504594707 10/16/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 EPAS ID: PAT4641419 Stylesheet Version v1.2

SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FREDERICK E. SHELTON IV	08/14/2017
DAVID C. YATES	08/15/2017
JASON L. HARRIS	08/15/2017

RECEIVING PARTY DATA

Name:	ETHICON LLC		
Street Address:	#475 STREET C, SUITE 401		
Internal Address:	LOS FRAILES INDUSTRIAL PARK		
City:	GUAYNABO		
State/Country:	PUERTO RICO		
Postal Code:	00969		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15628168

CORRESPONDENCE DATA

Fax Number: (412)355-6501

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: 412-355-3746

Email: piuspatents@klgates.com MICHELLE L. WEAVER **Correspondent Name:** Address Line 1: 210 SIXTH AVENUE Address Line 2: **K&L GATES CENTER**

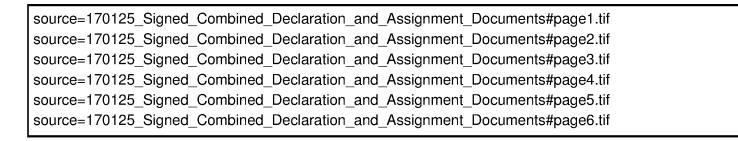
Address Line 4: PITTSBURGH, PENNSYLVANIA 15222-2613

ATTORNEY DOCKET NUMBER:	END8222USNP/170125
NAME OF SUBMITTER:	MICHELLE L. WEAVER
SIGNATURE:	/Michelle L. Weaver/
DATE SIGNED:	10/16/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
	•

Total Attachments: 6

PATENT REEL: 043869 FRAME: 0721

504594707



Attorney Docket No.; END8222USNP/170125 US Application No.: 15/628,168

The stached or filed herewith application of (iist of named inventors) The stached or filed herewith application of (iist of named inventors) The United States application or PCT international application number 15/028.168 filed on June 20, 2017. Declaration As the below named inventor, I hereby declare that: The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or au original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentiability as defined in Title 37, the United States Code of Pederal Regulations, §1.56 for filings of his Application in the United States of America. 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 five (3) years, or both for tillags of this Application in the United States of America. Assignment Bihicon I.I.C. ##75 Street C, Suite 401 Los Frailse Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delawage. (horeinafter designated as the "Assignee"), I hareby acknowledge that I have assigned the above-identified invention by previous assignment (attached herete) to Assignee which is betery conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: Or For good and valuable consideration, the sufficiency of which is acknowledged, I hereby resign and transfer mil/or have assigned and transferred to Assignee: up entire right, title, and interest in, to, not under the Application, including all priority rights for other countries arising thereform and the inventions or discoveries therein disloned, and any and all Letters Patent of the United States, Buropean Patent Office and of all other countries, which may be granted for such inventions or discoveries, or may o		COMBINED	DECLARATION AND ASSIGNMENT
The attached or filed herewith application of (list of named inventors) or The United States application or PCT international application number 15/628.168 filed on June 20, 2017. Declaration As the below named inventor, I hereby declare that: The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the daty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of his Application in the United States of America. 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 five (5) years, or both for filings of this Application in the United States of America. Assignment Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puetro Ricco 00969 a Limited Liability Company of Delaware. (hereinsfler designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: or For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: we entire right, title, and interest in to, and under the Application, including all priority rights for other countries, arising therefrom and he right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all I letters Patent of the United States, European Patent Office and of all where countries, which may be granted for such inventions or discoveries, and all rights in such Appli	l'itle of Invention:		
The United States application or PCT international application number 15628.168 filed on June 20, 2017. Declaration As the below named inventor, I hereby declare that: The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of his Application in the United States of America. 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 five (5) years, or both for filings of this Application in the United States of America. Assignment Ethican LLC ##75 Street C, Suite 401 Los Frailes Industrial Park Graynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: or For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: ny entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and he right to claim priority to the Application, all inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for such inventions or discoveries, and in and to all extensions, and continuations thereof, to be held and enjoyed by	This declaration and ass	ignment is directed to:	
Declaration As the below named inventor, I hereby declare that: The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I seknowledge the duty to disclose information which is material to patentiability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for fillings of his Application in the United States of America. I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or myrisonment of not more than five (5) years, or both for fillings of this Application in the United States of America. Assignment Ethicon LLC ##475 Street C, Suite 401 Los Frailes Industrial Park Graynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and he right to claim priority to the Application, all inventions or discoveries and all rights in such Application, including any and all provisionals, substitutions, divisions, and sontinuations thereof, and to all Letters Patent that may be granted for such inventions or discoveries, and in and to all extensions, and continuations thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may			The attached or filed herewith application of (list of named inventors),
Declaration As the below named inventor, I hereby declare that; The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for fillings of his Application in the United States of America. 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 five (5) years, or both for fillings of this Application in the United States of America. Assignment Ethicon LLC #475 Street C, Suite 401 Los Fraites Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer and/or have assigned and transferred to Assignee: The good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: The good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: The good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: The proposed and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: The proposed and valuable consideration, the sufficiency of which is acknowledged, I he		or	
As the below named inventor, I hereby declare that: The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of this Application in the United States of America. 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 five (5) years, or both for filings of this Application in the United States of America. Assignment Ethicon LLC #475 Street C, Suits 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer and/or have assigned and transferred to Assignee: The good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: The good and valuable consideration, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all priority rights for other countries arising therefrom and her right to claim priority to the Application, all inventions or discoveries and all rights in such Application including any and all priority or the Application, and a			
The above-identified application ("Application") was made or authorized by me. I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of his Application in the United States of America. 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 five (5) years, or both for filings of this Application in the United States of America. Assignment Bihicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: ny entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and he right to claim priority to the Application, all inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for such inventions or discoveries, and in and to all cetters betten that may be granted for such inventions or discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use a	Declaration		
I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application. I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of his Application in the United States of America. 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 five (3) years, or both for filings of this Application in the United States of America. Assignment Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: or For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and he right to claim priority to the Application, all inventions or discoveries and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	As the below n	amed inventor, I hereby decl	are that:
I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of his Application in the United States of America. 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 five (5) years, or both for filings of this Application in the United States of America. Assignment Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: Or For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and her right to claim priority to the Application, all inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for such inventions and discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for such inventions and discoveries, or any of them, all and enjoyed by Massignee for its own use and enjoyment to the full and of the term or terms for which such Letters Patent may	The above-idea	ntified application ("Applicat	tion") was made or authorized by me.
Increase the United States of America. 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 five (5) years, or both for filings of this Application in the United States of America. Behicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and her right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions or discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	I believe that I	am the original inventor or a	in original inventor of a claimed invention or discovery in the Application.
Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: To good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: The property of the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and tall Letters Patent that may be granted for said inventions and discoveries, and not all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by Massignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	nformation which is m	aterial to patentability as de-	nts of the Application, including the claims, and I acknowledge the duty to disclose fined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of
Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969 a Limited Liability Company of Delaware. (hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	I hereby acknown in the comment of not mo	wledge that any willful false are than five (5) years, or both	e statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or h for filings of this Application in the United States of America.
(hereinafter designated as the "Assignee"), I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	Assignment		#475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assigned which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer: For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.			
For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.			
For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee: my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyement to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	I hereby acknowhich is hereby conform	wledge that I have assigned ned for recordation in the US	the above-identified invention by previous assignment (attached hereto) to Assignee 3 Patent Office and I confirm I have and do assign and transfer:
my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.	or		
the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.			sufficiency of which is acknowledged, I hereby assign and transfer and/or have
Page 1 of 2	the right to claim priori States, European Paten such inventions or dis continuations thereof, a supplementary protection and enjoyment to the fu	ty to the Application, all inv at Office and of all other cou- coveries and all rights in and to all Letters Patent that on certificates, reexamination all end of the term or terms f	ventions or discoveries therein disclosed, and any and all Letters Patent of the United untries, which may be granted for such inventions or discoveries, or any of them, all such Application including any and all provisionals, substitutions, divisions, and it may be granted for said inventions and discoveries, and in and to all extensions, as, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use for which such Letters Patent may be granted, as fully and entirely as the same would
			Page 1 of 2

Attorney Docket No.: END8222USNP/170125 US Application No.: 15/628,168

I shall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office, any other patent offices, and under the Patent Cooperation Treaty, and any continuing, divisional, or reissue applications thereof, any reexamination of any of such applications, and any patent term extensions or supplementary protection certificates of any such applications and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

I hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to obtain legal recordation of this document.

Frederick E. Shelton, IV
LEGAL NAME OF INVENTOR

Signature /

Date

8/14/17

Attorney Docket No.: END8222USNP/170125 US Application No.: 15/628,168

COMBINED DECLARATION AND ASSIGNMENT
Title of Invention: CONTROL OF MOTOR VELOCITY OF A SURGICAL STAPLING AND CUTTING
INSTRUMENT BASED ON ANGLE OF ARTICULATION
This declaration and assignment is directed to:
The attached or filed herewith application of (list of named inventors),
or
The United States application or PCT international application number 15/628,168 filed on June 20, 2017.
Declaration
As the below named inventor, I hereby declare that:
The above-identified application ("Application") was made or authorized by me.
I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application.
I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of his Application in the United States of America.
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 five (5) years, or both for filings of this Application in the United States of America.
Assignment
Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969
a Limited Liability Company of Delaware.
(hereinafter designated as the "Assignee"),
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer:
or
For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee:
my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.
Page 1 of 2

Attorney Docket No.: END8222USNP/170125

US Application No.: 15/628,168

I shall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office, any other patent offices, and under the Patent Cooperation Treaty, and any continuing, divisional, or reissue applications thereof, any reexamination of any of such applications, and any patent term extensions or supplementary protection certificates of any such applications and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

I hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to obtain legal recordation of this document.

David C. Yates

LEGAL NAME OF INVENTOR

Signature

Data

8/15/1-

Attorney Docket No.: <u>BND8222USNP/170125</u> US Application No.: <u>15/628,168</u>

	COMBINED	DECLARATION AND ASSIGNMENT
Title of Invention:		VELOCITY OF A SURGICAL STAPLING AND CUTTING ON ANGLE OF ARTICULATION
This declaration and ass	ignment is directed to:	
		The attached or filed herewith application of (list of named inventors),
	or	
		The United States application or PCT international application number 15/628,168 filed on June 20, 2017.
Declaration		
As the below n	amed inventor, I hereby dec	lare that:
The above-ider	ntified application ("Applica	tion") was made or authorized by me.
I believe that I	am the original inventor or a	an original inventor of a claimed invention or discovery in the Application.
information which is m		onts of the Application, including the claims, and I acknowledge the duty to disclose fined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of
		e statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or th for filings of this Application in the United States of America.
Assignment		mar
:		Ethicon LLC #475 Street C, Suite 401
		Los Frailes Industrial Park
		Guaynabo, Puerto Rico 00969
· .		mited Liability Company of Delaware.
	(her	einafter designated as the "Assignee"),
		the above-identified invention by previous assignment (attached hereto) to Assignee S Patent Office and I confirm I have and do assign and transfer:
or	,	
For good and assigned and transferred		sufficiency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim priorit States, European Patent such inventions or disc continuations thereof, as supplementary protection and enjoyment to the ful	y to the Application, all involved office and of all other conceveries and all rights in and to all Letters Patent that a certificates, reexamination I end of the term or terms for	the Application, including all priority rights for other countries arising therefrom and ventions or discoveries therein disclosed, and any and all Letters Patent of the United antries, which may be granted for such inventions or discoveries, or any of them, all such Application including any and all provisionals, substitutions, divisions, and t may be granted for said inventions and discoveries, and in and to all extensions, as, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use for which such Letters Patent may be granted, as fully and entirely as the same would tent and sale not been made.
		Page 1 of 2

Attorney Docket No.: END8222USNP/170125 US Application No.: 15/628,168

I shall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office, any other patent offices, and under the Patent Cooperation Treaty, and any continuing, divisional, or reissue applications thereof, any reexamination of any of such applications, and any patent term extensions or supplementary protection certificates of any such applications and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

I hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to obtain legal recordation of this document.

Jason L. Harris
LEGAL NAME OF INVENTOR

Signature

8/15/2017 Date

Page 2 of 2