505370855 03/12/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5417647

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ROBERT R. OWINGS	01/24/2019
MARK J. PELLERITE	01/23/2019
ARNOLD W. FUNKENBUSCH	01/26/2019

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:	16332664

CORRESPONDENCE DATA

Fax Number: (651)736-7586

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.

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 651-733-1500 mmoes@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:	78376US006
NAME OF SUBMITTER:	MONICA J. MOES
SIGNATURE:	/Monica J. Moes/
DATE SIGNED:	03/12/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 3

source=DeclarationAndAssignment_78376US006#page1.tif source=DeclarationAndAssignment_78376US006#page2.tif source=DeclarationAndAssignment_78376US006#page3.tif

PATENT 505370855 REEL: 048576 FRAME: 0118

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

Case No:

78376US006

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:

embabas	PROGRAMME CONTRACTOR	un a patent lo bought on the line ha	st westersaid.	
	ARTICL	ES WITH RESISTANCE GRA	DIENTS FO	R UNIFORM SWITCHING
The	specification of wh	nich;	· · · · · · · · · · · · · · · · · · ·	
	is attached hereto	3 ;		
	was filed on as United States	Application No.		
Ø	is identified as PC filed on	CT International Application No. September 18, 2017		PCT/US2017/052059
The	above-identified a	pplication was made or authorized to	be made by	me.
fine In ac and 3M (assi) cont by m term all L there own inter cont have	or imprisonment or imprisonment or do hereby assign a COMPANY, and a gns, the entire righ inuation (in whole ne or made jointly vination of, my empetters Patent, reex name and to claim national convention inuation (in whole upon the said investee the part of the p	f not more than 5 years, or both, and valuable consideration, receipt of and transfer unto the 3M INNOVATIVE corporation of Delaware, having its put, 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 ight to apply for Letters Patent, Utility in any priority rights for such foreign ans, treaties, or otherwise), which have or in part), renewal, reexamination, rention or improvements thereon, to be this assignment and transfer not bee	which is acknown to principal office invention and and to any arrowernent is may of its existing thereof, of the polications to be been or make insue, or othereof, and end and end made;	ation is punishable under 18 U.S.C. 1001 by owledged, I have agreed to assign and transfer IES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and dapplication, and in and to any division or dail 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 ventors' Certificates in foreign countries in its which such applications are entitled under by be granted thereon or on any divisional, er or further application based in whole or in joyed as fully and exclusively as they would
cons that and	ideration any furth may be deemed n	er applications, assignments, and de ecessary by said Company, its succ	ocuments, and essors, assigr	ors, to execute and deliver without further of 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
gran		e said applications, to said 3M Innov		any and all Letters Patent which may be es Company, as the assignee of the entire right,
Lec	jal Name of Invent	OL. minimimimimimimimimimimimimimimimimimim	***************************************	
Ro	bert R. Owing	\$		· · · · · · · · · · · · · · · · · · ·
inv	entor's Signature:		Date:	
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PATENT REEL: 048576 FRAME: 0119

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

Case No:

78376US006

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

appl	lication and for whic	ch a patent is sought on the inventio	n entitled:	
	ARTICLI	ES WITH RESISTANCE GRA	DIENTS FC	R UNIFORM SWITCHING
The	specification of wh	ich:		
	is attached hereto	;		
	was filed on as United States A	Application No.		
Ø	is identified as PC filed on	T International Application No. September 18, 2017		PCT/US2017/052059
The	above-identified ap	oplication was made or authorized to	be made by	me,
		that any willful false statement made not more than 5 years, or both.	in this declar	ation is punishable under 18 U.S.C. 1001 by
3M (assident assident	COMPANY, and a company, the entire right invation (in whole come or made jointly which are parters Patent, reexageto (including the right mational conventionational conventionational conventionation (in whole compon the said invested been by me had the further agree for made and the component of the component o	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 improvided any such improvided any such improvided any such improving to apply for Letters Patent, Utility any priority rights for such foreign any priority rights for such foreign and priority rights for such foreign and in part), renewal, reexamination, rotion or improvements thereon, to be his assignment and transfer not been applications, assignments, and discussion by said Company, its successory by said Company, its successory by said Company, its successory	principal office I invention and and to any and evement is may y of its existing thereof, of the Models, or transplications to we been or may eissue, or oth e held and enjury and administrate ocuments, and essors, assign	IES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and I application, and in and to any division or d all 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, ar or further application based in whole or in oyed as fully and exclusively as they would pres, to execute and deliver without further I to perform such other acts as I lawfully may, s, and nominees, fully to secure its right, title,
and	interest as aforesa ntries; and	id and to obtain or maintain Letters	Patent, Utility	Models, or Inventors' Certificates in any and all
gran	hereby authorize a nted upon any of the and interest therei	e said applications, to said 3M Innov	tents to issue vative Properti	any and all Letters Patent which may be es Company, as the assignee of the entire right,
	gal Name of Invent	or.		
	ark J. Pellerite		_	
V.	rentor's Signature: Mark }	Pellente	Date: //23	/19

PATENT REEL: 048576 FRAME: 0120

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

Case No:

78376US006

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:

ARTIC	LES WITH RESISTANCE GRAD	DIENTS FOR UNIFORM SWITCHING
The specification of v	which:	
is attached here	to;	
was filed on as United States	Application No.	
is identified as F	PCT International Application No. September 18, 2017	PCT/US2017/052059
The above-identified	application was made or authorized to	be made by me.
	e that any willful false statement made of not more than 5 years, or both.	in this declaration is punishable under 18 U.S.C. 1001 by
3M COMPANY, and assigns, the entire ric continuation (in whole by me or made jointly termination of, my en all Letters Patent, recthereto (including the own name and to clainternational convent continuation (in whole part upon the said in have been by me har	a corporation of Delaware, having its pount, title, and interest in and to the said a or in part) of said application, and in a with others (provided any such improven applications, and any examinations, reissues, or extensions to right to apply for Letters Patent, Utility im any priority rights for such foreign and in part), renewal, reexamination, revention or improvements thereon, to be a this assignment and transfer not beer	
consideration any fut	ther applications, assignments, and do necessary by said Company, its succe	d administrators, to execute and deliver without further cuments, and to perform such other acts as I lawfully may, ssors, assigns, and nominees, fully to secure its right, title, ratent, Utility Models, or Inventors' Certificates in any and all
I do hereby authorize granted upon any of title, and interest the	the said applications, to said 3M Innov	ants to issue any and all Letters Patent which may be ative Properties Company, as the assignee of the entire righ
Legal Name of Inve	ntor:	
Arnold W. Funl	kenbusch	
Inventor's Signature	3 .	Date:
Lan.	12	1/26/2019

PATENT REEL: 048576 FRAME: 0121

RECORDED: 03/12/2019