittula

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Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Marko B. Popovic

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Witness Date: \_\_\_\_\_

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\_\_\_\_\_  
Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 3

Date: \_\_\_\_\_

Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: 10-30-17

  
Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature:  \_\_\_\_\_

Witness Name: Colleen Revere

Witness Date: Oct 30<sup>th</sup> 2017

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Seiichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Varun Visnudas Verlekar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

## ASSIGNMENT

In consideration of One Dollar (\$1.00) and other good and valuable consideration in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to: Worcester Polytechnic Institute, having a principal place of business at 100 Institute Road, Worcester, MA 01609, its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

### **BIOLOGICALLY-INSPIRED JOINTS AND SYSTEMS AND METHODS OF USE THEREOF**

and identified as:

**Application No.: 15/616,038**

**Filed: June 7, 2017**

and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

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For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignee, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignees, its successors and assigns, whereby said Letters Patent will be held and

BOS 48419536v1

**PATENT**

**REEL: 044680 FRAME: 0943**

enjoyed by the said assignees, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the

same would have been held and enjoyed by the undersigned if this assignment had not been made.

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_



Date: 10/30/2017

Richard Matthew Rafferty  
Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: Gerald A. Dalawan

Witness Name: GERALDO A. DALAWAN

Witness Date: 31 OCT 2017

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Seiichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_



Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

## ASSIGNMENT

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### **BIOLOGICALLY-INSPIRED JOINTS AND SYSTEMS AND METHODS OF USE THEREOF**

and identified as:

**Application No.: 15/616,038**

**Filed: June 7, 2017**

and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

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BOS 48419536v1

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 2

enjoyed by the said assignees, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the

same would have been held and enjoyed by the undersigned if this assignment had not been made.

Date: \_\_\_\_\_

Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

BOS 48419536v1

Date: \_\_\_\_\_

Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: 10/30/2017

S. Saivimal  
Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: Pham Huy Nguyen

Witness Name: Pham Huy Nguyen

Witness Date: 10/30/2017

Date: \_\_\_\_\_

Name of Inventor: Seiichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

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and identified as:

**Application No.: 15/616,038**

**Filed: June 7, 2017**

and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

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BOS 48419536v1

enjoyed by the said assignees, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the

same would have been held and enjoyed by the undersigned if this assignment had not been made.

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_



Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 4

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar


**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: 10/31/2017

  
Name of Inventor: Seichiro Ueda

**WITNESS**

Witness Signature: 橋本 慎也

Witness Name: Shinya Hashimoto

Witness Date: 10/31/2017

BOS 48419536v1

Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

## ASSIGNMENT

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and identified as:

**Application No.: 15/616,038**

**Filed: June 7, 2017**

and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

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BOS 48419536v1

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 2

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same would have been held and enjoyed by the undersigned if this assignment had not been made.

Date: \_\_\_\_\_

Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 3

Date: \_\_\_\_\_

Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 4

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Seichiro Ueda

**WITNESS**


Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Attorney Docket No. 110697-012501/US  
Application No.: 15/616,038  
Page 5

Date: 10-29-2017

  
Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: 

Witness Name: VINEET NAIR

Witness Date: 10/29/2017

Date: \_\_\_\_\_

Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_



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**Filed: June 7, 2017**

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Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Marko B. Popovic

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Name of Inventor: Matthew Paul Bowers

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Thane Robert Hunt

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Lynn Robert Koesterman

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Michael Pickett

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Richard Matthew Rafferty

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Saivimal Sridar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Seiichiro Ueda

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: \_\_\_\_\_

Name of Inventor: Varun Visnudas Verlencar

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

Date: 29-October-2017

  
Name of Inventor: Amaid Zia

**WITNESS**

Witness Signature:  \_\_\_\_\_

Witness Name: Abeera Eman Zia

Witness Date: 29-October-2017

Date: \_\_\_\_\_

Name of Inventor: Ananth Jonnavittula

**WITNESS**

Witness Signature: \_\_\_\_\_

Witness Name: \_\_\_\_\_

Witness Date: \_\_\_\_\_

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### **BIOLOGICALLY-INSPIRED JOINTS AND SYSTEMS AND METHODS OF USE THEREOF**

and identified as:

**Application No.: 15/616,038**

**Filed: June 7, 2017**

and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of said assignees, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignees, its successors and assigns, whereby said Letters Patent will be held and

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enjoyed by the said assignees, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the

same would have been held and enjoyed by the undersigned if this assignment had not been made.

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Name of Inventor: Marko B. Popovic

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