505771287 11/13/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5818103

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHRISTOPHER R. WILSON	11/13/2019
LASZLO MARKOS	11/11/2019
CARL J. WENTZEL	11/13/2019
RICHARD D. TWIGG	11/12/2019

RECEIVING PARTY DATA

Name:	3M INNOVATIVE PROPERTIES COMPANY
Street Address:	PO BOX 33427
City:	ST. PAUL
State/Country:	MINNESOTA
Postal Code:	55133-3427

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16682362

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.

Phone: 651-733-1500 **Email:** ttcollier@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:	R: 81020US004	
NAME OF SUBMITTER: THERESA T. COLLIER		
SIGNATURE:	/Theresa T. Collier/	
DATE SIGNED:	11/13/2019	
This document serves as an Oath/Declaration (37 CFR 1.63).		

Total Attachments: 4

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PATENT REEL: 050996 FRAME: 0411

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> PATENT REEL: 050996 FRAME: 0412

Case No:

81020US004

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:

END PLUG SENSOR DEVICE WITH VOLTAGE DIVIDER AND TEST POINT FEATURES
The specification of which:
is attached hereto;
was filed on as United States Application No.
is identified as PCT International Application No. filed on
The above-identified application was made or authorized to be made by me.
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 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; 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
Legal Name of Inventor:
Christopher R. Wilson Inventor's Signature: Date:
Inventor's Signature: Date:

PATENT REEL: 050996 FRAME: 0413

Case No:

81020US004

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:

END PLUG SE	ENSOR DEVICE WITH VC	LTAGE DIVIDER A	ND TEST POI	NT FEATURES
he specification of wh	ich:		4	
is attached heret	Ο;			
was filed on	* *			
as United States	Application No.			
is identified as P	CT International Application No		200	
The above-identified ap	oplication was made or authoriz	ed to be made by me.		
	that any willful false statement r not more than 5 years, or both		s punishable und	ler 18 U.S.C. 1001 by
BM COMPANY, and a designs, the entire right continuation (in whole do by me or made jointly vermination of, my empall Letters Patent, reexpended to claim of the right of the continuation (in whole continuation (in whole continuation).	and transfer unto the 3M INNOV corporation of Delaware, having t, title, and interest in and to the or in part) of said application, ar with others (provided any such i loyment with 3M COMPANY ar aminations, reissues, or extensi ght to apply for Letters Patent, any priority rights for such fore his, treaties, or otherwise), which or in part), renewal, reexamination or improvements thereon, this assignment and transfer no	g its principal office at Sa e said invention and appli ed in and to any and all in improvement is made du ind any of its existing or ful ions thereof, of the Unite Utility Models, or Invento sign applications to which in have been or may be g ion, reissue, or other or f to be held and enjoyed	tint Paul, Minneso ication, and in an improvements in t ring, or within one ature subsidiaries of States of Amer ors' Certificates in a such application further application	ota, its successors and doto any division or he said invention made e year after the), and in and to any and ica and countries foreign foreign countries in its as are entitled under ron any divisional, a based in whole or in
consideration any furth hat may be deemed no	yself and for my heirs, executor er applications, assignments, a ecessary by said Company, its id and to obtain or maintain Let	nd documents, and to pe successors, assigns, and	erform such other d nominees, fully	acts as I lawfully may, to secure its right, title,
	and request the Commissioner of e said applications, to said 3M I n.			
Legal Name of Inver	ntor:			
Laszlo Markos				
Inventor's Signature	.	Date:	<u> anneceda a</u>	
		1// (1/4		

PATENT REEL: 050996 FRAME: 0414

Case No:

81020US004

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:

END PLUG SENSOR DEVICE WITH VOLTAGE DIVIDER AND TEST POINT FEATURES

The specification of whi	ich:				+	
is attached hereto	0;					
was filed on as United States	Application No.				**************************************	590
is identified as Po	CT International Application No.				488 ×	
The above-identified ap	plication was made or authorized to	be made by me.				
	hat any willful false statement made not more than 5 years, or both.	in this declaration is	punishable	under 18 l	J.S.C. 1001	by
assigns, the entire right continuation (in whole continuation (in whole continuation of, my emplail Letters Patent, reexact thereto (including the right own name and to claim international convention continuation (in whole continuation the said invertional continuation).	corporation of Delaware, having its p c, title, and interest in and to the said or in part) of said application, and in a with others (provided any such impro- loyment with 3M COMPANY and any aminations, reissues, or extensions to ght to apply for Letters Patent, Utility any priority rights for such foreign a ans, treaties, or otherwise), which have or in part), renewal, reexamination, re- ntion or improvements thereon, to be this assignment and transfer not bee	invention and applice and to any and all imversely and to any and all imversely of its existing or fut hereof, of the United Models, or Inventors pplications to which see been or may be greassue, or other or fue held and enjoyed a	ation, and ir provements ng, or within ure subsidia States of A s' Certificate such applica anted there- rther applica	n and to and in the said none year aries), and america and its in foreign ations are con or on are ation based	y division or dinvention mafter the in and to any discountries for countries in entitled underly divisional, din whole or	nade y and preign n its r
consideration any furthe hat may be deemed ne	yself and for my heirs, executors, ar er applications, assignments, and do ecessary by said Company, its succe id and to obtain or maintain Letters f	ocuments, and to per essors, assigns, and	form such o nominees, f	ther acts a fully to sec	is I lawfully m ure its right, t	nay, title,
	nd request the Commissioner of Pat e said applications, to said 3M Innov n.					e right
Legal Name of Inven	itor:		***************************************	000000000000000000000000000000000000000		community (
Carl J. Wentzel						4
Inventor's Signature	12/2/27	Date: 11 / 13 / 1		one of the second se		

Case No:

81020US004

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:

END PLUG SENSOR DEVICE WITH VOLTA	GE DIVIDER AND TEST POINT FEATURES
The specification of which:	
is attached hereto;	
☐ was filed on as United States Application No.	
is identified as PCT International Application No. filed on	
The above-identified application was made or authorized to	be made by me.
hereby acknowledge that any willful false statement made fine or imprisonment of not more than 5 years, or both.	in this declaration is punishable under 18 U.S.C. 1001 by
and do hereby assign and transfer unto the 3M INNOVATIV 3M 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 a by me or made jointly with others (provided any such improvermination of, my employment with 3M COMPANY and any	invention and application, and in and to any division or and to any and all improvements in the said invention made vernent 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 pplications to which such applications are entitled under e been or may be granted thereon or on any divisional, elssue, or other or further application based in whole or in the held and enjoyed as fully and exclusively as they would
do further agree for myself and for my heirs, executors, and consideration any further applications, assignments, and do hat may be deemed necessary by said Company, its succeand interest as aforesaid and to obtain or maintain Letters Populations; and	cuments, and to perform such other acts as I lawfully may,
do hereby authorize and request the Commissioner of Pate granted upon any of the said applications, to said 3M Innova 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:	
Richard D. Twigg	
Inventor's Signature:	Date: 1/ //2 / / 9

PATENT REEL: 050996 FRAME: 0416

RECORDED: 11/13/2019