#### 505923510 02/19/2020

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5970228

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
ZEBA PARKAR	01/22/2020
JAMES D. HANSEN	02/12/2020
TIANYU WU	01/06/2020
CARSTEN FRANKE	01/08/2020
TIMOTHY D. DUNBAR	01/03/2020
GREGORY A. KOBUSSEN	01/03/2020
AHMED ABUELYAMAN	01/06/2020
BRADLEY D. CRAIG	01/07/2020

#### **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:	16640089

#### **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:** 6517331500

Email: jlanderson6@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:	79430US009
NAME OF SUBMITTER:	JAMIE L. ANDERSON
SIGNATURE:	/Jamie L. Anderson/

PATENT 505923510 REEL: 051856 FRAME: 0862

DATE SIGNED:	02/19/2020	
	This document serves as an Oath/Declaration (37 CFR 1.63).	
Fotal Attachments: 8	•	
ource=Declaration_79430US009#pag	e1.tif	
source=Declaration_79430US009#pag	e2.tif	
source=Declaration_79430US009#pag	e3.tif	
source=Declaration_79430US009#pag	e4.tif	
source=Declaration_79430US009#pag	e5.tif	
source=Declaration_79430US009#pag	e6.tif	
source=Declaration_79430US009#page7.tif		
source=Declaration_79430US009#pag	e8.tif	

Case No:

79430US009

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:

1		ADDITIVE	MANUFACTURING	OSITE ARTICLES MADE USING AN PROCESS
	ification of which			
☐ is a	attached hereto	;		
	s filed on United States A	Application No.		
⊠ is id	dentified as PC d on	T International Applicati August 22, 2018	on No.	PCT/IB2018/056371
The above	e-identified app	ilication was made or at	ithorized to be made by	me
I hereby a	icknowledge th		ment made in this declar	ation is punishable under 18 U.S.C. 1001 by
3M COMP assigns, the continuation of me or ne fermination all Letters thereto (indo the member thereto (indo the member the continuation of the co	PANY, and a content of the entire right, on (in whole or made jointly with of, my employ Patent, reexant cluding the right and to claim a lal conventions on (in whole or the said inventions)	o transier unto the 3M In proporation of Delaware, I title, and interest in and in part) of said applicati th others (provided any syment with 3M COMPAI ninations, reissues, or eat to apply for Letters Paint to apply for Letters Paint to apply for Letters Paint Television (In part), renewal reexample in part), renewal reexample in the province of the part (In part).	naving its principal office to the said invention and on, and in and to any an such improvement is many and any of its existin xtensions thereof, of the tent, Utility Models, or Ir h foreign applications to which have been or manination, reissue, or othereon, to be held and eniores.	owledged, I have agreed to assign and transfer TES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and d application, and in and to any division or ad 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 oyed as fully and exclusively as they would
hat may b	e deemed nec st as aforesaid	applications, assignment essary by said Company	NS, and documents, and	ors, 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, Models, or Inventors' Certificates in any and all
manifed up	y authorize and on any of the s terest therein,	request the Commissic aid applications, to said	ner of Patents to issue a 3M Innovative Propertie	any and all Letters Patent which may be es Company, as the assignee of the entire right,
I lena l	ame of Invento	p.		
§				,
Inventor	a Parkar 's Signature:		Date:	
	JA Jerry			/2020.

Case No:

79430US009

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:

IOADIATION		ACTURING PROCESS
The specification of w	/hich:	
is attached her	eto;	
was filed on as United State	es Application No.	
is identified as filed on	PCT International Application No. August 22, 2018	PCT/IB2018/056371
The above-identified	application was made or authorized t	to:ˈbe made bÿ me.
I hereby acknowledge fine or imprisonment	that any willful false statement mad of not more than 5 years, or both.	le in this declaration is punishable under 18 U.S.C. 1001 by
and do hereby assign 3M COMPANY, and a assigns, the entire rig continuation (in whole by me or made jointly termination of, my emall Letters Patent, ree thereto (including the own name and to clair international convention continuation (in whole part upon the said invhave been by me had do further agree for reconsideration any furtheresisters.	and transfer unto the 3M INNOVATI a corporation of Delaware, having its ht, title, and interest in and to the sai or in part) of said application, and in with others (provided any such impr ployment with 3M COMPANY and at xaminations, reissues, or extensions right to apply for Letters Patent, Utilit in any priority rights for such foreign ons, treaties, or otherwise), which ha or in part), renewal, reexamination, ention or improvements thereon, to be this assignment and transfer not beauty myself and for my heirs, executors, a ner applications, assignments, and d	and administrators, to execute and deliver without further
macinal ne decided i	iecessary by said Company, its succ	essors, assigns, and nominees, fully to secure its right, title, Patent, Utility Models, or Inventors' Certificates in any and all
do hereby authorize granted upon any of the itle, and interest there	ie said applications, to said 3M Innov	itents to issue any and all Letters Patent which may be vative Properties Company, as the assignee of the entire right,
Legal Name of Inve	ntor;	Washington and the same of the
James D. I		
Inventor's Signature	Tanogn C	Date:
1 DA		2-12-2020

Case No:

79430US009

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:

RADIATION CL	JRABLE COMPOSITION ADDITIVE MAI	NS AND COMPOS NUFACTURING F	SITE ARTICLES MADE USING AN PROCESS
The specification of wh			
☐ is attached heret			
☐ was filed on as United States	Application No.		
is identified as Po	CT International Application N August 22, 2018	lo.	PCT/IB2018/056371
	plication was made or author		
I hereby acknowledge t fine or imprisonment of	hat any willful false statement not more than 5 years, or bot	i made in this declara h.	tion is punishable under 18 U.S.C. 1001 by
3M COMPANY, and a cassigns, the entire right continuation (in whole or made jointly we termination of, my emplail Letters Patent, reexamenation and to claim ternational convention continuation (in whole opart upon the said inventional bart upon the said inventional bart upon the said inventional continuation (in whole opart upon the said inventional bart upon the said inventional continuation (in whole opart upon the said inventional continuation).	corporation of Delaware, havir, title, and interest in and to the in part) of said application, a ith others (provided any such oyment with 3M COMPANY a iminations, reissues, or extension to apply for Letters Patent, any priority rights for such for s, treaties, or otherwise), which in part), renewal, reexamination or improvements thereon its assignment and transfer not in particular in part	and its principal office a ne said invention and and in and to any and improvement is mad- and any of its existing sions thereof, of the L tility Models, or inversions to we of have been or may tion, reissue, or other at been made;	wiedged, 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 all improvements in the said invention made a during, or within one year after the or future subsidiaries), and in and to any and inited States of America and countries foreign entors' Certificates in foreign countries in its which such applications are entitled under be granted thereon or on any divisional, or further application based in whole or in yed as fully and exclusively as they would
hat may be deemed ne	cessary by said Company its	and documents, and t	s, to execute and deliver without further o perform such other acts as I lawfully may, and nominees, fully to secure its right, title, odels, or Inventors' Certificates in any and all
do hereby authorize an ranted upon any of the tle, and interest therein	Said annications, to sain aw-	of Patents to issue an Innovative Properties	y and all Letters Patent which may be Company, as the assignee of the entire right,
Lawat Nada			
Legal Name of Invento	or:	· <del></del>	
Tianyu Wu Inventor's Signature:			
miventor's Signature:	~~~`	Date:	
my.	u Wu	Jan	. 6, 2020

Case No:

79430US009

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:

# RADIATION CURABLE COMPOSITIONS AND COMPOSITE ARTICLES MADE USING AN ADDITIVE MANUFACTURING PROCESS The specification of which: is attached hereto; was filed on as United States Application No. is identified as PCT International Application No. PCT/IB2018/056371 filed on August 22, 2018

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 afcresaid 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:	
Carsten Franke	
Inventor's Signature:	Date:
actions	1/8/7070

Case No:

79430US009

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;

	ADDITIVE MANUFACT	COMPOSITE ARTICLES MADE USING AN FURING PROCESS
The specification of		
is attached he	reto;	
	es Application No.	
is identified as filed on	PCT International Application No. August 22, 2018	PCT/IB2018/056371
The above-identified	application was made or authorized to be	made by me.
I hereby acknowledg		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, resthereto (including the own name and to clai international conventicontinuation (in whole part upon the said invalve been by me had	a corporation of Delaware, having its principht, title, and interest in and to the said inverse or in part) of said application, and in and with others (provided any such improved apployment with 3M COMPANY and any of examinations, reissues, or extensions their right to apply for Letters Patent, Utility Moim any priority rights for such foreign applitions, treaties, or otherwise), which have been or in part), renewal, reexamination, reiss vention or improvements thereon, to be held this assignment and transfer not been marked.	
that may be deemed	necessary by said Company, its success	dministrators, to execute and deliver without further nents, and to perform such other acts as I lawfully may, rs, assigns, and nominees, fully to secure its right, title, nt, Utility Models, or Inventors' Certificates in any and all
I do hereby authorize granted upon any of ti title, and interest there	ing said applications, to said sixi innovative	to issue any and all Letters Patent which may be Properties Company, as the assignee of the entire right
Legal Name of Inve		
Timothy D Inventor's Signature		
1-1/2/4/4	e:  - Juntar	ate: Jan 3, 2020

Case No:

79430US009

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.

# RADIATION CURABLE COMPOSITIONS AND COMPOSITE ARTICLES MADE USING AN ADDITIVE MANUFACTURING PROCESS

ADDITIVE WANDFACTORING	PRUCESS
The specification of which:	
☐ is attached hereto;	
was filed on as United States Application No.	
is identified as PCT International Application No. filed on August 22, 2018	PCT/IB2018/056371
The above-identified application was made or authorized to be made by	me.
I hereby acknowledge that any willful false statement made in this declar fine or imprisonment of not more than 5 years, or both.	ration is punishable under 18 U.S.C. 1001 by
In addition, for good and valuable consideration, receipt of which is acknand do hereby assign and transfer unto the 3M INNOVATIVE PROPERT 3M COMPANY, and a corporation of Delaware, having its principal office assigns, the entire right, title, and interest in and to the said invention and continuation (in whole or in part) of said application, and in and to any an by me or made jointly with others (provided any such improvement is ma termination of, my employment with 3M COMPANY and any of its existin all Letters Patent, reexaminations, reissues, or extensions thereof, of the thereto (including the right to apply for Letters Patent, Utility Models, or In own name and to claim any priority rights for such foreign applications to international conventions, treaties, or otherwise), which have been or ma continuation (in whole or in part), renewal, reexamination, reissue, or otherwise) and the said invention or improvements thereon, to be held and enjinave been by me had this assignment and transfer not been made;	TES COMPANY, a wholly-owned subsidiary of at Saint Paul, Minnesota, its successors and dapplication, and in and to any division or ad 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 by the granted thereof on any divisional,
I do further agree for myself and for my heirs, executors, and administrate consideration any further applications, assignments, and documents, and that may be deemed necessary by said Company, its successors, assign and interest as aforesaid and to obtain or maintain Letters Patent, Utility I countries; and	to perform such other acts as I lawfully may
I do hereby authorize and request the Commissioner of Patents to issue a granted upon any of the said applications, to said 3M innovative Propertie title, and interest therein.	any and all Letters Patent which may be as Company, as the assignee of the entire right,

Gregory A. Kobussen
Inventor's Signature:

Date:

3 January 2020

Case No:

79430US009

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:

RADIATION	URABLE COMPOSITIONS A ADDITIVE MANUF	ND COMPOS ACTURING F	SITE ARTICLES MADE USING AN PROCESS
The specification of w	· · · · · · · · · · · · · · · · · · ·		
is attached her			
☐ was filed on as United State	es Application No.		
is identified as filed on	PCT International Application No. August 22, 2018		PCT/IB2018/056371
The above-identified	application was made or authorized	to be made by m	ae.
I hereby acknowledge		_	tion is punishable under 18 U.S.C. 1001 by
and do nereby assign 3M COMPANY, and a assigns, the entire rigicontinuation (in whole by me or made jointly termination of, my emall Letters Patent, recibereto (including the own name and to claim ternational conventionational in whole part upon the said involved.	and transfer unto the 3M INNOVAT a corporation of Delaware, having its ht, title, and interest in and to the sail or in part) of said application, and ir with others (provided any such improportion with 3M COMPANY and a xaminations, reissues, or extensions right to apply for Letters Patent, Utilim any priority rights for such foreignons, treaties, or otherwise), which have in part), renewal, reexamination.	IVE PROPERTII principal office a d invention and n and to any and ovement is mad ny of its existing thereof, of the L ty Models, or Inv applications to w we been or may reissue, or other to held and enion	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 all improvements in the said invention made e during, or within one year after the or future subsidiaries), and in and to any and Inited States of America and countries foreign rentors' Certificates in foreign countries in its which such applications are entitled under be granted thereon or on any divisional, or further application based in whole or in yed as fully and exclusively as they would
hat may be deemed r	ner applications, assignments, and di necessary by said Company, its succ	locuments, and t cessors, assigns	s, to execute and deliver without further o perform such other acts as I lawfully may, and nominees, fully to secure its right, title, odels, or Inventors' Certificates in any and all
do hereby authorize a granted upon any of the itle, and interest there	ie said applications, to said 31% innov	itents to issue ar vative Properties	ny and all Letters Patent which may be Company, as the assignee of the entire right,
Legal Name of Inve	ntor		
1 2 2			
Ahmed Ab Inventor's Signature	ue <u>iyaman</u> :	Date:	
<b>!</b>	belyen		-06-2020

**PATENT** 

**REEL: 051856 FRAME: 0870** 

Case No:

79430US009

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:

# RADIATION CURABLE COMPOSITIONS AND COMPOSITE ARTICLES MADE USING AN ADDITIVE MANUFACTURING PROCESS

ADDITIVE MANOPACTURING PROCESS
The specification of which:
is attached hereto;
was filed on as United States Application No.
is identified as PCT International Application No.  filed on  August 22, 2018  PCT/IB2018/056371
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:

Bradley D. Craig
Inventor's Signature;

Date:

1/7/10

PATENT REEL: 051856 FRAME: 0871

**RECORDED: 02/19/2020**