04/13/2018 504868463

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4915203

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EITAN T. WIENER	05/09/2017
KRISTEN G. DENZINGER	05/10/2017
RYAN M. ASHER	05/10/2017
PHILLIP H. CLAUDA	05/09/2017
CAMERON R. NOTT	05/06/2017
JEFFREY D. MESSERLY	05/16/2017
FREDERICK E. SHELTON IV	05/08/2017
GEOFFREY S. STROBL	05/11/2017

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15177466

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: 412-355-6423

Email: piuspatents@klgates.com ROBERTO CAPRIOTTI 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:	END7747USNP4/150239-4
NAME OF SUBMITTER:	ROBERTO CAPRIOTTI

PAIENI **REEL: 045536 FRAME: 0769** 504868463

OLONATURE	
SIGNATURE:	/Roberto Capriotti/
DATE SIGNED:	04/13/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 16	
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PATENT REEL: 045536 FRAME: 0770

COMBINED DECLARATION AND ASSIGNMENT		
	TH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS BASED ON TISSUE PARAMETERS	
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 <u>15/177,466</u> filed on <u>June 9, 2016</u> .	
Declaration		
As the below named inventor, I hereby decla	ire that:	
The above-identified application ("Applicati	on") was made or authorized by me.	
I believe that I am the original inventor or an	n original inventor of a claimed invention or discovery in the Application.	
I have reviewed and understood the content information which is material to patentability as defit this Application in the United States of America.	ts of the Application, including the claims, and I acknowledge the duty to disclose ined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of	
I hereby acknowledge that any willful false imprisonment of not more than five (5) years, or both	statement made in this declaration is punishable under 18 U.S.C. \S 1001 by fine or for filings of this Application in the United States of America.	
Assignment	Ethicon Endo-Surgery, LLC #475 Street C Los Frailes Industrial Park Guaynabo, Puerto Rico 00969	
a Lim	ited Liability Company of <u>Delaware</u> .	
(here	inafter designated as the "Assignee"),	
	the above-identified invention by previous assignment (attached hereto) to Assignee Patent Office and I confirm I have and do assign and transfer:	
or		
For good and valuable consideration, the assigned and transferred to Assignee:	sufficiency of which is acknowledged, I hereby assign and transfer and/or have	
the right to claim priority to the Application, all investates, European Patent Office and of all other coursuch inventions or discoveries and all rights in sucontinuations thereof, and to all Letters Patent that supplementary protection certificates, reexaminations	the Application, including all priority rights for other countries arising therefrom and entions or discoveries therein disclosed, and any and all Letters Patent of the United atries, which may be granted for such inventions or discoveries, or any of them, all such Application-including any and all provisionals, substitutions, divisions, and may be granted for said inventions and discoveries, and in and to all extensions, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use r which such Letters Patent may be granted, as fully and entirely as the same would not and sale not been made.	

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.

Eitan T. Wiener
LEGAL NAME OF INVENTOR

Signature

Date

5/9/2017

COMBINED DECLARATION AND ASSIGNMENT

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		TTH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS BASED ON TISSUE PARAMETERS
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 <u>15/177,466</u> filed on <u>June 9, 2016</u> .
Declaration		
As the below named inven	tor, I hereby dec	lare that:
The above-identified appli	cation ("Applica	tion") was made or authorized by me.
I believe that I am the orig	inal inventor or a	an original inventor of a claimed invention or discovery in the Application.
I have reviewed and unde information which is material to paths Application in the United State	atentability as de	ents 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
I hereby acknowledge that imprisonment of not more than five	any willful fals (5) years, or bot	e 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 Endo-Surgery, LLC #475 Street C Los Frailes Industrial Park Guaynabo, Puerto Rico 00969
	a Li	mited Liability Company of Delaware.
	(her	reinafter designated as the "Assignee"),
I hereby acknowledge tha which is hereby conformed for reco	I have assigned ordation in the US	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 cassigned and transferred to Assigne		e sufficiency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim priority to the Ap States, European Patent Office an such inventions or discoveries ar continuations thereof, and to all I supplementary protection certificat	opplication, all inv d of all other cond ad all rights in letters Patent that es, reexamination e term or terms to	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, ns, 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

PATENT REEL: 045536 FRAME: 0773

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.

Kristen G. Denzinger
LEGAL NAME OF INVENTOR

Kristi

 $\frac{5/10/17}{\text{Date}}$

	COMBINI	ED DECLA	ARATION AND ASSIGNMENT
Fitle of Invention:	SURGICAL SYSTEM ENERGY MODALIT	I WITH USE IES BASED	ER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS ON TISSUE PARAMETERS
This declaration and ass	ignment is directed to:		
		The atta	ached or filed herewith application of (list of named inventors),
	or		
	⊠	The Uni	nited States application or PCT international application r 15/177,466 filed on June 9, 2016.
Declaration			
As the below n	amed inventor, I hereby	declare that:	
The above-ide	ntified application ("App	lication") was	as made or authorized by me.
I believe that I	am the original inventor	or an origina	al inventor of a claimed invention or discovery in the Application.
nformation which is m	ed and understood the co aterial to patentability a United States of America	s defined in T	e Application, including the claims, and I acknowledge the duty to disclos Title 37, the United States Code of Federal Regulations, §1.56 for filings of
I hereby ackno imprisonment of not mo	owledge that any willful ore than five (5) years, or	false stateme both for filin	ent made in this declaration is punishable under 18 U.S.C. § 1001 by fine congs of this Application in the United States of America.
Assignment		Los F	on Endo-Surgery, LLC #475 Street C Frailes Industrial Park abo, Puerto Rico 00969
		a Limited Lia	ability Company of <u>Delaware</u> .
		(hereinafter d	designated as the "Assignee"),
I hereby acknowhich is hereby conform	owledge that I have assigned for recordation in the	gned the above e US Patent (ve-identified invention by previous assignment (attached hereto) to Assigne Office and I confirm I have and do assign and transfer:
or			,
For good and assigned and transferre		, the sufficie	ency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim prior States, European Pater such inventions or dis- continuations thereof, supplementary protection and enjoyment to the fi	ity to the Application, a nt Office and of all othe scoveries and all rights and to all Letters Paten on certificates, reexamin	Il inventions or countries, very in such Apt that may be ations, renewers for which	lication, including all priority rights for other countries arising therefrom an or discoveries therein disclosed, and any and all Letters Patent of the Unite which may be granted for such inventions or discoveries, or any of them, a pplication including any and all provisionals, substitutions, divisions, are granted for said inventions and discoveries, and in and to all extension wals, and reissues thereof, to be held and enjoyed by Assignee for its own us h such Letters Patent may be granted, as fully and entirely as the same wou sale not been made.
			Page 1 of 2

Attorney Docket No.: END7747USNP4/150239-4

US Application No.: 15/177,466

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.

Ryan M. Asher LEGAL NAME OF INVENTOR	
Roll	05/10/2017
Signature	Date

COMBINED DECLARATION AND ASSIGNMENT

Fitle of Invention: SURGICAL SYSTEM W	TITH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS
	S BASED ON TISSUE PARAMETERS
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 <u>15/177,466</u> filed on <u>June 9, 2016</u> .
Declaration	
As the below named inventor, I hereby dec	clare that:
The above-identified application ("Application of the control of t	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 contentation which is material to patentability as do his Application in the United States of America.	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
I hereby acknowledge that any willful fals imprisonment of not more than five (5) years, or bo	se 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	Ethicon Endo-Surgery, LLC #475 Street C Los Frailes Industrial Park Guaynabo, Puerto Rico 00969
a Li	mited Liability Company of <u>Delaware</u> .
(he	reinafter designated as the "Assignee"),
I hereby acknowledge that I have assigned which is hereby conformed for recordation in the U	d 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 assigned and transferred to Assignee:	e 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 the supplementary protection certificates, reexamination	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 outries, 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, ns, 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.
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Attorney Docket No.: END7747USNP4/150239-4

US Application No.: 15/177,466

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.

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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.

Phillip H. Clauda

LEGAL NAME OF INVENTOR

Phillip & Claude

5/9/2017

Date

	COMBINED	DECLARATION AND ASSIGNMENT	
	SURGICAL SYSTEM WITH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS ENERGY MODALITIES BASED ON TISSUE PARAMETERS		
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 15/177,466 filed on June 9, 2016.	
Declaration			
As the below na	amed inventor, I hereby dec	clare that:	
The above-iden	tified application ("Applica	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.	
information which is ma	d and understood the conte aterial to patentability as d United States of America.	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	
I hereby acknow imprisonment of not mor	wledge that any willful fals re than five (5) years, or bo	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 Endo-Surgery, LLC #475 Street C Los Frailes Industrial Park Guaynabo, Puerto Rico 00969	
	a Li	imited Liability Company of <u>Delaware</u> .	
•	(he	ereinafter designated as the "Assignee"),	
I hereby acknownich is hereby conform	wledge that I have assigned and for recordation in the U	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 assigned and transferred		e 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	ty to the Application, all in t Office and of all other co coveries and all rights in nd to all Letters Patent the n certificates, reexamination ll end of the term or terms	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 at 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.	
which is hereby conform or For good and assigned and transferred my entire right, title, and the right to claim priorit States, European Patent such inventions or discontinuations thereof, as supplementary protection and enjoyment to the full	valuable consideration, the U valuable consideration, the to Assignee: d interest in, to, and under ty to the Application, all interest of the Application, all interest and all rights in all to all Letters Patent the certificates, reexamination and of the term or terms	Is Patent Office and I confirm I have and do assign and transfer: the sufficiency of which is acknowledged, I hereby assign and transfer and/or the Application, including all priority rights for other countries arising therefron aventions or discoveries therein disclosed, and any and all Letters Patent of the U countries, which may be granted for such inventions or discoveries, or any of ther such Application including any and all provisionals, substitutions, divisions, at may be granted for said inventions and discoveries, and in and to all extens ons, renewals, and reissues thereof, to be held and enjoyed by Assignee for its ow for which such Letters Patent may be granted, as fully and entirely as the same v	

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.

Cameron R. Nott
LEGAL NAME OF INVENTOR

Signature

05/01/2017 Date

COMBINED DECLARATION AND ASSIGNMENT

	COMMINED	DECEARATION AND ADDIGNAMENT
Title of Invention:	SURGICAL SYSTEM W	ITH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS
]	ENERGY MODALITIES	BASED ON TISSUE PARAMETERS
This declaration and assig	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 <u>15/177,466</u> filed on <u>June 9, 2016</u> .
Declaration		
As the below na	med inventor, I hereby decl	are that:
The above-ident	ified application ("Applicat	tion") was made or authorized by me.
I believe that I a	m the original inventor or a	n original inventor of a claimed invention or discovery in the Application.
I have reviewed nformation which is mat his Application in the U	terial 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
I hereby acknow mprisonment of not more	vledge that any willful falso e than five (5) years, or bot	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 Endo-Surgery, LLC #475 Street C
		Los Frailes Industrial Park
		Guaynabo, Puerto Rico 00969
	a Liı	nited Liability Company of <u>Delaware</u> .
	(her	einafter designated as the "Assignee"),
I hereby acknow which is hereby conformed	vledge that I have assigned ed for recordation in the US	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 vassigned and transferred t		sufficiency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim priority States, European Patent such inventions or discontinuations thereof, an supplementary protection and enjoyment to the full	to the Application, all inv Office and of all other concernes and all rights in do to all Letters Patent that a certificates, reexamination lend 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 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 tent and sale not been made.

Attorney Docket No.: END7747USNP4/150239-4

US Application No.: 15/177,466

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.

Jeffrey D. Messerly

LEGAL NAME OF INVENTOR

Signature

5/16/2017 Date

COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: SURGICAL SYSTEM WITH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS ENERGY MODALITIES BASED ON TISSUE PARAMETERS				
This declaration and assi	gnment is directed to:			
		The attached or filed herewith application of (list of named inventors),		
	or			
	\boxtimes	The United States application or PCT international application number <u>15/177,466</u> filed on <u>June 9, 2016</u> .		
Declaration				
As the below na	med inventor, I hereby decl	are 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 Endo-Surgery, LLC #475 Street C Los Frailes Industrial Park Guaynabo, Puerto Rico 00969		
	a Lir	nited Liability Company of <u>Delaware</u> .		
(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 vassigned and transferred		sufficiency of which is acknowledged, I hereby assign and transfer and/or have		
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.				
		75 4 04		

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.

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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 A

5/8/17

COMBINED DECLARATION AND ASSIGNMENT

		ITH USER ADAPTABLE TECHNIQUES EMPLOYING SIMULTANEOUS BASED ON TISSUE PARAMETERS
Ehis declaration and assig		BROWN ON TIBEOUX XXXXIII WARREN
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	or	
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The above-identi	fied application ("Applicat	ion") was made or authorized by me.
I believe that I ar	n the original inventor or a	n original inventor of a claimed invention or discovery in the Application.
I have reviewed information which is mat this Application in the Un	erial to patentability as def	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
I hereby acknow imprisonment of not more	ledge that any willful false 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.
Assignment		Ethicon Endo-Surgery, LLC #475 Street C Los Frailes Industrial Park Guaynabo, Puerto Rico 00969
	a Lin	nited Liability Company of <u>Delaware</u> .
	(here	einafter designated as the "Assignee"),
I hereby acknow which is hereby conforme	ledge that I have assigned of for recordation in the US	the above-identified invention by previous assignment (attached hereto) to Assignee Patent Office and I confirm I have and do assign and transfer:
or		
For good and vassigned and transferred t		sufficiency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim priority States, European Patent such inventions or disco continuations thereof, an supplementary protection and enjoyment to the full	to the Application, all inv Office and of all other cou overies and all rights in a d to all Letters Patent that certificates, reexamination end of the term or terms for	the Application, including all priority rights for other countries arising therefrom and rentions 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 ent and sale not been made.
		Page 1 of 2

PATENT REEL: 045536 FRAME: 0785

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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.

Geoffrey S. Strobl

LEGAL NAME OF INVENTOR

Signature

Date

5/11/2017