## Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:		NEW ASSIGNMENT				
NATURE OF CONVEYANCE:		ASSIGNMENT				
CONVEYING PARTY DATA						
N			ame	Execution Date		
Timothy J. Denison				12/07/2007		
Joel A. Anderson				11/30/2007		
Michael W. Heinks				11/14/2007		
RECEIVING PARTY D	ATA					
Name:	Medtronic, Inc.	Medtronic. Inc.				
Street Address:		710 Medtronic Parkway				
City:	Minneapolis					
State/Country:	MINNESOTA					
Postal Code:	55432					
PROPERTY NUMBERS Total: 1  Property Type Number  11861939						
Property Type		4004	Number			
Application Number: 11861		939				
CORRESPONDENCE	DATA			\$40.00		
Fax Number:(651)735-1102Correspondence will be sent via US Mail when the fax attempt is unsuccessful.Phone:6517351100Email:Cygan@ssiplaw.comCorrespondent Name:Shumaker & Sieffert, P.A.Address Line 1:1625 Radio Drive, Suite 300Address Line 4:Woodbury, MINNESOTA 55125						
ATTORNEY DOCKET NUMBER:			1023-627US01			
NAME OF SUBMITTER:		Michael J. Ostrom				
Total Attachments: 9 source=Assignment#page1.tif source=Assignment#page2.tif 500416499 REEL: 020223 FRAME: 0231						

PATENT REEL: 020223 FRAME: 0232

source=Assignment#page3.tif source=Assignment#page4.tif source=Assignment#page5.tif source=Assignment#page7.tif source=Assignment#page8.tif source=Assignment#page9.tif Attorney Docket No.: 1023-627US01

## ASSIGNMENT

For valuable consideration, we, Timothy J. Denison of 4441 Beard Avenue S., Minneapolis, MN 55410, Joel A. Anderson of 9921 Toledo Drive N., Brooklyn Park, MN 55443 and Michael W. Heinks of 1796 19th Terrace, New Brighton, MN 55112, hereby assign to: Medtronic, Inc., having a place of business at: 710 Medtronic Parkway, LC-340, Minneapolis, MN 55432 and its successors and assigns (collectively hereinafter called "the Assignee") the entire right, title and interest throughout the world in the inventions and improvements which are the subject of an application for United States Patent signed by us, entitled CHOPPER-STABILIZED ANALOG-TO-DIGITAL CONVERTER, filed September 26, 2007, and assigned U.S. Serial Number 11/861,939; this assignment including said application, any provisional, continuation, continuation-in-part, divisional, reissue, renewal, extension or other application for any of said inventions or improvements, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application 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 we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and 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 the Assignee may reasonably request to effectuate fully this assignment.

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Date: Thee 200

On this

) ss:

)

Timothy J. Denison

State of

County of

Timothy J. Ber day of <u>December</u>, 20<u>07</u>, before me, <u>Effe</u>

Notary Public, personally appeared Timothy J. Denison personally known to me (or proved/to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

elle M. Hell



Signature of Notary Public My Commission Expires:

Date:	
State of	) ) ss:

On this

County of

Joel A. Anderson

, 20 , before me,

day of Notary Public, personally appeared Joel A. Anderson personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public My Commission Expires:

Date:			
	Michael W. Heinks		
State of )			
) ss: County of )			

On this \_\_\_\_\_\_day of \_\_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_\_, Notary Public, personally appeared Michael W. Heinks personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public My Commission Expires: Attorney Docket No.: 1023-627U801

## ASSIGNMENT

For valuable consideration, we, Timothy J. Denison of 4441 Beard Avenue S., Minneapolis, MN 55410. Joel A. Anderson of 9921 Toledo Drive N., Brooklyn Park, MN 55443 and Michael W. Heinks of 1796 19th Terrace, New Brighton, MN 55112, hereby assign to: Medtronic, Inc., having a place of business at: 710 Medtronic Parkway, LC-340, Minneapolis, MN 55432 and its successors and assigns (collectively hereinafter called "the Assignee") the entire right, title and interest throughout the world in the inventions and improvements which are the subject of an application for United States Patent signed by us, entitled CHOPPER-STABILIZED ANALOG-TO-DIGITAL CONVERTER, filed September 26, 2007, and assigned U.S. Serial Number 11/861,939; this assignment including said application, any provisional, continuation, continuation-in-part, divisional, reissue, renewal, extension or other application for any of said inventions or improvements, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application 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 we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and 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 the Assignee may reasonably request to effectuate fully this assignment.

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Date:					
····	Timot	hy J. Denison			
State of	) ) ss:				
County of	)				
On thisday of, 20, before me,, Notary Public, personally appeared Timothy J. Denison personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.					
		WITNESS my hand and official seal.			
		Signature of Notary Public My Commission Expires:			
Date:	Z Joel	Anderson			
State of Minnesota County of Ramsey	) ss:				
County of Ramsey	)				
On this <u>30<sup>th</sup></u> day of <u>November</u> , 20 <u>07</u> , before me, <u>Molly Chlubs Ch.</u> Notary Public, personally appeared Joel A. Anderson personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.					



AA AA AA A A

WITNESS my hand and official seal.

Mully Chlubeck Signature of Notary Public My Commission Expires:

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Michael W. Heinks

State of ) ) ss: County of )

On this \_\_\_\_\_\_ day of \_\_\_\_\_\_, 20\_\_\_\_, before me, \_\_\_\_\_\_, Notary Public, personally appeared Michael W. Heinks personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/arc subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal.

Signature of Notary Public My Commission Expires: Attorney Docket No.: 1023-627US01

## <u>ASSIGNMENT</u>

For valuable consideration, we, Timothy J. Denison of 4441 Beard Avenue S., Minneapolis, MN 55410, Joel A. Anderson of 9921 Toledo Drive N., Brooklyn Park, MN 55443 and Michael W. Heinks of 1796 19th Terrace, New Brighton, MN 55112, hereby assign to: Medtronic, Inc., having a place of business at: 710 Medtronic Parkway, LC-340, Minneapolis, MN 55432 and its successors and assigns (collectively hereinafter called "the Assignee") the entire right, title and interest throughout the world in the inventions and improvements which are the subject of an application for United States Patent signed by us, entitled CHOPPER-STABILIZED ANALOG-TO-DIGITAL CONVERTER, filed September 26, 2007, and assigned U.S. Serial Number 11/861,939; this assignment including said application, any provisional, continuation, continuation-in-part, divisional, reissue, renewal, extension or other application for any of said inventions or improvements, any and all United States and foreign patents, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application 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 we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and 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 the Assignee may reasonably request to effectuate fully this assignment.

> PATENT REEL: 020223 FRAME: 0239

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Date:		
		Timothy J. Denison
State of County of	) ) ss:	
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Notary Public, persona basis of satisfactory ev and acknowledged to r	Illy appeared T idence) to be the ne that hc/she/t are on the instru-	, 20, before me,, imothy J. Denison personally known to me (or proved to me on the me person(s) whose name is/are subscribed to within the instrument hey executed the same in his/her/their authorized capacity, and that iment the person(s), or the entity upon behalf of which the person(s)
		WITNESS my hand and official seal.
		Cimetan - Chiston - Dalla
		Signature of Notary Public My Commission Expires:
Date:		Joel A. Anderson
State of	)	
County of	) ss: )	
Notary Public, persona basis of satisfactory ev and acknowledged to n	lly appeared Jo idence) to be the ne that he/she/t re on the instru	, 20, before me,, wel A. Anderson personally known to me (or proved to me on the ne person(s) whose name is/are subscribed to within the instrument hey executed the same in his/her/their authorized capacity, and that imment the person(s), or the entity upon behalf of which the person(s)
		WITNESS my hand and official seal.
		Signature of Notary Public My Commission Expires:

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Date: \_1/-14-2007

a). Henton

Michael W. Heinks

State of Minnes<del>ula</del>

County of Ano Ka ) ss:

On this <u>HH</u> day of <u>November</u>, 2057, before me, <u>RITA L. ANDERSON</u> Notary Public, personally appeared Michael W. Heinks personally known to me (or proved to me on the basis of satisfactory evidence) to be the person(s) whose name is/are subscribed to within the instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity, and that by his/her/their signature on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

WITNESS my hand and official seal. lto 44107 Signature of Notary Public AL ANDERSON My Commission Expires:  $\sqrt{3}/10$ rr Public Jenuery 31, 2010 Anon 114107