PATENT ASSIGNMENT

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SUBMISSION TYPE: **NEW ASSIGNMENT** NATURE OF CONVEYANCE: **ASSIGNMENT**

CONVEYING PARTY DATA

Name	Execution Date
Fiorenzo Omenetto	08/09/2011

RECEIVING PARTY DATA

Name:	Tufts University/Trustees of Tufts College
Street Address:	Ballou Hall
City:	Medford
State/Country:	MASSACHUSETTS
Postal Code:	02155

PROPERTY NUMBERS Total: 34

Property Type	Number
Application Number:	60856297
Application Number:	60907502
PCT Number:	US0783642
Application Number:	12513394
Application Number:	60935459
PCT Number:	US0783600
Application Number:	12513384
Application Number:	60935050
PCT Number:	US0783620
Application Number:	12513441
PCT Number:	US0783634
Application Number:	12513423
PCT Number:	US0783605
Application Number:	12513387
PCT Number:	US0783639
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Application Number:	12513392
Application Number:	60906509
PCT Number:	US0783646
Application Number:	12513416
Application Number:	60985310
PCT Number:	US0882487
Application Number:	12741066
Application Number:	61073609
Application Number:	61088063
PCT Number:	US0947751
Application Number:	12999087
Application Number:	61151866
PCT Number:	US1024004
Application Number:	61226801
PCT Number:	US1042585
Application Number:	61238319
PCT Number:	US1047307
Application Number:	61206382
PCT Number:	US1022701

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: 2002458-0029

NAME OF SUBMITTER:

Atsuko N. Polzin, PhD, JD

Total Attachments: 6

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ASSIGNMENT

WHEREAS, OMENETTO, Fiorenzo of Wakefield, Massachusetts ("INVENTOR"):

hereby declares and agrees, on behalf of himself and all of his successors and assigns that he is aware of the patents and patent applications provided in the attached Appendix (ASSIGNED PATENT FILINGS), to the extent that he is an inventor therein; and

WHEREAS INVENTOR is or has been under an obligation to assign his interest in the ASSIGNED PATENT FILINGS to Tufts University/Trustees of Tufts College (hereinafter "ASSIGNEE"), having a usual place of business at Ballou Hall, Medford, MA 02155,

WHEREAS ASSIGNEE desires to acquire or confirm its interest in the ASSIGNED PATENT FILINGS;

NOW, THEREFORE, to all whom it may concern be it known that, in consideration of agreements previously and duly entered into between the parties, and/or for other good and valuable consideration, the receipt of which is hereby acknowledged, INVENTOR hereby declares, confirms, and agrees that:

The INVENTOR has previously sold, assigned, and transferred and/or does hereby sell, assign, and transfer unto said ASSIGNEE, its successors, assigns, and legal representatives, his entire right, title, and interest in and throughout the United States of America, its territories and all foreign countries, in and to any and all inventions described in the ASSIGNED PATENT FILINGS on which he is an inventor, and/or any priority applications to which such ASSIGNED PATENT FILINGS claim priority; and hereby confirms that his sale, assignment and/or transfer is and was effective at least as of the filing date of each such patent application included within the ASSIGNED PATENT FILINGS and/or each priority application to which such ASSIGNED PATENT APPLICATIONS claim priority. The INVENTOR's sale, assignment and/or transfer made and/or confirmed herein applies to each patent application or patent included in the ASSIGNED PATENT FILINGS on which the INVENTOR is an inventor, and to any application that is based in whole or in part on one or more patent applications or patented included in the ASSIGNED PATENT FILINGS, including to divisional, continuing, substitute, renewal, reissue, reexamination and other applications, for example that claim priority to one or more patent applications included in the ASSIGNED PATENT FILINGS. Also, this sale, assignment, and/or transfer pertains to any and all other rights arising under or pursuant to any and all international agreements, treaties, or laws relating to the protection of industrial property, including all rights of priority under the International Convention for the Protection of Industrial Property, and in and to any such patent(s) as may issue from any patent application included in the

ASSIGNED PATENT FILINGS, including any and all original and reissued patents which have been or shall be issued in the United States and foreign countries; said inventions, applications, and patent(s) to be held and enjoyed by ASSIGNEE for its own use and for its successors, assigns and legal representatives, to the full end of the term for which said patent(s) may be granted as fully and entirely as the same would have been held by the INVENTOR had his sale, assignment and transfer to ASSIGNEE not been made;

AND, INVENTOR hereby acknowledges that his Assignment, being of his entire right, title, and interest in and to the inventions, carries with it the right in ASSIGNEE, by attorneys and agents of ASSIGNEE selection, to apply for and receive any and all patent(s) for said inventions in its own name;

AND, INVENTOR hereby further agrees for himself and his executors and administrators to execute upon request any other lawful documents and likewise to perform any other lawful acts which may be deemed necessary or desirable to secure fully the ASSIGNED PATENT RIGHTS to ASSIGNEE, its successors, assignees, and legal representatives, but at its expense and charges, including the execution of application for patents in foreign countries, the execution of substitution, reissue, divisional or continuation applications, and the giving of testimony, preliminary statements, or other statements in any interference or other proceeding in which the inventions or any applications or patents directed to the inventions may be involved by communicating to the ASSIGNEE all facts known to the INVENTOR relating to the inventions and their history, and generally by doing everything possible which ASSIGNEE shall consider desirable for aiding in securing and maintaining proper patent protection for the inventions and for vesting title in the inventions and all applications for patent and all patents on the inventions in ASSIGNEE;

AND, INVENTOR further hereby authorizes ASSIGNEE or its attorneys or agents to insert the correct serial number(s) and/or filing date(s) into this assignment document (including in the Appendix), if appropriate;

AND, INVENTOR hereby appoints ASSIGNEE as his common agent for purposes of prosecuting international patent applications and any national patent applications for which such common agency is recognized;

AND, INVENTOR hereby requests the Director of Patents and Trademarks of the United States to issue any and all patent(s) as shall be granted upon any application or applications included in or based upon the ASSIGNED PATENT RIGHTS to ASSIGNEE, its successors, assigns, and legal representatives;

AND, INVENTOR covenants with said ASSIGNEE that no assignment, grant, mortgage, license, or other agreement affecting the rights and property herein conveyed has been made to others by him/her, and that full right to convey the same as herein expressed is possessed by him/her, or was possessed by him at the prior time at which he transferred his rights to ASSIGNEE.

Name: Fiorenzo Omenetto	8/9/11 Date:
	zave.
Witness Signatures:	
Milue Ruee	8/9/11
Name (please print):	Daté: '
(Parisir)	
Keleigh Sanfad	8/9/11
Keleigh Sanfad Keleigh Sanford	Date:
Name (please print):	

Appendix

ASSIGNED PATENT FILINGS

Title/Subject Matter	Serial #	Filing Date
Biopolymer Devices and Method for Manufacturing the Same	60/856,297	11/3/2006
Nanopatterned Biopolymer Optical Device and Method of Manufacturing the Same	60/907,502	4/5/2007
Nanopatterned Biopolymer Optical Device and Method of Manufacturing the Same	PCT/US07/83642	11/5/2007
Nanopatterned Biopolymer Optical Device and Method of Manufacturing the Same	12/513,394	5/4/2009
Biopolymer Photonic Crystals and Method of Manufacturing the Same	60/935,459	8/14/2007
Biopolymer Photonic Crystals and Method of Manufacturing the Same	PCT/US07/83600	11/5/2007
Biopolymer Photonic Crystals and Method of Manufacturing the Same	12/513,384	5/4/2009
Biopolymer Sensor and Method of Manufacturing the Same	60/935,050	7/24/2007
Biopolymer Sensor and Method of Manufacturing the Same	PCT/US07/83620	11/5/2007
Biopolymer Sensor and Method of Manufacturing the Same	12/513,441	5/4/2009
Biopolymer Optofluidic Device and Method of Manufacturing the Same	PCT/US07/83634	11/5/2007
Biopolymer Optofluidic Device and Method of Manufacturing the Same	12/513,423	5/4/2009
Biopolymer Optical Waveguide and Method of Manufacturing the Same	PCT/US07/83605	11/5/2007
Biopolymer Optical Waveguide and Method of Manufacturing the Same Electroactive Biopolymer Optical and Electro-	12/513,387	5/4/2009
Optical Devices and Method of manufacturing the same Electroactive Biopolymer Optical and Electro-	PCT/US07/83639	11/5/2007
Optical Devices and Method of manufacturing the same	12/513,392	5/4/2009
Microfluidic Device with a Cylindrical Microchannel and a Method for fabricating same	60/906,509	3/13/2007

Microfluidic Device with a Cylindrical Microchannel and a Method for fabricating same	PCT/US07/83646	11/5/2007
Microfluidic Device with a Cylindrical Microchannel and a Method for fabricating same	12/513,416	11/5/2007
Method for Fabrication of Silk Photonic Crystals by Nanocontact Imprinting	60/985,310	11/5/2007
Fabrication of Silk Fibroin Photonic Structures by Nanocontact Imprinting	PCT/US08/82487	11/5/2008
Fabrication of Silk Fibroin Photonic Structures by		
Nanocontact Imprinting	12/741,066	11/5/2008
Edible Holographic Silk Products	61/073,609	6/18/2008
Edible Holographic Silk Products	61/088,063	8/12/2008
Edible Holographic Silk Products	PCT/US09/47751	6/18/2009
Edible Holographic Silk Products	12/999,087	6/18/2009
Nanoimprinting of Silk Fibroin Films for		
Biomedical and Optical Device Applications	61/151,866	2/12/2009
Nanoimprinting of Silk Fibroin Structures for Biomedical and Biophotonic Applications	PCT/US10/24004	2/12/2010
All-Protein Implantable, Resorbable Reflectors	61/226,801	7/20/2009
All-Protein Implantable, Resorbable Reflectors	PCT/US10/42585	7/20/2010
Silk Transistor Devices and a Method of Making Transistor Devices from Silk	61/238,319	8/31/2009
Silk Transistor Devices Optical Sensing by Structural Color Control in	PCT/US10/47307	8/31/2010
Nano-Patterned Aperiodic Surfaces (N-PASs) Chemical/Biological Sensor Employing Scattered	61/206,382	1/30/2009
Chromatic Components in Nano-Patterned Aperiodic Surfaces	PCT/US10/22701	2/01/2010

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