PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPI	≣:	NEW ASSIGNMENT			
NATURE OF CONV	/EYANCE:	ASSIGNMENT	ASSIGNMENT		
CONVEYING PART	Y DATA				
		Execution Date			
Tae H. Joo		06/13/2001			
Ronald E. Stickney	,	01/06/2008			
Cynthia P. Jayne		12/31/2008			
Patricia O'Hearn		12/31/2008			
David R. Hampton			01/02/2009		
James W. Taylor			06/12/2009		
William E. Crone		01/16/2009			
Daniel Yerkovich			01/30/2009		
Paula Lank			01/05/2009		
Name:	Physio-Control, Inc.				
Street Address:	11811 Willows Road Northeast				
City:	Redmond				
State/Country:	WASHINGTON				
Postal Code:	98052				
	ERS Total: 1				
PROPERTY NUMB					
PROPERTY NUMB Property	Туре	Numbe	er		
Property		Numbe 13032250	er		
PROPERTY NUMB Property Application Numbe CORRESPONDEN	er:		er		
Property Application Numbe	er:	13032250	er		

Email: amandabernardy@techlaw.com

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

via US Mail.

Correspondent Name:Marger Johnson & McCollom PCAddress Line 1:210 SW Morrison StreetAddress Line 2:Suite 400

501817388

PATENT REEL: 027688 FRAME: 0704

Address Line 4: Portland, OREGON 97204					
ATTORNEY DOCKET NUMBER:	7257-0145_PB0009061.13				
NAME OF SUBMITTER:	Amanda K. Bemardy				
Total Attachments: 11 source=7257-0186 Assignment signed#page1.tif source=7257-0186 Assignment signed#page2.tif source=7257-0186 Assignment signed#page3.tif source=7257-0186 Assignment signed#page4.tif source=7257-0186 Assignment signed#page5.tif source=7257-0186 Assignment signed#page5.tif source=7257-0186 Assignment signed#page6.tif source=7257-0186 Assignment signed#page7.tif source=7257-0186 Assignment signed#page8.tif source=7257-0186 Assignment signed#page8.tif source=7257-0186 Assignment signed#page8.tif source=7257-0186 Assignment signed#page1.tif source=7257-0186 Assignment signed#page9.tif source=7257-0186 Assignment signed#page1.tif source=7257-0186 Assignment signed#page1.tif source=7257-0186 Assignment signed#page1.tif					

ASSIGNMENT WHEREAS, I/WE,

- Tae H. Joo, residing at Redmond, WA, (1)
- Ronald E. Stickney, residing at Edmonds, WA (2)(3)
- Cynthia P. Jayne, residing at Redmond, WA, (4)
- Paula Lank, residing at Renton, WA, (5)
- Patricia O'Hearn, residing at Mercer Island, WA, (6)
- David R. Hampton, residing at Woodinville, WA, (7)
- James W. Taylor, residing at Sammamish, WA, (8)
- William E. Crone, residing at Fall City, WA, and (9)
- Daniel Yerkovich, residing at Seattle, WA,

have invented certain improvements in Pulse Detection Apparatus, Software, and Methods Using Patient Physiological Signals which are the subject of an application(s) for Letters Patent of United States of America which was filed on 06/27/2005 as United States Application No. 11/167,247; and

WHEREAS, PHYSIO-CONTROL, INC. a corporation organized and existing under the laws of the State of Washington and having a principal place of business at 11811 Willows Road Northeast, Redmond, WA 98052, hereinafter referred to as "Assignee," is desirous of acquiring the entire right, title and interest in said invention and improvements for the United States and for all foreign countries and in all foreign and domestic Letters Patent which may be granted therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, We have sold, assigned and transferred and by these presents do sell, assign and transfer to Assignee, its successors and assigns, the entire right, title and interest in and to the invention and improvements, the patent application(s) identified above and all Letters Patent of the United States and any foreign countries which may be granted therefor, and our rights to claim priority based on the filing date(s) of the application(s) under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes, and in any and all extensions, divisions, continuations, continuations-in-part or reissues of said application(s) and Letters Patent granted thereon, the same to be held and enjoyed by Assignee for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made;

AND, for the aforesaid consideration, we authorize Assignee to apply in all countries in our names or in its own name for patents, utility models, design registration and like rights of exclusion and for inventors' certificates for said invention and improvements; and we hereby individually covenant and agree for ourselves and for our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments. Preliminary Statements and other lawful documents as Assignee may reasonably equest to effectuate fully this assignment.

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PATENT REEL: 023219 FRAME: 0340 PATENT REEL: 027688 FRAME: 0706

We hereby request the Commissioner of Patents and Trademarks to issue the Letters Patent to Assignee in accordance with this instrument.

IN WITNESS WHEREOF, I have hereunto set my hand on this _____ day of _____, 2008. Tae H. Joo STATE OF WASHINGTON) SS. COUNTY OF KING On this _____ day of ___ ___, 2008, before me personally appeared Tae H. Joo, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed. IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written. Notary Public IN WITNESS WHEREOF, I have hereunto set my hand on this 6th day of Janaary, 2008. Ronald E. Stickney STATE OF WASHINGTON) ss. COUNTY OF KING On this $6^{\pm h}$ day of 9000, 2008, before me personally appeared Ronald E. Stickney, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed. IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written. linge ry Public



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PATENT REEL: 023219 FRAME: 0341 PATENT REEL: 027688 FRAME: 0707

IN WITNESS WHEREOF, I have hereunto set my hand on this 31 day of December 2008 & CAF Cyne P. Jery Cynthia P. Javne STATE OF WASHINGTON) ss. COUNTY OF KING On this 3/5t day of Dec., 2008, before me personally appeared Cynthia P. Jayne, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed. IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written. Public TINESS WHEREOF, I have hereunto set my hand on this $\frac{5^{th}}{2}$ day of $\frac{1}{2008}$, 2008. P.L. Paule Une Paula Lank STATE OF WASHINGTON) ss. COUNTY OF KING On this Ju day of , 2008, before me personally appeared Paula Lank, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed. IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written. Votary/Public

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PATENT REEL: 023219 FRAME: 0342 PATENT REEL: 027688 FRAME: 0708 IN WITNESS WHEREOF, I have hereunto set my hand on this <u>31</u> day of <u>Differentian</u>, 2008.

Kard Offere Patricia O' Hearn STATE OF WASHINGTON) ss. Jec., 2008, before me personally appeared Patricia O' Hearn, to IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office,

COUNTY OF KING

On this 3/57 day of me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

g day and year above written.

lotary Public

David R. Hampton

STATE OF WASHINGTON) ss. COUNTY OF KING

On this day of beforeline

personally appeared David R. Hampton, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

ESS WHEREOF, I have hereunto set my hand on this 1 day of Irruthay

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.



otary Public

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PATENT REEL: 023219 FRAME: 0343 PATENT REEL: 027688 FRAME: 0709

IN WITNESS WHEREOF, 1 h	ave hereunto set my hand on this 12 day of	2009,000
	James W. Taylor	Japla
STATE OF WASHINGTON)	
COUNTY OF KING) ss.)	
personally appeared James W. 7 foregoing instrument and ackno IN WITNESS WHERE the day and year above written.	On this <u>1244</u> day of <u>June</u> Taylor, to me known to be the person described in and who wledged that he executed the same as his free act and deed OF, I have hereunto affixed my official signature with the	executed the
	Dames A. Stennett	L
······		
IN WITNESS WHEREOF, I have	e hereunto set my hand on this 16 day of 64n	2009 W.E.C.
	Willin & Las	~~~~
	William E. Crone	
STATE OF WASHINGTON)		
COUNTY OF KING)	SS.	
personally appeared William E. Cro foregoing instrument and acknowle IN WITNESS WHEREOF, the day and year above written.	On this <u>day of</u> <u>any unerec</u> 2000 one, to me known to be the person described in and who ex dged that he executed the same as his free act and deed. I have hereunto affixed my official signature with the sea.	8, before me secuted the of my office,
	Jotary Public Doller	iger .
5557557 / 999999955571 1 980952282553		
	Page 5 of 7	TENT

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IN WITNESS WHEREOF, I have hereunto set my hand on this 3a day of 4w

STATE OF WASHINGTON)) ss. COUNTY OF KING)

On this NUL

personally appeared Daniel Yerkovich, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

IN WITNESS WHEREOF, I have hereunto affixed my official signature with the seal of my office, the day and year above written.



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This is the final page of this Assignment.

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 \boxtimes

Docket No.: PB9061.07

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Application No.: Filing Date: Title:	Tae H. Joo 11/167,247 06/27/2005 Pulse Detection Ap Physiological Signa	Group Art Unit: Examiner: Conf. No.: paratus, Software, and Metho als	3762 Evanisko, George Robert 2015 ods Using Patient			
CERTIFICATE OF TRANSM United States Patent and Tradem	ISSION: I hereby certify that t ark Office via the EFS-Web on	his paper and all paper(s) described herein November 17, 2008/	are being transmitted to the			
		10-				
		Carlotta Y. Bell				

TRANSMITTAL OF EMPLOYMENT AGREEMENT IN LIEU OF ASSIGNMENT

Commissioner for Patents Alexandria, VA 22313-1450

Transmitted herewith is the employment agreement between Medtronic and Tae H. Joo, the first named inventor in the above-referenced matter.

Tae Joo is no longer employed by Medtronic and has not responded to our requests to assign and transfer the rights and interests in the above-referenced matter by execution of an Assignment document.

The Medtronic Employment Agreement in its entirety is therefore submitted in lieu of Assignment with request for consideration of section four of the document titled "Inventions".

Please apply any related charges or credits to Deposit Account Number 13-2546.

Respectfully submitted,

Date: November 17, 2008

/ Gregory T. Kavounas / Gregory T. Kavounas Reg. No. 37,862

Attachment: Tae H. Joo Employment Agreement

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MEDTRONIC EMPLOYEE AGREEMENT

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1. INTRODUCTION

Medtronic and the undersigned employee recognize the importance to Medtronic of protecting Medtronic's rights with respect to business information and inventions without unduly impairing the Employee's ability to pursue his/her profession. Accordingly, Employee has entered into this Agreement in consideration of Medtronic's offer of employment or continuing employment and the benefits associated with that employment, in consideration of being given access to confidential information, and in consideration of Medtronic's obligations to the Employee contained in this Agreement.

Medtronic and the undersigned Employee, intending to be legally bound, agree as follows:

2. DEFINITIONS

- (a) Medtronic means Medtronic, Inc and all of its parent, subsidiary or affiliated corporations and the operating divisions of any of them.
- (b) Confidential Information means any information or compilation of information that the Employee learns or develops during the course of his/her employment that derives independent economic value from not being generally known, or readily ascertainable by proper means, by other persons who can obtain economic value from its disclosure or use. It includes but is not limited to trade secrets and may relate to such matters as research and development, manufacturing processes, management systems and techniques and sales and marketing plans and information.
- (c) Inventions mean any invention, improvement, discovery or idea (whether patentable or not and including those which may be subject to copyright protection) generated, conceived, or reduced to practice by the Employee alone or in conjunction with others, during or after working hours, while an employee of Medtronic.
- (d) Medtronic Product means any product, product line or service (including any component thereof or research to develop information useful in connection with a product or service) that is being designed, developed, manufactured, marketed or sold by Medtronic or with respect to which Medtronic has acquired Confidential Information which it intends to use in the design, development, manufacture, marketing or sale of a product or service.
- (e) Competitive Product means any product, product line for service (including any component thereof or research to develop information useful in connection with a product or service) that is being designed, developed, manufactured, marketed or sold by anyone other than Medtronic and is of the same general type, performs similar functions, or is used for the same purposes as a Medtronic Product on which the employee worked during the last one year of employment or about which he/she received or had knowledge of Confidential Information.

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PATENT REEL: 023219 FRAME: 0348 PATENT REEL: 027688 FRAME: 0714 (f) Monthly Base Pay means 1/12 of an employee's total salary and commissions (exclusive of benefits, bonuses and any indirect or deferred compensation) for the last four (4) full fiscal quarters preceding termination of employment.

3. EMPLOYMENT

Medtronic agrees to employ or continue to employ the Employee. Compensation and benefits will be in accordance with current Medtronic compensation, patent incentive and Employee benefit plans, any or all of which may be changed, altered or eliminated by Medtronic without the Employee's consent.

Employee agrees to perform the duties associated with the employment to the best of his/her abilities, to be familiar with Medtronic policies that related to his/her duties and to abide by those policies, including, without limitation, Medtronic's policies regarding Conflicts of Interest and Business Conduct.

The employment may be terminated by either party at will and without reason or cause.

4. INVENTIONS

Employee agrees to promptly disclose to Medtronic in writing all inventions; and all such inventions shall be the exclusive property of Medtronic and are hereby assigned to Medtronic, except if the invention does not related to the existing or reasonably foreseeable business interests of Medtronic, Medtronic may, in its sole discretion, release or license that invention to the Employee upon written request.

Further, Employee will, at Medtronic's expense, give Medtronic all assistance it reasonably requires to perfect, protect, and use its rights to inventions. In particular, but without limitation, Employee will sign all documents, do all things, and supply all information that Medtronic may deem necessary or desirable to:

- (a) Transfer or record the transfer of his/hers entire right, title and interest in Inventions; and
- (b) Enable Medtronic to obtain patent, copyright or trademark protection for Inventions anywhere in the world.

The obligations of this paragraph shall continue beyond the termination of employment with respect to Inventions conceived or made by Employee during the period of his/her employment and shall be binding upon assigns, executors, administrators and other legal representatives. For purposes of this Agreement, any Invention relating to the business of Medtronic on which Employee files a patent application within one (1) year after termination of employment with Medtronic shall be presumed to cover Inventions conceived by Employee during the term of his/her employment. Subject to proof to the contrary by good faith, written and duly corroborated records establishing that such Invention was conceived and made following termination of employment.

NOTICE: Pursuant to Minnesota Statutes \$181.78, the employee is hereby notified that the Agreement does not apply to any invention for which no equipment, supplies, facility, or trade secret information of Medtronic was used and which was developed eatirely on the employee's own time, and (1) which does not relate (a) directly to the business of Medtronic

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terms of this Agreement is unconditional and does not depend on the performance or nonperformance of any terms, duties or obligations not specifically recited in this Agreement.

Moreover, the Employee's obligations to maintain the confidentiality of Medtronic's Confidential Information is unconditional and shall not be excused by any conduct on Medtronic's part except prior voluntary disclosure of the information.

Further, the obligations of either party with respect to post-termination employment (paragraphs 7 and 8) depend only on performance of the obligations contained in those paragraphs and shall not be excused by any other conduct of either party.

10. EFFECTIVE DATE AND GOVERNING LAW

This Agreement shall be effective on its execution by the Employee.

The validity, enforceability, construction and interpretation of this Agreement shall be governed by the laws of the State of Minnesota.

11. SEVERABILITY

In the event that any provision of this Agreement is invalid or unenforceable under applicable law, that shall not affect the validity or enforceability of the remaining provisions.

To the extent that any provisions of this Agreement is unenforceable because it is overbroad, that provision shall be limited to the extent required by applicable law and enforced as so limited.

12. TRANSFERABILITY

The rights and obligations of Medtronic hereunder may be transferred to its successors and assigns. Employee may not, however, transfer or assign his/her rights or obligations in this Agreement.

Tae. H. Employee Name (Please Print)

Date

Employee Signature

Date

LEGAL/AGRMTS/EMPLYMNT-EMPLOYEE/MDT EMPLOYEE AGRMT.

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RECORDED: 09/11/2009

RECORDED: 02/10/2012

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