PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2925698

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
GLUMETRICS, INC.	03/20/2014

RECEIVING PARTY DATA

Name:	MEDTRONIC MINIMED, INC.
Street Address:	18000 DEVONSHIRE STREET
City:	NORTHRIDGE
State/Country:	CALIFORNIA
Postal Code:	91325-1219

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	08067649

CORRESPONDENCE DATA

Fax Number: (818)576-6202

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: 818-576-5517
Email: christine.pineiro@medtronic.com
Correspondent Name: MEDTRONIC MINIMED, INC.
Address Line 1: 18000 DEVONSHIRE STREET
Address Line 4: NORTHRIDGE, CALIFORNIA 91325-1219

ATTORNEY DOCKET NUMBER:	C00007482.USV3
NAME OF SUBMITTER:	CHRISTINE PINEIRO
SIGNATURE:	/Christine Pineiro/
DATE SIGNED:	07/03/2014

Total Attachments: 17
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ASSIGNMENT

(1) Insert Name(s) and Address of Assignor

(1) GluMetrics, Inc., 15375 Barranca Parkway, Suite I-108, Irvine, CA 92618

Assignor is the owner of all right, title, and interest in and to all the worldwide patents and patent applications listed in Exhibit A attached hereto and incorporated herein.

In consideration of good and valuable considerations paid to the undersigned (the receipt of which is hereby acknowledged), the undersigned agree(s) to assign, and hereby does assign, transfer, sell and set over to

(2) Insert name of Assignee

(2) MEDTRONIC MINIMED, INC.

(3) Insert state of Incorporation of Assignee

(3) Delaware

(4) Insert address of Assignee

(4) of 18000 Devonshire Street, Northridge, CA 91325-1219 (hereinafter designated as the Assignee), its successors and assigns, the entire worldwide right, title and interest in the invention (and any and all applications and all patents which may be granted on the invention) listed in

(5) Insert identification of Invention, such as Title, Case Number or Foreign Application Number

(5) **EXHIBIT A, which is attached to this document and incorporated herein**

(6) Insert Date of Signing of Assignment

(6) on March 12, 2014

For the aforementioned consideration, the undersigned does (do) materially represent to the Assignee, its successors and assigns, that at the time of the execution of this assignment that the undersigned is (are) a lawful owner(s) of the entire right, title and interest in and to the invention and the above-identified application for patent, and that the same is unencumbered, and that the undersigned has (have) good right(s) and lawful authority to sell and convey the same in the manner set forth herein.

The undersigned further agree(s):

a) to execute all papers necessary in connection with an application in any country of the world and any extension, reissue, reexamination, continuation-in-part, continuation or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient;

b) to execute all papers necessary in connection with any interference which may be declared concerning this application or extension, reissue, reexamination, continuation-in-part, continuation or divisional applications thereof;

c) to execute all papers and documents which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements (including the Patent Cooperation Treaty, Paris Convention, etc.) for any application filed in a foreign country claiming priority to the invention;

d) to execute all papers and documents which may be necessary to obtain a grant of a valid United States Patent or other international application or foreign country patent to the Assignee; and

e) to hereby authorize(s) and request(s) the Director of the United States Patent and Trademark Office to issue any and all Letters Patents of the United States resulting from the application or any extension, reissue, reexamination, continuation-in-part, continuation or divisional applications thereof to the Assignee, as Assignee of the entire right, title and interest in and to the same, and hereby covenants that he has (they have) full right to

convey the entire interest herein assigned, and that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, any agreement in conflict herewith.

Date: 3.20.14

ASSIGNOR:

GluMetrics, Inc.
a California corporation

By: _____

Name: William H. Markle

Title: President & CEO

State of California
County of Orange)

On March 20, 2014 before me, Alysun Turner, Notary Public
(insert name and title of the officer)

personally appeared William H. Markle,
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

ALYSUN TURNER
Commission # 1924916
Notary Public - California
Orange County
My Comm. Expires Mar 8, 2015

Signature _____ (Seal)

ACCEPTANCE:

The undersigned, MEDTRONIC MINIMED, INC., a Delaware corporation, hereby declares that it has accepted the foregoing assignment.

SIGNED AND SEALED this 11th day of April, 2014.

ASSIGNEE:

MEDTRONIC MINIMED, INC.,
a Delaware Corporation

By: _____

Name: Eric P. Geismar

Title: Vice President and Chief Counsel

State of California
County of Los Angeles)

On April 11, 2014 before me, Christine A. Good, Notary Public
(insert name and title of the officer)

personally appeared Eric P. Geismar,
who proved to me on the basis of satisfactory evidence to be the person~~(s)~~ whose name~~(s)~~ is/~~are~~ subscribed to the within instrument and acknowledged to me that he/~~she~~/~~they~~ executed the same in his/~~her~~/~~their~~ authorized capacity~~(ies)~~, and that by his/~~her~~/~~their~~ signature~~(s)~~ on the instrument the person~~(s)~~, or the entity upon behalf of which the person~~(s)~~ acted, executed the instrument.
I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Christine A. Good (Seal)

CHRISTINE A. GOOD
Commission # 1950330
Notary Public - California
Los Angeles County
My Comm. Expires Sep 26, 2015

Exhibit A GluMetrics' Patents and Patent Applications being assigned to Medtronic MiniMed, Inc.

☐ **GluMetrics-Owned Utility Patents**

☐ **GluMetrics-Owned Design Patent**

▒ **Acquired from TGC/Diametrics**

Issued Patents

Patent No.	Filing Date	Issue Date	Exp. Date	Title	Comments	EP	JP
7,417,164	Jul 24, 2007	Aug 26, 2008	Jul 24, 2027	Fluorescent dyes for use in glucose sensing	Covers preferred HPTS dye chemistry with tri Cys-MA dye	1	1
7,767,846	Aug 22, 2008	Aug 3, 2010	Jul 24, 2027	Fluorescent dyes for use in glucose sensing	Broadens coverage of preferred HPTS dye		
7,751,863	Feb 6, 2007	Jul 6, 2010	Aug 5, 2028	Optical determination of pH and glucose	Covers methods for the simultaneous detection of blood glucose and pH	1	1
8,498,682	Jul 2, 2010	Jul 30, 2013	Aug 5, 2028	Optical determination of pH and glucose	Covers device for the simultaneous detection of blood glucose and pH		
7,824,918	Aug 6, 2008	Nov 2, 2010	Apr 23, 2029	HPTS-mono and bis Cys-MA fluorescent dyes for use in	Covers variations on HPTS dye chemistry to include		

Patent No.	Filing Date	Issue Date	Exp. Date	Title	Comments	EP	JP
				analyte sensors	mono and bis Cys-MA dyes		
8,202,731	Jun 3, 2010	Jun 19, 2012	Mar 25 2029	HPTS-mono and bis CYS-MA polymerizable fluorescent dyes for use in analyte sensors	Covers further variations to HPTS dye		
7,829,341	Jul 11, 2008	Nov 9, 2010	Apr 30, 2029	Polyviologen boronic acid quenchers for use in analyte sensors	Covers alternative boronic acid substituted quencher compounds		
7,939,664	May 1, 2008	May 10, 2011	Sep 7, 2029	Pyridinium boronic acid quenchers for use in analyte sensors	Covers further alternative boronic acid substituted quencher compounds	1	
8,178,676	Mar 22, 2011	May 15, 2012	Sep 7, 2029	Pyridinium boronic acid quenchers for use in analyte sensors	Covers further alternative boronic acid substituted quencher compounds		
8,088,097	Nov 20, 2008	Jan 3, 2012	Apr 7, 2030	Use of an equilibrium intravascular sensor to achieve tight glycemic control	Covers methods of glycemic control using an equilibrium sensor (an *Inter Partes* Reexam challenging patentability of the broadest claims is pending)		

Patent No.	Filing Date	Issue Date	Exp. Date	Title	Comments	EP	JP
8,535,262	Dec 9, 2011	Sep 17, 2013	Apr 7, 2030	Use of an equilibrium intravascular sensor to achieve tight glycemic control	Covers methods of continuous glucose monitoring using an equilibrium sensor		
8,110,251	Feb 5, 2008	Feb 7, 2012	Dec 9, 2030	Method for polymerizing a monomer solution within a cavity to generate a smooth polymer surface	Covers methods of making an optical glucose sensor		
8,512,245	Apr 16, 2009	Aug 20, 2013	Jun 20, 2032	Sensor for percutaneous intravascular deployment without an indwelling cannula	Covers methods of intravascular deployment		
8,473,222	Mar 11, 2011	Jun 25, 2013	Apr 28, 2031	Measurement devices and methods for measuring analyte concentration incorporating temperature and pH correction	Covers algorithms for temperature and pH correction		
8,467,843	Nov 4, 2009	Jun 18, 2013	Aug 27, 2031	Optical sensor configuration for ratiometric correction of blood glucose measurement	Covers various sensor configurations		
8,658,795	Apr 25, 2012	Feb. 25, 2014	May 1, 2028	Pyridinium boronic acid quenchers for use in analyte sensors	Covers analyte sensor with quencher comprising one or more pyridinium groups		

Patent No.	Filing Date	Issue Date	Exp. Date	Title	Comments	EP	JP
D626,143	Nov 10, 2008	Oct 26, 2010	Oct 26, 2024	Computer-generated icon for a blood glucose display	Covers tachometer design for glucose trend monitor	1	1
5,511,547	Feb 16, 1994	Apr 30, 1996	Feb 16, 2014	Solid state sensors			
5,596,988	Dec 7, 1994	Jan 28, 1997	Dec 7, 2014	Multi-parameter sensor apparatus			
5,618,587	Dec 7, 1994	Apr 8, 1997	Dec 7, 2014	Vacuum rig apparatus	Covers method and apparatus for vacuum filling a porous membrane with a hydrogel		
6,702,972	Aug 23, 2000	Mar 9, 2004	Jun 9, 2018	Methods of making a kink-resistant catheter			

Pending Patent Applications

Appl. No.	Filing Date	Status	EstimatedExp. Date	Title	Comments (present claim scope)	EP	JP
12/027,158	Feb 6, 2008	Pending on non-final rejection	Feb 6, 2028	Optical systems and methods for ratiometric measurement of blood glucose concentration	Covers various optical configurations for facilitating ratiometric correction of glucose signal	EP2120680 A2	
12/118,401	May 9, 2008	Allowed	May 9, 2028	Equilibrium non-consuming fluorescence sensor for real time intravascular glucose measurement	Covers sensors and methods for intravascular, equilibrium, non-consuming fluorescence (intensity and lifetime) detection of glucose		
13/456,059	Apr 25, 2012	Pending CON awaiting action	May 1, 2008	Pyridinium boronic acid quenchers for use in analyte sensors	Covers analyte sensor with quencher comprising one or more pyridinium groups		

Appl. No.	Filing Date	Status	EstimatedExp. Date	Title	Comments (present claim scope)	EP	JP
13/894,718	May 15, 2013	Issue Fee Paid	Nov 4, 2029	Optical sensor configuration for ratiometric correction of blood glucose measurement	Covers use of various sensor configurations for interstitial/subQ determination of glucose		
12/794,466	Jun 4, 2010	Pending with interview and response filed after final rejection	Jun 4, 2030	Algorithms for calibrating an analyte sensor	Covers use of modified Michaelis-Menten equation for calculating glucose concentration from equilibrium fluorescence chemistry		
12/895,394	Sep 30, 2010	Pending with RCE and response to final rejection	Sep 30, 2030	Sensors with thromboresistant coating	Covers sensor with heparin + HBAC coating stably associated with porous membrane		

Appl. No.	Filing Date	Status	EstimatedExp. Date	Title	Comments (present claim scope)	EP	JP
13/894,228	May 13, 2013	Pending DIV awaiting action	Sep 30, 2030	Sensors with thromboresistant coating	Covers sensor with heparin coating covalently associated with porous membrane		
14/024,384	Sep 11, 2013	Pending CON awaiting action	Apr 7, 2030	Continuous glucose monitoring using an equilibrium sensor	Covers continuous glucose monitoring using an equilibrium sensor deployed in interstitial fluid		
13/918,012	Jun 14, 2013	Pending DIV awaiting action	Apr 28, 2031	Measurement devices and methods for measuring analyte concentration incorporating temperature and pH correction	Covers methods and algorithms for temperature and pH correction of glucose sensing in interstitial fluid		
13/221,696	Aug 30, 2011	Pending awaiting action	Aug 30, 2031	Optical sensor configuration and methods for monitoring glucose activity in interstitial fluid	Covers methods of detecting glucose in interstitial fluid using equilibrium sensor		

Appl. No.	Filing Date	Status	EstimatedExp. Date	Title	Comments (present claim scope)	EP	JP
PCT/US2012/051910	Aug 22, 2012	NP due Feb 25, 2014	Aug 22, 2032	Controller for optical analtye sensor	Covers system with controller having display and programming to control calibration, sensor interrogation, ratiometric correction, etc.		
13/022,494	Feb 7, 2011	Pending awaiting action	Feb 7, 2031	Antioxidant protection of a chemical sensor	Covers sensor with polymer associated antioxidants (including e.g., catalyse and vitamin E)		
13/095,748	Apr 27, 2011	Pending awaiting action	Apr 27, 2031	Deployment system and method for optical analyte sensor	Covers telescoping introducer for deploying and calibrating sensor		

Appl. No.	Filing Date	Status	EstimatedExp. Date	Title	Comments (present claim scope)	EP	JP
13/951,125	Jul 25, 2013	Pending CON awaiting action	Aug 5, 2028	Optical determination of pH and glucose	Covers methods for the simultaneous detection of glucose and pH in interstitial fluid		
PCT/US2012/057127	Sep 25, 2012	NP due Mar 27, 2014	Sep 25, 2032	Method for functionalizing a porous membrane covering of an optical sensor to facilitate coupling of an antithrombogenic agent	Covers plasma method for amino functionalizing sensor surface for coupling antithrombogenic agents		
PCT/US2012/052631	Aug 28, 2012	NP due Feb 28, 2014	Aug 28, 2032	Information storage for sterilized for analyte sensor	Covers sterile sensor with non-volatile memory and RFID element for powering, communicating and storing information		
PCT/US2012/046513	Jul 12, 2012	NP due Jan 15, 2014	Jul 12, 2032	Combinations of fluorphores and pyridinium boronic acid quenchers for use in analyte sensors	Covers new sensor chemistry comprising fluorophores and pyridinium quenchers		

Appl. No.	Filing Date	Status	EstimatedExp. Date	Title	Comments (present claim scope)	EP	JP
61/723,745	Nov 7, 2012	Utility due Nov 7, 2013	Nov 7, 2033	Dry insertion and one-point in vivo calibration of an optical analyte sensor	Covers dry insertion and one-point in vivo calibration for equilibrium sensor deployed intravascularly		
61/774,355	Mar 7, 2013	Utility due Nov 7, 2013	Nov 7, 2033	Dry insertion and one-point in vivo calibration of an optical analyte sensor	Second provisional filed to add clinical data-- covers dry insertion and one-point in vivo calibration for sensor deployed subcutaneously		
61/777,217	Mar 12, 2013	Utility due Mar 12, 2014	Mar 12, 2034	Method for applying polymerization coating to sensor	Plasma coating method		

Corresponding Foreign Patents and Patent Applications

All corresponding foreign counterparts to the above patents and patent applications are included in the patent assignment, including but not limited to:

	ID	Title	Filing Date	Published
1	EP2054476 B9	Flourescent dyes for use in glucose sensing	07-24-2007	03-14-2012
2	EP2147003 B1	Pyridinium boronic acid quenchers for use in analyte sensors	05-01-2008	04-20-2011
3	EP2217316 A4	Use of an equilibrium intravascular sensor to achieve tight glycemic control	11-20-2008	01-16-2013
4	EP2054476 B1	Flourescent dyes for use in glucose sensing	07-24-2007	06-29-2011
5	JP2011511755 A	Polyviologen Boronic Acid Quenchers for Use in Analyte Sensors	07-11-2008	04-14-2011
6	JP5159778 B2	Flourescent Dyes for Use in Glucose Sensing	07-24-2007	03-13-2013
7	JP2010517693 A	Optical system for ratio metric measurement of glucose concentration in the blood and detection	02-06-2008	05-27-2010

8	JP2011504399 A	Use of an equilibrium intravascular sensor to achieve tight glycemic control	11-20-2008	02-10-2011
9	EP2438152 A4	Algorithms for calibrating an analyte sensor	06-04-2010	12-12-2012
10	JP2010535903 A	Hpts-mono and bis cys-ma polymerizable fluorescent dyes for use in analyte sensors	08-06-2008	11-25-2010
11	JP2010526599 A	Equilibrium non-consuming fluorescence sensor for real time intravascular glucose measurement	05-09-2010	08-05-2010
12	JP2010527010 A	Device and methods for calibrating analyte sensors	05-09-2008	08-05-2010
13	EP2217316 A1	Use of an equilibrium intravascular sensor to achieve tight glycemic control	11-20-2008	08-18-2010
14	JP5017377 B2	Optical decision of ph and glucose	01-28-2008	09-05-2012
15	JP2013509944 A	Optical sensor configuration for ratiometric correction of blood glucose measurement	08-06-2010	03-21-2013
16	JP2012529060 A	Algorithm in order to	06-04-2010	11-15-2012

			calibrate the inspection body sensor		
17		JP2013506503 A	The sensor which has anti- thrombus characteristic coating	09-30-2010	02-28-2013
18		JP2013519101 A	Antioxident protection of a chemical sensor	02-07-2011	05-23-2013
19		EP2222686 A2	Polyviologen boronic acid quenchers for use in analyte sensors	07-11-2008	09-01-2010
20		EP2496139 A1	Improved optical sensor configuration for ratiometric correction of blood glucose measurement	08-06-2010	09-12-2012
21		EP2534470 A1	Antioxidant protection of a chemical sensor	02-07-2011	12-19-2012
22		EP2162057 A1	Equilibrium non-consuming fluorescence sensor for real time intravascular glucose measurement	05-09-2008	03-17-2010
23		EP2438152 A1	Algorithms for calibrating an analyte sensor	06-04-2010	04-11-2012
24		EP2545373 A1	Measurement devices and methods for measuring analyte concentration incorporating temperature and ph correction	03-11-2011	01-16-2013

25		EP2120680 A2	Optical systems and methods for rationmetric measurement of blood glucose concentration	02-06-2008	11-25-2009
26		EP2122334 A1	Method for polymerizing a monomer solution within a cavity to generate a smooth polymer surface	02-05-2008	11-25-2009
27		EP2122361 A1	Optical determination of ph and glucose	01-28-2008	11-25-2009
28		EP2181160 A1	Hpts-mono and bis cys-ma polymerizable fluorescent dyes for use in analyte sensors	08-06-2008	05-05-2010
29		JP2010526094 A	Pyridinium boronic acid quenchers for use in analyte sensors	05-01-2008	07-29-2010