

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>Zhong Chen</td> <td>08/31/2012</td> </tr> <tr> <td>Jingjing Ma</td> <td>08/29/2012</td> </tr> </tbody> </table>		Name	Execution Date	Zhong Chen	08/31/2012	Jingjing Ma	08/29/2012				
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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											
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CORRESPONDENCE DATA											
<p>Fax Number: 6517363833 Phone: 651-733-1500 Email: mmoes@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: P.O. Box 33427 Address Line 4: St. Paul, MINNESOTA 55133-3427</p>											
ATTORNEY DOCKET NUMBER:	66181US004										
NAME OF SUBMITTER:	Monica J. Moes										
Total Attachments: 2 source=Assignment_66181US004#page1.tif source=Assignment_66181US004#page2.tif											

CH \$40.00 13635049

ASSIGNMENT OF APPLICATION

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

**CERAMIC SHAPED ABRASIVE PARTICLES, METHODS OF MAKING THE SAME,
AND ABRASIVE ARTICLES CONTAINING THE SAME**


- ☒ 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/US2011/034049; filed April 27, 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.

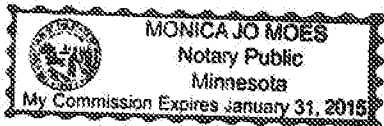
In witness whereof, I/we have signed my/our name(s) on the day and year set forth below.

Given Name (first and middle [if any]): Zhong		Family Name or Surname: Chen	
Inventor's Signature: 		Date: 08/31/2012	
Residence: Woodbury, Minnesota		Country: United States of America	Citizenship: People's Republic of China


STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)


On this 31st day of August 2012, before me personally appeared the above-named Zhong Chen, and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.

(Seal)



MONICA JO MOES
Notary Public
Minnesota
My Commission Expires January 31, 2015

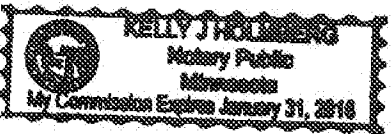

Notary Public

Given Name (first and middle [if any]): Jingjing	Family Name or Surname: Ma	
Inventor's Signature: 	Date: 08/29/2012	
Residence: Cottage Grove, Minnesota	Country: USA	Citizenship: United States of America

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

On this 29 day of August, 2012, before me personally appeared the above-named Jingjing Ma, and who executed the foregoing instrument, as said person's free act and deed, on the day and year aforesaid.

(Seal)



Notary Public Kelly J. Holmberg