	Case No.: 63491US002
	ORM COVER SHEET ITS ONLY
To: The Director of the U.S. Patent and Trademark Office:	
Please record the attached document(s) or the new addres	s(es) below.
Name of conveying party(ies)	2. Name and address of receiving party(ies):
Owen, lan R. Wald, Charles R. Studiner IV, Charles J. Swanson, Mark A. Woo, Edward J. Schmidt, Curtis J. Braunschweig, Ehrich J. Oct. 8, 2007 Oct. 8, 2007 Oct. 8, 2007	3M Innovative Properties Company P.O. Box 33427 St. Paul, Minnesota 55133-3427 Additional name(s) of receiving party(ies) attached? ☐ Yes ☑ No
Additional name(s) of conveying party(ies) attached? ☐ Yes ☑ No	
3. Nature of conveyance: ☐ Assignment ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Joint Research Agreement ☐ Government Interest As	ssignment
4. Application or patent number(s)	document is being filed together with a new application.
A. Patent Application No(s). 29/283290	B. Patent No(s).
Additional Numbers A	ttached? ☐ Yes ⊠ No
Name and address to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:
Name: Scott A. Baum Office of Intellectual Property Counsel 3M Innovative Properties Company	
Phone Number: -1-651-733-1534 Fax Number: 651-736-3833	7. Total fee (37 CFR §§ 1.21(h) & 3.41): \$40.00 Enclosed Authorized to be charged to deposit account
32692	
Customer Number	8. Payment Information:
	Deposit Account Number: 13-3723
	Authorized User Name: Scott A. Baum
9. Signature: Printed Name of Attorney/Agent: Pamela L., Stewart Registration No.: 45,707	October 19, 2007 Date
Pages: Total number of pages including COVER SHEET, atta	chments, and documents 10

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

Case No.: 63491US002

ASSIGNMENT OF APPLICATION

Whereas I/we, the below named inventor(s), with residence and citizenship as indicated

be	elow, have made an invention in
	RANDOM HOLE ABRASIVE DISC
	for which an application for a United States Patent is being filed contemporaneously herewith;
\boxtimes	for which an application for a United States Patent identified as U.S. Patent Application No. 29/283290; was filed on August 9, 2007;
	which application is identified as PCT International Patent Application No. ; filed ;

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

Assignment

Page 1 of 4 Case No.: 63491US002

Given Name (first and middle [if any]):

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.

Family Name or Surname:

IAN R.	OWEN	
Inventor's Signature:	Date:	Citizenship:
Residence: Baldwin, Wisconsin	Country: USA	Citizenship: British
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY)		
On this	going instrument, as sai	me personally appeared the d person's free act and deed, on
(Seal) JAME A EBACH	Yotary Public	Shach_
Given Name (first and middle [if any]): CHARLES R.	Family Name or Surnam WALD	
Inventor's Signature: Cholesk Ward	Date: /0 - 8 - 0 - Country: USA	7
Residence: Oakdale, Minnesota	Country: / USA	Citizenship: United States of America
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY)		
On this 8th day of October	, <u>2007,</u> before	me personally appeared the
above-named CHARLES R. WALD, and who executed th deed, on the day and year aforesaid.	e foregoing instrument,	as said person's free act and
(Seal) JAMIE A. EBACH Notary Public Minnesota My Commission Expires January 31, 2010	yotan Public	Epaler

Given Name (first and middle [if any]): CHARLES J.	Family Name or Surnam STUDINER IV	e:
Inventor's Signature	Date: 10/5/2002	
Residence: Cottage Grove, Minnesota	Country: USA	Citizenship: United States of America
STATE OF MINNESOTA) ss. COUNTY OF RAMSEY On this day of day of above-named CHARLES J. STUDINER IV, and who executed and deed, on the day and year aforesaid. (Seal) JAMIE A. EBACH Notary Public Minnesota My Commission Expires January 31, 2010	207, before cuted the foregoing instruction with the property of the property	me personally appeared the ument, as said person's free act
Given Name (first and middle [if any]):	Eswille Name of Con-	
MARK A,	Family Name or Surname SWANSON	e :
Inventor's Signature:	Date:	
Residence: Ames, Iowa	Country: USA	Citizenship: United States of America
STATE OF IOWA)) ss. COUNTY OF) On this day of above-named MARK A. SWANSON, and who executed the deed, on the day and year aforesaid.	,, before ne foregoing instrument,	
(Seal)	Notary Public	~

Assignment

Page 3 of 4

Case No.: 63491US002

Given Name (first and middle [if any]): EDWARD J.	Family Name or Surname: WOO
Inventor's Signature:	Date: $(8-8-9)$ Country: Citizenship:
Residence: Woodbury, Minnesota	Country: Citizenship: USA United States of America
STATE OF MINNESOTA)) ss.	·
COUNTY OF RAMSEY) On this Standard day of October	, <u>ZOU7</u> , before me personally appeared the
above-named EDWARD J. WOO, and who executed the deed, on the day and year aforesaid.	
(Seal) JAMIE A. EBACH Notary Public Minnesota Ny Commission Expires January 31, 2010	Notary Public
Given Name (first and middle [if any]): CURTIS J.	Family Name or Surname: SCHMIDT
Inventor's Signature:	Date: 10/8/07
Residence: South St. Paul, Minnesota	Country: Citizenship: USA United States of America
STATE OF MINNESOTA)) ss.	
COUNTY OF RAMSEY) On this Aday of Orthogram	, <u>ZOO 7</u> , before me personally appeared the
above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid.	the foregoing instrument, as said person's free act and
(Seal) JAMIE A. EBACH	Notary Public
Notary Public Minnesota My Commission Expires January 31, 2010	Notally Public
Given Name (first and middle [if any]): EHRICH J.	Family Name or Surname: BRAUNSCHWEIG
Inventor's Signature:	Date:
Residence: Woodbury, Minnesota	Country: Citizenship: USA United States of America
STATE OF MINNESOTA)	OTHER STATE OF ATTEMEN
COUNTY OF RAMSEY) ss. On this Sth day of October	2017 hoforo ma navanally
above-named EHRICH J. BRAUNSCHWEIG, and who exact and deed, on the day and year aforesaid.	
(Seal) JAMIE A, EBACH Notary Public Minnesota My Commission Expires January 31, 2010	Notary Public

Assignment

Page 4 of 4

Case No.: 63491US002

Case No.: 63491US002

ASSIGNMENT OF APPLICATION

Whereas I/we the helow named inventor(s) with residence and citizenship as indicated

RANDOM HU	LE ABRASIVE DISC	
for which an application for a United State	s Patent is being filed	contemporaneously herewith
for which an application for a United State 29/283290; was filed on August 9, 2007;	s Patent identified as	U.S. Patent Application No.

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, relssues, 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

Assignment Page 1 of 4 Case No.: 63491US002

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.

JAN R.	Family Name or Suman OWEN	ne:
Inventor's Signature:	Date:	
Residence: Baldwin, Wisconsin	Country: USA	Citizenship: British
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this day of above-named IAN R. OWEN, and who executed the fore the day and year aforesaid.	, before golng instrument, as sai	me personally appeared the diperson's free act and deed, on
(Seal)	Notary Public	
Given Name (first and middle [if any]): CHARLES R.	Family Name or Surnan WALD	
Inventor's Signature:	Date:	
Residence: Oakdale, Minnesota	Country: USA	Citizenship: United States of America
STATE OF MINNESOTA)) ss. COUNTY OF RAMSEY) On this day of above-named CHARLES R. WALD, and who executed the deed, on the day and year aforesaid.	,, before ie foregoing instrument,	me personally appeared the as said person's free act and
(Seal)	Notary Public	

Assignment

Page 2 of 4

Case No.: 63491US002

Given Name (first and middle [if any]): CHARLES J.	STUDINER IV	::
Inventor's Signature:	Date:	
Residence: Cottage Grove, Minnesota	Country: USA	Citizenship: United States of America
STATE OF MINNESOTA)) ss, COUNTY OF RAMSEY) On this day of	, before	me personally appeared the
above-named CHARLES J. STUDINER IV, and who exe and deed, on the day and year aforesaid.	cuted the foregoing instr	ument, as said person's free act
(Seal)	Notary Public	
Given Name (first and middle [if any]): MARK A.	Family Name or Surnam SWANSON	ne:
Inventor's Signature: Mark A Swanson	Date: 10/17/6	
Residence: Ames, lowa	Country: USA	Citizenship: United States of America
STATE OF IOWA) ss. COUNTY OF, Story On this 17 day of October above-named MARK A. SWANSON, and who executed deed, on the day and year afcresaid.	, <u>200</u> 17_, before the foregoing instrument	me personally appeared the , as said person's free act and
(Seal) JOHN & CHERYL PEARSON	Chery Pear Notary Public Chary T	son Pansan
	1	

Case No.: 63491US002

Given Name (first and middle [if any]): EDWARD J.	Family Name or Suma	me;
EDVVARU J.	WOO	
Inventor's Signature:	Date:	
Residence:	Country:	Citizenship:
Woodbury, Minnesota	USA	United States of America
STATE OF MINNESOTA)		
) ss.		
COUNTY OF RAMSEY		
On thisday of	,, befor	e me personally appeared the
above-named EDWARD J. WOO, and who executed the	e foregoing instrument, a	as said person's free act and
deed, on the day and year aforesaid.		
(Seal)		
	Notary Public	Control of the Contro
	-	
And the second s		
Given Name (first and middle [if any]): CURTIS J.	Family Name or Surna	ne:
	SCHMIDT	
Inventor's Signature:	Date:	
Residence:	Country:	Citizenship:
South St. Paul, Minnesota	USA	United States of America
STATE OF MINNESOTA)		
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COUNTY OF RAMSEY		
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On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]):	the foregoing Instrumer Notary Public Family Name or Sumar	t, as said person's free act and
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J.	the foregoing Instrumer Notary Public Family Name or Sumar BRAUNSCHWEIG	t, as said person's free act and
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]):	the foregoing Instrumer Notary Public Family Name or Sumar	t, as said person's free act and
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On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence:	Notary Public Family Name or Sumar BRAUNSCHWEIG Date: Country:	t, as said person's free act and ne:
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota	Notary Public Family Name or Sumar BRAUNSCHWEIG Date:	t, as said person's free act and
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota STATE OF MINNESOTA)	Notary Public Family Name or Sumar BRAUNSCHWEIG Date: Country:	t, as said person's free act and ne:
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota STATE OF MINNESOTA) ss.	Notary Public Family Name or Sumar BRAUNSCHWEIG Date: Country:	t, as said person's free act and ne:
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota STATE OF MINNESOTA)	Notary Public Family Name or Surnar BRAUNSCHWEIG Date: Country: USA	t, as said person's free act and ne: Citizenship: United States of America
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On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota STATE OF MINNESOTA)	Notary Public Family Name or Surnar BRAUNSCHWEIG Date: Country: USA	t, as said person's free act and ne: Citizenship: United States of America e me personally appeared the
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On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota STATE OF MINNESOTA)	Notary Public Family Name or Surnar BRAUNSCHWEIG Date: Country: USA	t, as said person's free act and ne: Citizenship: United States of America e me personally appeared the
On this day of above-named CURTIS J. SCHMIDT, and who executed deed, on the day and year aforesaid. (Seal) Given Name (first and middle [if any]): EHRICH J. Inventor's Signature: Residence: Woodbury, Minnesota STATE OF MINNESOTA)	Notary Public Family Name or Surnar BRAUNSCHWEIG Date: Country: USA before executed the foregoing in	t, as said person's free act and ne: Citizenship: United States of America e me personally appeared the

Assignment

Page 4 of 4

Case No.: 63491US002