504433965 06/27/2017

#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4480666

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
BARRY C. WORRELL	12/18/2015
GEOFFREY S. STROBL	01/20/2016
GREGORY A. TREES	01/20/2016
JONATHAN T. BATROSS	02/18/2016
KRISTEN T. SHOGER	11/15/2015
DAVID K. NORVELL	12/18/2015
MICHAEL J. ANDREYKO	11/16/2015
GREGORY W. JOHNSON	02/03/2016
SHAWN C. SNYDER	02/18/2016
CHAD P. BOUDREAUX	12/16/2015

#### RECEIVING PARTY DATA

Name:	ETHICON ENDO-SURGERY, INC.	
Street Address:	4545 CREEK ROAD	
City:	CINCINNATI	
State/Country:	OHIO	
Postal Code:	45242	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	14921430

#### 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: END7042USCNT1/110388CON1

**REEL: 042830 FRAME: 0772** 504433965

PAIENI

NAME OF SUBMITTER:	ROBERTO CAPRIOTTI
SIGNATURE:	/Roberto Capriotti/
DATE SIGNED:	06/27/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 20	·
source=Signed_Combined_Declar	ation_and_Assignment_Documents#page1.tif
source=Signed_Combined_Declaration_and_Assignment_Documents#page2.tif	
source=Signed_Combined_Declaration_and_Assignment_Documents#page3.tif	
source=Signed_Combined_Declaration_and_Assignment_Documents#page4.tif	
source=Signed_Combined_Declaration_and_Assignment_Documents#page5.tif	
source=Signed_Combined_Declaration_and_Assignment_Documents#page6.tif	
source=Signed_Combined_Declaration_and_Assignment_Documents#page7.tif	
source=Signed_Combined_Declaration_and_Assignment_Documents#page8.tif	
source=Signed Combined Declar	ation and Assignment Documents#page9.tif

### COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT
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 14/921,430 filed on October 23, 2015.
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 disclos 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 o 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, Inc.  4545 Creek Road  Cincinnati, Ohio 45242
A corporation of the state or country of Ohio
(hereinafter designated as the "Assignee"),
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:
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

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.

Barry C. Worrell	<u>_</u>
LEGAL NAME OF INVENTOR	
Bang c Warell	12-18-2015
Signature \( \)	Date

# COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT
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 14/921,430 filed on October 23, 2015.
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 disclosinformation 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 of 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, Inc. 4545 Creek Road Cincinnati, Ohio 45242
A corporation of the state or country of Ohio
(hereinafter designated as the "Assignee"),
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assigne 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 hav 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 us 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

US Application No.: 14/921,430

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.

Geoffrey S. Strobl

LEGAL NAME OF INVENTOR

Signature/

Date

1/20/2016

# COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT
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 14/921,430 filed on October 23, 2015.
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 disclos 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 of 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, Inc. 4545 Creek Road Cincinnati, Ohio 45242
A corporation of the state or country of Ohio
(hereinafter designated as the "Assignee"),
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assigne 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

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.

Gregory A. Trees

LEGAL NAME OF INVENTOR

Signature

Date.

20/2016

 $\begin{array}{c} \text{Attorney Docket No.: } \underline{END7042USCNT1/110388CON1} \\ \text{US Application No.: } \underline{14/921,430} \end{array}$ 

# COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPT	IC FEEDBACK DE	VICES FOR SURGICAL ROBOT
This declaration and assignment		
		The attached or filed herewith application of (list of named inventors),
	or	
		The United States application or PCT international application number 14/921,430 filed on October 23, 2015.
Declaration		
As the below named in	ventor, I hereby decl	are that:
The above-identified a	oplication ("Applicat	ion") was made or authorized by me.
I believe that I am the o	original inventor or a	n original inventor of a claimed invention or discovery in the Application,
	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
		e statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or for filings of this Application in the United States of America.
Assignment		Ethicon Endo-Surgery, Inc. 4545 Creek Road Cincinnati, Ohio 45242
	A corp	poration of the state or country of Ohio
	(here	sinafter 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 assigned and transferred to Assign		sufficiency of which is acknowledged, I hereby assign and transfer and/or have
the right to claim priority to the States, European Patent Office such inventions or discoveries continuations thereof, and to all supplementary protection certific	Application, all inve and of all other cour and all rights in so Letters Patent that cates, reexaminations the term or terms fo	ne 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 ntries, which may be granted for such inventions or discoveries, or any of them, all uch Application including any and all provisionals, substitutions, divisions, and may be granted for said inventions and discoveries, and in and to all extensions, and reissues thereof, to be held and enjoyed by Assignee for its own use or 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

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.

<u>Jonathan T. Batross</u>

LEGAL NAME OF INVENTOR

Signature

teb 18,2016

# COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: <u>HAPTIC FEEDBACK DEV</u>	VICES FOR SURGICAL ROBOT
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 14/921,430 filed on October 23, 2015.
Declaration	
As the below named inventor, I hereby declar	are that:
The above-identified application ("Applicati	on") 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 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. § 1001 by fine or for filings of this Application in the United States of America.
Assignment	
	Ethicon Endo-Surgery, Inc. 4545 Creek Road Cincinnati, Ohio 45242
A corp	poration of the state or country of Ohio
(here	inafter designated as the "Assignee"),
I hereby acknowledge that I have assigned twhich is hereby conformed 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 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 succontinuations thereof, and to all Letters Patent that supplementary protection certificates, reexaminations	the Application, including all priority rights for other countries arising therefrom and contions or discoveries therein disclosed, and any and all Letters Patent of the United notices, 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 or which such Letters Patent may be granted, as fully and entirely as the same would not and sale not been made.

Page 1 of 2

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 T. Shoger

LEGAL NAME OF INVENTOR

Signature

Nov. 15, 201

Date

# COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPTIC FEEDBACK DEV	/ICES FOR SURGICAL ROBOT
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 14/921,430 filed on October 23, 2015.
Declaration	
As the below named inventor, I hereby declar	re that:
The above-identified application ("Application	on") 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 content information which is material to patentability as define this Application in the United States of America.	s of the Application, including the claims, and I acknowledge the duty to disclose ned in Title 37, the United States Code of Federal Regulations, §1.56 for filings of
	statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or for filings of this Application in the United States of America.
Assignment	
	Ethicon Endo-Surgery, Inc. 4545 Creek Road
	Cincinnati, Ohio 45242
A corpo	oration of the state or country of Ohio
(herei	nafter designated as the "Assignee"),
	he 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 s 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 inver States, European Patent Office and of all other count such inventions or discoveries and all rights in su continuations thereof, and to all Letters Patent that r supplementary protection certificates, reexaminations,	e Application, including all priority rights for other countries arising therefrom and actions or discoveries therein disclosed, and any and all Letters Patent of the United tries, which may be granted for such inventions or discoveries, or any of them, all ch 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 which such Letters Patent may be granted, as fully and entirely as the same would at and sale not been made.
	Page 1 of 2

US Application No.: <u>14/921,430</u>

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 K. Norvell
LEGAL NAME OF INVENTOR
Signature

12-18-2015

	US Application No.: <u>14/921,430</u>				
	COMBINED DECLARATION AND ASSIGNMENT				
Title of In	vention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT				
This declara	tion 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 14/921,430 filed on October 23, 2015.				
Declaratio	on .				
As	the below named inventor, I hereby declare that:				
The	The above-identified application ("Application") was made or authorized by me.				
I be	I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application.				
information	ave reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of ation in the United States of America.				
I h imprisonme	ereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or not more than five (5) years, or both for filings of this Application in the United States of America.				
Assignme	Ethicon Endo-Surgery, Inc. 4545 Creek Road Cincinnati, Ohio 45242				
	A corporation of the state or country of Ohio				
	(hereinafter designated as the "Assignee"),				
☐ I h which is her	creby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assignee reby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer:				
or					
	r good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have d transferred to Assignee:				
the right to States, Eur such invent continuation supplement and enjoym	ight, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United opean Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all tions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and as thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, ary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use tent 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 held and enjoyed by me had this assignment and sale not been made.				
	Page 1 of 2				

Page 1 of 2

US Application No.: <u>14/921,430</u>

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.

<u>Michael J. Andreyko</u>

LEGAL NAME OF INVENTOR

Signature

11-16-2015

Date

4. 2 350 650

### COMBINED DECLARATION AND ASSIGNMENT

COMBINED BEELINGS STATES				
Title of Invention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT				
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 14/921,430 filed on October 23, 2015.				
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 disclosinformation 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 c imprisonment of not more than five (5) years, or both for filings of this Application in the United States of America.				
Assignment Fals Surgery Inc.				
Ethicon Endo-Surgery, Inc. 4545 Creek Road				
Cincinnati, Ohio 45242				
A corporation of the state or country of Ohio				
(hereinafter designated as the "Assignee"),				
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assigne 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 an the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the Unite States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, a such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, an 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 us 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				

US Application No.: 14/921,430

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.

Gregory W. Johnson

LEGAL NAME OF INVENTOR

Signature

2/3/16

Date

Attorney Docket No.:  $\frac{END7042USCNT1/110388CON1}{US~Application~No.:~} \underline{14/921,430}$ 

### COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT	
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 14/921,430 filed on October 23, 2015.	
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 dis information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filin this Application in the United States of America.	close gs of
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fi imprisonment of not more than five (5) years, or both for filings of this Application in the United States of America.	ne or
Assignment  Ethicon Endo-Surgery, Inc.  4545 Creek Road  Cincinnati, Ohio 45242	
A corporation of the state or country of Ohio	
(hereinafter designated as the "Assignee"),	
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to Assign which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer:	gnee
or	
For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or assigned and transferred to Assignee:	have
my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefron the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the U States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of then such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extens supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own 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 we have been held and enjoyed by me had this assignment and sale not been made.	nited n, all and ions, use
Page <b>1</b> of <b>2</b>	

US Application No.: 14/921,430

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.

Shawn C. Snyder	
LEGAL NAME OF INVENTOR	
O a	2-18-16
Signature	Date

#### COMBINED DECLARATION AND ASSIGNMENT

Title of Invention: HAPTIC FEEDBACK DEVICES FOR SURGICAL ROBOT	
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 14/921,430 filed on October 23, 2015.	
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 information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for fi 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 imprisonment of not more than five (5) years, or both for filings of this Application in the United States of America.	y fine or
Assignment	
Ethicon Endo-Surgery, Inc. 4545 Creek Road	
Cincinnati, Ohio 45242	
A corporation of the state or country of Ohio	
(hereinafter designated as the "Assignee"),	
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) to A which is hereby conformed for recordation in the US Patent Office and I confirm I have and do assign and transfer:	Assignee
or	
For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and assigned and transferred to Assignee:	or have
my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefore the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of the such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, division continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all ext supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its 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 have been held and enjoyed by me had this assignment and sale not been made.	e United hem, all ons, and ensions, own use
Page 1 of 2	

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.