	U.S. DEPARTMENT OF COMMER 20 - 2004 U.S. Patent and Trademark Official
OMB No. 0651-0027 (exp. 6/30/2005)	
To the Honorable Commission of Pate 102	725397 original documents or copy thereof.
1. Name of conveying party(ie3) 4PR 15 AM 9: 01 Mark G. Frei	2. Name and address of receiving party(ies)
Ivan Osorio FINANCE SECTION	Name: Medtronic, Inc.
Jonathon E. Giftakis Nina M. Graves David L. Carlson Randy M. Jensen	Internal Address:
Additional name of conveying party(ies) attached?	
3. Nature of conveyance:	Street Address: 710 Medtronic Parkway
Assignment Derger	City: Minneapolis State: MN Zip: 55432
Security Agreement Change of Name Other	Additional Name(s) & address(es) attached?
Other	
Execution Date: <u>03/01/04; 03/01/04; 02/12/04; 02/16/04;</u> <u>02/18/04; 02/17/04; 02/17/04</u>	
Additional numbers	attached? Yes No
 Name and address of party to whom correspondence concerning this document should be mailed: 	attached? Yes No 6. Total number of applications and patents involved:
 Name and address of party to whom correspondence concerning this document should be mailed: Name: <u>Binal J. Patel</u> 	
 Name and address of party to whom correspondence concerning this document should be mailed: 	6. Total number of applications and patents involved:
 Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. V204 FT0H11 00000085 190733 10687133 	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ <u>40.00</u>
 Name and address of party to whom correspondence concerning this document should be mailed: Name: <u>Binal J. Patel</u> Internal Address: <u>Banner & Witcoff, Ltd.</u> 	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ <u>40.00</u> Enclosed
 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. /2004 FT0H11 00000085 190733 10687133 8821 40.00 DA Street Address: 10 South Wacker Drive 	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 Enclosed Authorized to be charged to deposit account
 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: <u>Binal J. Patel</u> Internal Address: <u>Banner & Witcoff, Ltd.</u> /2004 670011 00000085 190733 10687133 8021 40.00 DA 	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 □ Enclosed ☑ Authorized to be charged to deposit account 8. Deposit account number: 19-0733
5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. /2004 FT0H11 00000085 190733 10687133 8821 40.00 DA Street Address: 10 South Wacker Drive Street Address: 10 South Wacker Drive Stite 3000 City: Chicago State: IL Zip: 60606	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 □ Enclosed ☑ Authorized to be charged to deposit account 8. Deposit account number: 19-0733 (Attach duplicate copy of this page if paying by deposit accourt
5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. /2004 FT0H11 00000085 190733 10687133 8821 40.00 DA Street Address: 10 South Wacker Drive Street Address: 10 South Wacker Drive Stite 3000 City: Chicago State: IL Zip: 60606	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 □ Enclosed ☑ Authorized to be charged to deposit account 8. Deposit account number: 19-0733
 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. 100000085 190733 10687133 100000085 190733 1068714 10000008 10000008 10000008 1000008 10000008 1000008 1000	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 Enclosed Authorized to be charged to deposit account 8. Deposit account number: 19-0733 (Attach duplicate copy of this page if paying by deposit accourt SE THIS SPACE
 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. 100000085 190733 10687133 10687133 100000085 190733 10687133 1000000085 190733 10687133 100000085 190733 1068714 100000085 190733 1068714 100000085 190733 1068714 100000085 190733 1069714 10000085 190734 10000085 10000085 190734 1000085 10000085 190734 1000085 10000085 190734 1000085 	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 □ Enclosed ☑ Authorized to be charged to deposit account 8. Deposit account number: 19-0733 (Attach duplicate copy of this page if paying by deposit accour SE THIS SPACE
 5. Name and address of party to whom correspondence concerning this document should be mailed: Name: Binal J. Patel Internal Address: Banner & Witcoff, Ltd. 7204 FT0H11 00000085 190733 10687133 40.00 DA Street Address: 10 South Wacker Drive Suite 3000 City: Chicago State: IL Zip: 60606 DO NOT U 9. Statement and signature. To the best of my knowledge and belief, the foregoing infois a true copy of the original document. 	 6. Total number of applications and patents involved: 7. Total fee (37 CFR 3.41) \$ 40.00 □ Enclosed ☑ Authorized to be charged to deposit account 8. Deposit account number: 19-0733 (Attach duplicate copy of this page if paying by deposit accour SE THIS SPACE

ASSIGNMENT

Inventors: Mark G. Frei Ivan Osorio Mark T. Rise Jonathon E. Giftakis Nina M. Graves David L. Carlson Randy M. Jensen

Application Nos. US Non-provisional - 10/687,133 PCT/US03/32908 US Provisional - 60/504,141 US Provisional - 60/418,383 Date of Execution of Application:

Filing Date: October 15, 2003 Filing Date: October 15, 2003 Filing Date: September 19, 2003 Filing Date: October 15, 2002

In consideration of One Dollar (\$1.00) and other good and valuable considerations in hand paid, the receipt and sufficiency whereof are hereby acknowledged, the undersigned hereby assign to:

MEDTRONIC, INC., a corporation of the State of Minnesota

its successors and assigns, the entire right, title and interest in the invention or improvements of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

CHANNEL-SELECTIVE BLANKING FOR A MEDICAL DEVICE SYSTEM

and identified as:

Attorney Docket No. 11738.00140

in the offices of Banner & Witcoff, Ltd. and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements, and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known, and the date of execution of the application.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all divisional, continuation and substitute applications for said invention or improvements, and any necessary oath, affidavit or declaration relating thereto, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations the undersigned authorize

Client Ref. P-10936.00

Attorney Docket No. 11738.00140

T. Rise Mark

-12,2004 Date

State of Minnesota

County of Anoka) ss:

This 12th day of Elowary 2004, before me personally came the above-named, Mark T. Rise, came to me personally know as the individual who executed the foregoing assignment, who acknowledged to me that he executed the same of his own free will for the purposes herein set forth.

TAMMY KAYE WATER NOTARY PUBLIC-MINNESOTA MY COMMISSION EXPIRES 1-31-2005 ·····

<u>Janny Laye</u> Waternan Ngtary Public My Commission Expires: <u>1-31-05</u>

-16 ____,2004 Date

State of Minnesota

County of Anoka) ss:

Jona than E. H. Holg Jopathon E. Giftakis

This 16th day of Februar 2004, before me personally came the above-named, Jonathon E. Giftakis, came to me personally know as the individual who executed the foregoing assignment, who acknowledged to me that he executed the same of his own free will for the purposes herein set forth.



Motary Public

My Commission Expires:	1-3	-05
------------------------	-----	-----

Ep18,2004

State of Minnesota County of $\pm norrection$) ss:

Kung Nina M. Grave Aave

This 18^{th} day of Rim(10) 2004, before me personally came the above-named, Nina M. Graves, came to me personally know as the individual who executed the foregoing assignment, who acknowledged to me that she executed the same of her own free will for the purposes herein set forth.

ANCY R. BRANTNER Notary Public nesota ins Jan. 31, 201

<u>cilling R. Paralliter</u> Notary Public

My Commission Expires: _____ 1.31.05

id L. Carlson

2004 Date

State of Minnesota) ss: County of Amplia

day of CDUQU2004, before me personally came the above-named, David L. Carlson, This came to me personally know as the individual who executed the foregoing assignment, who acknowledged to me that he executed the same of his own free will for the purposes herein set forth.

nan TAMMY KAYE WAT NOTARY PUBLIC-MININESOTA MY COMMISSION EXPITES 1-31-2005 My Commission Expires: Randy M Jensen , 2004 State of Minnesota County of AND Ka) ss:

day of HOVWWWW004, before me personally came the above-named, Randy M. Jensen, This came to me personally know as the individual who executed the foregoing assignment, who acknowledged to me that he executed the same of his own free will for the purposes herein set forth.

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plumen Notary Public My Commission Expires:

# EXHIBIT 11.2

### ASSIGNMENT

This Agreement is by and between Flint Hills Scientific, L.L.C., a for-profit limited liability company, with offices at 5020 West 15<sup>th</sup> Street, Suite A, Lawrence, Kansas, 66049 (hereinafter "FHS"), and Ivan Osorio, Mark G. Frei, Naresh C. Bhavaraju, Thomas E. Peters ("Inventors") (FHS and the Inventors collectively constituting the "Assignors"), and MEDTRONIC, INC. a corporation organized and existing under the laws of the State of Minnesota and having a principal place of business at 710 Medtronic Parkway, Minneapolis, Minnesota 55432-5604 ("Medtronic").

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignors hereby sell and assign to Medtronic, its successors and assigns, any and all right title and interest the Assignors may have in and to the patent applications identified in the attached Schedule 11.2 and any invention described or claimed in such patent applications, and any non-provisional, foreign or international patent applications claiming priority to the applications set forth in Schedule 11.2, including any continuation, divisional, continuation-in-part, or reissue applications, or any patent applications or patents claiming any of the inventions set forth in the claims or specifications of the applications in Schedule 11.2, and any patents issuing from any of the above patent applications, the same to be held and enjoyed by Medtronic for its own use and benefit and use and benefit of its successors and assigns to the full end of the term for which the patent may be granted, as fully and entirely as the same would have been held and enjoyed by Assignors had this assignment and sale not been made, including without limitation the right to enforce the patent and collect damages for past or future infringement.

And, for the consideration aforesaid, Assignors represent and warrant to Medtronic, its successors and assigns, that at the time of the execution and delivery of these presents, Assignors are the lawful owners of our full interests as inventors of the inventions, applications and patents mentioned above.

For the consideration aforesaid, the Assignors hereby individually covenant and agree to and with Medtronic, its successors and assigns, that whenever Medtronic's counsel or the counsel of its successors or assigns, learned in the law, shall advise that an amendment or division of, or continuation or any continuation-in-part thereof, or any other proceeding in connection with the filing or prosecution of said domestic or foreign patent applications, including interference proceedings, is lawful and desirable, or that a reissue or extension is lawful and desirable, we, or our executors, administrators or assigns will render assistance as Medtronic may require to perfect assignments, and to publish, patent or protect such in any Patent Office or in litigation.

We hereby request the Honorable Commissioner of Patents and Trademarks to issue any and all patents assigned herein to Medtronic in accordance with this instrument.

ACCORDINGLY, each of the parties has caused this Agreement to be executed, in the manner appropriate for each, as of the date indicated.

Address:

Mark G. Frei 2513 Via Linda Drive Lawrence, Kansas 66047 Flint Hills Scientific, L.L.C. Mark G. Frei, Ph.D.

Mark G. Frei Individually and as Manager of Flint Hills Scientific, L.L.C.

STATE OF KANSAS

COUNTY OF Douglas

On this 15t day of 1900 day 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.

NOTABY PUBLIC - State of Kansas PATTY L. HUN

Juntyinger

Address:

Ivan Osorio 4005 W. 124th Street Leawood, Kansas 66209

Ivan Osorio, M.D

STATE OF KANSAS

COUNTY OF

SS.

On this 15f day of Ma-ct, 2004, before me personally appeared Ivan Osorio, 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.

Charly Barns

CHERYL L My Appt. Expires

Schedule 11.2 Attachment to Exhibit 11.2 that replaces Exhibit 11.1 of the Second Addendum to the License and Development Agreement

# **Patent Applications**

| DOCKET NO.    | APP. NO.       | FILED              | INVENTORS          | TITLE                         |
|---------------|----------------|--------------------|--------------------|-------------------------------|
| P-10933.00 US | 60/418,580     | October 15, 2002   | Mark G. Frei       | Signal Quality Monitoring and |
|               |                |                    | Ivan Osorio        | Control for a Medical Device  |
|               |                |                    |                    | System                        |
| P-10933.00 US | 10/687,348     | October 15, 2003   | Mark G. Frei       | Signal Quality Monitoring and |
|               |                |                    | Ivan Osorio        | Control for a Medical Device  |
|               |                |                    |                    | System                        |
| P-10933.01 US | 60/503,803     | September 19, 2003 | Mark G. Frei       | Signal Quality Monitoring and |
|               |                |                    | Ivan Osorio        | Control for a Medical Device  |
|               |                |                    |                    | System                        |
| P-10933.02 WO | PCT/US03/33002 | October 15, 2003   | Mark G. Frei       | Signal Quality Monitoring and |
|               |                |                    | Ivan Osorio        | Control for a Medical Device  |
|               |                |                    |                    | System                        |
| P-10933.03 US | 10/687,557     | October 15, 2003   | Mark G. Frei       | Signal Quality Monitoring and |
|               |                | _                  | Ivan Osorio        | Control for a Medical Device  |
|               |                |                    | Jonathan C. Werder | System                        |
|               |                |                    | David L. Carlson   |                               |
| P-10933.04 WO | PCT/US03/32938 | October 15, 2003   | Mark G. Frei       | Signal Quality Monitoring and |
|               |                |                    | Ivan Osorio        | Control for a Medical Device  |
|               |                |                    | Jonathan C. Werder | System                        |
|               |                |                    | David L. Carlson   |                               |
| P-10935.00 US | 60/418,553     | October 15, 2002   | Ivan Osorio        | Multi-Modal Operation of a    |
|               |                |                    | Mark G. Frei       | Medical Device System         |
|               |                |                    | Mark T. Rise       |                               |
|               |                |                    | Scott F. Schaffner |                               |
|               |                |                    | Nina M. Graves     |                               |

| DOCKET NO.    | APP. NO.       | FILED              | INVENTORS            | TITLE                          |
|---------------|----------------|--------------------|----------------------|--------------------------------|
| P-10935.00 US | 10/687,289     | October 15, 2003   | Ivan Osorio          | Multi-Modal Operation of a     |
|               |                |                    | Mark G. Frei         | Medical Device System          |
|               |                |                    | Mark I. Kise         |                                |
|               |                |                    | Scott F. Schaffner   |                                |
|               |                |                    | Nina M. Graves       |                                |
| P-10935.01 US | 60/503,998     | September 19, 2003 | Ivan Osorio          | Multi-Modal Operation of a     |
|               |                |                    | Mark G. Frei         | Medical Device System          |
|               |                |                    | Mark T. Rise         |                                |
|               |                |                    | Scott F. Schaffner   |                                |
|               |                |                    | Nina M. Graves       |                                |
| P-10935.02 WO | PCT/US03/32997 | October 15, 2003   | Ivan Osorio          | Multi-Modal Operation of a     |
|               |                |                    | Mark G. Frei         | Medical Device System          |
|               |                |                    | Mark T. Rise         |                                |
|               |                |                    | Scott F. Schaffner   |                                |
|               |                |                    | Nina M. Graves       |                                |
| P-10936.00 US | 60/418,383     | October 15, 2002   | Mark G. Frei         | Channel-Selective Blanking for |
|               |                |                    | Ivan Osorio          | a Medical Device System        |
|               |                |                    | Mark T. Rise         | •                              |
|               |                |                    | Jonathon E. Giftakis |                                |
|               |                |                    | Nina M. Graves       |                                |
| P-10936.00 US | 10/687,133     | October 15, 2003   | Mark G. Frei         | Channel-Selective Blanking for |
|               |                |                    | Ivan Osorio          | a Medical Device System        |
|               |                |                    | Mark T. Rise         |                                |
|               |                |                    | Jonathon E. Giftakis |                                |
|               |                |                    | Nina M. Graves       |                                |
| P-10936.01 US | 60/504,141     | September 19, 2003 | Mark G. Frei         | Channel-Selective Blanking for |
|               |                |                    | Ivan Osorio          | a Medical Device System        |
|               |                |                    | Mark T. Rise         |                                |
|               |                |                    | Jonathon E. Giftakis |                                |
|               |                |                    | Nina M. Graves       |                                |

| P-10936.02 WO     PCT/US03/32908       P-10947.00 US     60/418,623       P-10947.00 US     10/687,135       P-10947.01 US     10/687,135 | 0 October 15, 2003<br>October 15, 2002<br>October 15, 2003<br>October 15, 2003 | Mark G. Frei<br>Ivan Osorio<br>Mark T. Rise<br>Jonathon E. Giftakis<br>Nina M. Graves<br>Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randy M. Jensen | Channel-Selective Blanking for<br>a Medical Device System |
|-------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|
|                                                                                                                                           |                                                                                | Mark G. Frei<br>Ivan Osorio<br>Mark T. Rise<br>Jonathon E. Giftakis<br>Nina M. Graves<br>Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randy M. Jensen | Channel-Selective Blanking for<br>a Medical Device System |
|                                                                                                                                           | October 15, 2002<br>October 15, 2003<br>October 15, 2003                       | Ivan Osorio<br>Mark T. Rise<br>Jonathon E. Giftakis<br>Nina M. Graves<br>Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randy M. Jensen                 | a Medical Device System                                   |
|                                                                                                                                           | October 15, 2002<br>October 15, 2003                                           | Mark T. Rise<br>Jonathon E. Giftakis<br>Nina M. Graves<br>Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randy M. Jensen                                |                                                           |
|                                                                                                                                           | October 15, 2002<br>October 15, 2003<br>October 15, 2003                       | Jonathon E. Giftakis<br>Nina M. Graves<br>Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randy M. Jensen                                                |                                                           |
|                                                                                                                                           | October 15, 2002<br>October 15, 2003                                           | Nina M. Graves<br>Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randv M. Jensen                                                                        |                                                           |
|                                                                                                                                           | October 15, 2002<br>October 15, 2003                                           | Ivan Osorio<br>Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randv M. Jensen                                                                                          |                                                           |
|                                                                                                                                           | October 15, 2003                                                               | Mark G. Frei<br>Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randv M. Jensen                                                                                                         | Configuring and Testing                                   |
|                                                                                                                                           | October 15, 2003                                                               | Naresh C. Bhavaraju<br>Thomas E. Peters<br>Randv M. Jensen                                                                                                                         | Treatment Therapy Parameters                              |
|                                                                                                                                           | October 15, 2003                                                               | Thomas E. Peters<br>Randy M. Jensen                                                                                                                                                | for a Medical Device System                               |
|                                                                                                                                           | October 15, 2003                                                               | Randy M. Jensen                                                                                                                                                                    |                                                           |
|                                                                                                                                           | October 15, 2003                                                               |                                                                                                                                                                                    |                                                           |
|                                                                                                                                           |                                                                                | Ivan Osorio                                                                                                                                                                        | Configuring and Testing                                   |
|                                                                                                                                           |                                                                                | Mark G. Frei                                                                                                                                                                       | Treatment Therapy Parameters                              |
|                                                                                                                                           |                                                                                | Naresh C. Bhavaraju                                                                                                                                                                | for a Medical Device System                               |
|                                                                                                                                           |                                                                                | Thomas E. Peters                                                                                                                                                                   |                                                           |
|                                                                                                                                           |                                                                                | Randy M. Jensen                                                                                                                                                                    |                                                           |
| -                                                                                                                                         | September 19, 2003                                                             | Ivan Osorio                                                                                                                                                                        | Configuring and Testing                                   |
|                                                                                                                                           |                                                                                | Mark G. Frei                                                                                                                                                                       | Treatment Therapy Parameters                              |
|                                                                                                                                           |                                                                                | Naresh C. Bhavaraju                                                                                                                                                                | for a Medical Device System                               |
|                                                                                                                                           |                                                                                | Thomas E. Peters                                                                                                                                                                   |                                                           |
|                                                                                                                                           |                                                                                | Randy M. Jensen                                                                                                                                                                    |                                                           |
| P-10947.02 WO PCT/US03/33000                                                                                                              | 0 October 15, 2003                                                             | Ivan Osorio                                                                                                                                                                        | Configuring and Testing                                   |
|                                                                                                                                           |                                                                                | Mark G. Frei                                                                                                                                                                       | Treatment Therapy Parameters                              |
|                                                                                                                                           |                                                                                | Naresh C. Bhavaraju                                                                                                                                                                | for a Medical Device System                               |
|                                                                                                                                           |                                                                                | Thomas E. Peters                                                                                                                                                                   |                                                           |
|                                                                                                                                           |                                                                                | Randy M. Jensen                                                                                                                                                                    |                                                           |

| P-10948.00 US     60/418,476       P-10948.00 US     10/687,344 | October 15 2007    |                      |                          |
|-----------------------------------------------------------------|--------------------|----------------------|--------------------------|
|                                                                 | 00000 13, 2002     | Ivan Osorio          | Screening Techniques for |
|                                                                 |                    | Mark G. Frei         | Management of a Nervous  |
|                                                                 |                    | Naresh C. Bhavaraju  | System Disorder          |
|                                                                 |                    | Thomas E. Peters     |                          |
|                                                                 |                    | Nina M. Graves       |                          |
|                                                                 |                    | Scott F. Schaffner   |                          |
|                                                                 |                    | Jonathon E. Giftakis |                          |
|                                                                 |                    | Mark T. Rise         |                          |
|                                                                 |                    | Jonathan C. Werder   |                          |
|                                                                 | October 15, 2003   | Ivan Osorio          | Screening Techniques for |
|                                                                 |                    | Mark G. Frei         | Management of a Nervous  |
|                                                                 |                    | Naresh C. Bhavaraju  | System Disorder          |
|                                                                 |                    | Thomas E. Peters     |                          |
|                                                                 |                    | Nina M. Graves       |                          |
|                                                                 |                    | Scott F. Schaffner   |                          |
|                                                                 |                    | Jonathon E. Giftakis |                          |
|                                                                 |                    | Mark T. Rise         |                          |
|                                                                 |                    | Jonathan C. Werder   |                          |
| P-10948.01 US 60/503,963                                        | September 19, 2003 | Ivan Osorio          | Screening Techniques for |
|                                                                 |                    | Mark G. Frei         | Management of a Nervous  |
|                                                                 |                    | Naresh C. Bhavaraju  | System Disorder          |
|                                                                 |                    | Thomas E. Peters     |                          |
|                                                                 |                    | Nina M. Graves       |                          |
|                                                                 |                    | Scott F. Schaffner   |                          |
|                                                                 |                    | Jonathon E. Giftakis |                          |
|                                                                 |                    | Mark T. Rise         |                          |
|                                                                 |                    | Jonathan C. Werder   |                          |

| P-10948.02 WO    |                |                    |                      | TILLE                          |
|------------------|----------------|--------------------|----------------------|--------------------------------|
|                  | rui/usus/32906 | October 15, 2003   | Ivan Osorio          | Screening Techniques for       |
|                  |                |                    | Mark G. Frei         | Management of a Nervous        |
|                  |                |                    | Naresh C. Bhavaraju  | System Disorder                |
|                  |                |                    | Thomas E. Peters     | 1                              |
|                  |                |                    | Nina M. Graves       |                                |
|                  |                |                    | Scott F. Schaffner   |                                |
|                  |                |                    | Jonathon E. Giftakis |                                |
|                  |                |                    | Mark T. Rise         |                                |
|                  |                |                    | Jonathan C. Werder   |                                |
| P-10949.00 US 6( | 60/418,496     | October 15, 2002   | Mark G. Frei         | Clustering of Recorded Patient |
|                  |                |                    | Ivan Osorio          | Neurological Activity to       |
|                  |                |                    | Nina M. Graves       | Determine Length of a          |
|                  |                |                    | Scott F. Schaffner   | Neurological Event             |
|                  |                |                    | Mark T. Rise         | )                              |
|                  |                |                    | Jonathon E. Giftakis |                                |
|                  |                |                    | David L. Carlson     |                                |
| P-10949.00 US    | 10/687,571     | October 15, 2003   | Mark G. Frei         | Clustering of Recorded Patient |
|                  |                |                    | Ivan Osorio          | Neurological Activity to       |
|                  |                |                    | Nina M. Graves       | Determine Length of a          |
|                  |                |                    | Scott F. Schaffner   | Neurological Event             |
|                  |                |                    | Mark T. Rise         |                                |
|                  |                |                    | Jonathon E. Giftakis |                                |
|                  |                |                    | David L. Carlson     |                                |
| P-10949.01 US 60 | 60/503,794     | September 19, 2003 | Mark G. Frei         | Clustering of Recorded Patient |
|                  |                |                    | Ivan Osorio          | Neurological Activity to       |
|                  |                |                    | Nina M. Graves       | Determine Length of a          |
|                  |                |                    | Scott F. Schaffner   | Neurological Event             |
|                  |                |                    | Mark T. Rise         |                                |
|                  |                |                    | Jonathon E. Giftakis |                                |
|                  |                |                    | David L. Carlson     |                                |

| DOCKET NO.    | APP. NO.       | FILED              | INVENTORS            | TITLE                          |
|---------------|----------------|--------------------|----------------------|--------------------------------|
| P-10949.02 WO | PCT/US03/32940 | October 15, 2003   | Mark G. Frei         | Clustering of Recorded Patient |
|               |                |                    | Ivan Osorio          | Neurological Activity to       |
|               |                |                    | Nina M. Graves       | Determine Length of a          |
|               |                |                    | Scott F. Schaffner   | Neurological Event             |
|               |                |                    | Mark T. Rise         | )                              |
|               |                |                    | Jonathon E. Giftakis |                                |
|               |                |                    | David L. Carlson     |                                |
| P-10950.00 US | 60/418,446     | October 15, 2002   | Ivan Osorio          | Synchronization and            |
| _             |                |                    | Naresh C. Bhavaraju  | Calibration Clocks for a       |
|               |                |                    | Thomas E. Peters     | Medical Device and Calibrated  |
|               |                |                    | Mark G. Frei         | Clock                          |
|               |                |                    | Jonathan C. Werder   |                                |
| P-10950.00 US | 10/687,566     | October 15, 2003   | Ivan Osorio          | Synchronization and            |
|               |                |                    | Naresh C. Bhavaraju  | Calibration Clocks for a       |
|               |                |                    | Thomas E. Peters     | Medical Device and Calibrated  |
|               |                |                    | Mark G. Frei         | Clock                          |
|               |                |                    | Jonathan C. Werder   |                                |
| P-10950.01 US | 60/503,795     | September 19, 2003 | Ivan Osorio          | Synchronization and            |
|               |                |                    | Naresh C. Bhavaraju  | Calibration Clocks for a       |
|               |                |                    | Thomas E. Peters     | Medical Device and Calibrated  |
|               |                |                    | Mark G. Frei         | Clock                          |
|               |                |                    | Jonathan C. Werder   |                                |
| P-10950.02 WO | PCT/US03/32941 | October 15, 2003   | Ivan Osorio          | Synchronization and            |
|               |                |                    | Naresh C. Bhavaraju  | Calibration Clocks for a       |
|               |                |                    | Thomas E. Peters     | Medical Device and Calibrated  |
|               |                |                    | Mark G. Frei         | Clock                          |
|               |                |                    | Jonathan C. Werder   |                                |
| P-10951.00 US | 60/418,638     | October 15, 2002   | Ivan Osorio          | Control of Treatment Therapy   |
|               |                |                    | Mark G. Frei         | During Start-up and During     |
|               |                |                    | David L. Carlson     | Operation of a Medical Device  |
|               |                |                    |                      | System                         |

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| P-10951.00 US       10/687,290         P-10951.01 US       60/503,793         P-10951.02 WO       PCT/US03/32868         P-10952.00 US       60/418,666         P-10952.00 US       60/418,666 | October 15, 2003<br>September 19, 2003 | Ivan Osorio<br>Math G. Frai | Control of Treatment Theranv  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|-----------------------------|-------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                   | September 19, 2003                     | Math G Easi                 |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   | September 19, 2003                     | TATALA U. L'ICI             | During Start-up and During    |
|                                                                                                                                                                                                                                                                                                                                                                                                   | September 19, 2003                     | David L. Carlson            | Operation of a Medical Device |
|                                                                                                                                                                                                                                                                                                                                                                                                   | September 19, 2003                     |                             | System                        |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Ivan Osorio                 | Control of Treatment Therapy  |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Mark G. Frei                | During Start-up and During    |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | David L. Carlson            | Operation of a Medical Device |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        |                             | System                        |
|                                                                                                                                                                                                                                                                                                                                                                                                   | October 15, 2003                       | Ivan Osorio                 | Control of Treatment Therapy  |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Mark G. Frei                | During Start-up and During    |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | David L. Carlson            | Operation of a Medical Device |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        |                             | System                        |
|                                                                                                                                                                                                                                                                                                                                                                                                   | October 15, 2002                       | Mark G. Frei                | Timed Delay for Redelivery of |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Ivan Osorio                 | Treatment Therapy for a       |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Naresh C. Bhavaraju         | Medical Device System         |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | David L. Carlson            |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Jonathon E. Giftakis        |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Nina M. Graves              |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   | October 15, 2003                       | Mark G. Frei                | Timed Delay for Redelivery of |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Ivan Osorio                 | Treatment Therapy for a       |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Naresh C. Bhavaraju         | Medical Device System         |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | David L. Carlson            |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Jonathon E. Giftakis        |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Nina M. Graves              |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   | September 19, 2003                     | Mark G. Frei                | Timed Delay for Redelivery of |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Ivan Osorio                 | Treatment Therapy for a       |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Naresh C. Bhavaraju         | Medical Device System         |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | David L. Carlson            |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Jonathon E. Giftakis        |                               |
|                                                                                                                                                                                                                                                                                                                                                                                                   |                                        | Nina M. Graves              |                               |

| DOCKET NO.    | APP. NO.       | FILED              | INVENTORS            | TITLE                         |
|---------------|----------------|--------------------|----------------------|-------------------------------|
| P-10952.02 WO | PCT/US03/32909 | October 15, 2003   | Mark G. Frei         | Timed Delay for Redelivery of |
|               |                |                    | Ivan Osorio          | Treatment Therapy for a       |
| -             |                |                    | Naresh C. Bhavaraju  | Medical Device System         |
|               |                |                    | David L. Carlson     |                               |
|               |                |                    | Jonathon E. Giftakis |                               |
|               |                |                    | Nina M. Graves       |                               |
| P-10953.00 US | 60/418,628     | October 15, 2002   | Mark T. Rise         | Medical Device System With    |
|               |                |                    | Adrianus P. Donders  | Relaying Module for           |
|               |                |                    | Scott F. Schaffner   | Treatment of Nervous System   |
|               |                |                    |                      | Disorders                     |
| P-10953.00 US | 10/687,306     | October 15, 2003   | Mark T. Rise         | Medical Device System With    |
|               |                |                    | Adrianus P. Donders  | Relaying Module for           |
|               |                |                    | Scott F. Schaffner   | Treatment of Nervous System   |
|               |                |                    |                      | Disorders                     |
| P-10953.01 US | 60/503,792     | September 19, 2003 | Mark T. Rise         | Medical Device System With    |
|               |                |                    | Adrianus P. Donders  | Relaying Module for           |
|               |                |                    | Scott F. Schaffner   | Treatment of Nervous System   |
|               |                |                    |                      | Disorders                     |
| P-10953.02 WO | PCT/US03/32867 | October 15, 2003   | Mark T. Rise         | Medical Device System With    |
|               |                |                    | Adrianus P. Donders  | Relaying Module for           |
|               |                |                    | Scott F. Schaffner   | Treatment of Nervous System   |
|               |                |                    |                      | Disorders                     |
| P-10954.00 US | 60/418,609     | October 15, 2002   | Ivan Osorio          | Cycle Mode Providing          |
|               |                |                    | Naresh C. Bhavaraju  | Redundant Back-up to Ensure   |
|               |                |                    | David L. Carlson     | Termination of Treatment      |
|               |                |                    | Randy M. Jensen      | Therapy in a Medical Device   |
|               |                |                    |                      | System                        |
| P-10954.00 US | 10/688,214     | October 15, 2003   | Ivan Osorio          | Cycle Mode Providing          |
|               |                |                    | Naresh C. Bhavaraju  | Redundant Back-up to Ensure   |
|               |                |                    | David L. Carlson     | Termination of Treatment      |
|               |                |                    | Randy M. Jensen      | Therapy in a Medical Device   |
|               |                |                    |                      | System                        |

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|-----------------|---------------------------------------|--------------------|---------------------|--------------------------------|
| P-10954.01 US   | 60/504,447                            | September 19, 2003 | Ivan Osorio         | Cycle Mode Providing           |
|                 |                                       |                    | Naresh C. Bhavaraju | Redundant Back-up to Ensure    |
|                 |                                       |                    | David L. Carlson    | Termination of Treatment       |
|                 |                                       |                    | Randy M. Jensen     | Therapy in a Medical Device    |
|                 |                                       |                    |                     | System                         |
| P-10954.02 WO   | PCT/US03/32572                        | October 15, 2003   | Ivan Osorio         | <b>Cycle Mode Providing</b>    |
|                 |                                       |                    | Naresh C. Bhavaraju | Redundant Back-up to Ensure    |
|                 |                                       |                    | David L. Carlson    | Termination of Treatment       |
|                 |                                       |                    | Randy M. Jensen     | Therapy in a Medical Device    |
|                 |                                       |                    |                     | System                         |
| P-11107.00 US 6 | 60/418,527                            | October 15, 2002   | Mark G. Frei        | Phase Shifting of Neurological |
|                 |                                       |                    | Jonathan C. Werder  | Signals in a Medical Device    |
|                 |                                       |                    | David L. Carlson    | System                         |
| P-11107.00 US   | 10/687,570                            | October 15, 2003   | Mark G. Frei        | Phase Shifting of Neurological |
|                 |                                       |                    | Jonathan C. Werder  | Signals in a Medical Device .  |
|                 |                                       |                    | David L. Carlson    | System                         |
| P-11107.01 US 6 | 60/503,985                            | September 19, 2003 | Mark G. Frei        | Phase Shifting of Neurological |
|                 |                                       |                    | Jonathan C. Werder  | Signals in a Medical Device    |
|                 |                                       |                    | David L. Carlson    | System                         |
| P-11107.02 WO   | PCT/US03/33047                        | October 15, 2003   | Mark G. Frei        | Phase Shifting of Neurological |
|                 |                                       |                    | Jonathan C. Werder  | Signals in a Medical Device    |
|                 |                                       |                    | David L. Carlson    | System                         |

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| P-11108.00 US60/418,372October 15, 2002Mark T. RiseNina M. GravesJonathon E. GiftakisJonathan C. WerderDavid L. CarlsonRandy M. JensenScott F. SchaffnerNaresh C. BhavarajuMark G. FreiNaresh C. BhavarajuMark G. FreiP-11109.00 US60/418,506October 15, 2002P-11109.00 US60/418,506October 15, 2002P-11109.00 US10/687,389October 15, 2003P-11109.00 US10/687,389October 15, 2003P-11109.00 US10/687,389October 15, 2003P-11109.00 US60/503,999Nark G. FreiNina M. GravesJonathon E. GiftakisP-11109.00 US60/503,999Nark G. FreiP-11109.01 US60/503,999September 19, 2003P-11109.01 US60/503,999September 19, 2003P-11109.01 US60/503,999September 19, 2003P-11109.01 US60/503,999September 19, 2003P-11109.02 WOPCT/US03/32944October 15, 2003P-11109.02 WOPCT/US03/32944 <th>DOCKET NO.</th> <th>APP. NO.</th> <th>FILED</th> <th>INVENTORS</th> <th>TITLE</th> | DOCKET NO.    | APP. NO.       | FILED              | INVENTORS            | TITLE                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|----------------|--------------------|----------------------|------------------------------|
| 60/418,506     October 15, 2002       10/687,389     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       60/503,999     September 19, 2003       PCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | P-11108.00 US | 60/418,372     | October 15, 2002   | Mark T. Rise         | Programmer Software          |
| 60/418,506     October 15, 2002       60/418,506     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       PCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                |                    | Nina M. Graves       | Requirement Specification    |
| 60/418,506     October 15, 2002       60/418,506     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       PCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                |                    | Jonathon E. Giftakis | ,                            |
| 60/418,506       October 15, 2002         60/418,506       October 15, 2003         10/687,389       October 15, 2003         60/503,999       September 19, 2003         60/503,999       September 19, 2003         PCT/US03/32944       October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                |                    | Jonathan C. Werder   |                              |
| 60/418,506     October 15, 2002       60/418,506     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       60/503,999     September 19, 2003       PCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |               |                |                    | David L. Carlson     |                              |
| 60/418,506     October 15, 2002       60/418,506     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       60/503,32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                |                    | Randy M. Jensen      |                              |
| 60/418,506     October 15,2002       60/418,506     October 15,2003       10/687,389     October 15,2003       60/503,999     September 19,2003       60/503,999     September 19,2003       PCT/US03/32944     October 15,2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                |                    | Scott F. Schaffner   |                              |
| 60/418,506         October 15, 2002           60/418,506         October 15, 2003           10/687,389         October 15, 2003           60/503,999         September 19, 2003           60/503,999         September 19, 2003           PCT/US03/32944         October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |                |                    | Naresh C. Bhavaraju  |                              |
| 60/418,506     October 15, 2002       60/418,506     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       PCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |               |                |                    | Mark G. Frei         |                              |
| 60/418,506         October 15,2002           10/687,389         October 15,2003           10/687,389         October 15,2003           60/503,999         September 19,2003           60/503,999         September 19,2003           PCT/US03/32944         October 15,2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                |                    | Ivan Osorio          |                              |
| 60/418,506       October 15, 2002         10/687,389       October 15, 2003         60/503,999       September 19, 2003         60/503,999       September 19, 2003         PCT/US03/32944       October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |               |                |                    | Thomas E. Peters     |                              |
| 10/687,389     October 15, 2003       60/503,999     September 19, 2003       FCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | P-11109.00 US | 60/418,506     | October 15, 2002   | Ivan Osorio          | Scoring of Sensed            |
| 10/687,389     October 15, 2003       10/687,389     October 15, 2003       60/503,999     September 19, 2003       PCT/US03/32944     October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                |                    | Mark G. Frei         | Neurological Signals for Use |
| 10/687,389         October 15,2003           60/503,999         September 19, 2003           FCT/US03/32944         October 15,2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |               |                |                    | Nina M. Graves       | With a Medical Device System |
| 10/687,389       October 15, 2003         60/503,999       September 19, 2003         FCT/US03/32944       October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |               |                |                    | Jonathon E. Giftakis | •                            |
| 60/503,999         September 19, 2003           FCT/US03/32944         October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | P-11109.00 US | 10/687,389     | October 15, 2003   | Ivan Osorio          | Scoring of Sensed            |
| 60/503,999         September 19, 2003           60/503,999         September 19, 2003           PCT/US03/32944         October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                |                    | Mark G. Frei         | Neurological Signals for Use |
| 60/503,999         September 19, 2003           PCT/US03/32944         October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |               |                |                    | Nina M. Graves       | With a Medical Device System |
| 60/503,999 September 19, 2003<br>PCT/US03/32944 October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |               |                |                    | Jonathon E. Giftakis |                              |
| PCT/US03/32944 October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | P-11109.01 US | 60/503,999     | September 19, 2003 | Ivan Osorio          | Scoring of Sensed            |
| PCT/US03/32944 October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                |                    | Mark G. Frei         | Neurological Signals for Use |
| PCT/US03/32944 October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                |                    | Nina M. Graves       | With a Medical Device System |
| PCT/US03/32944 October 15, 2003                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                |                    | Jonathon E. Giftakis |                              |
| Mark G. Frei<br>Nina M. Graves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | P-11109.02 WO | PCT/US03/32944 | October 15, 2003   | Ivan Osorio          | Scoring of Sensed            |
| Nina M. Graves                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |               |                |                    | Mark G. Frei         | Neurological Signals for Use |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |               |                |                    | Nina M. Graves       | With a Medical Device System |
| Jonathon E. Giftakis                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |               |                |                    | Jonathon E. Giftakis |                              |

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