# 504977087 06/26/2018

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5023833

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CARSTEN FRANKE	05/23/2018
KENNETH L. SMITH	05/23/2018
JESSE R. BEHNKE	05/23/2018
ROBERT L.W. SMITHSON	06/21/2018
LUCAS D. CRESTIK	05/24/2018
OLESTER BENSON JR.	05/24/2018
ALEXANDER J. HUFFMAN	05/23/2018

#### **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:	16066104

#### **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: cmwagner01@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:	77023US010
NAME OF SUBMITTER:	COLLEEN M. WAGNER
SIGNATURE:	/Colleen M. Wagner/
DATE SIGNED:	06/26/2018

This document serves as an Oath/Declaration (37 CFR 1.63).

## **Total Attachments: 7**

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Case No:

77023US010

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:

application and for fillion a parameta assign as the most as	and the same of th
CONTINUOUS ADDITIVE MAI	NUFACTURING APPARATUS
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 13, 2016	PCT/US2016/066278
The above-identified application was made or authorized to	be made by me.
I hereby acknowledge that any willful false statement made fine or imprisonment of not more than 5 years, or both.	e in this declaration is punishable under 18 U.S.C. 1001 by
and do hereby assign and transfer unto the 3M iNNOVATN 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 by me or made jointly with others (provided any such improtermination of, my employment with 3M COMPANY and an all Letters Patent, reexaminations, reissues, or extensions	and to any and all improvements in the said invention made overment is made during, or within one year after the my of its existing or future subsidiaries), and in and to any and thereof, of the United States of America and countries foreign y Models, or Inventors' Certificates in foreign countries in its applications to which such applications are entitled under we been or may be granted thereon or on any divisional, reissue, or other or further application based in whole or in we held and enjoyed as fully and exclusively as they would
that may be deemed necessary by said Company, its succ	nd administrators, to execute and deliver without further ocuments, and to perform such other acts as I lawfully may, essors, assigns, and nominees, fully to secure its right, title, Patent, Utility Models, or Inventors' Certificates in any and all
I do hereby authorize and request the Commissioner of Pa granted upon any of the said applications, to said 3M Innovitite, and interest therein.	itents to issue any and all Letters Patent which may be vative Properties Company, as the assignee of the entire right
Legal Name of Inventor:	
Carsten Franke	
Inventor's Signature:	Date:
Cart Frank	5/23/2018

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

Case No:

77023US010

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:

	CONTINUOUS ADDITIVE MANUFACTUR	RING APPARATUS
The	specification of which:	
	is attached hereto;	
	was flied on as United States Application No.	
Ø	is identified as PCT International Application No. filed on December 13, 2016	PCT/US2016/066278

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 easign 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:			
Kenneth L. Smith			
Inventor's Signature: / /	Date:		
Kunth of South	Man	73	2018
· · ·	1		

REEL: 046200 FRAME: 0694

Case No:

77023US010

As a below named inventor, I belie	₃ve I am an original inve	ntor or an original join	t inventor of a claimed	invention in the
application and for which a patent	is sought on the inventio	n entitled:	•	

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is attached here			
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The above-identified	application was made or authoriz	zed to be made by	/ me.
	e that any willful false statement i of not more than 5 years, or both		aration is punishable under 18 U.S.C. 1001 by
and do hereby assign 3M COMPANY, and assigns, the entire rig continuation (in whole by me or made jointly termination of, my email Letters Patent, ree thereto (including the own name and to clai international conventicontinuation (in whole part upon the said invalve been by me had I do further agree for consideration any furthat may be deemed	and transfer unto the 3M INNOV a corporation of Delaware, having tht, title, and interest in and to the e or in part) of said application, are with others (provided any such in ployment with 3M COMPANY are examinations, reissues, or extensing to apply for Letters Patent, and priority rights for such force ons, treaties, or otherwise), whice or in part), renewal, reexamination or improvements thereon, it this assignment and transfer no emyself and for my heirs, executo ther applications, assignments, a necessary by said Company, its	VATIVE PROPER g its principal office said invention as and in any of its exist ions thereof, of the Utility Models, or eign applications the been or mion, reissue, or of the been made; and documents, all successors, assignations.	nowledged, I have agreed to assign and transfer ITIES COMPANY, a wholly-owned subsidiary of the at Saint Paul, Minnesota, its successors and application, and in and to any division or and all improvements in the said invention made ade during, or within one year after the ing or future subsidiaries), and in and to any and the United States of America and countries foreign Inventors' Certificates in foreign countries in its of which such applications are entitled under may be granted thereon or on any divisional, there or further application based in whole or in injoyed as fully and exclusively as they would actors, to execute and deliver without further and to perform such other acts as I lawfully may, and nominees, fully to secure its right, title, and Models, or Inventors' Certificates in any and all
granted upon any of t title, and interest ther	he said applications, to said 3M l ein.		e any and all Letters Patent which may be fies Company, as the assignee of the entire right
Legal Name of Inve			
Jesse R/Behnk		i	
Inventor's Signature	: RK	Date: 5/.	23/18

Case No:

77023US010

As a below named inventor, I believe I an	n an original invento	r or an original joint	t inventor of a claimed	invention in the
application and for which a patent is soug	ht on the invention e	ntitled:		

app	iication and for whi	on a patent is sought on the invention	n entitied:	
		CONTINUOUS ADDITIVE MAI	NUFACTU	RING APPARATUS
The	specification of wh	ich:		
	is attached hereto	$\Sigma_{i}$		
	was filed on as United States	Application No.		
	as office office	oppinedabit (40)		
$\boxtimes$	is identified as PC filed on	T International Application No. December 13, 2016		PCT/US2016/066278
		pplication was made or authorized to		
		that any willful talse statement made f not more than 5 years, or both.	in this declar	ration is punishable under 18 U.S.C. 1001 by
3M assi coni by n tern all L ther own inter coni part have	COMPANY, and a igns, the entire right tinuation (in whole ne or made jointly white parties Patent, reex eto (including the right and to claim rnational conventionation (in whole upon the said inverse been by me had it in the parties of the said inverse entire the entire that it is not the said inverse that it is not that	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 improblement with 3M COMPANY and an aminations, reissues, or extensions tight to apply for Letters Patent, Utility 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	orincipal office I invention and and to any are ovement is many by of its existing thereof, of the Models, or It applications to we been or many eissue, or othe held and en an made;	FIES 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 ide during, or within one year after the ig 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 be granted thereon or on any divisional, er or further application based in whole or in joyed as fully and exclusively as they would
con: that and	sideration any furth may be deemed n	er applications, assignments, and de ecessary by said Company, its succ	ocuments, an essors, assigi	ors, 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
grar	hereby authorize a nted upon any of th and interest there	e said applications, to said 3M Innov	tents to issue rative Properti	any and all Letters Patent which may be es Company, as the assignee of the entire right
Le	gal Name of Invent	Of:		
R	obert L.W. Smit	thson		
Inv	rentor's Signature:		Date:	
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**PATENT** 

Case No:

77023US010

As a below named inventor, I believe I am an original in application and for which a patent is sought on the inventor.	nventor or an original joint inventor of a claimed invention in the ntion entitled:
CONTINUOUS ADDITIVE N	IANUFACTURING APPARATUS
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 13, 2016	PCT/US2016/066278
The above-identified application was made or authorize	d to be made by me.
I hereby acknowledge that any willful false statement m fine or imprisonment of not more than 5 years, or both.	ade in this declaration is punishable under 18 U.S.C. 1001 by
and do hereby assign and transfer unto the 3M INNOVA 3M COMPANY, and a corporation of Delaware, having assigns, the entire right, title, and interest in and to the continuation (in whole or in part) of said application, and by me or made jointly with others (provided any such in termination of, my employment with 3M COMPANY and all Letters Patent, reexaminations, reissues, or extension thereto (including the right to apply for Letters Patent, U own name and to claim any priority rights for such foreign international conventions, treaties, or otherwise), which continuation (in whole or in part), renewal, reexamination part upon the said invention or improvements thereon, thave been by me had this assignment and transfer not	I any of its existing or future subsidiaries), and in and to any and one thereof, of the United States of America and countries foreign itility Models, or Inventors' Certificates in foreign countries in its gn applications to which such applications are entitled under have been or may be granted thereon or on any divisional, on, reissue, or other or further application based in whole or in to be held and enjoyed as fully and exclusively as they would been made;
consideration any further applications, assignments, and that may be deemed necessary by said Company, its signs.	s, and administrators, to execute and deliver without further d documents, and to perform such other acts as I lawfully may, uccessors, assigns, and nominees, fully to secure its right, title, ers Patent, Utility Models, or Inventors' Certificates in any and all
	Patents to issue any and all Letters Patent which may be inovative Properties Company, as the assignee of the entire right
Legal Name of Inventor:	
Lucas D. Crestik	
Inventor's Signature:	Date:
Jun Cath	5/24/18

Case No:

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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 on	the invention entitled:		

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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:			
Olester Benson, Jr.			
Inventor's Signature:	Date:		
Kisked Jenson, T	24 MAY 2018		

Case No:

77023US010

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Legal Name of Inven	tor		
Alexander J. Hu	ffman		
Inventor's Signature:		Date:	
als YM		5/	23/2018

PATENT REEL: 046200 FRAME: 0699

**RECORDED: 06/26/2018**