

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

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>Guy D. Joly</td> <td>10/22/2012</td> </tr> <tr> <td>Nathan E. Schultz</td> <td>10/22/2012</td> </tr> <tr> <td>Encai Hao</td> <td>10/22/2012</td> </tr> </tbody> </table>		Name	Execution Date	Guy D. Joly	10/22/2012	Nathan E. Schultz	10/22/2012	Encai Hao	10/22/2012		
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>3M Innovative Properties Company</td> </tr> <tr> <td>Street Address:</td> <td>P.O. Box 33427</td> </tr> <tr> <td>City:</td> <td>St. Paul</td> </tr> <tr> <td>State/Country:</td> <td>MINNESOTA</td> </tr> <tr> <td>Postal Code:</td> <td>55133-3427</td> </tr> </table>		Name:	3M Innovative Properties Company	Street Address:	P.O. Box 33427	City:	St. Paul	State/Country:	MINNESOTA	Postal Code:	55133-3427
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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>13661086</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13661086						
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CORRESPONDENCE DATA											
<p>Fax Number: 6517363833</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 651-733-1500</p> <p>Email: cmwagner01@mmm.com</p> <p>Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY</p> <p>Address Line 1: PO BOX 33427</p> <p>Address Line 4: ST. PAUL, MINNESOTA 55133-3427</p>											
ATTORNEY DOCKET NUMBER:	65873US008										
NAME OF SUBMITTER:	Colleen M. Wagner										
	This document serves as an Oath/Declaration (37 CFR 1.63).										
<p>Total Attachments: 3</p> <p>source=DeclarationAssignment_signed_65873US008#page1.tif</p> <p>source=DeclarationAssignment_signed_65873US008#page2.tif</p> <p>source=DeclarationAssignment_signed_65873US008#page3.tif</p>											

CH \$40.00 13661086

**DECLARATION AND ASSIGNMENT,  
FOR UTILITY OR DESIGN  
PATENT APPLICATION (37 CFR § 1.63)**

Case No:

65873US008

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

**FUNCTIONALIZED ZIRCONIA NANOPARTICLES AND HIGH INDEX FILMS MADE THEREFROM**

The specification of which:

☒ is attached hereto;

☐ was filed on \_\_\_\_\_  
as United States Application No. \_\_\_\_\_

☐ is identified as PCT International Application No. \_\_\_\_\_  
filed on \_\_\_\_\_

The above-identified application was made or authorized to be made by me.

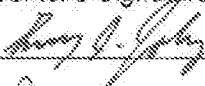
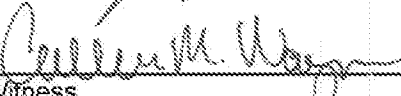
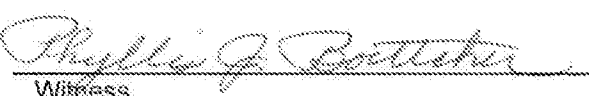
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than 5 years, or both.

In addition, for good and valuable consideration, receipt of which is acknowledged, I/we have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me/us had this assignment and transfer not been made;

I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M innovative Properties Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Legal Name of Inventor: <b>Guy D. Joly</b>	
Inventor's Signature: 	Date: 11-22-2012
Witness: 	Witness: 

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I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Legal Name of Inventor:

**Nathan E. Schultz**

Inventor's Signature:

*Nathan E. Schultz*

Date:

*10-22-2012*

*Quellen M. Wayne*

Witness

*Phyllis J. Battista*

Witness

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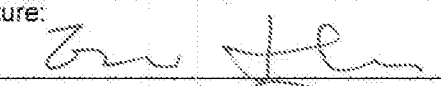

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In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Legal Name of Inventor: <b>Encal Hao</b>	
Inventor's Signature: 	Date: 10-22-2012
Witness: 	Witness: 