PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ARIEL BIRENBAUM	01/29/2019
RON BARAK	01/29/2019
OREN P. WEINGARTEN	03/04/2019

RECEIVING PARTY DATA

Name:	COVIDIEN LP
Street Address:	15 HAMPSHIRE STREET
City:	MANSFIELD
State/Country:	MASSACHUSETTS
Postal Code:	02048

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16259731

CORRESPONDENCE DATA

Fax Number: (303)581-6632

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.

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elizabeth.e.burlingame@medtronic.com

COVIDIEN LP Correspondent Name:

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Address Line 2: MAIL STOP A36

Address Line 4: BOULDER, COLORADO 80301-3299

ATTORNEY DOCKET NUMBER:	C00015901US01(1988-395)
NAME OF SUBMITTER:	MARIANNE R. SCHREIBER
SIGNATURE:	/Marianne R. SCHREIBER/
DATE SIGNED:	03/14/2019

Total Attachments: 6

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> **PATENT** REEL: 048597 FRAME: 0977 505374728



PATENT REEL: 048597 FRAME: 0978

Attorney Docket No. C00015901US01(1988-395) PATENT

For: [X] U.S. and/or [X] Foreign Rights
For: [X] U.S. Application or [] U.S. Patent
By: [X] Inventor or [] Present Owner

ASSIGNMENT OF INVENTION

In consideration of the payment by ASSIGNEE to ASSIGNORS of the sum of One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration,

ASSIC	SNORS:	
		Ariel Birenbaum Ron Barak Oren P. Weingarten
		is by person or entity to whom invention was previously assigned and this was recorded in ollowing) Recorded on: Reel Frame
hereb	y sells, a	ssigns and transfers to
ASSIC	GNEE:	Covidien LP 15 Hampshire Street Mansfield, MA 02048 US
and th	e succe	ssors, assigns and legal representatives of the ASSIGNEE
[X] th	e entire	right, title and interest
	undivide ssions	ed percent (%) interest for the United States and its territorial
future	infringer	oreign countries, including all rights to claim priority, the right to sue for present, past and ment, in the United States, its territorial possessions, and in all foreign countries, including all vention rights in and to the invention and any and all improvements entitled:
	SYSTEM	AND METHOD FOR CATHETER DETECTION IN FLUOROSCOPIC IMAGES AND UPDATING DISPLAYED POSITION OF CATHETER (Title)
and w	hich is fo	
(a) (b) (c) (d)	[x] [x] [] []	U.S. application Serial No16/259,731 filed onJanuary 28, 2019. U.S. provisional application No filed on U.S. Patent No issued PCT application No filed on A change of address to which correspondence is to be sent regarding patent maintenance fees is being sent separately.
(e)	[X]	and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, continuation-in-part, divisional, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

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ASSIGNORS hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this assignment;

ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to Issue all such Letters Patent to ASSIGNEE:

ASSIGNORS further covenant to promptly provide all pertinent facts and documents known and accessible to ASSIGNORS relating to said invention and said Letters Patent and legal equivalents; to testify as to the same in any interference, litigation or proceeding related thereto; to execute and deliver any and all papers that may be necessary or desirable to perfect the title to said invention or any Letters Patents which may be granted therefore in said ASSIGNEE, its successors, assigns or other legal representatives; to execute any additional or divisional applications for patents for said invention, or any part or parts thereof, and for the reissue of any Letters Patents to be granted therefore; and to make all rightful oaths and do all lawful acts requisite for procuring the same or for aiding therein, all without further compensation, but at the sole expense of ASSIGNEE, its successors, assigns, or other legal representatives.

ASSIGNORS hereby grant ASSIGNEE and Assignee's attorneys the power to insert the Serial No. and/or filing date of the above-described application(s) after such information becomes known to them.

IN WITNESS WHEREOF, I/We have hereunto set hand and seal.

<u>Ariel Birenbaum</u> (Name)	
(Inventor Signature)	39 Jan 3019 (Date)
Witnessed by:	
Ron Barak (Print Name)	
(Witness Signature)	29 Jan 2019 (Date)

Ron Barak (Name)	
(Inventor Signature)	29 Jan 2019 (Date)
Witnessed by:	
Ariel Birenbourn (Print Name)	
(Witness Signature)	<u>होते प्रथा</u> (Date)
Oren P. Weingarten (Name)	
(Inventor Signature)	(Date)
Witnessed by:	
(Print Name)	
(Witness Signature)	(Date)

Page 3 of 3

Attorney Docket No. C00015901US01(1988-395) PATENT

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ASSIGNORS:	Ariel Birenbaum Ron Barak Oren P. Weingarten
PTO add the fo	Recorded on: Reel Frame
hereby sells, as	ssigns and transfers to
ASSIGNEE:	Covidien LP 15 Hampshire Street Mansfield, MA 02048 US
and the succes	sors, assigns and legal representatives of the ASSIGNEE
[X] the entire r	ight, title and interest
[] an undivide possessions	d percent (%) interest for the United States and its territorial
future infringen	oreign countries, including all rights to claim priority, the right to sue for present, past and nent, in the United States, its territorial possessions, and in all foreign countries, including all rention rights in and to the invention and any and all improvements entitled:
SYSTEM	AND METHOD FOR CATHETER DETECTION IN FLUOROSCOPIC IMAGES AND UPDATING DISPLAYED POSITION OF CATHETER (Title)
and which is fo	, ,
(a) [x] (b) [x] (c) [] (d) []	U.S. application Serial No. 16/259,731 filed on January 28, 2019 U.S. provisional application No. 62/627,911 filed on February 8, 2018. U.S. Patent No issued PCT application No filed on A change of address to which correspondence is to be sent regarding patent
(e) [X]	maintenance fees is being sent separately. and any legal equivalent thereof in a foreign country, including the right to claim priority and, in and to, all Letters Patent to be obtained for said invention by the above application or any continuation, continuation-in-part, divisional, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof.

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<u>Ariel Birenbaum</u> (Name)	
(Inventor Signature)	(Date)
Witnessed by:	
(Print Name)	
(Witness Signature)	(Date)

Ron Barak (Name)	•
(Inventor Signature)	(Date)
Witnessed by:	
(Print Name)	
(Witness Signature)	(Date)
Oren P. Weingarten (Name)	
(Inventor Signature)	<u>y-Mar-19</u> (Date)
Witnessed by:	
GUY ALEXANDRONI (Print Name)	
(Witness Signature)	Y-MAR-19 (Date)

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