

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>Patrick A. Mach</td> <td>01/17/2013</td> </tr> <tr> <td>Raj Rajagopal</td> <td>01/30/2013</td> </tr> <tr> <td>Wensheng Xia</td> <td>01/21/2013</td> </tr> <tr> <td>Jinsheng Zhou</td> <td>02/01/2013</td> </tr> <tr> <td>Chunmei Guo</td> <td>02/07/2013</td> </tr> </tbody> </table>		Name	Execution Date	Patrick A. Mach	01/17/2013	Raj Rajagopal	01/30/2013	Wensheng Xia	01/21/2013	Jinsheng Zhou	02/01/2013	Chunmei Guo	02/07/2013
Name	Execution Date												
Patrick A. Mach	01/17/2013												
Raj Rajagopal	01/30/2013												
Wensheng Xia	01/21/2013												
Jinsheng Zhou	02/01/2013												
Chunmei Guo	02/07/2013												
RECEIVING PARTY DATA													
Name:	3M INNOVATIVE PROPERTIES COMPANY												
Street Address:	P.O. BOX 33427												
City:	ST. PAUL												
State/Country:	MINNESOTA												
Postal Code:	55133-3427												
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>13701935</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13701935								
Property Type	Number												
Application Number:	13701935												
CORRESPONDENCE DATA													
Fax Number:	6517363833												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	651-733-1500												
Email:	jlhansen4@mmm.com												
Correspondent Name:	3M INNOVATIVE PROPERTIES COMPANY												
Address Line 1:	PO BOX 33427												
Address Line 4:	ST. PAUL, MINNESOTA 55133-3427												
ATTORNEY DOCKET NUMBER:	66415US004												
NAME OF SUBMITTER:	Judy L. Hansen												
Total Attachments: 2 source=Assignment_executed_66415US004#page1.tif source=Assignment_executed_66415US004#page2.tif													

CH \$40.00 13701935

ASSIGNMENT OF APPLICATION

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated below, have made an invention in

FILTRATION METHODS AND DEVICES

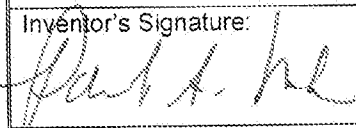
- for which an application for a United States Patent is being filed contemporaneously herewith;
- for which an application for a United States Patent identified as U.S. Patent Application No. **13/701,935**, was filed on **June 6, 2011**
- which application is identified as PCT International Patent Application No. **PCT/US2011/039242**; filed **June 6, 2011**;

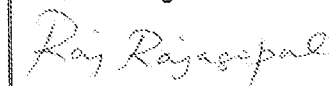
Now, therefore, for good and valuable consideration, receipt of which is acknowledged, I/we have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office 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;

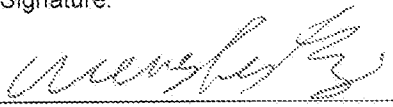
I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company, 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

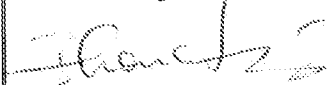
I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

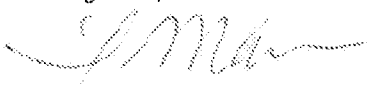
In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle [if any]): Patrick A.	Family Name or Surname: Mach	
Inventor's Signature: 	Date: 1-17-2013	
Residence: Shorewood, Minnesota	Country: U.S.A.	Citizenship: United States of America

Given Name (first and middle [if any]): Raj	Family Name or Surname: Rajagopal	
Inventor's Signature: 	Date: 1/30/2013	
Residence: Woodbury, Minnesota	Country: U.S.A.	Citizenship: United States of America

Given Name (first and middle [if any]): Wensheng	Family Name or Surname: Xia	
Inventor's Signature: 	Date: 1-21-2013	
Residence: Woodbury, Minnesota	Country: U.S.A.	Citizenship: People's Republic of China United States of America

Given Name (first and middle [if any]): Jinsheng	Family Name or Surname: Zhou	
Inventor's Signature: 	Date: 02-01-2013	
Residence: Woodbury, Minnesota	Country: U.S.A.	Citizenship: People's Republic of China United States of America

Legal Name of Inventor Chunmei Guo, Deceased		
Signature of Legal Representative: 	Date: 2-7-2013	
Guoping Mao, Legal Representative		
Residence: Woodbury, Minnesota	Country: U.S.A.	Citizenship: United States of America