PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3113245

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
SHENGGUANG QI	10/09/2014
XIJUN MAO	10/10/2014
ZHAOBIN CHENG	10/17/2014
THOMAS J. GILBERT	10/08/2014

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:	14401908

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: jmcourtney@mmm.com

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

Address Line 1: P.O., BOX 33427

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

ATTORNEY DOCKET NUMBER:	69839US005	
NAME OF SUBMITTER:	JOYCE M. COURTNEY	
SIGNATURE:	/Joyce M. Courtney/	
DATE SIGNED:	11/18/2014	
	This document serves as an Oath/Declaration (37 CFR 1.63).	

Total Attachments: 4

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DECLARATION AND ASSIGNMENT. FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

69839US005

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: METHOD OF MAKING A MECHANICAL FASTENER AND APPARATUS INCLUDING A **ROLLER WITH PROTRUSIONS** The specification of which: is attached hereto; was filed on as United States Application No. PCT/CN2012/075734 is identified as PCT International Application No. May 18, 2012 filed on The above-identified epolication was made or authorized to be made by me. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than 5 years, or both. In addition, for good and valuable consideration, receipt of which is acknowledged, I 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, little, 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 had this assignment and transfer not been made; I do further agree for myself and for my 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 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 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. Legal Name of Inventor: Shengguang Qi Inventor's Signature: Date: 2014.10.9

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DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

69839US005

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:

METHOD O		L FASTENER AND VITH PROTRUSION:	APPARATUS INCLUDING A S
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is attached her	reto;		
was filed on as United State	es Application No.		
is identified as F	PCT International Application N). P	CT/CN2012/075734
filed on	May 18, 2012		
The above-identifie	d application was made or autho	rized to be made by me.	
and do hereby assigns, the entire recontinuation (in who by me or made join termination of, my call Letters Patent, in thereto (including the own name and to conternational convercentinuation (in who part upon the said in have been by me here as a said in the content of the call th	gn and transfer unto the 3M INNot a corporation of Delaware, have ight, title, and interest in and to to let or in part) of said application, the with others (provided any succemployment with 3M COMPANY examinations, reissues, or extended in any priority rights for such for the any priority rights for such for the any priority rights for such for the any priority rights for the any priority righ	DVATIVE PROPERTIES ng its principal office at S he said invention and app and in and to any and all n improvement is made d and any of its existing or hisions thereof, of the Unit t, Utility Models, or Inven- ireign applications to which ich have been or may be ation, reissue, or other or in, to be held and enjoyed not been made;	dged, I have agreed to assign and transfer COMPANY, a wholly-owned subsidiary of saint Paul, Minnesota, its successors and olication, and in and to any division or improvements in the said invention made juring, or within one year after the future subsidiaries), and in and to any and ted States of America and countries foreign tors' Certificates in foreign countries in its och such applications are entitled under granted thereon or on any divisional, further application based in whole or in d as fully and exclusively as they would
consideration any fithat may be deeme	urther applications, assignments d necessary by said Company, i	and documents, and to page successors, assigns, a	to execute and deliver without further perform such other acts as I lawfully may, and nominees, fully to secure its right, title, lets, or Inventors' Certificates in any and all
I do hereby authoriz granted upon any c title, and interest th	f the said applications, to said 3l	r of Patents to issue any A Innovative Properties C	and all Letters Patent which may be company, as the assignee of the entire right.
Legal Name of Inv			
Xijun Mao		:	
Inventor's Signatu	re:	Date:	OBOBER S SERAP LARCETEGA
Xijun 1	(ao	Oct 10.	

DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

69839US005

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 entitied:

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is attached here	ito;			
was filed on as United State	s Application No.			
is identified as F	CT International Application May 18, 2012	No.	PCT/CN2012/075734	
The above-identified	application was made or aut	thorized to be made by	me.	
I hereby acknowledg		ent made in this declar	ration is punishable under 18 t	J.S.C. 1001 by
and do nereby assign 3M COMPANY, and assigns, the entire riccontinuation (in whole by me or made jointly termination of, my enall Letters Patent, recthereto (including the own name and to clainternational convent continuation (in whole part upon the said inchave been by me had	n and transfer unto the 3M IN a corporation of Delaware, hight, title, and interest in and the or in part) of said application with others (provided any suppleyment with 3M COMPAN examinations, reissues, or exight to apply for Letters Pailim any priority rights for such ions, treaties, or otherwise), and in part), renewal, reexample or in part), renewal, reason this assignment and transferthis assignment and transferthis	INOVATIVE PROPERT aving its principal office to the said invention and on, and in and to any ar uch improvement is maily and any of its existing tensions thereof, of the tent, Utility Models, or lift of the which have been or maintation, reissue, or othereon, to be held and ener not been made;	cwledged, I have agreed to as FIES COMPANY, a wholly-own at Saint Paul, Minnesota, its a d application, and in and to an id all improvements in the said ide during, or within one year a g or future subsidiaries), and in United States of America and inventors' Certificates in foreign which such applications are a iny be granted thereon or on an er or further application based joyed as fully and exclusively a	ned subsidiary of successors and y division or i invention made after the in and to any and i countries foreign a countries in its entitled under by divisional, i in whole or in as they would
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I do hereby authorize granted upon any of t title, and interest ther	the said applications, to said	ner of Patents to issue 3M Innovative Properti	any and all Letters Patent whi es Company, as the assignee	ch may be of the entire right
Legal Name of Inve	Tar.			
Zhaobin Cheng				
inventor's Signature	2001,200,2014.	Date:	16.10.1]	· · · · · · · · · · · · · · · · · · ·

3M 1952113v1

DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

69839US005

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:

	METHOD OF N	MAKING A MECHANICAL FA ROLLER WITH		ND APPARATUS INCLUDING A ONS
The	specification of wh	ích:	····	
	is attached hereto	Š		
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The	above-identified a	oplication was made or authorized	to be made by	me.
fine In a and 3M assi con term all L ther own inte con part hav	or imprisonment of ddition, for good ar do hereby assign a COMPANY, and a igns, the entire rightinuation (in whole me or made jointly valuation of, my empetters Patent, reex reto (including the raname and to claim mational conventionational conventionational in whole tupon the said inverse been by me had	f not more than 5 years, or both, and valuable consideration, receipt of and transfer unto the 3M INNOVAT corporation of Delaware, having its t, title, and interest in and to the sailor in part) of said application, and in with others (provided any such implessionment with 3M COMPANY and a aminations, reissues, or extensions ight to apply for Letters Patent, Utilin any priority rights for such foreign ns, treaties, or otherwise), which have or in part), renewal, reexamination, ention or improvements thereon, to this assignment and transfer not be	f which is acknown in the property of the existing of the existing the existing the existing Models, or I applications to ave been or maken and existing made;	ration is punishable under 18 U.S.C. 1001 by rowledged, I have agreed to assign and transfer RES COMPANY, a wholiy-owned subsidiary of at Saint Paul, Minnesota, its successors and diapplication, and in and to any division or and all improvements in the said invention made ade during, or within one year after the ag or future subsidiaries), and in and to any and a United States of America and countries foreign nited States of America and countries in its owhich such applications are entitled under ay be granted thereon or on any divisional, her or further application based in whole or in anyone to a supplication based as they would
con that and	sideration any furth t may be deemed n	er applications, assignments, and ecessary by said Company, its suc	documents, an cessors, assig	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 all
gra		e said applications, to said 3M Inno		any and all Letters Patent which may be les Company, as the assignee of the entire righ
Le	gal Name of Invent	ior:		
8	homas J. Gilbe			omma
S C	ventor's Signature:	WILL	Date:	8/2014

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RECORDED: 11/18/2014