

## PATENT ASSIGNMENT

Electronic Version v1.1  
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SUBMISSION TYPE:	NEW ASSIGNMENT						
NATURE OF CONVEYANCE:	ASSIGNMENT						
CONVEYING PARTY DATA							
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Himanshu Jain</td> <td>11/15/2011</td> </tr> <tr> <td>Hassan Moawad</td> <td>11/07/2011</td> </tr> </tbody> </table>		Name	Execution Date	Himanshu Jain	11/15/2011	Hassan Moawad	11/07/2011
Name	Execution Date						
Himanshu Jain	11/15/2011						
Hassan Moawad	11/07/2011						
RECEIVING PARTY DATA							
Name:	Lehigh University						
Street Address:	354 Whitaker Laboratory						
Internal Address:	5 East Packer Avenue						
City:	Bethlehem						
State/Country:	PENNSYLVANIA						
Postal Code:	18015						
PROPERTY NUMBERS Total: 1							
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13273577</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13273577		
Property Type	Number						
Application Number:	13273577						
CORRESPONDENCE DATA							
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ATTORNEY DOCKET NUMBER:	12407-48						
NAME OF SUBMITTER:	Kurt L. Ehresman						
Total Attachments: 3 source=Assignment48#page1.tif source=Assignment48#page2.tif source=Assignment48#page3.tif							

CH \$40.00 13273577

## ASSIGNMENT AND AGREEMENT

ASSIGNOR(S): Hassan M.M. Moawad, of Bethlehem, PA

Himanshu Jain of Bethlehem, PA

ASSIGNEE: Lehigh University  
5 East Packer Avenue  
Bethlehem, PA 18015

PATENT APPLICATION:

Title: FABRICATION OF NANOPOROUS GLASS FIBER FOR FLEXIBLE  
BIOSCAFFOLDS AND OTHER PRODUCTS

Serial Number: 13/273,577

Filing Date: October 14, 2011

For good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNOR(S) have sold, assigned and transferred, and do hereby sell, assign and transfer unto ASSIGNEE and its successors, assigns, and legal representatives, the entire right, title and interest for the United States of America in and to certain inventions relating to improvements the invention(s) described, illustrated and claimed in the application for Letters Patent of the United States of America identified above, together with the entire right, title and interest in and to the application, and in and to Letters Patent which may be issued upon the application, and upon any division, extension, continuation or reissue thereof.

ASSIGNOR(S) hereby authorize ASSIGNEE or ASSIGNEE'S representative to insert the application serial number and the filing date on this assignment if either is unknown at the time of execution of this assignment.

ASSIGNOR(S) hereby also sell, assign and transfer unto ASSIGNEE, the entire right, title and interest in and to the invention and in and to applications for Letters Patent therefore in all countries foreign to the United States of America, including all rights under any and all international conventions and treaties in respect of the invention and the applications for Letters Patent in foreign countries, and ASSIGNOR(S) further authorize ASSIGNEE to apply for Letters Patent in foreign countries directly in its own name, and to claim priority of the filing date of the application for Letters Patent of the United States of America under the provisions of any and all international conventions and treaties.

ASSIGNOR(S) hereby authorize and request the Commissioner of Patents of the United States of America to issue Letters Patent upon the aforesaid application, division, extension, continuation or reissue, to ASSIGNEE, for the sole use and benefit of ASSIGNEE, its successors, assigns and legal representatives, to the full end of the term for which Letters Patent may be granted, the same as they would have been held and enjoyed by me had this assignment not been made, and ASSIGNOR(S) hereby authorize and request the equivalent authorities in foreign countries to issue the patents of their respective countries to ASSIGNEE.

ASSIGNOR(S) agree that, when requested, they will, without charge to ASSIGNEE, but at its expense, sign all papers, take all rightful oaths, and do all acts which may be necessary, desirable or convenient for securing and maintaining patents for the inventions in any and all countries and for vesting title thereto in ASSIGNEE, its successors, assigns and legal representatives or nominees.

ASSIGNOR(S) covenant with ASSIGNEE, its successors, assigns and legal representatives, that the interest and property hereby conveyed is free from all prior assignment, grant, mortgage, license or other encumbrance.

Hassan Moawad  
HASSAN M.M. MOAWAD

DATE: November 7, 2011

STATE OF Pennsylvania )  
 )ss  
COUNTY OF Northampton )

The undersigned Notary Public in and for the County and State aforesaid, do hereby certify that HASSAN M.M. MOAWAD, whose name is subscribed to the foregoing instrument, appeared before me this day in person and acknowledged that he signed, sealed and delivered the instrument as his free and voluntary act and deed for the uses and purposes therein set forth.

Given under my hand and notarial seal this 7<sup>th</sup> day of November, 2011:

My commission expires:

[Seal]

August 15, 2015

  
Notary Public Signature

Margaret E. Metz

Printed Name of Notary Public

COMMONWEALTH OF PENNSYLVANIA  
Notarial Seal  
Margaret E. Metz, Notary Public  
City of Bethlehem, Northampton County  
My Commission Expires Aug. 15, 2015  
MEMBER, PENNSYLVANIA ASSOCIATION OF NOTARIES

