

07-19-2002

Form PTO-1595 (Rev. 03/01) OMB No. 0651-0027 (exp. 5/31/2002)

RECO



U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office

PRICE OF

102160785

To the Honorable Commissioner of Patents and Trademarks: Please Record the attached original documents or copy thereof.

1. Name of conveying party(ies): Kai Kuck, Joseph A. Orr and Lara Brewer
Additional name of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name: RESPIRONICS, INC.
Internal Address:
Street Address: 1010 Murry Ridge Lane
City: Murrysville State: PA Zip: 15668
Additional Name(s) & address(es) attached? Yes No

3. Nature of conveyance:
 Assignment Merger
 Security Agreement Change of Name
 Other _____
Execution Date: June 28, 2002 and July 3, 2002

4. Application number(s) or patent number(s):
If this document is being filed together with a new application, the execution date of the application is: _____
A. Patent Application No.(s)
10/121,219
B. Patent No.(s)
Additional numbers attached? Yes No

5. Name and address of party to whom correspondence concerning this document should be mailed:
Name: TraskBritt
Internal Address:
Street Address: P.O. Box 2550
City: Salt Lake City State: UT Zip: 84110

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:
20-1469
(Attach duplicate copy of this page if paying by deposit account)

07/19/2002 ANNED1 00000015 10121219

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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.
Brick G. Power
Name of Person Signing
Reg. No. 38,581

Attorney Docket No.: 2181-4954US
Signature: *Brick G. Power*
Date: July 8, 2002

Total number of pages including cover sheet, attachments, and documents: 6

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

PATENT REEL: 013088 FRAME: 0531

PATENT

Attorney Docket No. 4954US

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned ASSIGNOR does hereby:

SELL, ASSIGN AND TRANSFER to RESPIRONICS, INC. ("ASSIGNEE"), a corporation of the state of Delaware having a place of business at, 1010 Murry Ridge Lane, Murrysville, PA 15668, the entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the Application for United States Letters Patent Serial No. 10/121,219 filed on April 11, 2002, and entitled ALGORITHMS, SYSTEMS, AND METHODS FOR ESTIMATING CARBON DIOXIDE STORES, TRANSFORMING RESPIRATORY GAS MEASUREMENTS, AND OBTAINING ACCURATE NONINVASIVE PULMONARY CAPILLARY BLOOD FLOW AND CARDIAC OUTPUT MEASUREMENTS, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent or the legal equivalent thereof which have been or may be filed in the United States and all foreign countries relating to any of such improvements; all original, reexamined and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application made in the United States;

AUTHORIZE the ASSIGNEE to apply for and receive any and all United States and foreign patents relating to such improvements in its own name;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to and in the name of the ASSIGNEE;

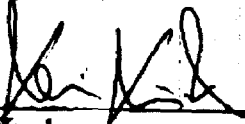
WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement or encumbrance affecting the rights and property herein conveyed has been or will be made or entered into by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the ASSIGNEE, to carry out in good faith the intent and purpose of this assignment, to execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications relating to any and all such improvements; to execute all rightful oaths, declarations, assignments, powers of attorney and other papers; to communicate to the ASSIGNEE all facts and provide to the ASSIGNEE all documents and things known and accessible to the undersigned relating to such improvements and the history thereof, and testify as to the same in any interference, litigation or other proceeding relating thereto; and generally to do everything possible which the ASSIGNEE

shall consider desirable for vesting title to such improvements in the ASSIGNEE, and to secure, maintain, defend and enforce valid and enforceable patent protection for such improvements;

AGREE AND ACKNOWLEDGE that the SALE, ASSIGNMENT AND TRANSFER of rights and property set forth herein is and shall be IRREVOCABLE and BINDING upon the heirs, assigns, representatives and successors of each undersigned ASSIGNOR and EXTEND to the successors, assigns and nominees of the ASSIGNEE.

ASSIGNOR:



Kai Kuck

Residing at: Klabundeweg 7, 22359 Hamburg, Germany

Date 28 Jun 2002

ASSIGNMENT

FOR GOOD AND VALUABLE CONSIDERATION, the receipt, sufficiency and adequacy of which are hereby acknowledged, each undersigned ASSIGNOR does hereby:

SELL, ASSIGN AND TRANSFER to RESPIRONICS, INC. ("ASSIGNEE"), a corporation of the state of Delaware having a place of business at, 1010 Murry Ridge Lane, Murrysville, PA 15668, the entire right, title and interest for the United States and all foreign countries in and to any and all improvements which are disclosed in the Application for United States Letters Patent Serial No. 10/121,219 filed on April 11, 2002, and entitled ALGORITHMS, SYSTEMS, AND METHODS FOR ESTIMATING CARBON DIOXIDE STORES, TRANSFORMING RESPIRATORY GAS MEASUREMENTS, AND OBTAINING ACCURATE NONINVASIVE PULMONARY CAPILLARY BLOOD FLOW AND CARDIAC OUTPUT MEASUREMENTS, such application and all divisional, continuing, substitute, renewal, reissue and all other applications for patent or the legal equivalent thereof which have been or may be filed in the United States and all foreign countries relating to any of such improvements; all original, reexamined and reissued patents which have been or shall be issued in the United States and all foreign countries on such improvements; and specifically including the right to file foreign applications under the provisions of any convention or treaty and claim priority based on such application made in the United States;

AUTHORIZE the ASSIGNEE to apply for and receive any and all United States and foreign patents relating to such improvements in its own name;

AUTHORIZE AND REQUEST the issuing authority to issue any and all United States and foreign patents granted on such improvements to and in the name of the ASSIGNEE;

WARRANT AND COVENANT that no assignment, grant, mortgage, license or other agreement or encumbrance affecting the rights and property herein conveyed has been or will be made or entered into by the undersigned, and that the full right to convey the same as herein expressed is possessed by the undersigned;

COVENANT, when requested and at the expense of the ASSIGNEE, to carry out in good faith the intent and purpose of this assignment, to execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications relating to any and all such improvements; to execute all rightful oaths, declarations, assignments, powers of attorney and other papers; to communicate to the ASSIGNEE all facts and provide to the ASSIGNEE all documents and things known and accessible to the undersigned relating to such improvements and the history thereof, and testify as to the same in any interference, litigation or other proceeding relating thereto; and generally to do everything possible which the ASSIGNEE

shall consider desirable for vesting title to such improvements in the ASSIGNEE, and to secure, maintain, defend and enforce valid and enforceable patent protection for such improvements;

AGREE AND ACKNOWLEDGE that the SALE, ASSIGNMENT AND TRANSFER of rights and property set forth herein is and shall be IRREVOCABLE and BINDING upon the heirs, assigns, representatives and successors of each undersigned ASSIGNOR and EXTEND to the successors, assigns and nominees of the ASSIGNEE.

ASSIGNORS:

Joseph A. Orr
Joseph A. Orr

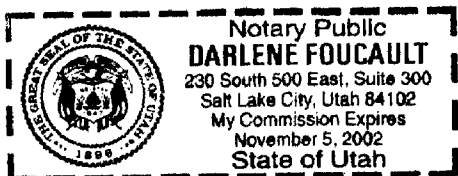
Date 3 July, 02

Lara Brewer
Lara Brewer

Date 3 July, 2002

STATE OF UTAH)
: ss.
COUNTY OF SALT LAKE)

BEFORE ME, the undersigned authority, on this 3rd day of July, 2002, personally appeared Joseph A. Orr, personally known or proven by satisfactory documentary evidence to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.



Darlene Foucault
Notary or Consular Officer

STATE OF Utah)
COUNTY OF Salt Lake) : ss.

BEFORE ME, the undersigned authority, on this 3rd day of July, 2002, personally appeared Lara Brewer, personally known or proven by satisfactory documentary evidence to me to be the person whose name is subscribed to the foregoing instrument and acknowledged to me that he executed the same of his own free will for the purposes and consideration therein expressed.

Darlene Holt
Notary or Consular Officer

