PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
North Carolina State University	03/03/2009

RECEIVING PARTY DATA

Name:	The University of North Carolina at Chapel Hill	
Street Address:	308 Bynum Hall, CB #4105	
City:	Chapel Hill	
State/Country:	NORTH CAROLINA	
Postal Code: 27599-4105		

PROPERTY NUMBERS Total: 3

Property Type	Number
Application Number:	60833736
PCT Number:	US0716935
Application Number:	12374182

CORRESPONDENCE DATA

Fax Number: (919)862-2260

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

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Email: polly.burton@alston.com

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Address Line 4: Charlotte, NORTH CAROLINA 28280-4000

ATTORNEY DOCKET NUMBER: 035052/367428

NAME OF SUBMITTER: W. Murray Spruill

Total Attachments: 3

PATENT REEL: 022553 FRAME: 0744 120.00 6083373

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> PATENT REEL: 022553 FRAME: 0745

ASSIGNMENT

THIS ASSIGNMENT, made by **NORTH CAROLINA STATE UNIVERSITY**, a university, having its principal place of business at 2401 Research Drive, Suite 1122, CB 8210, Raleigh, NC 27695, hereinafter referred to as Assignor;

WITNESSETH: That,

WHEREAS, as shown by the records of the United States Patent and Trademark Office, Assignor has previously acquired all right, title, and interest in and to the United States patent and/or patent applications identified on the attached Schedule and in and to all corresponding patents and/or patent applications worldwide, and in and to the inventions represented thereby (all hereinafter referred to as the "Patents"); and,

WHEREAS THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL, a university, having its principal place of business at 308 Bynum Hall, Campus Box 4105, Chapel Hill, NC 27599-4105, hereinafter referred to as Assignee, is desirous of acquiring the entire right, title, and interest in and to said Patents and in and to the inventions represented thereby; and

WHEREAS, the parties have agreed to the Assignment hereinafter set forth;

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, the above Assignor has sold and by these presents does hereby sell, assign, transfer, and convey unto the said Assignee, its successors and assigns, its entire right, title, and interest in and to said Patents and the inventions represented thereby, and any and all continuations, continuations-in-part, or divisions thereof, and any and all Letters Patent or reissues, reexaminations, or extensions thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim priority in all foreign countries in accordance with the International Convention; all rights corresponding to said Patents in foreign countries throughout the world; and all of its rights to sue for past infringement of said Patents worldwide, together with all claims for damage by reason of past infringement of said Patents, with the right to sue for, and collect the same for Assignee's own use and enjoyment; all to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignor if this assignment and sale had not been made.

From time to time after the date hereof, at the request of either party hereto, and at the expense of the party so requesting, each of the parties hereto shall execute and deliver to such

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requesting party such documents and take such other action as such requesting party may reasonably request in order to consummate more effectively the transactions contemplated hereby.

The Assignor further covenants and agrees that, at the time of the execution and delivery of these presents, it possesses full title to the inventions and Patents thereon as earlier identified, and that it has the unencumbered right and authority to make this assignment.

t	OF, the Assignor has caused	this assignment to be	e executed this
3rd day of March	, 2009.		
	NORTH CAROLIN	A STATE UNIVER	SITY
	Ву:		(SEAL)
	Printed Name:	Billy B. Houghtelin	<u> </u>
	Title:	Office of Technology Tr	ansfer
	1100.		
STATE OF North Capolina COUNTY OF WALL)		
acknowledged that he/she is STATE UNIVERSITY and	Tle Divecto / acknowledged, on behalf of I	ame before me this d of NORTH NORTH CAROLIN	ay and I CAROLINA
UNIVERSITY, the due exec		100	
Witness my hand and official	seal, this the $3^{-\delta}$ day of	of March	, 2009.
(Official Seal)	Celus	- JA E. She	lul
		Notary Public	WIHE
My commission expires:	acomber, 21 2000	<u>, </u>	HOTAR
			E. Aug.
			THE WALL
			W. Commy P.

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SCHEDULE OF ASSIGNMENT PATENT APPLICATIONS

North Carolina State University assigning to University of North Carolina at Chapel Hill

Application No.	Filing Date	Fitle
PCT/US2004/042706	12/20/2004	Method for Fabricating Isolated Micro- and
		Nanostructures Using Soft or Imprint Lithography
60/691,607	6/17/2005	Methods and Systems for Functionalizing and
		Harvesting Particles
PCT/US2006/023722	6/19/2006	Methods and Systems for Functionalizing and
		Harvesting Particles
11/921,614	12/5/2007	Nanoparticle Fabrication Methods, Systems, and
		Materials
60/714,961	9/7/2005	Materials and Methods for Fabricating Isolated
		Micro- and Nano- Structures Having Chemical
		Functionality
PCT/US2006/034997	9/7/2006	Materials and Methods for Fabricating Isolated
101/002000/00///	37772000	Micro- and Nano- Structures Having Chemical
		Functionality
60/762,802	1/27/2006	Taggants and Methods and Systems for Fabricating
00, , 02,002	172772000	Same
PCT/US2007/002476	1/29/2007	Taggants and Methods and Systems for Fabricating
101/05200//0021/0	1/25/2007	Same
12/162,264	7/25/2008	Taggants and Methods and Systems for Fabricating
12/102/201	112312000	Same
60/798,858	5/9/2006	Micro and Nano-Particles for Photovoltaics and
00,750,000	0,5,2000	Methods of Making the Same
PCT/US2007/011220	5/9/2007	High Fidelity Nano-Structures and Arrays for
101,05200.,011220	0.3,200,	Photovoltaics and Methods of Making the Same
12/299,839	11/6/2008	High Fidelity Nano-Structures and Arrays for
12,23,000	11,0,200	Photovoltaics and Methods of Making the Same
60/833,736	7/27/2006	Micro and Nano-Carriers for Biological Systems
PCT/US2007/016935	7/27/2007	Micro and Nano-Carriers for Biological Systems
12/374,182	1/16/2009	Nanopartricle Fabrication Methods, Systems, and
12/37/1,102	1/10/2009	Materials for Fabricating Artificial Red Blood Cells
PCT/US05/04421	2/14/2005	Functional Materials and Novel Methods for the
1 017 0503704421	2/14/2003	Fabrication of Microfluidic Devices
60/706,786	8/9/2005	Microfluidic Devices, Functional Materials, and
00/700,700	01912003	Methods of Fabrication
PCT/US2006/031067	8/9/2006	Methods and Materials for Fabricating Microfluidic
1 01/052000/05100/	0/9/2000	Devices
PCT/US2004/031274	9/23/2004	Photocurable Perfluoropolyethers for Use as Novel
1 01/032004/0312/4	912312004	Materials in Microfluidic Devices
10/572,764	5/16/2007	
10/3/2,/04	3/10/2007	Photocurable Perfluoropolyethers for Use as Novel
LEGAL02/31163317v1		Materials in Microfluidic Devices

LEGAL02/31163317v1

RECORDED: 04/16/2009

PATENT REEL: 022553 FRAME: 0748