

02-25-2000



5656-13
January 20, 2000

To the Honorable Commissioner of Patents and Trademark

1-24-00

Please record the attached original documents or copy them

101275681

1. Name of conveying party(ies):

G. Neal Kay
Donald L. Hopper
Jan Pieter Heemels
Jeff Hall

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

UAB Research Foundation
701 S. 20th Street, Suite 1120G
Birmingham, Alabama 35294-0111

RECEIVED
2000 JAN 24 AM 10:59
OPR/FINANCE

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

3. Nature of conveyance:

- Assignment
- Merger
- Security Agreement
- Change of Name
- Other _____

Execution Date: 22 December 1999; 20 December 1999; 23 December 1999; 22 December 1999

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

4. Application Serial No. 09/408,623 Patent No.

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

Additional numbers attached? Yes No

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

Kenneth D. Sibley
Myers Bigel Sibley & Sajovec
P. O. Box 37428
Raleigh NC 27627

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41) \$40.00
 Enclosed
 Authorized to be charged to deposit account

8. Deposit account number: 50-0220

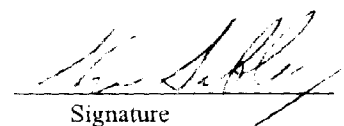
DO NOT USE THIS SPACE

9. Statement and signature

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

Kenneth D. Sibley, Reg #31,665

Name of Person Signing

 Jan 20 2000
Signature Date

Total number of pages including cover sheet, attachments and document: 11

02/25/2000 DNGUYEN 00000077 09408623

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40.00 OP

ASSIGNMENT

THIS ASSIGNMENT, made by us, **G. Neal Kay**, citizen of the United States of America, residing at 2432 Henrietta Road, Birmingham, Alabama 35223, **Donald L. Hopper**, citizen of the United States of America, residing at 11761 99th Avenue North, Maple Grove, Minnesota, 55369; **Jan-Pieter Heemells**, citizen of the Belgium, residing at Excelsiorlaan 37, Zoning Keiberg, 1930 Zaventem, Belgium; and **Jeff Hall**, citizen of the United States of America, residing at 401 Maple Trace, Birmingham, Alabama 35244;

WITNESSETH: That,

WHEREAS, we are the joint inventors of certain new and useful improvements in **METHOD OF DETERMINING A VENTILATORY THRESHOLD BREAKPOINT FOR AN ADAPTIVE RATE PACEMAKER** for which an application for United States Letters Patent has been filed in the United States Patent and Trademark Office on September 30, 1999, under Serial No. 09/408,623, and

WHEREAS, the UAB Research Foundation, an educational institution chartered under the laws of the State of Alabama having a principal operation at 701 S. 20th Street, Suite 1120G, Birmingham, County of Jefferson, State of Alabama 35294-0111, hereinafter referred to as assignee, is desirous of acquiring our entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America, and all foreign countries;

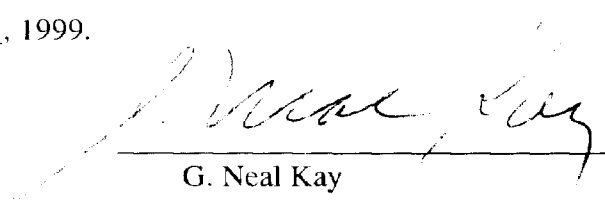
NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer, and convey unto the said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and application above-mentioned, and that we have the unencumbered right and authority to make this assignment.

We further covenant and agree to bind our heirs, legal representatives, and assigns promptly to communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives.

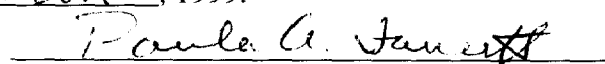
IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 22nd day of DECEMBER, 1999.



G. Neal Kay (SEAL)

STATE OF ALABAMA)
) ss:
COUNTY OF JEFFERSON)

Before me personally appeared G. Neal Kay, to me known to be the person described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the purposes therein stated, this 22nd day of DECEMBER, 1999.



Notary Public

SEAL

My Commission Expires: MY COMMISSION EXPIRES JUNE 3, 2003

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 20 day of Dec, 1999.

Donald L. Hopper (SEAL)
Donald L. Hopper

STATE OF MINNESOTA)
) ss:
COUNTY OF DUNN)
) RAMSEY

Before me personally appeared Donald L. Hopper, to me known to be the person described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the purposes therein stated, this 20 day of Dec, 1999.

Tammy J. Lawler
Notary Public

SEAL

My Commission Expires: 1-31-2005



IN WITNESS WHEREOF, I have hereunto set my hand and seal on this _____ day of _____, 1999.

ASSIGNOR:

Jan-Pieter Heemells

Witnessed by:

Date: _____

Date: _____

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 22 day of December, 1999.

Jeffery S. Hall (SEAL)
Jeff Hall

STATE OF ALABAMA)
) ss:
COUNTY OF JEFFERSON)

Before me personally appeared Jeff Hall, to me known to be the person described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the purposes therein stated, this 23RD day of DECEMBER, 1999.

Paula A. Stewart
Notary Public

SEAL

My Commission Expires: MY COMMISSION EXPIRES JUNE 3, 2001

ASSIGNMENT

THIS ASSIGNMENT, made by us, **G. Neal Kay**, citizen of the United States of America, residing at 2432 Henrietta Road, Birmingham, Alabama 35223, **Donald L. Hopper**, citizen of the United States of America, residing at 11761 99th Avenue North, Maple Grove, Minnesota, 55369; **Jar- Pieter Heemels**, citizen of the ~~Belgium~~ ^{NETHERLANDS}, residing at ~~Excelsiorlaan 37, Zoning Keiberg, 1930 Zaventem, Belgium~~ ^{WINGERTS HECKE 6, 35392 GIESSEN, GERMANY}; and **Jeff Hall**, citizen of the United States of America, residing at 401 Maple Trace, Birmingham, Alabama 35244;

WITNESSETH: That,

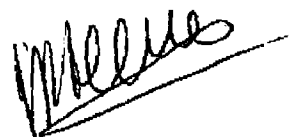
WHEREAS, we are the joint inventors of certain new and useful improvements in **METHOD OF DETERMINING A VENTILATORY THRESHOLD BREAKPOINT FOR AN ADAPTIVE RATE PACEMAKER** for which an application for United States Letters Patent has been filed in the United States Patent and Trademark Office on September 30, 1999, under Serial No. 09/408,623, and

WHEREAS, the UAB Research Foundation, an educational institution chartered under the laws of the State of Alabama having a principal operation at 701 S. 20th Street, Suite 1120G, Birmingham, County of Jefferson, State of Alabama 35294-0111, hereinafter referred to as assignee, is desirous of acquiring our entire right, title and interest in and to said invention as described in said application, and in and to any and all Letters Patent which shall be granted therefor in the United States of America, and all foreign countries;

NOW, THEREFORE, To Whom It May Concern, be it known that for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, we have sold and by these presents do hereby sell, assign, transfer, and convey unto the said assignee, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any and all continuations, continuations-in-part, or divisions thereof, and in and to any and all Letters Patent of the United States of America and all foreign countries or reissues thereof which may be granted therefor or thereon, for the full end of the term for which said Letters Patent may be granted, together with the right to claim the priority of said application in all foreign countries in accordance with the International Convention, the same to be held and enjoyed by said assignee, its successors and assigns, as fully and entirely as the same would have been held and enjoyed by us if this assignment and sale had not been made.

We hereby request that said Letters Patent be issued in accordance with this assignment.

We further covenant and agree that, at the time of the execution and delivery of these presents, we possess full title to the invention and application above-mentioned, and that we have the unencumbered right and authority to make this assignment.



We further covenant and agree to bind our heirs, legal representatives, and assigns promptly to communicate to said assignee or its representatives any facts known to us relating to said invention, to testify in any interference or legal proceedings involving said invention, to execute any additional papers which may be requested to confirm the right of the assignee, its representatives, successors, or assigns to secure patent or similar protection for the said invention in all countries and to vest in the assignee complete title to the said invention and Letters Patent, without further compensation, but at the expense of said assignee, its successors, assigns, and other legal representatives.

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this _____ day of _____, 1999.

G. Neal Kay (SEAL)

STATE OF ALABAMA)
) ss:
COUNTY OF JEFFERSON)

Before me personally appeared G. Neal Kay, to me known to be the person described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the purposes therein stated, this _____ day of _____, 1999.

Notary Public

SEAL

My Commission Expires: _____



IN WITNESS WHEREOF, I have hereunto set my hand and seal on this _____ day of _____, 1999.

Donald L. Hopper (SEAL)

STATE OF MINNESOTA)
) ss:
COUNTY OF RAMSEY)

Before me personally appeared Donald L. Hopper, to me known to be the person described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the purposes therein stated, this _____ day of _____, 1999.

Notary Public

SEAL

My Commission Expires: _____



IN WITNESS WHEREOF, I have hereunto set my hand and seal on this 23 day of DECEMBER, 1999.

ASSIGNOR:

[Signature]
Jan Peter Heemels

Witnessed by:

I. RAPPENWICKER

J. Poppinger

Date: 23.12.99

E. MAHLE [Signature]

Date: 23.12.99

[Signature]

IN WITNESS WHEREOF, I have hereunto set my hand and seal on this _____ day of _____, 1999.

Jeff Hall (SEAL)

STATE OF ALABAMA)
) ss:
COUNTY OF JEFFERSON)

Before me personally appeared Jeff Hall, to me known to be the person described in and who executed the foregoing instrument, and he acknowledged to me that he executed the same for the purposes therein stated, this _____ day of _____, 1999.

Notary Public

SEAL

My Commission Expires: _____

5656-13

