

Form PTO-1595 (Rev. 08/05)  
OMB No. 0651-0027 (exp. 6/30/2008)

U.S. DEPARTMENT OF COMMERCE  
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## RECORDATION FORM COVER SHEET PATENTS ONLY

P22445 US

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

ANDREW C. HAYES  
JOHN J. MASTROTOTARO  
SHELDON B. MOBERG  
JOHN C. MUELLER, JR.  
H. BUD CLARK  
MIKE CHARLES VALLET TOLLE  
GARY L. WILLIAMS  
BIHONG WU  
GARRY M. STEIL

Additional name(s) of conveying party(ies) attached? ☐ Yes ☒ No

2. Name and address of receiving party(ies):

MEDTRONIC MINIMED, INC.  
18000 Devonshire Street  
Northridge, CA 91325-1219

Additional name(s) & address(es) attached? ☐ Yes ☒ No

3. Nature of conveyance:

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Other \_\_\_\_\_

Execution Date March 10, 27, 28 & 30, 2006

4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s)  
11/322,489

B. Patent No.(s)

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Ajit S. Narang, Esq.  
MEDTRONIC MINIMED, INC.  
18000 Devonshire Street  
Northridge, CA 91325-1219

6. Total number of applications and patents invdved: [ 1 ]

7. Total fee (37 CFR 3.41).....\$ 40

- ☐ Enclosed  
☒ Authorized to be charged to deposit account

8. Deposit account number: 50-0621

(Attach copy of this page if paying by deposit account)

9. Statement and signature.

*To the best of my knowledge and belief, the foregoing is true and correct and any attached copy is a true copy of the original document.*

Ajit S. Narang  
Name of Person Signing

Ajit S. Narang  
Signature

7/6/06  
Date

Total number of pages comprising cover sheet, attachments and document: [ 11 ]

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

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OMB No. 0651-0027 (exp. 6/30/2006)

04-13-2006

U.S. DEPARTMENT OF COMMERCE  
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103218858

P22445 US

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ANDREW C. HAYES  
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JOHN C. MUELLER, JR.  
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Ajit S. Narang

Name of Person Signing

Ajit S. Narang  
Signature

7/2/06  
Date

Total number of pages comprising cover sheet, attachments and document: [ 9 ]

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Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22314-0140

PATENT

REEL: 017890 FRAME: 0555

**ASSIGNMENT**Attorney Docket No.: P22445 US(1-9) *Insert Name(s) of  
Inventor(s)*

- (1) ANDREW C. HAYES
- (2) JOHN J. MASTROTOTARO
- (3) SHELDON B. MOBERG
- (4) JOHN C. MUELLER, JR.
- (5) H. BUD CLARK
- (6) MIKE CHARLES VALLET TOLLE
- (7) GARY L. WILLIAMS
- (8) BIHONG WU
- (9) GARRY M. STEIL

In consideration of the sum of one dollar (\$1.00) and other good and valuable considerations paid to each of the undersigned, the undersigned agree(s) to assign, and hereby does assign, transfer and set over to

(10) *Insert name of  
Assignee*(10) MEDTRONIC MINIMED, INC.(11) *Insert state of  
Incorporation of Assignee*(11) Delaware(12) *Insert address of  
Assignee*

(12) of 18000 Devonshire Street, Northridge, CA 91325-1219  
(hereinafter designated as the Assignee) the entire worldwide right, title and interest in the invention known as

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

(13) ALGORITHM SENSOR AUGMENTED BOLUS ESTIMATOR FOR  
SEMI-CLOSED LOOP INFUSION SYSTEM, U.S. Patent Application Serial  
No. 11/322,489 filed December 30, 2005  
for which the undersigned has (have) executed an application for patent in the United States of America

(14) *Insert Date of Signing  
of Application*(14) on March 10, 27, 28 & 30, 2006

1) The undersigned agree(s) to execute all papers necessary in connection with an application in any country of the world and any continuing or divisional applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

2) The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

3) The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

4) The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

5) The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, 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 execute, any agreement in conflict herewith.

6) The undersigned hereby appoints:

Paul H. Kovelman, Reg. No. 35,228;  
Richard K. Yoon, Reg. No. 42,247;  
Vivian S. Shin, Reg. No. 43,919;  
Ajit S. Narang, Reg. No. 55,480;

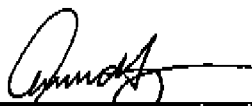
and all of the firm of Foley & Lardner LLP:

Ted R. Rittmaster, Reg. No. 32,933;  
David A. Blumenthal, Reg. No. 26,257;  
Richard D. Malone, Reg. No. 51,991;  
William J. Robinson, Reg. No. 29,430;  
Victor deGyarfas, Reg. No. 40,583

the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document.

Date: 3/28/06

Signature of Inventor



Andrew C. Hayes

State of California

County of Los Angeles

On this March 28, 2006, before me, Christine Pineiro, a Notary Public, personally appeared Andrew C. Hayes, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.



Notary Public



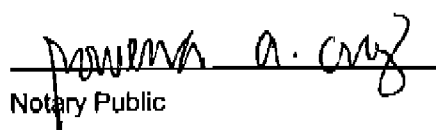
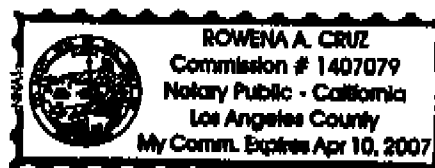
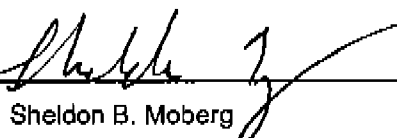
Date: 3/27/06 Signature of Inventor  
John J. Mastrototaro

State of California

County of Los Angeles

On this 3/27/06, before me, Rowena A. Cruz, a Notary Public, personally appeared John J. Mastrototaro, personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

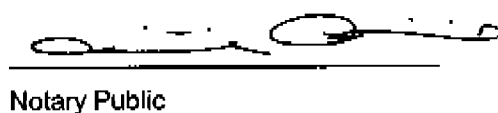
  
Notary PublicDate: 3/10/06 Signature of Inventor  
Sheldon B. Moberg

State of California

County of Los Angeles

On this March 10, 2006, before me, Christine Pineiro, a Notary Public, personally appeared Sheldon B. Moberg, personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

  
Notary Public

Date: 3/28/06 Signature of Inventor John C. Mueller, Jr.  
John C. Mueller, Jr.

State of California


County of Los Angeles

On this March 28, 2006, before me, Christine Pineiro, a Notary Public, personally appeared John C. Mueller, Jr., personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

Christine Pineiro  
Notary Public



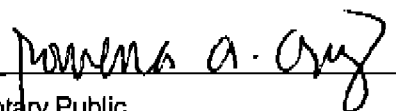
Date: 3/27/04 Signature of Inventor   
H. Bud Clark

State of California


County of Los Angeles

On this 3/27/04, before me, Rowena A. Cruz, a Notary Public, personally appeared H. Bud Clark, personally known to me (~~or proved to me on the basis of satisfactory evidence~~) to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

  
Notary Public




Date: 3.28.06 Signature of Inventor   
Mike Charles Vallet Tolle

State of California

County of Los Angeles

On this March 28, 2006, before me, Christine Pineiro, a Notary Public, personally appeared Mike Charles Vallet Tolle, personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

  
Notary Public




Date: 3/28/06 Signature of Inventor   
Gary L. Williams

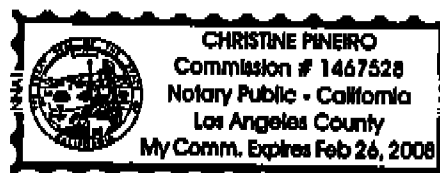
State of California

County of Los Angeles

On this March 28, 2006, before me, Christine Pineiro, a Notary Public, personally appeared Gary L. Williams, ~~personally known to me~~ (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

  
Notary Public





Date: 3/30/06 Signature of Inventor *Bihong Wu*  
Bihong Wu

State of California

County of Los Angeles

On this March 30, 2005, before me, Christine Pineiro, a Notary Public, personally appeared Bihong Wu, ~~personally known to me~~ (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledge to me that she executed the same in her authorized capacity, and that by her signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

*Christine Pineiro*

Notary Public



Date: Mar 27/06 Signature of Inventor *G. M. Steil*  
Garry M. Steil

State of California

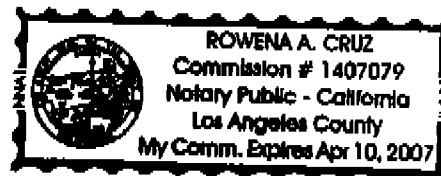
County of Los Angeles

On this 3/27/06, before me, Rowena A. Cruz, a Notary Public, personally appeared Garry M. Steil, ~~personally known to me~~ (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

*Rowena A. Cruz*

Notary Public



## ACCEPTANCE:

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

SIGNED AND SEALED this 30<sup>th</sup> day of March, 2006.

## ASSIGNEE:

MEDTRONIC MINIMED, INC.,  
a Delaware Corporation


By: Name: Eric P. GeismarTitle: Vice President and Senior Counsel

State of California

County of Los Angeles

On this March 30, 2006, before me, Christine Pineiro, a Notary Public, personally appeared Eric P. Geismar, personally known to me ~~(or proved to me on the basis of satisfactory evidence)~~ to be the person whose name is subscribed to the within instrument, and acknowledge to me that he executed the same in his authorized capacity, and that by his signature on the instrument, the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS, my hand and official seal.

  
Notary Public