

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>Encai Hao</td> <td>05/21/2012</td> </tr> <tr> <td>Kurt C. Melancon</td> <td>07/18/2012</td> </tr> <tr> <td>Audrey A. Sherman</td> <td>05/30/2012</td> </tr> <tr> <td>William Blake Kolb</td> <td>06/01/2012</td> </tr> <tr> <td>Robert F. Kamrath</td> <td>05/30/2012</td> </tr> <tr> <td>Maureen A. Kavanagh</td> <td>05/30/2012</td> </tr> <tr> <td>Chris J. Tanley</td> <td>06/02/2012</td> </tr> <tr> <td>Jeffrey A. Peterson</td> <td>05/30/2012</td> </tr> </tbody> </table>		Name	Execution Date	Encai Hao	05/21/2012	Kurt C. Melancon	07/18/2012	Audrey A. Sherman	05/30/2012	William Blake Kolb	06/01/2012	Robert F. Kamrath	05/30/2012	Maureen A. Kavanagh	05/30/2012	Chris J. Tanley	06/02/2012	Jeffrey A. Peterson	05/30/2012
Name	Execution Date																		
Encai Hao	05/21/2012																		
Kurt C. Melancon	07/18/2012																		
Audrey A. Sherman	05/30/2012																		
William Blake Kolb	06/01/2012																		
Robert F. Kamrath	05/30/2012																		
Maureen A. Kavanagh	05/30/2012																		
Chris J. Tanley	06/02/2012																		
Jeffrey A. Peterson	05/30/2012																		
RECEIVING PARTY DATA																			
Name:	3M INNOVATIVE PROPERTIES COMPANY																		
Street Address:	P.O. BOX 33427																		
City:	SAINT 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>13512984</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13512984														
Property Type	Number																		
Application Number:	13512984																		
CORRESPONDENCE DATA																			
Fax Number:	6517363833																		
Phone:	651-733-1500																		
Email:	amzontelli@mmm.com																		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>																			
Correspondent Name:	3M INNOVATIVE PROPERTIES COMPANY																		
Address Line 1:	PO BOX 33427																		
Address Line 4:	ST. PAUL, MINNESOTA 55133-3427																		

ATTORNEY DOCKET NUMBER:	67372US002
NAME OF SUBMITTER:	Angela M. Zontelli
<p>Total Attachments: 12</p> <p>source=AssignmentSigned_66013US005#page1.tif</p> <p>source=AssignmentSigned_66013US005#page2.tif</p> <p>source=AssignmentSigned_66013US005#page3.tif</p> <p>source=AssignmentSigned_66013US005#page4.tif</p> <p>source=AssignmentSigned_66013US005#page5.tif</p> <p>source=AssignmentSigned_66013US005#page6.tif</p> <p>source=AssignmentSigned_66013US005#page7.tif</p> <p>source=AssignmentSigned_66013US005#page8.tif</p> <p>source=AssignmentSigned_66013US005#page9.tif</p> <p>source=AssignmentSigned_66013US005#page10.tif</p> <p>source=AssignmentSigned_66013US005#page11.tif</p> <p>source=AssignmentSigned_66013US005#page12.tif</p>	

ASSIGNMENT OF APPLICATION

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

NANO-POROUS ADHESIVE TIE LAYER

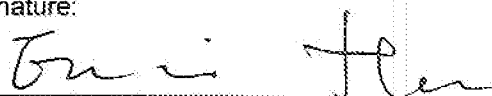

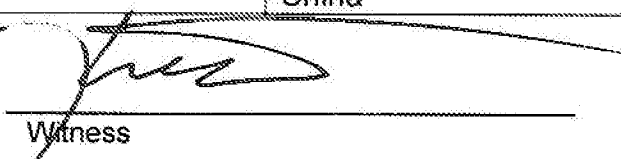
- for which an application for a United States Patent is being filed contemporaneously herewith;
- for which an application for a United States Patent identified as U.S. Patent Application No. , was filed on ;
- which application is identified as PCT International Patent Application No. PCT/US2010/058195; filed November 29, 2010;

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;

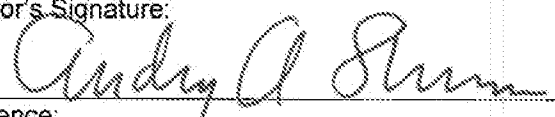
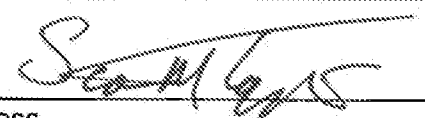
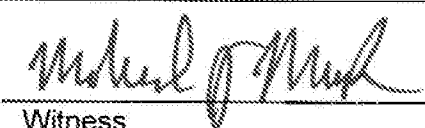
I/We do further agree for myself/ourselves and for my/our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I/we lawfully may, that may be deemed necessary by said Company,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


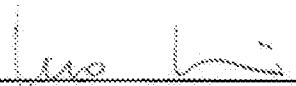

I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

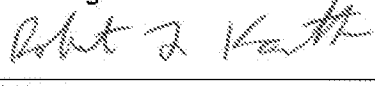
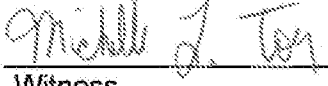
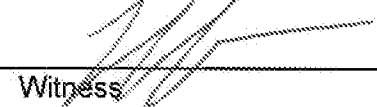
In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

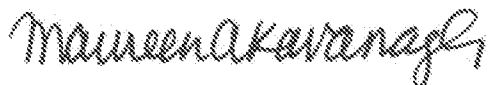
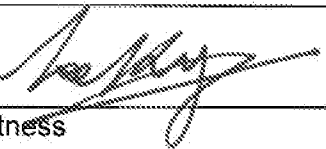
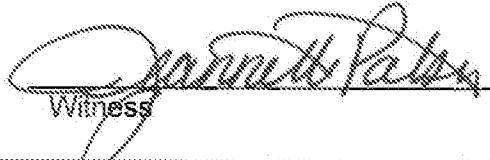
Given Name (first and middle [if any]): Encai		Family Name or Surname: Hao	
Inventor's Signature: 		Date: 05-21-2012	
Residence: Woodbury, Minnesota		Country: USA	Citizenship: People's Republic of China
Witness 		Witness 	

Given Name (first and middle [if any]): Kurt C.		Family Name or Surname: Melancon	
Inventor's Signature:		Date:	
Residence: White Bear Lake, Minnesota		Country: USA	Citizenship: United States of America
Witness		Witness	

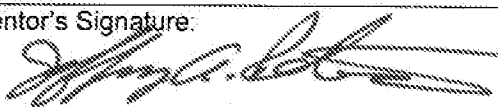
Given Name (first and middle [if any]): Audrey A.		Family Name or Surname: Sherman	
Inventor's Signature: 		Date: 5-30-12	
Residence: Saint Paul, Minnesota		Country: USA	Citizenship: United States of America
Witness 		Witness 	

Given Name (first and middle [if any]): William Blake		Family Name or Surname: Kolb	
Inventor's Signature: 		Date: 6/1/12	
Residence: West Lakeland, Minnesota		Country: USA	Citizenship: United States of America
Witness: 		Witness: 	

Given Name (first and middle [if any]): Robert F.		Family Name or Surname: Kamrath	
Inventor's Signature: 		Date: 5-30-2012	
Residence: Mahtomedi, Minnesota		Country: USA	Citizenship: United States of America
Witness: 		Witness: 	

Given Name (first and middle [if any]): Maureen A.		Family Name or Surname: Kavanagh	
Inventor's Signature: 		Date: 5-30-2012	
Residence: Stanchfield, Minnesota		Country: USA	Citizenship: United States of America
Witness: 		Witness: 	

Given Name (first and middle [if any]): Chris J.		Family Name or Surname: Tanley	
Inventor's Signature:		Date:	
Residence: Woodbury, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Jeffrey A.		Family Name or Surname: Peterson	
Inventor's Signature: 		Date: 5/30/12	
Residence: Lake Elmo, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

ASSIGNMENT OF APPLICATION

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

NANO-POROUS ADHESIVE TIE LAYER

- 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. , was filed on ;
- which application is identified as PCT International Patent Application No. PCT/US2010/058195; filed November 29, 2010;

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]): Encai		Family Name or Surname: Hao	
Inventor's Signature:		Date:	
Residence: Woodbury, Minnesota		Country: USA	Citizenship: People's Republic of China
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Kurt C.		Family Name or Surname: Melancon	
Inventor's Signature: <i>Kurt C Melancon</i>		Date: 7/18/12	
Residence: White Bear Lake, Minnesota		Country: USA	Citizenship: United States of America
_____ Paul Melancon Witness		_____ Jean David Melancon Witness	

Given Name (first and middle [if any]): Audrey A.		Family Name or Surname: Sherman	
Inventor's Signature:		Date:	
Residence: Saint Paul, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): William Blake		Family Name or Surname: Kolb	
Inventor's Signature:		Date:	
Residence: West Lakeland, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Robert F.		Family Name or Surname: Kamrath	
Inventor's Signature:		Date:	
Residence: Mahtomedi, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Maureen A.		Family Name or Surname: Kavanagh	
Inventor's Signature:		Date:	
Residence: Stanchfield, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Chris J.		Family Name or Surname: Tanley	
Inventor's Signature:		Date:	
Residence: Woodbury, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Jeffrey A.		Family Name or Surname: Peterson	
Inventor's Signature:		Date:	
Residence: Lake Elmo, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

ASSIGNMENT OF APPLICATION

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

NANO-POROUS ADHESIVE TIE LAYER

- 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. , was filed on ;
- which application is identified as PCT International Patent Application No. PCT/US2010/058195; filed November 29, 2010;

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]): Encai		Family Name or Surname: Hao	
Inventor's Signature:		Date:	
Residence: Woodbury, Minnesota		Country: USA	Citizenship: People's Republic of China
_____ Witness		_____ Witness	



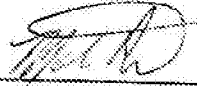
Given Name (first and middle [if any]): Kurt C.		Family Name or Surname: Melancon	
Inventor's Signature:		Date:	
Residence: White Bear Lake, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Audrey A.		Family Name or Surname: Sherman	
Inventor's Signature:		Date:	
Residence: Saint Paul, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle (if any)): William Blake		Family Name or Surname: Kolb	
Inventor's Signature:		Date:	
Residence: West Lakeland, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle (if any)): Robert F.		Family Name or Surname: Kamrath	
Inventor's Signature:		Date:	
Residence: Mahtomedi, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle (if any)): Maureen A.		Family Name or Surname: Kavanagh	
Inventor's Signature:		Date:	
Residence: Stanchfield, Minnesota		Country: USA	Citizenship: United States of America
_____ Witness		_____ Witness	

Given Name (first and middle [if any]): Chris J.		Family Name or Surname: Tanley	
Inventor's Signature: 		Date: 06/01/2012	
Residence: Woodbury, Minnesota		Country: USA	Citizenship: United States of America
Witness 		Witness 	

Given Name (first and middle [if any]): Jeffrey A.		Family Name or Surname: Peterson	
Inventor's Signature:		Date:	
Residence: Lake Elmo, Minnesota		Country: USA	Citizenship: United States of America
Witness		Witness	