505267214 01/08/2019

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT5313986

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MEHDI M. JAFARI	10/17/2013
PERIAGOUNDER R. ARUL	10/17/2013
JEFFREY K. AVIANO	10/17/2013

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:	16242260

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: H-RM-03291.US01CON	
NAME OF SUBMITTER:	KATHLEEN E. OTT
SIGNATURE:	/Kathleen E. Ott/
DATE SIGNED:	01/08/2019

Total Attachments: 3

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PATENT REEL: 047929 FRAME: 0842 505267214

ASSIGNMENT

WHEREAS, I (we), the undersigned

- 1. Mehdi M. Jafari, 25982 Anacapa St., Laguna Hills, California 92653;
- 2. Periagounder R. Arul, 80 Medford, Irvine, California 92620;
- 3. Jeffrey K. Aviano, 1946 Rock Springs Rd., Escondido, California 92026;

(hereinafter, individually referred to as "ASSIGNOR" and collectively referred to as "ASSIGNORS") am (are) inventor(s) of the subject matter which is claimed and for which a patent is sought based on the patent application entitled:

METHODS AND SYSTEMS FOR LEAK ESTIMATION

and which may be further identified below (hereinafter, the "Patent Application").

NOW THEREFORE, I (we), the ASSIGNOR(S), in consideration of my (our) past and/or present relationship with the ASSIGNEE (defined below) or an affiliate thereof, and for other good and valuable consideration, the receipt, sufficiency and adequacy of which are hereby acknowledged, do(es) hereby:

SELL, ASSIGN AND TRANSFER to Covidien LP (hereinafter, the "ASSIGNEE"), a legal entity of the State of Delaware, having a place of business at 15 Hampshire Street, Mansfield, MA 02048, the entire right, title and interest for the United States and all foreign countries in and to any invention(s) and all improvements which are disclosed in the Patent Application and all divisional, continuation, continuation-in-part, substitute, renewal, reissue, reexaminations, and all other applications for patent which have been or shall be filed in the United States, including all provisional and non-provisional applications, and all foreign countries relating to such inventions and improvements; all original and reissued or re-examined patents which have been or shall be issued in the United States and all foreign countries for such invention(s) and improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on the Patent Application, and the right to sue for past, present and future infringement of any patents issuing from the Patent Application;

AUTHORIZE AND REQUEST ASSIGNEE, its successors and assigns, or any attorney it may properly designate to insert into this assignment additional information, such as that listed below, identifying the Patent Applications after execution of this assignment;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on the Patent Application to the ASSIGNEE,

AUTHORIZE the ASSIGNEE to apply for such patents for the invention in its own name;

WARRANT AND COVENANT that no assignment, grant, mortgage, lien, license or other encumbrance or agreement affecting the rights and property herein conveyed has been or will be

PATENT REEL: 04**2929** FRAME: 0**84**8 made to others by the undersigned, and that the full right to convey the same as herein expressed is possessed by the ASSIGNOR(S);

COVENANT, when requested and at the expense of the ASSIGNEE, to carry out in good faith the intent and purpose of this assignment, that the undersigned will (1) execute all divisional, continuation, continuation-in-part, substitute, renewal, reissue, re-examinations, and all other patent applications based on the Patent Application, including any and all such invention(s) and improvements entitled; (2) execute all rightful oaths, declarations, assignments, powers of attorney and other papers relating to the foregoing; (3) communicate to the ASSIGNEE all facts known to the undersigned relating to the Patent Application, including any and all invention(s) and improvements disclosed therein and the history relating thereto; (4) cooperate with the ASSIGNEE in any interference, opposition, dispute, litigation, or other proceeding involving any of the applications or patents for such invention(s) and improvements, including but not limited to testifying; and (5) generally do everything possible which the ASSIGNEE shall consider desirable for vesting title to such invention(s) and improvements in the ASSIGNEE, and for securing, maintaining and enforcing proper patent protection for such inventions(s) and improvements; and

AGREE THAT THIS ASSIGNMENT IS BINDING upon the heirs, assigns, representatives and successors of the undersigned and extends to the successors, assigns and nominees of the ASSIGNEE.

Additional Patent Application Information

U.S. Provisional Application Serial No.	, filed on
U.S. Non-Provisional Application Serial No.	, filed on
International Application Serial No	, filed on
gnature): M. M. Joe Lewi Name: Mehdi M. Jafari	Date: $10 - 17 - 20 3$
STATE OF California § COUNTY OF San Diego § .ss.	
BEFORE ME, the undersigned authority, on this 17 7/1 da appeared Mehdi M. Jafari known to me to be the person whose	y of Deroselly
appeared Mehdi M. Jafari known to me to be the person whose and acknowledged to me that he executed the same of his over therein expressed. WALTER E. PUESCHEL	se name subscribed to the foregoing instrument on free will for the purposes and consideration

(Signature):	1.00	Date:	11007 2013
Name: Peria	agounder R. Arul		
STATE OF Cal	lifornia §		
COUNTY OF Sa	an Diego § ss.		
appeared Periagour instrument and ack consideration therei	WALTER E. PUESCHEL Commission # 1981874 Notary Public - California San Diego County	son whose name	subscribed to the foregoing
		ary rubite	
(Signature):	rey K. Aviano	Date:	170ct 2013
STATE OF Ca	alifornia _§		
COUNTY OFS	an Diego § ss.		
BEFORE ME, the appeared Jefferey K	undersigned authority, on this <u>17 7/4</u> da X. Aviano known to me to be the person who to me that he executed the same of his ow	ose name subscribe	ed to the foregoing instrument
THE FEBRUARY STATES OF THE STA	WALTER E. PUESCHEL Commission # 1981874 Notary Public - California San Diego County My Comm. Evaluate 111 0 0010	M	geled (

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Notary Public