# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5045411

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

#### **CONVEYING PARTY DATA**

Name	Execution Date
NAIYONG JING	06/19/2018
SHUPENG WU	06/21/2018
ZHIGANG YU	06/20/2018
JIAFENG LIU	06/25/2018
MINGNA XIONG	06/20/2018

#### 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:	16064404		

#### **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: mmoes@mmm.com

3M INNOVATIVE PROPERTIES COMPANY **Correspondent Name:** 

Address Line 1: PO BOX 33427

Address Line 4: ST. PAUL, MINNESOTA 55133-3427

ATTORNEY DOOKET NUMBER	7700410005		
ATTORNEY DOCKET NUMBER:	77364US005		
NAME OF SUBMITTER:	MONICA J. MOES		
SIGNATURE:	/Monica J. Moes/		
DATE SIGNED:	07/11/2018		
	This document serves as an Oath/Declaration (37 CFR 1.63).		

**Total Attachments: 5** 

**PATENT** REEL: 046320 FRAME: 0122

504998663

source=DeclarationAndAssignment\_77364US005#page1.tif source=DeclarationAndAssignment\_77364US005#page2.tif source=DeclarationAndAssignment\_77364US005#page3.tif source=DeclarationAndAssignment\_77364US005#page4.tif source=DeclarationAndAssignment\_77364US005#page5.tif

> PATENT REEL: 046320 FRAME: 0123

Case No:

77364US005

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:

abbiication and for will	on a patent is sought on the inventio	n enguea.	
COMP	OSITION, METHOD OF MAKI	ING COMP	OSITION, AND ARTICLE
The specification of wh	nich:		
is attached hereto			
was filed on as United States.	Application No.		
is identified as PC filed on	T International Application No.  December 25, 2015		PCT/CN2015/098922
The above-identified a	pplication was made or authorized to	be made by	me.
fine or imprisonment o	f not more than 5 years, or both.		ation is punishable under 18 U.S.C. 1001 by
3M COMPANY, and a assigns, the entire righ continuation (in whole by me or made jointly termination of, my empall Letters Patent, reex thereto (including the rown name and to clain international conventio continuation (in whole part upon the said inve	corporation of Delaware, having its part, title, and interest in and to the said or in part) of said application, and in with others (provided any such improving the said and such improving the said and any aminations, reissues, or extensions and priority rights for such foreign any priority rights for such foreign and part), renewal, reexamination, reisport in part), renewal, reexamination, respectively.	orincipal office I invention and and to any an ovement is ma by of its existin thereof, of the y Models, or Ir applications to ye been or ma eissue, or oth- e held and enj	IES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and application, and in and to any division or dall improvements in the said invention made de during, or within one year after the g or future subsidiaries), and in and to any and United States of America and countries foreign eventors' Certificates in foreign countries in its which such applications are entitled under y be granted thereon or on any divisional, er or further application based in whole or in oyed as fully and exclusively as they would
consideration any furth that may be deemed n	er applications, assignments, and de ecessary by said Company, its succ	ocuments, and essors, assign	ors, to execute and deliver without further I to perform such other acts as I lawfully may, is, and nominees, fully to secure its right, title, Models, or Inventors' Certificates in any and all
	e said applications, to said 3M Innov		any and all Letters Patent which may be es Company, as the assignee of the entire right,
Tanak Blanca at two		***************************************	
Legal Name of Invent Naiyong Jing	OF C		
Inventor's Signature:		Date:	
	loof Jing		119/2018

PATENT REEL: 046320 FRAME: 0124

Case No:

77364US005

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the

COMP	OSITION, METHOD OF MAK	ING COMPOSITION, AND ARTICLE
The specification of wl		The second secon
is attached hereto		
	,	
was filed on as United States	Application No.	
	•	
is identified as P(	T International Application No.	PCT/CN2015/098922
filed on	December 25, 2015	
The above-identified a	pplication was made or authorized t	be made by me.
In addition, for good ar and do hereby assign and a sasigns, the entire righ continuation (in whole by me or made jointly varieties) termination of, my empall Letters Patent, reexistence (including the right) own name and to claim international convention continuation (in whole continuation the said investigation of the said inv	Indiction more than 5 years, or both, and valuable consideration, receipt of and transfer unto the 3M INNOVATI corporation of Delaware, having its t, title, and interest in and to the said or in part) of said application, and in with others (provided any such improving the said application, and argument with 3M COMPANY and argument w	which is acknowledged, I have agreed to assign and transfer VE PROPERTIES COMPANY, a wholly-owned subsidiary of principal office at Saint Paul, Minnesota, its successors and I invention and application, and in and to any division or and to any and all improvements in the said invention made overnent is made during, or within one year after the ray of its existing or future subsidiaries), and in and to any and thereof, of the United States of America and countries foreign y Models, or Inventors' Certificates in foreign countries in its applications to which such applications are entitled under the processor of the countries of the polication of the policatio
I do further agree for m consideration any furth that may be deemed no and interest as aforesa countries; and I do hereby authorize a	er applications, assignments, and di ecessary by said Company, its succi id and to obtain or maintain Letters in and request the Commissioner of Pai	and 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 letters Patent which may be
title, and interest therein	7.·	ative Properties Company, as the assignee of the entire right
Shupeng Wu	***	
Inventor's Signature:		Date:

**PATENT REEL: 046320 FRAME: 0125** 

2018.06.21.

Case No:

77364US005

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:

COM	POSITION, METHOD OF M	AKING COMF	OSITION, AND ARTICLE
The specification of w	rhich:		
☐ is attached here	to;		
was filed on as United States	Application No.		
is identified as P filed on	CT International Application No. December 25, 2015		PCT/CN2015/098922
The above-identified	application was made or authorize	ed to be made by	me.
fine or imprisonment and do hereby assign 3M COMPANY, and assigns, the entire rigontinuation (in whole by me or made jointly termination of, my entall Letters Patent, reathereto (including the lown name and to claim international conventicontinuation (in whole part upon the said inverted in the said in th	of not more than 5 years, or both.  and valuable consideration, receip and transfer unto the 3M INNOV a corporation of Delaware, having th, title, and interest in and to the e or in part) of said application, an with others (provided any such in applyment with 3M COMPANY an examinations, reissues, or extensi right to apply for Letters Patent, I m any priority rights for such fore ons, treaties, or otherwise), which e or in part), renewal, reexaminati	ot of which is acknown that the principal office its principal office said invention are in any of its existions thereof, of the Utility Models, or its applications to have been or mon, reissue, or of the be held and elemants.	nowledged, I have agreed to assign and transfer TIES COMPANY, a wholly-owned subsidiary of e at Saint Paul, Minnesota, its successors and application, and in and to any division or nd all improvements in the said invention made ade during, or within one year after the ng or future subsidiaries), and in and to any and e United States of America and countries foreign Inventors' Certificates in foreign countries in its o which such applications are entitled under ay be granted thereon or on any divisional, her or further application based in whole or in njoyed as fully and exclusively as they would
consideration any fur that may be deemed	ther applications, assignments, at necessary by said Company, its s	nd documents, ar successors, assig	ators, to execute and deliver without further and to perform such other acts as I lawfully may, and nominees, fully to secure its right, title, Models, or Inventors' Certificates in any and all
I do hereby authorize granted upon any of t title, and interest ther	he said applications, to said 3M I	of Patents to issue nnovative Proper	e any and all Letters Patent which may be ties Company, as the assignee of the entire righ
Legal Name of inve	ntor:		
Zhigang Yu			
Inventor's Signature	C .	Date:	
Thigons	Y	) im. 2	vo, 2013

PATENT REEL: 046320 FRAME: 0126

Case No:

77364US005

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:

,	OSITION, METHOD OF MA		OSITION AND ARTICLE	
The specification of w				
is attached heret				
was filed on as United States				
	OT international Application No. Decamber 25, 2015		PCT/CN2015/098922	••••••
The above-identified a	pplication was made or authorized	d to be made by:	me.	
in addition, for good are and do hereby assign and do hereby assign assigns, the entire righ continuation (in whole by rise or made jointly to termination of, my empail Letters Patent, reex thereto (including the rown name and to claim nternational convention terminuation (in whole about upon the said investage been by me had to do further agree for mediand assignment.	rifict more than 5 years, or both, and valuable consideration, receipt and transfer unto the 3M INNOVA corporation of Delaware, having it, title, and interest in and to the sor in part) of said application, and with others (provided any such imployment with 3M COMPANY and aminations, reissues, or extension ght to apply for Letters Patent, Ut any priority rights for such foreigns, treaties, or otherwise), which is or in part), renewal, reexamination or improvements thereon, to this assignment and transfer not by self and for my here, executors,	of which is acknown. TIVE PROPERT to principal office and invention and in and to any an provement is marked to existing the existing its thereof, of the sitty Models, or in applications to nave been or marked and enjugen made;	ation is punishable under 18 U.S.C. 1001 in pulse agreed to assign and train TES COMPANY, a wholly-owned subsidiar at Saint Paul. Minnesota, its successors at application, and in and to any division or division and all improvements in the said invention made during, or within one year after the gor future subsidiaries), and in and to any United States of America and countries for enter the such applications are entitled under by the granted thereon or on any divisional, and further application based in whole or it of further application based in whole or it of the perform such other acts as I lawfully ments to perform such other acts as I lawfully ments.	nsfeir Ty of and ade and reign its in
hat may be deemed no	ecessary by said Company, its suc	ccessors, assign:	to penorm such other acts as I lawfully miss, and nominees, fully to secure its right, ti Nodels, or Inventors! Certificates in any an	tie.
do hereby authorize a tranied upon any of the itie, and interest therei	e said applications, to said 3M Inn	Patents to issue a lovative Propertie	any and all Letters Patent which may be as Company, as the assignee of the entire	right,
Legal Name of Invent	) <u>".</u>			****
Jiafeng Liu				coceres
Inventor's Signature:		Date: 6/25/2018		***************************************

Case No:

77364US005

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:

appi	ication and for whi	ch a patent is sought on the inventio	n entitled:	
	COMP	OSITION, METHOD OF MAKI	NG COMP	OSITION, AND ARTICLE
The	specification of wh	nich:		
	is attached hereto	9;		
	was filed on as United States	Application No.		
$\boxtimes$	is identified as PC filed on	T International Application No.  December 25, 2015		PCT/CN2015/098922
The	above-identified a	pplication was made or authorized to	be made by	me.
fine	or imprisonment o	f not more than 5 years, or both.		ration is punishable under 18 U.S.C. 1001 by owledged, I have agreed to assign and transfer
3M ( assignment by notering them all L them own inter cont part	COMPANY, and a gns, the entire righ inuation (in whole ne or made jointly initiation of, my empetters Patent, reex to (including the rational conventionation (in whole upon the said investion the said investion inuation (in whole upon the said investion (in whole page).	corporation of Delaware, having its part, title, and interest in and to the said or in part) of said application, and in with others (provided any such improbloyment with 3M COMPANY and an aminations, reissues, or extensions tight to apply for Letters Patent, Utility any priority rights for such foreign ans, treaties, or otherwise), which havor in part), renewal, reexamination, re	principal office invention and to any are wement is many of its existing thereof, of the polications to be been or many eissue, or other held and en	FIES COMPANY, a wholly-owned subsidiary of e at Saint Paul, Minnesota, its successors and d application, and in and to any division or and all improvements in the said invention made ade during, or within one year after the ing or future subsidiaries), and in and to any and a United States of America and countries foreign inventors' Certificates in foreign countries in its a which such applications are entitled under any be granted thereon or on any divisional, her or further application based in whole or in applying and exclusively as they would
cons that and	sideration any furth may be deemed n	ner applications, assignments, and de ecessary by said Company, its succ	ocuments, and essors, assign	tors, to execute and deliver without further d to perform such other acts as I lawfully may, ns, and nominees, fully to secure its right, title, Models, or Inventors' Certificates in any and al
gran	hereby authorize a ited upon any of the and interest there	e said applications, to said 3M Innov	tents to issue rative Propert	any and all Letters Patent which may be ies Company, as the assignee of the entire righ
}	gal Name of Invent	Or:		
	ngna Xiong		,	
Inv	entor's Signature:		Date:	onum
	Mingra	Vion	June	20,20/8

PATENT REEL: 046320 FRAME: 0128

**RECORDED: 07/11/2018**