504788109 02/22/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4834841

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
STEVEN T. AWISZUS	11/10/2017
ERIC C. LOBNER	11/15/2017
MICHAEL G. WURM	11/10/2017
KIRAN S. KANUKURTHY	02/20/2018
JIA HU	11/17/2017
MATTHEW J. BLACKFORD	02/20/2018
KEITH G. MATTSON	02/12/2018
RONALD D. JESME	02/20/2018
NATHAN J. ANDERSON	02/21/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15631870

CORRESPONDENCE DATA

Fax Number:

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.

Email: mekosloski@mmm.com

Correspondent Name: 3M INNOVATIVE PROPERTIES COMPANY

Address Line 1: P.O. BOX 33427

Address Line 4: SAINT PAUL, MINNESOTA 55133-3427

ATTORNEY DOCKET NUMBER:	78908US004
NAME OF SUBMITTER:	MYCKI E. KOSLOSKI
SIGNATURE:	/Mycki E. Kosloski/

PATENT 504788109 REEL: 044997 FRAME: 0816

DATE SIGNED:	02/22/2018	
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 9	·	
ource=Executed Declaration	-Assignment 78908US004#page1.tif	
source=Executed Declaration	-Assignment 78908US004#page2.tif	
source=Executed Declaration	-Assignment 78908US004#page3.tif	
source=Executed Declaration	-Assignment 78908US004#page4.tif	
source=Executed Declaration	-Assignment 78908US004#page5.tif	
source=Executed Declaration	-Assignment 78908US004#page6.tif	
source=Executed Declaration	-Assignment 78908US004#page7.tif	
source=Executed Declaration	-Assignment 78908US004#page8.tif	
source=Executed Declaration	-Assignment 78908US004#page9.tif	
Executed Declaration	-Assignment 78908US004#page9.tif	

Case No:

78908US004

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:

PERSONAL PROTECTIVE EQUIPMENT (PPE) WITH ANALYTICAL STREAM PROCESSING FOR SAFETY EVENT DETECTION
The specification of which:
is attached hereto;
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 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
Legal Name of Inventor;
Steven T. Awiszus
Inventor's Signature: Date: 11-10-2017

Case No:

78908US004

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:

PE	RSONAL PROTECTIVE EQUIP PROCESSING FOR S		
The specificati	ion of which:		
is attache	ed hereto;		
was filed as United	on June 23, 2017 d States Application No.		15/631,870
is identified is	ed as PCT International Application No.		
The above-ide	entified application was made or authorize	zed to be made by	me.
	owledge that any willful false statement inment of not more than 5 years, or both		ation is punishable under 18 U.S.C. 1001 by
and do hereby 3M COMPANY assigns, the er continuation (in by me or made termination of, all Letters Pate thereto (includiown name and international continuation (in part upon the s	vassign and transfer unto the 3M INNO'S, and a corporation of Delaware, having ntire right, title, and interest in and to the n whole or in part) of said application, a e jointly with others (provided any such a my employment with 3M COMPANY are treexaminations, reissues, or extensing the right to apply for Letters Patent, d to claim any priority rights for such fore onventions, treaties, or otherwise), which whole or in part), renewal, reexaminations.	VATIVE PROPERT g its principal office a said invention and in and to any an improvement is mand any of its existing the Utility Models, or it eign applications to the have been or mation, reissue, or oth, to be held and en	owledged, I have agreed to assign and transfer 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, er or further application based in whole or in loyed as fully and exclusively as they would
consideration a that may be de	any further applications, assignments, a eemed necessary by said Company, its s aforesaid and to obtain or maintain Le	and documents, and successors, assign	ors, to execute and deliver without further it 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
	any of the said applications, to said 3M		any and all Letters Patent which may be es Company, as the assignee of the entire right,
Legal Name	of inventor	***************************************	
Eric C. Lol			
Inventor's Sig		Date:	
,	AM 2	<i>ii</i>	30 17

Case No:

78908US004

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:

PERSONAL	PROTECTIVE EQUIPMEN PROCESSING FOR SAFE		
The specification of which):	· · · · · · · · · · · · · · · · · · ·	
is attached hereto;			
⊠ was filed on □	une 23, 2017	1	
as United States App			15/631,870
is identified as PCT ifiled on	International Application No.		
The above-identified appl	ication was made or authorized to	be made by m	ne,
I hereby acknowledge that fine or imprisonment of no	it any willful false statement made ot more than 5 years, or both.	in this declara	tion is punishable under 18 U.S.C. 1001 by
and do hereby assign and 3M COMPANY, and a cor assigns, the entire right, to continuation (in whole or i by me or made jointly with termination of, my employ all Letters Patent, reexample thereto (including the right own name and to claim an international conventions, continuation (in whole or i part upon the said inventions).	I transfer unto the 3M INNOVATIVE poration of Delaware, having its partle, and interest in and to the said in part) of said application, and in a others (provided any such improvement with 3M COMPANY and an inations, reissues, or extensions to apply for Letters Patent, Utility by priority rights for such foreign a treaties, or otherwise), which havin part), renewal, reexamination, re	/E PROPERTI principal office a i invention and and to any and evement is mad y of its existing thereof, of the life / Models, or Inventions to vive been or may eissue, or othe e held and enjo	wledged, I have agreed to assign and transfer ES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and application, and in and to any division or I all improvements in the said invention made le during, or within one year after the 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 to be granted thereon or on any divisional, or or further application based in whole or in eyed as fully and exclusively as they would
consideration any further that may be deemed nece	applications, assignments, and do essary by said Company, its succe	ocuments, and essors, assigns	rs, to execute and deliver without further to perform such other acts as I lawfully may, s, and nominees, fully to secure its right, title, flodels, or Inventors' Certificates in any and all
I do hereby authorize and granted upon any of the s title, and interest therein.	request the Commissioner of Pat aid applications, to said 3M Innov	tents to issue a ative Propertie	iny and all Letters Patent which may be is Company, as the assignee of the entire righ
Legal Name of Inventor:			
Michael G. Wurm			
Inventor's Signature:		Date:	
MMINI		//	- Nov - 2017

Case No:

78908US004

As a below named inventor, libelieve 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:

PERSONAL PROTECTIVE EQUIPMENT (PPE) WITH ANALYTICAL STREAM PROCESSING FOR SAFETY EVENT DETECTION The specification of which: is attached hereto: was filed on June 23, 2017 as United States Application No. 15/631,870 is identified as PCT International Application No. filed on 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: Loo 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, Kiran S. Kanukurthy Inventor's Signature: Date: 02-20-18

Case No:

78908US004

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:

PERSON	AL PROTECTIVE EQUIPM PROCESSING FOR SA	ENT (PPE) W AFETY EVEN	/ITH ANALYTICAL STREAM T DETECTION
The specification of w			
is attached heret			
was filed on	t		
as United States	June 23, 2017 Application No.		15/631,870
			13031,070
is identified as Pe	CT International Application No.		
	Opplication was made as with six	d f- t 1	
The above-lightlined a	application was made or authorize	d to be made by	me.
I hereby acknowledge fine or imprisonment of	that any willful false statement m of not more than 5 years, or both.	ade in this decla	ration is punishable under 18 U.S.C. 1001 by
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 inveloce the sai	or in partion of Delaware, having ont, title, and interest in and to the sor in part) of said application, and with others (provided any such imployment with 3M COMPANY and caminations, reissues, or extensioning to apply for Letters Patent, Un any priority rights for such foreigns, treaties, or otherwise), which or in part), renewal, reexamination or improvements thereon, this assignment and transfer not the contract of the co	Its principal offices and invention and in and to any and provement is made in any of its existing the provened in any of its existing the provened in a polications to have been or made; and ended in a polication of the provened in and ended in a polication of the provened in a policat	TIES COMPANY, a wholly-owned subsidiary of e at Saint Paul, Minnesota, its successors and id application, 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 nventors' Certificates in foreign 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 alloyed as fully and exclusively as they would
that may be deemed n	ecessary by said Company, its su	documents, an Iccessors, assini	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
do hereby authorize a granted upon any of the citle, and interest there	ie said applications, to said 3M INI	Patents to issue novative Properti	any and all Letters Patent which may be ies Company, as the assignee of the entire right
Legal Name of Invent	or:		
Jia Hu			
Inventor's Signature:		Date:	
	7274-	i	1/17/2017

Case No:

78908US004

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:

PERSON	IAL PROTECTIVE EQUIPME PROCESSING FOR SAI	NT (PPE) W FETY EVEN	VITH ANALYTICAL STREAM	anna ang
The specification of w				
is attached heret				
was filed on	June 23, 2017		ioni	
as United States		l	15/631,870	
is identified as Pi	CT International Application No.			
The above-identified a	application was made or authorized	to be made by	√ me.	
I hereby acknowledge fine or imprisonment o	that any willful false statement mad if not more than 5 years, or both.	le in this decla	aration is punishable under 18 U.S.C. 1001 by	ÿ
assigns, the entire right continuation (in whole by me or made jointly termination of, my empall Letters Patent, reesthereto (including the lown name and to clair international convention continuation (in whole part upon the entire assistance).	corporation of Delaware, having its nt, title, and interest in and to the sa- or in part) of said application, and it with others (provided any such import ployment with 3M COMPANY and a caminations, reissues, or extensions right to apply for Letters Patent, Utili in any priority rights for such foreign ons, treaties, or otherwise), which have or in part), renewal, reexamination	principal office id invention and to any as rovernent is many of its existing the invention of the ity Models, or I applications to reissue, or other held and ended in the invention of the inve	TTES COMPANY, a wholly-owned subsidiary to at Saint Paul, Minnesota, its successors are application, and in and to any division or and all improvements in the said invention manded during, or within one year after the ing or future subsidiaries), and in and to any are United States of America and countries fore Inventors' Certificates in foreign countries in it o which such applications are entitled under any be granted thereon or on any divisional, her or further application based in whole or in njoyed as fully and exclusively as they would	nd ide and eigr its
consideration any furtr that may be deemed n	ner applications, assignments, and c recessary by said Company, its succ	focuments, an cessors, assici	ators, to execute and deliver without further nd to perform such other acts as I lawfully ma ins, and nominees, fully to secure its right, titl Models, or Inventors' Certificates in any and	es.
I do hereby authorize a granted upon any of th title, and interest there	e said applications, to said 3M Inno	atents to issue vative Properti	e any and all Letters Patent which may be ties Company, as the assignee of the entire ri	ight
Legal Name of Invent	Or:	················		1
Matthew J. Black	(ford			munee
Inventor's Signature:		Date:		accomptus
Medric	Balan	Fel	n 20,2018	

Case No:

78908US004

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:

PERSONAL PROTECTIVE EQUIPMENT (PPE) WITH ANALYTICAL STREAM PROCESSING FOR SAFETY EVENT DETECTION The specification of which: is attached hereto; was filed on June 23, 2017 as United States Application No. 15/631,870 is identified as PCT International Application No. filed on 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: Keith G. Mattson Inventor's Signature: Date: in Gulation

PATENT REEL: 044997 FRAME: 0824

02-12-2018

Case No:

78908US004

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:

PERSON	AL PROTECTIVE EQUIPMEN PROCESSING FOR SAF			
The specification of wh	nich			*********
is attached hereto) ;			
was filed on	June 23, 2017		1	
as United States			15/631,870	
is identified as PC filed on	CT International Application No.			
The above-identified a	pplication was made or authorized to	b be made by	/ me.	
n addition, for good are and do hereby assign and to hereby assign assigns, the entire right continuation (in whole ermination of, my empail Letters Patent, reex hereto (including the rown name and to claim national convention continuation (in whole part upon the said invented been by me had to the part upon the said invented to the part upon	If not more than 5 years, or both, and valuable consideration, receipt of and transfer unto the 3M INNOVATI's 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 improvided any such improving to apply for Letters Patent, Utility and priority rights for such foreign and priority rights for such foreign and treaties, or otherwise), which have in part), renewal, reexamination, rention or improvements thereon, to be this assignment and transfer not been	which is ackr VE PROPER' principal offici- d invention and and to any ar- evement is many of its existing thereof, of the second or many of the second or many of the second or other held and eren made;	nowledged, I have agreed to assign and trans. TIES COMPANY, a wholly-owned subsidiary at Saint Paul, Minnesota, its successors and application, and in and to any division or and all improvements in the said invention mande during, or within one year after the ang or future subsidiaries), and in and to any a United States of America and countries for Inventors' Certificates in foreign countries in the owner which such applications are entitled under any be granted thereon or on any divisional, her or further application based in whole or in njoyed as fully and exclusively as they would	sfer / of nd ade and reign its
consideration any furth that may be deemed n	er applications, assignments, and di ecessary by said Company, its succ	ocuments, an essors, assig	ators, to execute and deliver without further nd to perform such other acts as I lawfully ma ins, and nominees, fully to secure its right, tit with Models, or Inventors' Certificates in any and	io.
do hereby authorize a granted upon any of th itle, and interest therei	e said applications, to said 3M Innov	tents to issue vative Propert	e any and all Letters Patent which may be ties Company, as the assignee of the entire i	right
Legal Name of Invent	Ot:	·····		
Ronald D. Jesme	•			
Inventor's Signature:		Date:		
Paul	Dhane		20 Feb 2018	***************************************

Case No:

78908US004

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:

PERSONAL PROTECTIVE EQUIPMENT (PPE) WITH ANALYTICAL STREAM PROCESSING FOR SAFETY EVENT DETECTION The specification of which: is attached hereto; was filed on June 23, 2017 as United States Application No. 15/631,870 is identified as PCT International Application No. filed on 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: Nathan J. Anderson Inventor's Signature: Date: 2/21/2018 MARCI

PATENT REEL: 044997 FRAME: 0826

RECORDED: 02/22/2018