502133130 11/19/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Rudolph H. Nobis	10/17/2012
Frank Jankoski	10/17/2012
Omar J. Vakharia	10/17/2012
John A. Faux	11/13/2012
Gregory J. Bakos	10/17/2012
Duane A. Linenkugel	10/23/2012
Christopher Paul Swain	10/19/2012

RECEIVING PARTY DATA

Name:	Ethicon Endo-Surgery, Inc.
Street Address:	4545 Creek Road
City:	Cincinnati
State/Country:	ОНЮ
Postal Code:	45242

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	11127513

CORRESPONDENCE DATA

502133130

Fax Number: 5133378489

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 513-337-7158

Email: Vvanden5@its.jnj.com
Correspondent Name: Johnson & Johnson

Address Line 1: One Johnson & Johnson Plaza

Address Line 2: Philip S. Johnson

Address Line 4: New Brunswick, NEW JERSEY 08933

ATTORNEY DOCKET NUMBER: END5337USNP

REEL: 029318 FRAME: 0539

PATENT

,00 11127513

CH \$40 00

NAME OF SUBMITTER:	Virginia VanDenBurg		
Total Attachments: 20			
source=END5337USNP_AssignmentSigned	l#page1.tif		
source=END5337USNP_AssignmentSigned	l#page2.tif		
source=END5337USNP_AssignmentSigned	l#page3.tif		
source=END5337USNP_AssignmentSigned	l#page4.tif		
source=END5337USNP_AssignmentSigned	l#page5.tif		
source=END5337USNP_AssignmentSigned	l#page6.tif		
source=END5337USNP_AssignmentSigned	#page7.tif		
source=END5337USNP_AssignmentSigned	l#page8.tif		
source=END5337USNP_AssignmentSigned	source=END5337USNP_AssignmentSigned#page9.tif		
source=END5337USNP_AssignmentSigned	source=END5337USNP_AssignmentSigned#page10.tif		
source=END5337USNP_AssignmentSigned	#page11.tif		
source=END5337USNP_AssignmentSigned#page12.tif			
source=END5337USNP_AssignmentSigned#page13.tif			
source=END5337USNP_AssignmentSigned#page14.tif			
source=END5337USNP_AssignmentSigned#page15.tif			
source=END5337USNP_AssignmentSigned#page16.tif			
source=END5337USNP_AssignmentSigned#page17.tif			
source=END5337USNP_AssignmentSigned#page18.tif			
source=END5337USNP_AssignmentSigned#page19.tif			
source=END5337USNP_AssignmentSigned#page20.tif			

ASSIGNMENT

Serial No.: 11/127,513 Filed: May 12, 2005

WHEREAS, Rudolph H. Nobis, a citizen of the United States of America, residing at 4594 Atrium Court, Mason, Ohio 45040; Frank Jankoski, a citizen of the United States of America, residing at 6 Vista Court, Phillipsburg, New Jersey 08865; Omar J. Vakharia a citizen of the United States of America, residing at 2036 Berkshire Club Drive, Cincinnati, Ohio 45230, John A. Faux, a citizen of the United States of America, residing at 12311 North Kylene Canyon Drive, Oro Valley, Arizona 85755; Gregory J. Bakos, a citizen of the United States of America, residing at 5647 Hawthorn Court, Mason, Ohio 45040; Duane A. Linenkugel, a citizen of the United States of America, residing at 11999 Britesilks Lane, Cincinnati, Ohio 45249; and Christopher Paul Swain, a citizen of the United Kingdom, residing at 41 Willow Road, London NW3 1TN United Kingdom; (hereinafter called "Assignors"), have made certain new and useful inventions or discoveries relating to:

T-TYPE SUTURE ANCHORING DEVICES AND METHODS OF USING SAME

for which they have this day executed an application for Letters Patent of the United States; and

WHEREAS, Ethicon Endo-Surgery, Inc., located at 4545 Creek Road, Cincinnati, Ohio 45242, a corporation formed under the laws of the State of Ohio, (hereinafter called "Assignee"), is desirous of acquiring Assignors' entire right, title, and interest therein:

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar and other valuable considerations to them moving, the receipt of which is hereby acknowledged, Assignors have sold, assigned, and transferred, and do hereby sell, assign and transfer unto said Assignee their entire right, title and interest in and to all said inventions and discoveries disclosed in said application whose identification above by serial number and filing date, when available is hereby authorized, and in and to said application, all substitutions, divisions, and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals, and reissues thereof, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made;

And Assignors hereby authorize and request the Commissioner of Patents of the United States to issue said Letters Patent in accordance with this Assignment;

And for the consideration aforesaid, Assignors covenant and agree with said Assignee that he has a full and unencumbered title to the inventions and discoveries above described and hereby assigned, which title they warrant unto said Assignee, its successors and assigns;

END5337USNP Page 1 of 5

And for the consideration aforesaid, Assignors further covenant and agree that they will, whenever requested, but without cost to them promptly communicate to said Assignee or its representatives any facts known to them relating to said inventions and discoveries, testify in any interference or legal proceedings involving said inventions and discoveries, and execute any additional papers that may be necessary to enable said Assignee or its representatives, successors, nominees, or assigns to secure full and complete protection for the said inventions and discoveries or that may be necessary to vest in said Assignee the complete title to the said inventions and discoveries and patents hereby conveyed and to enable it to record said title.

IN TESTIMONY WI	HEREOF, Assig	gnor has hereunto set his hand and seal this _	17
day of October,	2012.	RML-	(L.S.)
		Rudolph H. Nobis	`
STATE OF OHIO)) ss.	•	
COUNTY OF HAMILTON)		
a Notary Public, personally a and who executed the forego	ppeared Rudolp ing instrument i acknowledge tl	day of October, 2012, be on H. Nobis, who I am satisfied is the person not in my presence, and I having first made know that he signed, sealed, and delivered the same oses therein expressed.	amed in n to him
Notary P My Co	A A. VANDENBURG Public, State of Ohio mmission Expires ember 15, 2013	Virginia a. Vanton Bung Notary Public	\

END5337USNP Page 2 of 5

day of		ssignor has hereunto set his	nand and seal this
		-	(L.S.)
	,	Frank Jankoski	
STATE OF)) ss.		
COUNTY OF)		
a Notary Public, person who executed the for	onally appeared France egoing instrument in id acknowledge that	k Jankoski, who I am satisfie my presence, and I having he signed, sealed, and delive	, 2012, before me, and is the person named in and first made known to him the red the same as his voluntary
		Notary Public	:
day of October	, 2012.	Omar J. Vakharia	(L.S.)
STATE OF OHIO COUNTY OF HAMI)) ss.		
BE IT REME a Notary Public, perso and who executed the the contents thereof,	MBERED, That on to conally appeared Oma conforce foregoing instrument the did acknowledge	ar J. Vakharia, who I am satint in my presence, and I have	2012, before me, sfied is the person named in ing first made known to him d delivered the same as his
OF THE STATE OF TH	GINIA A. VANDENBURG stary Public, State of Ohio My Commission Expires December 15, 2013	<u> Virincia A. Ca</u> Notary Publi	END5337USNP Page 3 of 5

		ssignor has hereunto set his ha	and and seal this
day of	, 2012.		
			(L.S.)
STATE OF)) ss.	John A. Faux	
COUNTY OF)	e	
a Notary Public, person who executed the fore	onally appeared John egoing instrument in d acknowledge that	this day of n A. Faux, who I am satisfied n my presence, and I having fin he signed, sealed, and delivered rein expressed.	is the person named in and rst made known to him the
		Notary Public	
IN TESTIMO day of Ochber	NY WHEREOF, As , 2012.	ssignor has hereunto set his ha Gregory J. Bakos	
STATE OF OHIO COUNTY OF HAMII)) ss. LTON)		
a Notary Public, perso and who executed the the contents thereof,	onally appeared Greg foregoing instrumenthe did acknowledge	this /// day of Oche gory J. Bakos, who I am satisf at in my presence, and I havin that he signed, sealed, and reposes therein expressed.	ied is the person named in g first made known to him
Notary My C	IA A. VANDENBURG Public, State of Ohio ommission Expires cember 15, 2013	Cinginia a. The Notary Public	END5337USNP Page 4 of 5

IN TESTIMONY WHEREOF, Assignor I	has hereunto set his hand and seal this $\frac{23}{100}$
day of 6070BER, 2012.	
Dua	(L.S.)
STATE OF OHIO)	. •
) ss. CÓUNTY OF HAMILTON)	
BE IT REMEMBERED, That on this a Notary Public, personally appeared Duane A. Lin in and who executed the foregoing instrument in him the contents thereof, he did acknowledge that voluntary act and deed for the uses and purposes the VIRGINIA A. VANDENBURG Notary Public, State of Ohio My Commission Expires December 15, 2013 IN TESTIMONY WHEREOF, Assignor he day of, 2012.	my presence, and I having first made known to he signed, sealed, and delivered the same as his erein expressed. Mynial Lunton Burg Notary Public
Chris	(L.S.)
	nophor ruoi 5 main
STATE OF)	
) ss.	
COUNTY OF)	
BE IT REMEMBERED, That on this a Notary Public, personally appeared Christopher named in and who executed the foregoing instruknown to him the contents thereof, he did acknow same as his voluntary act and deed for the uses and	ment in my presence, and I having first made vledge that he signed, sealed, and delivered the
	Notary Public

END5337USNP Page 5 of 5

ASSIGNMENT

Serial No.: 11/127,513 Filed: May 12, 2005

WHEREAS, Rudolph H. Nobis, a citizen of the United States of America, residing at 4594 Atrium Court, Mason, Ohio 45040; Frank Jankoski, a citizen of the United States of America, residing at 6 Vista Court, Phillipsburg, New Jersey 08865; Omar J. Vakharia a citizen of the United States of America, residing at 2036 Berkshire Club Drive, Cincinnati, Ohio 45230, John A. Faux, a citizen of the United States of America, residing at 12311 North Kylene Canyon Drive, Oro Valley, Arizona 85755; Gregory J. Bakos, a citizen of the United States of America, residing at 5647 Hawthorn Court, Mason, Ohio 45040; Duane A. Linenkugel, a citizen of the United States of America, residing at 11999 Britesilks Lane, Cincinnati, Ohio 45249; and Christopher Paul Swain, a citizen of the United Kingdom, residing at 41 Willow Road, London NW3 1TN United Kingdom; (hereinafter called "Assignors"), have made certain new and useful inventions or discoveries relating to:

T-TYPE SUTURE ANCHORING DEVICES AND METHODS OF USING SAME

for which they have this day executed an application for Letters Patent of the United States; and

WHEREAS, Ethicon Endo-Surgery, Inc., located at 4545 Creek Road, Cincinnati, Ohio 45242, a corporation formed under the laws of the State of Ohio, (hereinafter called "Assignee"), is desirous of acquiring Assignors' entire right, title, and interest therein:

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar and other valuable considerations to them moving, the receipt of which is hereby acknowledged, Assignors have sold, assigned, and transferred, and do hereby sell, assign and transfer unto said Assignee their entire right, title and interest in and to all said inventions and discoveries disclosed in said application whose identification above by serial number and filing date, when available is hereby authorized, and in and to said application, all substitutions, divisions, and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals, and reissues thereof, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made;

And Assignors hereby authorize and request the Commissioner of Patents of the United States to issue said Letters Patent in accordance with this Assignment;

And for the consideration aforesaid, Assignors covenant and agree with said Assignee that he has a full and unencumbered title to the inventions and discoveries above described and hereby assigned, which title they warrant unto said Assignee, its successors and assigns;

END5337USNP Page 1 of 5

And for the consideration aforesaid, Assignors further covenant and agree that they will, whenever requested, but without cost to them promptly communicate to said Assignee or its representatives any facts known to them relating to said inventions and discoveries, testify in any interference or legal proceedings involving said inventions and discoveries, and execute any additional papers that may be necessary to enable said Assignee or its representatives, successors, nominees, or assigns to secure full and complete protection for the said inventions and discoveries or that may be necessary to vest in said Assignee the complete title to the said inventions and discoveries and patents hereby conveyed and to enable it to record said title.

IN TESTIMONY WI	HEREOF, Assi	gnor has hereunto set hi	s hand and seal this
day of,	2012.		
			(L.S.)
		Rudolph H. Nobis	(-, -, -,
STATE OF OHIO)	-	
) ss.		
COUNTY OF HAMILTON)		
			, 2012, before me,
			satisfied is the person named in
			aving first made known to him and delivered the same as his
voluntary act and deed for the			and derivered the same as ms
voluntary act and acca for the	dises and purpe	oses merem expressed.	
			•
		Notary Pu	blic

END5337USNP Page 2 of 5

day of <u>OCTOBER</u> , 2	_	nor has hereunto set his hand and seal this
	Ē	Frank Jankoski (L.S.)
STATE OF NEW JERSEY COUNTY OF Somerset) ss.)	
a Notary Public, personally a who executed the foregoing	ppeared Frank Jan instrument in my owledge that he si	day of october, 2012, before me, nkoski, who I am satisfied is the person named in and presence, and I having first made known to him the igned, sealed, and delivered the same as his voluntary expressed.
	-	Notary Public
		HERLANDER AMORIM NOTARY PUBLIC OF NEW JERSEY
A Committee of the Comm		Commission Expires 6/11/20/3
IN TESTIMONY WI	, 2012.	or has hereunto set his hand and seal this(L.S.)
	C	Omar J. Vakharia
STATE OF OHIO)	
COUNTY OF HAMILTON) ss.)	
BE IT REMEMBERI		day of, 2012, before me,
a Notary Public, personally a and who executed the forego	ing instrument in acknowledge that	my presence, and I having first made known to him at he signed, sealed, and delivered the same as his
a Notary Public, personally a and who executed the forego the contents thereof, he did	ing instrument in acknowledge that	my presence, and I having first made known to him at he signed, sealed, and delivered the same as his es therein expressed.
a Notary Public, personally a and who executed the forego the contents thereof, he did	ing instrument in acknowledge that	Vakharia, who I am satisfied is the person named in my presence, and I having first made known to him at he signed, sealed, and delivered the same as his es therein expressed. Notary Public END5337USNP

day of		gnor has hereunto set his hand and seal this
		(L.S.)
		John A. Faux
STATE OF)	•
COUNTY OF) ss.)	
a Notary Public, personally a who executed the foregoing	appeared John A instrument in m owledge that he	day of
		Notary Public
IN TESTIMONY W day of	•	gnor has hereunto set his hand and seal this(L.S.)
·		Gregory J. Bakos
STATE OF OHIO)	
COUNTY OF HAMILTON) ss.)	
a Notary Public, personally a and who executed the forego	appeared Gregor sing instrument i acknowledge the	day of, 2012, before me, ry J. Bakos, who I am satisfied is the person named in in my presence, and I having first made known to him hat he signed, sealed, and delivered the same as his sees therein expressed.
		Notary Public
		END5337USNP Page 4 of 5

		Assignor has hereunto set his hand and seal this
day of	, 2012.	
		(L.S.)
		Duane A. Linenkugel
STATE OF OHIO	,	
STATE OF OHIO)) ss.	
COUNTY OF HAMIL	TON)	
BE IT REMEN	MBERED, That on	this day of, 2012, before me,
a Notary Public, perso	nally appeared Dua	ane A. Linenkugel, who I am satisfied is the person named
in and who executed the theorem is the contents there	the foregoing instr	ument in my presence, and I having first made known to ledge that he signed, sealed, and delivered the same as his
voluntary act and deed	for the uses and pu	arposes therein expressed.
	_	•
		Notary Public
		·
IN TESTIMON	NY WHEREOF, A	ssignor has hereunto set his hand and seal this
day of	, 2012.	
		(L.S.)
		Christopher Paul Swain
STATE OF	1	
) ss.	
COUNTY OF)	
BE IT REMEM	IBERED, That on	this, 2012, before me,
a Notary Public, perso	onally appeared Cl	nristopher Paul Swain, who I am satisfied is the person
named in and who ex known to him the con	ecuted the foregoi tents thereof, he d	ing instrument in my presence, and I having first made id acknowledge that he signed, sealed, and delivered the
same as his voluntary a	ct and deed for the	uses and purposes therein expressed.
		-
		Notary Public
		•

END5337USNP Page 5 of 5

ASSIGNMENT

Serial No.: 11/127,513 Filed: May 12, 2005

WHEREAS, Rudolph H. Nobis, a citizen of the United States of America, residing at 4594 Atrium Court, Mason, Ohio 45040; Frank Jankoski, a citizen of the United States of America, residing at 6 Vista Court, Phillipsburg, New Jersey 08865; Omar J. Vakharia a citizen of the United States of America, residing at 2036 Berkshire Club Drive, Cincinnati, Ohio 45230, John A. Faux, a citizen of the United States of America, residing at 12311 North Kylene Canyon Drive, Oro Valley, Arizona 85755; Gregory J. Bakos, a citizen of the United States of America, residing at 5647 Hawthorn Court, Mason, Ohio 45040; Duane A. Linenkugel, a citizen of the United States of America, residing at 11999 Britesilks Lane, Cincinnati, Ohio 45249; and Christopher Paul Swain, a citizen of the United Kingdom, residing at 41 Willow Road, London NW3 1TN United Kingdom; (hereinafter called "Assignors"), have made certain new and useful inventions or discoveries relating to:

T-TYPE SUTURE ANCHORING DEVICES AND METHODS OF USING SAME

for which they have this day executed an application for Letters Patent of the United States; and

WHEREAS, Ethicon Endo-Surgery, Inc., located at 4545 Creek Road, Cincinnati, Ohio 45242, a corporation formed under the laws of the State of Ohio, (hereinafter called "Assignee"), is desirous of acquiring Assignors' entire right, title, and interest therein:

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar and other valuable considerations to them moving, the receipt of which is hereby acknowledged, Assignors have sold, assigned, and transferred, and do hereby sell, assign and transfer unto said Assignee their entire right, title and interest in and to all said inventions and discoveries disclosed in said application whose identification above by serial number and filing date, when available is hereby authorized, and in and to said application, all substitutions, divisions, and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals, and reissues thereof, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made;

And Assignors hereby authorize and request the Commissioner of Patents of the United States to issue said Letters Patent in accordance with this Assignment;

And for the consideration aforesaid, Assignors covenant and agree with said Assignee that he has a full and unencumbered title to the inventions and discoveries above described and hereby assigned, which title they warrant unto said Assignee, its successors and assigns;

END5337USNP Page 1 of 5

And for the consideration aforesaid, Assignors further covenant and agree that they will, whenever requested, but without cost to them promptly communicate to said Assignee or its representatives any facts known to them relating to said inventions and discoveries, testify in any interference or legal proceedings involving said inventions and discoveries, and execute any additional papers that may be necessary to enable said Assignee or its representatives, successors, nominees, or assigns to secure full and complete protection for the said inventions and discoveries or that may be necessary to vest in said Assignee the complete title to the said inventions and discoveries and patents hereby conveyed and to enable it to record said title.

IN TESTIMONY W	HEREOF, Assign	nor has hereunto set his	s hand and seal this
day of,	2012.		
			(L.S.)
		Rudolph H. Nobis	(
STATE OF OHIO)	-	
) ss.		
COUNTY OF HAMILTON)		
a Notary Public, personally a and who executed the forego	ppeared Rudolph ing instrument in acknowledge th	n H. Nobis, who I am san my presence, and I ha nat he signed, sealed, a	, 2012, before meanisfied is the person named in wing first made known to him and delivered the same as his
		Notary Pub	olic

END5337USNP Page 2 of 5

		(1 2)
		Frank Jankoski (L.S.)
STATE OF)) ss.	
COUNTY OF)	
a Notary Public, personally a who executed the foregoing	ppeared Frank Jainstrument in moweledge that he	day of, 2012, before me, ankoski, who I am satisfied is the person named in and y presence, and I having first made known to him the signed, sealed, and delivered the same as his voluntary expressed.
		Notary Public
day of	, 2012.	Omar J. Vakharia (L.S.)
STATE OF OHIO)	
COUNTY OF HAMILTON) ss.)	
a Notary Public, personally a and who executed the forego the contents thereof, he did	appeared Omar J sing instrument i acknowledge th	. Vakharia, who I am satisfied is the person named in a my presence, and I having first made known to him at he signed, sealed, and delivered the same as his
a Notary Public, personally a and who executed the forego	appeared Omar J sing instrument i acknowledge th	day of, 2012, before me, . Vakharia, who I am satisfied is the person named in a my presence, and I having first made known to him that he signed, sealed, and delivered the same as his ses therein expressed. Notary Public

IN TESTIMONY D	VHEREOF, Ass	signor has hereunto set his hand and seal this
The state of the s	_, 2012.	Kle MARO
STATE OF ARIZONA)	John A, Faux (L.S.)
COUNTY OF Pma) ss.)	
who executed the foregoing	instrument in movied go that he	s /37 day of //2012 no 2012, before me, A. Faux, who I am satisfied is the person named in and my presence, and I having first made known to him the signed, sealed, and delivered the same as his voluntary in expressed.
COLLEEN SATTE NOTARY PUBLIC - / PIMA COUN My Commission April 25, 20	ARIZONA IY Bophos	Tolleen & Borning on Stolley alther laite
IN TESTIMONY W	HEREOF, Assig , 2012.	gnor has hereunto set his hand and seal this
		(L.S.)
		Gregory J. Bakos
STATE OF OHIO)	
COUNTY OF HAMILTON) ss.)	
and who executed the foregol	ppeared Gregory ng instrument it acknowledge th	day of, 2012, before me, J. Bakos, who I am satisfied is the person named in my presence, and I having first made known to him at he signed, sealed, and delivered the same as his es therein expressed.
		Notary Public
		Property Prince END5337USNP
		Page 4 of 5

IN TESTIMO day of		Assignor has hereunto set his hand and seal this
	·	AT CL
		Duane A. Linenkugel (L.S.)
STATE OF OHIO		
COUNTY OF HAMII) ss. LTON)	
a Notary Public, perso in and who executed him the contents there	onally appeared Duthe foregoing instead, he did acknow	n this day of, 2012, before me, name A. Linenkugel, who I am satisfied is the person named trument in my presence, and I having first made known to wledge that he signed, sealed, and delivered the same as his purposes therein expressed.
		Notary Public
IN TESTIMO day of		Assignor has hereunto set his hand and seal this(L.S.)
		Christopher Paul Swain
STATE OF)) ss.	
COUNTY OF)	
a Notary Public, person named in and who ex known to him the con	onally appeared (secuted the foregatents thereof, he	this, 2012, before me, Christopher Paul Swain, who I am satisfied is the person oing instrument in my presence, and I having first made did acknowledge that he signed, sealed, and delivered the e uses and purposes therein expressed.
		Notary Public

END5337USNP Page 5 of 5

ASSIGNMENT

Serial No.: 11/127,513 Filed: May 12, 2005

WHEREAS, Rudolph H. Nobis, a citizen of the United States of America, residing at 4594 Atrium Court, Mason, Ohio 45040; Frank Jankoski, a citizen of the United States of America, residing at 6 Vista Court, Phillipsburg, New Jersey 08865; Omar J. Vakharia a citizen of the United States of America, residing at 2036 Berkshire Club Drive, Cincinnati, Ohio 45230, John A. Faux, a citizen of the United States of America, residing at 12311 North Kylene Canyon Drive, Oro Valley, Arizona 85755; Gregory J. Bakos, a citizen of the United States of America, residing at 5647 Hawthorn Court, Mason, Ohio 45040; Duane A. Linenkugel, a citizen of the United States of America, residing at 11999 Britesilks Lane, Cincinnati, Ohio 45249; and Christopher Paul Swain, a citizen of the United Kingdom, residing at 41 Willow Road, London NW3 1TN United Kingdom; (hereinafter called "Assignors"), have made certain new and useful inventions or discoveries relating to:

T-TYPE SUTURE ANCHORING DEVICES AND METHODS OF USING SAME

for which they have this day executed an application for Letters Patent of the United States; and

WHEREAS, Ethicon Endo-Surgery, Inc., located at 4545 Creek Road, Cincinnati, Ohio 45242, a corporation formed under the laws of the State of Ohio, (hereinafter called "Assignee"), is desirous of acquiring Assignors' entire right, title, and interest therein:

NOW, THEREFORE, BE IT KNOWN that for and in consideration of the sum of One Dollar and other valuable considerations to them moving, the receipt of which is hereby acknowledged, Assignors have sold, assigned, and transferred, and do hereby sell, assign and transfer unto said Assignee their entire right, title and interest in and to all said inventions and discoveries disclosed in said application whose identification above by serial number and filing date, when available is hereby authorized, and in and to said application, all substitutions, divisions, and continuations thereof, and in and to all Letters Patent, United States and foreign, that may be granted for said inventions and discoveries, and in and to all extensions, renewals, and reissues thereof, the same to be held and enjoyed by said Assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by Assignors if this Assignment and sale had not been made;

And Assignors hereby authorize and request the Commissioner of Patents of the United States to issue said Letters Patent in accordance with this Assignment;

And for the consideration aforesaid, Assignors covenant and agree with said Assignee that he has a full and unencumbered title to the inventions and discoveries above described and hereby assigned, which title they warrant unto said Assignee, its successors and assigns;

END5337USNP Page 1 of 5

And for the consideration aforesaid, Assignors further covenant and agree that they will, whenever requested, but without cost to them promptly communicate to said Assignee or its representatives any facts known to them relating to said inventions and discoveries, testify in any interference or legal proceedings involving said inventions and discoveries, and execute any additional papers that may be necessary to enable said Assignee or its representatives, successors, nominees, or assigns to secure full and complete protection for the said inventions and discoveries or that may be necessary to vest in said Assignee the complete title to the said inventions and discoveries and patents hereby conveyed and to enable it to record said title.

IN TESTIMONY WHEREOF, A	Assignor has hereunto set his	hand and seal this
day of, 2012.	_	
		(L.S.)
	Rudolph H. Nobis	(L,O.)
STATE OF OHIO)		
) ss.		
COUNTY OF HAMILTON)		
BE IT REMEMBERED, That on	this day of	2012, before me
a Notary Public, personally appeared Ru		
and who executed the foregoing instrum	<u>.</u>	<u> </u>
the contents thereof, he did acknowled		nd delivered the same as his
voluntary act and deed for the uses and p	urposes therein expressed.	
	·	
	Notary Pub	lic

END5337USNP Page 2 of 5

		Frank Jankoski	(L.S.)
STATE OF)) ss.		•
COUNTY OF)		
a Notary Public, personally a who executed the foregoing	ppeared Frank Ja instrument in my owledge that he s	nkoski, who I am satisy presence, and I havin igned, sealed, and deli	, 2012, before me, sfied is the person named in and ag first made known to him the evered the same as his voluntary
		Notary Pub	blic
day of	-	Omar J. Vakharia	(L.S.)
STATE OF OHIO	1		
COUNTY OF HAMILTON) ss.)		
a Notary Public, personally a and who executed the forego	ppeared Omar J. ing instrument in acknowledge that	Vakharia, who I am s my presence, and I h at he signed, sealed,	, 2012, before me, satisfied is the person named in aving first made known to him and delivered the same as his
	-	Notary Pu	blic

IN TESTIMONY W	_	nor has hereunto set his hand and seal this
		<i>a.</i> a.
		John A. Faux
STATE OF)	
COUNTY OF) ss.)	
a Notary Public, personally who executed the foregoing	appeared John A instrument in my nowledge that he	day of, 2012, before me, Faux, who I am satisfied is the person named in and y presence, and I having first made known to him the signed, sealed, and delivered the same as his voluntary expressed.
		Notary Public
IN TESTIMONY W		nor has hereunto set his hand and seal this
		(L.S.)
		Gregory J. Bakos
STATE OF OHIO)	
) ss.	
COUNTY OF HAMILTON)	
a Notary Public, personally a and who executed the forego	appeared Gregory oing instrument in acknowledge th	day of, 2012, before me, J. Bakos, who I am satisfied is the person named in my presence, and I having first made known to him at he signed, sealed, and delivered the same as his es therein expressed.
		Notary Public
		END5337USNP
		Page 4 of 5

day of		assignor has hereunto set his ha	and and scar tims
			ДСУ
		Duane A. Linenkugel	(L.S.)
STATE OF OHIO)		·
COUNTY OF HAMILTO) ss. ON)		
a Notary Public, personal in and who executed the	ly appeared Dua foregoing instru he did acknowl	this day of ane A. Linenkugel, who I am sa ument in my presence, and I h edge that he signed, sealed, and urposes therein expressed.	tisfied is the person named aving first made known to
		Notary Public	
IN TESTIMONY day of 19th () ther	WHEREOF, A , 2012.	ssignor has hereunto set his ha	nd and seal this(L.S.)
STATE OF)	/ /	
COUNTY OF) ss.)	UK	
a Notary Public, persona named in and who execu known to him the conten	lly appeared Cluted the foregonets thereof, he d	this day of nristopher Paul Swain, who I ing instrument in my presence id acknowledge that he signed uses and purposes therein expr	am satisfied is the person e, and I having first made , sealed, and delivered the

RECORDED: 11/19/2012

PATENT REEL: 029318 FRAME: 0560

END5337USNP Page 5 of 5