PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4510063

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ANDREW J. MCGREGOR	04/17/2017
JAMES E. NASH	06/12/2017
THOMAS P. ANDERSON	07/17/2017

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:	15538859

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: tlemke2@mmm.com

Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY

Address Line 1: P.O. BOX 33427

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

ATTORNEY DOCKET NUMBER:	76116US004
NAME OF SUBMITTER:	TERI M. LEMKE
SIGNATURE:	/Teri M. Lemke/
DATE SIGNED:	07/19/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

source=Assignment_76116US004#page1.tif source=Assignment_76116US004#page2.tif source=Assignment_76116US004#page3.tif

> **PATENT** REEL: 043041 FRAME: 0700 504463361

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

Case No:

76116US004

As a below named inventor, I believe I am an original inventor application and for which a patent is sought on the inventor	entor or an original joint inventor of a claimed invention in the on entitled:
TUBULAR CON	VECTIVE DEVICE
The specification of which:	
is attached hereto;	
was filed on as United States Application No.	
is identified as PCT International Application No. filed on December 23, 2015	PCT/US2015/000201
The above-identified application was made or authorized	to be made by me.
fine or imprisonment of not more than 5 years, or both.	the in this declaration is punishable under 18 U.S.C. 1001 by If which is acknowledged, I have agreed to assign and transfer
3M 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 impetermination of, my employment with 3M COMPANY and all Letters Patent, reexaminations, reissues, or extensions thereto (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, part upon the said invention or improvements thereon, to have been by me had this assignment and transfer not be	n and to any and all improvements in the said inventor indec- rovement is made during, or within one year after the any of its existing or future subsidiaries), and in and to any and s 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 ave been or may be granted thereon or on any divisional, , reissue, or other or further application based in whole or in be held and enjoyed as fully and exclusively as they would seen made;
consideration any further applications, assignments, and that may be deemed necessary by said Company, its suc and interest as aforesaid and to obtain or maintain Letter countries; and	and administrators, to execute and deliver without further documents, and to perform such other acts as I lawfully may, coessors, assigns, and nominees, fully to secure its right, title, s Patent, Utility Models, or Inventors' Certificates in any and all
I do hereby authorize and request the Commissioner of F granted upon any of the said applications, to said 3M Inntitle, and interest therein.	Patents to issue any and all Letters Patent which may be ovative Properties Company, as the assignee of the entire righ
Legal Name of Inventor:	
Andrew J. McGregor	
Inventor's Signature	Date
Ordy M. Gran	4/17/17

PATENT REEL: 043041 FRAME: 0701

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

Case No:

76116US004

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:

	TUBULAR CONV		VICE	
The specification of wl	ich:			
is attached herete				
was filed on	· · · · · · · · · · · · · · · · · · ·	-		
as United States	Application No.			
☑ is identified as P(CT International Application No.		PCT/US2015/000201	\neg
filed on	December 23, 2015		11002010100201	1
The above-identified a	pplication was made or authorized to	be made by r	ne.	
	that any willful false statement made f not more than 5 years, or both.	in this declara	ation is punishable under 18 U.S.C. 1001 by	
and do hereby assign 3M COMPANY, and a assigns, the entire right continuation (in whole by me or made jointly termination of, my empall Letters Patent, reexthereto (including the rown name and to clair international convention continuation (in whole part upon the said invented the	and transfer unto the 3M INNOVATIVE 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 improdoyment with 3M COMPANY and an examinations, reissues, or extensions right to apply for Letters Patent, Utility in any priority rights for such foreign and or in part), renewal, reexamination, restriction or improvements thereon, to be this assignment and transfer not been	VE PROPERTICATION OF THE PROPERTICATION OF T	ewledged, I have agreed to assign and transfer IES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and application, and in and to any division or drall improvements in the said invention made deduring, or within one year after the ground or future subsidiaries), and in and to any an United States of America and countries foreign ventors' Certificates in foreign countries in its which such applications are entitled under to be granted thereon or on any divisional, are or further application based in whole or in byed as fully and exclusively as they would	of e od gn
consideration any furtl that may be deemed r	ner applications, assignments, and di ecessary by said Company, its succ	ocuments, and essors, assign:	ors, to execute and deliver without further to perform such other acts as I lawfully may, s, and nominees, fully to secure its right, title, Models, or Inventors' Certificates in any and a	
	e said applications, to said 3M Innov		any and all Letters Patent which may be es Company, as the assignee of the entire rig	ht,
Legal Name of Inven	tor:			
James E. Nash				
Inventor's Signature:		Date:		
~ //	91/01		-12-2017	

PATENT REEL: 043041 FRAME: 0702

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

Case No:

76116US004

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:

	TUBULAR CONVECTIVE DEVICE			
The	specification of wh	ich:		
	is attached hereto	;		
	was filed on as United States A	Application No.		
\boxtimes	is identified as PC filed on	T International Application No. December 23, 2015	PCT/US2015/000201	

The above-identified application 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, 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 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:	
Thomas P. Anderson	
Inventor's Signature:	Date:

PATENT REEL: 043041 FRAME: 0703

RECORDED: 07/19/2017