10/17/2018 505146131

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT5192897

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JEROME R. MORGAN	10/10/2018
CHESTER O. BAXTER III	10/15/2018
FREDERICK E. SHELTON IV	10/16/2018
GARY W. KNIGHT	10/12/2018

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16021321

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) 355-8276

Email: piuspatents@klgates.com

Correspondent Name: CARA M. PINTO Address Line 1: 210 SIXTH AVENUE Address Line 2: **K&L GATES CENTER**

Address Line 4: PITTSBURGH, PENNSYLVANIA 15222-2613

ATTORNEY DOCKET NUMBER:	END7417USCNT1/140293CON1
NAME OF SUBMITTER:	CARA M. PINTO
SIGNATURE:	/Cara M. Pinto/
DATE SIGNED:	10/17/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 8 source=signed_declarations_assignments#page1.tif source=signed_declarations_assignments#page2.tif source=signed_declarations_assignments#page3.tif source=signed_declarations_assignments#page4.tif source=signed_declarations_assignments#page5.tif source=signed_declarations_assignments#page6.tif source=signed_declarations_assignments#page7.tif source=signed_declarations_assignments#page8.tif

PATENT

REEL: 047199 FRAME: 0125

US Application No.: 16/021,321

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: LOCKING ARRANGEMENTS FOR DETACHABLE SHAFT ASSEMBLIES WITH

ARTRULATABLE SUI	WICAL END EFFECTURE
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 16/021,321 filed on June 28, 2018.
Declaration	
As the below named inventor, I hereby de-	clare that:
The above-identified application ("Application ("Application of the above-identified application of th	ation") 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.
	ents of the Application, including the claims, and I acknowledge the duty to disclose efined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of
	se statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or oth 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
s I.	imited Liability Company of <u>Delaware</u> .
(he	reinafter designated as the "Assignee"),
	d the above-identified invention by previous assignment (attached hereto) to Assignee IS Patent Office and I confirm I have and do assign and transfer:
or	
For good and valuable consideration, the assigned and transferred to Assignee:	ne sufficiency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim priority to the Application, all in States, European Patent Office and of all other consuch inventions or discoveries and all rights in continuations thereof, and to all Letters Patent it supplementary protection certificates, reexamination	the Application, including all priority rights for other countries arising therefrom and eventions or discoveries therein disclosed, and any and all Letters Patent of the United countries, which may be granted for such inventions or discoveries, or any of them, all such Application including any and all provisionals, substitutions, divisions, and not may be granted for said inventions and discoveries, and in and to all extensions, ons, 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 ment and sale not been made.
	Page 1 of 2

US Application No.: 16/021,321

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.

Jerome R. Morgan LEGAL NAME OF INVENTOR	
	10/10/18
Signature	Date

Page 2 of 2

Attorney Docket No.: END7417USCNT1/140293CON1
US Application No.: 16/021,321

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention:		ENTS FOR DETACHABLE SHAFT ASSEMBLIES WITH GICAL END EFFECTORS	
This declaration and assi	gnment is directed to:		
		The attached or filed herewith application of (list of named inventors),	
	or .		
		The United States application or PCT international application number 16/021,321 filed on June 28, 2018.	
Declaration			
As the below na	amed inventor, I hereby dec	lare that:	
The above-iden	tified application ("Applica	tion") was made or authorized by me.	
I believe that I	am the original inventor or s	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.			
		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.	
Assignment Ethicon LLC #475 Street C, Suite 401 Los Frailes Industrial Park Guaynabo, Puerto Rico 00969			
a Limited Liability Company of Delaware.			
	(her	einafter 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 assigned and transferred		sufficiency of which is acknowledged, I hereby assign and transfer and/or have	
the right to claim priori States, European Paten such inventions or dis- continuations thereof, a supplementary protectio and enjoyment to the fu	ty to the Application, all in t Office and of all other co coveries and all rights in ind to all Letters Patent the in certificates, reexamination ill end of the term or terms:	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 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 at may be granted for said inventions and discoveries, and in and to all extensions, and, 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 nent and sale not been made.	
		Page 1 of 2	

US Application No.: 16/021,321

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.

Chester O. Baxter, III	
LEGAL NAME OF INVENTOR,—	
C(36:	10/15/18
Signature	Date

REEL: 047199 FRAME: 0129

US Application No.: 16/021,321

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: LOCKING ARRANGEMENTS FOR DETACHABLE SHAFT ASSEMBLIES WITH ARTICULATABLE SURGICAL END EFFECTORS			
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 16/021,321 filed on June 28, 2018.		
Declaration			
As the below named inventor, I hereby de-	clare that:		
The above-identified application ("Applic	ation") 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.			
	se statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or the things 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 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.			
Page 1 of 2			
	PATENT		

US Application No.: 16/021,321

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.

F	rederick E. Shelton, IV
L	EGAL NAME OF INVENTOR
	That I show

Signature/

10/16/18

Page 2 of 2

Attorney Docket No.: END7417USCNT1/140293CON1
US Application No.: 16/021,321

	COMBINED	DECLARATION AND ASSIGNMENT
Title of Invention:		IENTS FOR DETACHABLE SHAFT ASSEMBLIES WITH GICAL END EFFECTORS
This declaration and ass	ignment is directed to:	
		The attached or filed herewith application of (list of named inventors),
	er	
		The United States application or PCT international application number 16/021,321 filed on June 28, 2018.
Declaration		
As the below n	amed inventor, I hereby dec	lare that;
The above-ider	ntified application ("Applica	ition") 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.
information which is m	d and understood the conte aterial to patentability as de United States of Americs.	ents of the Application, including the claims, and I acknowledge the duty to disclose offined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of
		se statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or the 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 Li	imited Liability Company of <u>Delaware</u> .
	(he	reinafter designated as the "Assignee"),
I hereby acknowhich is hereby conform	wledge that I have assigned ned for recordation in the U	I 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 valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to Assignee:		
the right to claim priori States, European Pater such inventions or dis continuations thereof, a supplementary protection and enjoyment to the fa	ty to the Application, all in it Office and of all other co coveries and all rights in and to all Letters Patent the on certificates, reexamination all end of the term or terms	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 nuntries, which may be granted for such inventions or discoveries, or any of them, all such Application including any and all provisionals, substitutions, divisions, and at may be granted for said inventions and discoveries, and in and to all extensions, ans, 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 nent and sale not been made.

Page 1 of 2

US Application No.: 16/021,321

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, Buropean 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.

Gary W. Knight LEGAL NAME OF INVENTOR Day W Lught	10/12/18
Signature	Date

Page 2 of 2

PATENT

REEL: 047199 FRAME: 0132