

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

|                       |                |
|-----------------------|----------------|
| SUBMISSION TYPE:      | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT     |

**CONVEYING PARTY DATA**

| Name             | Execution Date |
|------------------|----------------|
| Junsheng Zhou    | 09/03/2010     |
| Zhiyong Xu       | 08/24/2010     |
| Ping Wang        | 08/31/2010     |
| Pierre Bonvallat | 08/13/2010     |

**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**

| Property Type       | Number   |
|---------------------|----------|
| Application Number: | 12867069 |

**CORRESPONDENCE DATA**

Fax Number: (651)736-3833  
*Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*  
 Phone: 651-733-1500  
 Email: tcollier@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: | 63393US006 |
|-------------------------|------------|

|                    |                    |
|--------------------|--------------------|
| NAME OF SUBMITTER: | Theresa T. Collier |
|--------------------|--------------------|

Total Attachments: 9  
 source=Assn\_signed\_63393US006#page1.tif

CH \$40.00 12867069

**501283941**

**PATENT  
 REEL: 024950 FRAME: 0655**

source=Assn\_signed\_63393US006#page2.tif  
source=Assn\_signed\_63393US006#page3.tif  
source=Assn\_signed\_63393US006#page4.tif  
source=Assn\_signed\_63393US006#page5.tif  
source=Assn\_signed\_63393US006#page6.tif  
source=Assn\_signed\_63393US006#page7.tif  
source=Assn\_signed\_63393US006#page8.tif  
source=Assn\_signed\_63393US006#page9.tif

**ASSIGNMENT OF APPLICATION**

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

HIGH DENSITY FIBER DISTRIBUTION HUB

- or 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. 12/867069; was filed on August 11, 2010;
- which application is identified as PCT International Patent Application No. PCT/US2009/035440; filed February 27, 2009;

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]):<br>JUNSHENG |                   | Family Name or Surname:<br>ZHOU |  |
| Inventor's Signature:<br><i>Junsheng Zhou</i>       |                   | Date:<br><i>Sept. 3rd. 2010</i> |  |
| Residence:<br>Shanghai                              | Country:<br>China | Citizenship:<br>China           |  |
| _____<br>Witness                                    |                   | _____<br>Witness                |  |

|  |                   |                               |  |
|--|-------------------|-------------------------------|--|
| Given Name (first and middle [if any]):<br>ZHIYONG |                   | Family Name or Surname:<br>XU |  |
| Inventor's Signature:                              |                   | Date:                         |  |
| Residence:<br>Shanghai                             | Country:<br>China | Citizenship:<br>China         |  |
| _____<br>Witness                                   |                   | _____<br>Witness              |  |

|   |                   |                                 |  |
|---|-------------------|---------------------------------|--|
| Given Name (first and middle [if any]):<br>PING |                   | Family Name or Surname:<br>WANG |  |
| Inventor's Signature:                           |                   | Date:                           |  |
| Residence:<br>Shanghai                          | Country:<br>China | Citizenship:<br>China           |  |
| _____<br>Witness                                |                   | _____<br>Witness                |  |

|   |  |                                      |                        |
|---|--|--------------------------------------|------------------------|
| Given Name (first and middle [if any]):<br>PIERRE |  | Family Name or Surname:<br>BONVALLAT |                        |
| Inventor's Signature:                             |  | Date:                                |                        |
| Residence:<br>Cluses                              |  | Country:<br>France                   | Citizenship:<br>France |
| _____<br>Witness                                  |  | _____<br>Witness                     |                        |

**ASSIGNMENT OF APPLICATION**

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

|                                     |
|-------------------------------------|
| HIGH DENSITY FIBER DISTRIBUTION HUB |
|-------------------------------------|

- or 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. 12/867069; was filed on August 11, 2010;
- which application is identified as PCT International Patent Application No. PCT/US2009/035440; filed February 27, 2009;

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]):<br>JUNSHENG |  | Family Name or Surname:<br>ZHOU |                       |
| Inventor's Signature:                               |  | Date:                           |                       |
| Residence:<br>Shanghai                              |  | Country:<br>China               | Citizenship:<br>China |
| _____<br>Witness                                    |  | _____<br>Witness                |                       |

|  |  |   |                       |
|--|--|---|-----------------------|
| Given Name (first and middle [if any]):<br>ZHIYONG |  | Family Name or Surname:<br>XU           |                       |
| Inventor's Signature:<br><i>ZHIYONG XU</i>         |  | Date:<br><i>Aug, 24th, 2010</i>         |                       |
| Residence:<br>Shanghai                             |  | Country:<br>China                       | Citizenship:<br>China |
| _____<br><i>Jingying Zhou</i><br>Witness           |  | _____<br><i>Zong Haifeng</i><br>Witness |                       |

|   |  |   |                       |
|---|--|---|-----------------------|
| Given Name (first and middle [if any]):<br>PING |  | Family Name or Surname:<br>WANG         |                       |
| Inventor's Signature:<br><i>PING WANG PING</i>  |  | Date:<br><i>Aug. 31. 2010</i>           |                       |
| Residence:<br>Shanghai                          |  | Country:<br>China                       | Citizenship:<br>China |
| _____<br><i>Jingying Zhou</i><br>Witness        |  | _____<br><i>Zong Haifeng</i><br>Witness |                       |

|   |  |                                      |                        |
|---|--|--------------------------------------|------------------------|
| Given Name (first and middle [if any]):<br>PIERRE |  | Family Name or Surname:<br>BONVALLAT |                        |
| Inventor's Signature:                             |  | Date:                                |                        |
| Residence:<br>Cluses                              |  | Country:<br>France                   | Citizenship:<br>France |
| _____<br>Witness                                  |  | _____<br>Witness                     |                        |



**ASSIGNMENT OF APPLICATION**

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

HIGH DENSITY FIBER DISTRIBUTION HUB

- or 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. 12/867069; was filed on August 11, 2010;
- which application is identified as PCT International Patent Application No. PCT/US2009/035440; filed February 27, 2009;

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


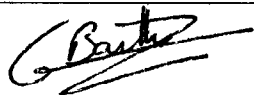
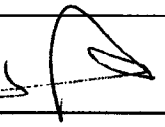
I/We do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

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]):<br>JUNSHENG |                   | Family Name or Surname:<br>ZHOU |  |
| Inventor's Signature:                               |                   | Date:                           |  |
| Residence:<br>Shanghai                              | Country:<br>China | Citizenship:<br>China           |  |
| _____<br>Witness                                    |                   | _____<br>Witness                |  |

|  |                   |                               |  |
|--|-------------------|-------------------------------|--|
| Given Name (first and middle [if any]):<br>ZHIYONG |                   | Family Name or Surname:<br>XU |  |
| Inventor's Signature:                              |                   | Date:                         |  |
| Residence:<br>Shanghai                             | Country:<br>China | Citizenship:<br>China         |  |
| _____<br>Witness                                   |                   | _____<br>Witness              |  |

|   |                   |                                 |  |
|---|-------------------|---------------------------------|--|
| Given Name (first and middle [if any]):<br>PING |                   | Family Name or Surname:<br>WANG |  |
| Inventor's Signature:                           |                   | Date:                           |  |
| Residence:<br>Shanghai                          | Country:<br>China | Citizenship:<br>China           |  |
| _____<br>Witness                                |                   | _____<br>Witness                |  |

|  |  |  |                        |
|--|--|--|------------------------|
| Given Name (first and middle [if any]):<br>PIERRE  |  | Family Name or Surname:<br>BONVALLAT   |                        |
| Inventor's Signature:<br>         |  | Date:<br>August 2010, 13 <sup>th</sup>   |                        |
| Residence:<br>Cluses   |  | Country:<br>France   | Citizenship:<br>France |
| BARTHES Guy<br>16 August 2010<br> |  | JULY JOEL<br>11 August 2010<br> |                        |
| Witness  |  | Witness  |                        |