PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3509759

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RONALD W. AUSEN	07/07/2015
WILLIAM J. KOPECKY	07/02/2015
THOMAS P. HANSCHEN	06/30/2015
WEI ZHANG	06/30/2015

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

Property Type	Number
Application Number:	14772117

CORRESPONDENCE DATA

Fax Number: (651)736-3833

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 651-733-1500

Email: kholmberg@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:	71440US009
NAME OF SUBMITTER:	KELLY J. HOLMBERG
SIGNATURE:	/Kelly J. Holmberg/
DATE SIGNED:	09/02/2015
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

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Case No:

71440US009

As a	below	named	inventor,	I believe I	am ai	n original	inventor	or an	original	joint	inventor	of a	claimed	invention	in the	ş
app	lication	and for	which a p	atent is so	ought c	n the inv	ention er	ititled:	7							

sphireation and for without a bateur is sought on the invention	n englied.
NETTINGS, DIES, AND METH	ODS OF MAKING THE SAME
The specification of which:	
is attached hereto;	
was filed on as United States Application No.	
is identified as PCT International Application No. filed on March 7, 2014	PCT/US2014/021494
The above-identified application was made or authorized to	be made by me.
ine or imprisonment of not more than 5 years, or both. In addition, for good and valuable consideration, receipt of and do hereby assign and transfer unto the 3M INNOVATIVEM COMPANY, and a corporation of Delaware, having its passigns, the entire right, title, and interest in and to the said continuation (in whole or in part) of said application, and in by me or made jointly with others (provided any such improvermination of, my employment with 3M COMPANY and an all Letters Patent, reexaminations, reissues, or extensions thereto (including the right to apply for Letters Patent, Utility own name and to claim any priority rights for such foreign a international conventions, treaties, or otherwise), which have continuation (in whole or in part), renewal, reexamination, repart upon the said invention or improvements thereon, to be nave been by me had this assignment and transfer not been	and to any and all improvements in the said invention made overnent is made during, or within one year after the y of its existing or future subsidiaries), and in and to any and thereof, of the United States of America and countries foreign with Models, or Inventors' Certificates in foreign countries in its applications to which such applications are entitled under we been or may be granted thereon or on any divisional, eissue, or other or further application based in whole or in the held and enjoyed as fully and exclusively as they would in made;
hat may be deemed necessary by said Company, its succe	nd administrators, to execute and deliver without further ocuments, and to perform such other acts as I lawfully may, essors, assigns, and nominees, fully to secure its right, title, Patent, Utility Models, or Inventors' Certificates in any and all
do hereby authorize and request the Commissioner of Pat granted upon any of the said applications, to said 3M Innov itle, and interest therein.	tents to issue any and all Letters Patent which may be rative Properties Company, as the assignee of the entire right
Legal Name of Inventor:	
Ronald W. Ausen	annan
Inventor's Signature:	Date:
Romald to Awar	July 2 2015

Case No:

71440US009

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

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NETTINGS, DIES, AND METH	ODS OF MAKING THE SAME		
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is identified as PCT International Application No. filed on March 7, 2014	PCT/US2014/021494		
The above-identified application was made or authorized to	be made by me.		
and do hereby assign and transfer unto the 3M INNOVATIVEM COMPANY, and a corporation of Delaware, having its passigns, the entire right, title, and interest in and to the said continuation (in whole or in part) of said application, and in any me or made jointly with others (provided any such improvermination of, my employment with 3M COMPANY and any all Letters Patent, reexaminations, reissues, or extensions thereto (including the right to apply for Letters Patent, Utility own name and to claim any priority rights for such foreign a international conventions, treaties, or otherwise), which have continuation (in whole or in part), renewal, reexamination, repart upon the said invention or improvements thereon, to be nave been by me had this assignment and transfer not been	which is acknowledged, I have agreed to assign and transfer /E PROPERTIES COMPANY, a wholly-owned subsidiary of principal office at Saint Paul, Minnesota, its successors and invention and application, and in and to any division or and to any and all improvements in the said invention made wement is made during, or within one year after the y of its existing or future subsidiaries), and in and to any and hereof, of the United States of America and countries foreign Models, or Inventors' Certificates in foreign countries in its applications to which such applications are entitled under the been or may be granted thereon or on any divisional, elissue, or other or further application based in whole or in the held and enjoyed as fully and exclusively as they would in made;		
hat may be deemed necessary by said Company, its succe	nd administrators, to execute and deliver without further ocuments, and to perform such other acts as I lawfully may, essors, assigns, and nominees, fully to secure its right, title, Patent, Utility Models, or Inventors' Certificates in any and all		
do hereby authorize and request the Commissioner of Pat granted upon any of the said applications, to said 3M Innov- itle, and interest therein.	ents to issue any and all Letters Patent which may be ative Properties Company, as the assignee of the entire right		
Legal Name of Inventor:			
William J. Kopecky			
Inventor's Signature:	Date:		
William of Kopely 5 5 / 5			

Case No:

71440US009

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

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NETTINGS, DIES, AND METHODS OF	MAKING THE SAME
The specification of which:	
is attached hereto;	
was filed on as United States Application No.	
is identified as PCT International Application No. filed on March 7, 2014	PCT/US2014/021494
The above-identified application was made or authorized to be made	by me.
hereby acknowledge that any willful false statement made in this decine or imprisonment of not more than 5 years, or both. In addition, for good and valuable consideration, receipt of which is acted to hereby assign and transfer unto the 3M INNOVATIVE PROPERM COMPANY, and a corporation of Delaware, having its principal of assigns, the entire right, title, and interest in and to the said invention continuation (in whole or in part) of said application, and in and to any by me or made jointly with others (provided any such improvement is ermination of, my employment with 3M COMPANY and any of its exical Letters Patent, reexaminations, reissues, or extensions thereof, of thereto (including the right to apply for Letters Patent, Utility Models, of the part of the par	cknowledged, I have agreed to assign and transfer ERTIES COMPANY, a wholly-owned subsidiary of fice at Saint Paul, Minnesota, its successors and and application, and in and to any division or y and all improvements in the said invention made made during, or within one year after the isting or future subsidiaries), and in and to any and the United States of America and countries foreign or Inventors' Certificates in foreign countries in its s to which such applications are entitled under may be granted thereon or on any divisional, other or further application based in whole or in
do further agree for myself and for my heirs, executors, and administonsideration any further applications, assignments, and documents, hat may be deemed necessary by said Company, its successors, as and interest as aforesaid and to obtain or maintain Letters Patent, Uticountries; and	and to perform such other acts as I lawfully may, signs, and nominees, fully to secure its right, title,
do hereby authorize and request the Commissioner of Patents to iss granted upon any of the said applications, to said 3M Innovative Prop itle, and interest therein.	sue any and all Letters Patent which may be perties Company, as the assignee of the entire right
Legal Name of Inventor:	
Thomas P. Hanschen	uuuu
Inventor's Signature: Date:	130/2015

Case No:

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As a below named inventor, I believe t			intor of a claimed invention in	n the
application and for which a patent is so	ught on the invention en	titled		

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The above-identified application was made or authorized	to be made by me.
and do hereby assign and transfer unto the 3M INNOVAT MM COMPANY, and a corporation of Delaware, having its assigns, the entire right, title, and interest in and to the sa continuation (in whole or in part) of said application, and it by me or made jointly with others (provided any such imple ermination of, my employment with 3M COMPANY and a all Letters Patent, reexaminations, reissues, or extension hereto (including the right to apply for Letters Patent, Util own name and to claim any priority rights for such foreign international conventions, treaties, or otherwise), which he continuation (in whole or in part), renewal, reexamination	any of its existing or future subsidiaries), and in and to any and is thereof, of the United States of America and countries foreign lity Models, or Inventors' Certificates in foreign countries in its applications to which such applications are entitled under lave been or may be granted thereon or on any divisional, are reissue, or other or further application based in whole or in the held and enjoyed as fully and exclusively as they would
consideration any further applications, assignments, and hat may be deemed necessary by said Company, its suc	and administrators, to execute and deliver without further documents, and to perform such other acts as I lawfully may, ccessors, assigns, and nominees, fully to secure its right, title, is Patent, Utility Models, or Inventors' Certificates in any and all
	Patents to issue any and all Letters Patent which may be ovative Properties Company, as the assignee of the entire right
Legal Name of Inventor:	
Wei Zhang	
Inventor's Signature:	Date:
MM 21~9	June 30, 2015

PATENT REEL: 036476 FRAME: 0270

RECORDED: 09/02/2015