

12-23-1998

Express Mail Label No. EL168015195US

Date of Deposit: December 17, 1998

FORM
Express Of
OMB 085

100928317

U.S. Department of Commerce
Patent and Trademark Office
PATENT

12.17.98

~~12.17.98~~**RECORDATION FORM COVER SHEET
PATENTS ONLY**

TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies).

Submission Type

New



Resubmission (Non-Recordation)

Document ID#



Correction of PTO Error

Reel #

Frame #



Corrective Document

Reel #

Frame #

Conveyance Type

Assignment



Security Agreement



License



Change of Name



Merger



Other

U.S. Government

(For Use ONLY by U.S. Government Agencies)



Departmental File



Secret File

Conveying Party(ies)

Mark if additional names of conveying parties attached

Execution Date
Month Day Year

Name (line 1)

Ethicon, Inc.

Oct. 22, 1998

Name (line 2)

Second Party

Name (line 1)

Name (line 2)

Execution Date
Month Day Year**Receiving Party**

Mark if additional names of receiving parties attached

Name (line 1)

Critikon Company, L.L.C.

Name (line 2)

☐ If document to be recorded
is an assignment and the
receiving party is not
domiciled in the United
States, an appointment
of a domestic
representative is attached.
(Designation must be a
separate document from
Assignment.)

Address (line 1)

4110 George Road

Address (line 2)

Address (line 3)

Tampa

City

Florida

State/Country

33631

Zip Code

Domestic Representative Name and Address

Enter for the first Receiving Party only.

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

12/22/1998 TTOM11 00000095 4440536

FOR OFFICE USE ONLY

01 FC:581

4440.00 OP

4440E

Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Officer, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practices. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS.

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

REEL: 9703 FRAME: 0280

Correspondent Name and Address

Area Code and Telephone Number

Name

Address (line 1)

Address (line 2)

Address (line 3)

Address (line 4)

Pages

Enter the total number of pages of the attached conveyance document including any attachments.

#

Application Number(s) or Patent Number(s)

☒ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

Patent Number(s)

If this document is being filed together with a new Patent Application, enter the date the patent application was signed by the first named executing inventor.

Month Day Year

Patent Cooperation Treaty (PCT)

Enter PCT application number

only if a U.S. Application Number has not been assigned.

PCT

PCT

PCT

PCT

PCT

PCT

Number of Properties

Enter the total number of properties involved.

#

Fee Amount

Fee Amount for Properties Listed (37 CFR 3.41): \$

Method of Payment:
Deposit Account

Enclosed ☒

Deposit Account ☐

(Enter for payment by deposit account or if additional fees can be charged to the account.)

Deposit Account Number:

#

Authorization to charge additional fees:

Yes

☒

No

☐

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. Charges to deposit account are authorized, as indicated herein.

Rashmi Chandra

Name of Person Signing

Rashmi Chandra

Signature

12/17/98

Date

RECORDATION FORM COVER SHEET
CONTINUATION A
PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Application Number(s) or Patent Number(s)

☒ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

09/002230

09/001181

09/034112

08/894065

Patent Number(s)

4488556

4486292

D-287052

D-297260

4807223

4464123

4501280

4533456

4627440

4848901

4546778

4546775

4543962

4638810

5170795

RECORDATION FORM COVER SHEET
CONTINUATION
PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Name (line 1)

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3) City State/Country Zip Code

Application Number(s) or Patent Number(s)

☐ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Patent Number(s)

5680870	5660184	5616823
5706256	5731582	5661302
5746203	5752919	5651370
4546770	4466879	5788644
<input type="text"/>	<input type="text"/>	<input type="text"/>

RECORDATION FORM COVER SHEET
CONTINUATION B
PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Application Number(s) or Patent Number(s)

☒ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Patent Number(s)

<input type="text" value="4754761"/>	<input type="text" value="5052397"/>	<input type="text" value="D-304233"/>
<input type="text" value="4825879"/>	<input type="text" value="4807631"/>	<input type="text" value="4825872"/>
<input type="text" value="5024226"/>	<input type="text" value="4988229"/>	<input type="text" value="5103833"/>
<input type="text" value="5127407"/>	<input type="text" value="D-340769"/>	<input type="text" value="5187641"/>
<input type="text" value="5253645"/>	<input type="text" value="D-343683"/>	<input type="text" value="5218968"/>

RECORDATION FORM COVER SHEET
CONTINUATION ^C
PATENTS ONLY

U.S. Department of Commerce
Patent and Trademark Office
PATENT

Conveying Party(ies)

☐ Mark if additional names of conveying parties attached

Enter additional Conveying Parties

Name (line 1)

Execution Date
Month Day Year

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Execution Date
Month Day Year

Name (line 1)

Name (line 2)

Receiving Party(ies)

☐ Mark if additional names of receiving parties attached

Enter additional Receiving Party(ies)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Name (line 1)

Name (line 2)

Address (line 1)

Address (line 2)

Address (line 3)

City

State/Country

Zip Code

☐ If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.)

Application Number(s) or Patent Number(s)

☒ Mark if additional numbers attached

Enter either the Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the same property).

Patent Application Number(s)

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

Patent Number(s)

5417220	5311872	5357970
5309908	D-356296	5704362
5447163	5505207	5480611
5518000	5724981	5579776
5577508	5590662	5606977

UNITED STATES PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT ("Assignment") is made and entered into as of this 22 day of October, 1998, ("Effective Date"), by and between Ethicon, Inc., a New Jersey, USA corporation, with its principal office at U.S. Route #22, Somerville, New Jersey 08876, USA ("Assignor"), and Critikon Company, L.L.C., a Delaware limited liability company, with its principal office c/o Liberty Partners, 4110 George Road, Tampa, Florida 33631, USA ("Assignee").

WHEREAS, Assignor and Assignee are parties to that certain Asset Purchase Agreement dated as of September 9, 1998 ("Purchase Agreement"), pursuant to which Assignor has agreed to sell and Assignee has agreed to purchase the assets, properties and rights pertaining to the Transferred Business as defined in the Purchase Agreement;

WHEREAS, Assignor, owns the entire right, title and interest in, to and under those United States patents and patent applications identified and set forth on Schedules A and B respectively, and the foreign patents and patent applications identified and set forth on Schedule C (collectively the "Patents"); and

WHEREAS, Assignee wishes to acquire and Assignor wishes to assign all right, title and interest in and to the Patents.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor agrees and does hereby sell, assign, transfer and set over to Assignee, the entire right, title and interest in and to the Patents, for the United States and for all foreign countries, including any continuations, divisions, continuations-in-part, reissues, reexaminations, extensions or foreign equivalents thereof, and

including the subject matter of all claims which may be obtained therefrom for its own use and enjoyment, and for the use and enjoyment of its successors, assigns or other legal representatives, as fully and entirely as the same would have been held and enjoyed by Assignor if this Assignment and sale had not been made; together with all income, royalties, damages or payments due or payable as of the Effective Date or thereafter, including, without limitation, all claims for damages by reason of past, present or future infringement or other unauthorized use of the Patents, with the right to sue for, and collect the same for its own use and enjoyment, and for the use and enjoyment of its successors, assigns, or other legal representatives.

Assignor authorizes and requests the Commissioner of Patents and Trademarks to record Assignee as owner of the Patents, including any continuations, divisions, continuations-in-part, reissues, reexaminations or extensions thereof, and to issue any and all letters patent of the United States thereon to Assignee, as assignee of the entire right, title and interest in, to and under the same, for the sole use and enjoyment of Assignee, its successors, assigns or other legal representatives.

Assignor shall provide Assignee, its successors, assigns or other legal representatives, cooperation and assistance at Assignee's request and expense (including the execution and delivery of any and all affidavits, declarations, oaths, exhibits, assignments, powers of attorney or other documentation as may be reasonably required): (1) in the preparation and prosecution of any applications covering the inventions assigned herein; (2) in the prosecution or defense of any interference, opposition, reexamination, reissue, infringement or other proceedings that may arise in connection with any of the patent rights assigned herein, including, but not limited to, testifying as to any facts relating to the patent rights assigned herein and this Assignment; (3) in obtaining any additional patent protection that Assignee may deem

appropriate which may be secured under the laws now or hereafter in effect in the United States or any other country; and (4) in the implementation or perfection of this Assignment.

* * * * *

IN TESTIMONY WHEREOF, the Assignor and Assignee have caused this Assignment to be signed and executed by the undersigned officers thereunto duly authorized this 22nd day of October, 1998.

ETHICON, INC.

By: [Signature]

Name: JOSEPH F. SHIRTZ

Title: ASSISTANT SECRETARY

CRITIKON COMPANY, L.L.C.

By: [Signature]

Name: Robert B. Stockman

Title: VP

STATE OF NEW JERSEY)
) SS.
COUNTY OF MIDDLESEX)

On this 22nd day of October, 1998, there appeared before me Joseph F. Shirtz, personally known to me, who acknowledged that he signed the foregoing Assignment as his voluntary act and deed on behalf and with full authority of Ethicon, Inc..

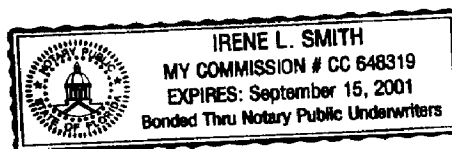
[Signature]
Notary Public

STATE OF Florida)
) SS.
COUNTY OF Hillsborough)

[Signature]
Notary Public

On this 23 day of October, 1998, there appeared before me Robert B. Stockman personally known to me, who acknowledged that he signed the foregoing Assignment as his voluntary act and deed on behalf and with full authority of Critikon Company, L.L.C.

[Signature]
Notary Public



SCHEDULE A

ETHICON, INC.

U. S. PATENT REGISTRATIONS

U.S. PATENT REGISTRATIONS

TITLE	PATENT NO.	ISSUE DATE
Utomatic mean blood pressure reading device	4349034	09/14/82
Magnetically coupled isolation interface circuit	4338951	07/13/82
Automatic mean blood pressure reading device	4360029	11/23/82
Pulmonary monitor	4413632	11/08/83
Support and anchoring mechanism for membranes in selectively responsive field effect devices	4456522	06/26/84
Method and apparatus for encapsulation of chemically sensitive field effect device	4449011	05/15/84
Adaptive incremental blood pressure monitor	4461266	07/24/84
System for encapsulation of semiconductor chips devices	4393130	07/12/83
Pneumotachograph with pitot-like tubes	4403514	09/13/83
AC mode operation of Chemfet devices	4488556	12/18/84
Arm simulator for an oscillometric blood pressure monitor	4464123	08/07/84

TITLE	PATENT NO.	ISSUE DATE
Moisture detector for respiratory monitoring systems	4546778	10/15/85
Support and anchoring mechanism for membranes in selectively responsive field effect devices	4486292	12/04/84
Automatic identification of cuff size in automated blood pressure monitors	4501280	02/26/85
Detection of blood pressure complexes in automated vital signs monitors	4546775	10/15/85
Blood pressure monitor	D-287052	12/02/86
Oxygen sensor for rapid blood gas analysis	4533456	08/06/85
Improve method of automated blood pressure detection	4543962	10/01/85
Portable electronic blood pressure monitor	D-297260	08/16/88
Improved sphygmomanometric cuff pressurizing system	4627440	12/09/86
Improved automated diastolic blood pressure monitor with data enhancement	4638810	01/27/87
Communications protocol for distributed station network	4807223	02/21/89
Pulse oximeter sensor control system	4848901	07/18/89
Improved automated systolic blood pressure monitor with data enhancement	5170795	12/15/92
Improved automated mean arterial blood pressure monitor with data enhancement	4754761	07/05/88
Oscillometric blood pressure monitor employing non-uniform decrementing steps	5052397	10/01/91

TITLE	PATENT NO.	ISSUE DATE
A housing for an automated blood pressure and other vital signs monitoring device	D-304233	10/24/89
Pulse oximeter sensor	4825879	05/02/89
Pulse oximetry system	4807631	02/28/89
Finger sensor for pulse oximetry system	4825872	05/02/89
Neuroxymeter sensor	5024226	06/18/91
Single hand notebook	4988229	01/29/91
Peripheral vascular analytical instruments	5103833	04/14/92
Neuroxymeter sensor	5127407	07/07/92
Pressure monitor console	D-340769	10/26/93
Patient monitoring unit and care station	5187641	02/16/93
A method of producing an audible alarm in a blood pressure and pulse oximeter monitor	5253645	10/19/93
Combined patient monitor and care station	D-343683	01/25/94
Peripheral arterial monitoring instrument	5218968	06/15/93
Peripheral arterial monitoring instruments	5417220	05/23/95
Peripheral arterial monitoring instrument	5311872	05/17/94
Method for determining dominant heart rates	5357970	10/25/94
A method of producing an audible alarm in a blood pressure and pulse oximeter monitor	5309908	05/10/94
Electrical adaptor and the like	D-356296	03/14/95

TITLE	PATENT NO.	ISSUE DATE
Method for oscillometric blood pressure determination employing curve fitting	5704362	01/06/98
Peripheral arterial monitoring instruments	5447163	09/05/95
Character distinguishing sized blood pressure cuff system	5505207	04/09/96
Carbon dioxide detector	5480611	01/02/96
Oscillometric blood pressure monitor employing deflation periods of alternating durations	5518000	05/21/96
Peripheral arterial monitoring instruments	5724981	03/10/98
Oscillometric blood pressure monitor with enhanced cuff pressure control	5579776	12/03/96
Determination of oscillometric blood pressure by linear approximation	5577508	11/26/96
Detection of oscillometric blood pressure complexes using correlation	5590662	01/07/97
Oscillometric blood pressure monitor which automatically determines when to take blood pressure measurements	5606977	03/04/97
Oscillometric blood pressure monitor which acquires blood pressure signals from composite arterial pulse signal	5680870	10/28/97
Pacemaker pulse detection and artifact rejection	5660184	08/26/97
Calibration verification device	5616823	04/01/97
Clock frequency coordination for electromagnetic compatibility	5706256	01/06/98
Surface sensor device	5731582	03/24/98

TITLE	PATENT NO.	ISSUE DATE
Method of quantitatively determining one or more characteristics of a substance	5661302	08/26/97
Failsafe supervisor system for a patient monitor	5746203	05/05/98
Mitigation of respiratory artifact in blood pressure signal using line segment smoothing	5752919	05/19/98
Detection of oscillometric blood pressure complexes using correlation	5651370	07/29/97
Pulmonary monitor	4546770	10/15/85
Polarographic oxygen sensor	4466879	08/21/84
Automatic lead switching for ECG monitor	5788644	08/04/98

SCHEDULE B

ETHICON, INC.

U. S. PATENT APPLICATIONS

TITLE	APP. NO.	DATE
Electronic module blind mate connection system	08/726430	10/04/96
Modular patient monitor	29/063736	12/13/96
Patient monitor with articulating display	29/063708	12/13/96
NIBP trigger in response to detected heart rate variability	08/966719	11/10/97
Reconfigurable user interface for modular patient monitor	09/034800	03/04/98
Apparatus and method for non-invasive measurement of a substance	08/933520	09/18/97
NIBP playback device	08/445273	05/19/95
Apparatus for non-invasive measurement within a human or animal body	08/681590	07/29/96
Method for determining minimum wait time between blood pressure determinations	09/021869	02/11/98
System and method for breath stimulation	09/002230	12/31/97
Non-invasive blood pressure sling	09/001181	12/30/97
Electrically isolated patient electronics powered by light	09/034112	03/03/98

NON-INVASIVE MEDICAL
SENSOR

08/894,065

11-17-97

AL

SCHEDULE C**ETHICON, INC.****FOREIGN PATENTS**

TITLE	REG. NO.	DATE
AUSTRIA		
Improved automated mean arterial blood pressure monitor with data enhancement	AT0208521	11/13/91
Improved automated systolic blood pressure monitor with data enhancement	AT0207806	06/19/96
Improved sphygmomanometric cuff pressurizing system	AT0207805	09/09/92
Automatic identification of cuff size in automated blood pressure monitors	AT0122123	12/27/90
Support and anchoring mechanism for membranes in selectively responsive field effect devices	AT0075410	01/14/87
Improved automated diastolic blood pressure monitor with data enhancement	AT0207807	11/30/94
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	AT0208520	04/15/92
Neuroxymeter sensor	AT0651968	01/29/97

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
AUSTRALIA		
Communications protocol for distributed station network	604980	04/24/91
Peripheral arterial monitoring instruments	672488	01/22/97
Interchangeable pneumatic connector for blood pressure monitors	669172	09/17/96
Character distinguishing sized blood pressure cuff system	689828	07/23/98
Pulse oximeter sensor	606751	07/03/91
Support and anchoring mechanism for membranes in selectively responsive field effect devices	555820	03/11/87
Method for determining dominant heart rates	669971	10/14/96
Improved automated diastolic blood pressure monitor with data enhancement	615263	01/24/92
Improved automated diastolic blood pressure monitor with data enhancement	623116	08/31/92
Automatic identification of cuff size in automated blood pressure monitors	566139	03/14/88
Pulse oximeter sensor control system	615952	02/07/92
Peripheral vascular analytical instruments	649003	08/30/94
Improved automated diastolic blood pressure monitor with data enhancement	592352	04/26/90
Improved sphygmomanometric cuff pressurizing system	583637	08/25/89

TITLE	REG. NO.	DATE
AUSTRALIA		
Pulse oximetry system	602253	02/05/91
A housing for an automated blood pressure and other vital signs monitoring device	104365	07/13/89
Oscillometric blood pressure monitor which automatically determines when to take blood pressure measurements	689985	07/23/98

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
AUSTRALIA		
Method for oscillometric blood pressure determination employing curve fitting	70252/94	08/12/94
NIBP playback device	52297/96	05/15/96
Pacemaker pulse detection and artifact rejection	52259/96	05/13/96
Oscillometric blood pressure monitor with enhanced cuff pressure control	40889/96	01/09/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
BELGIUM		
Improved automated systolic blood pressure monitor with data enhancement	BE0207806	06/19/96
Improved automated mean arterial blood pressure monitor with data enhancement	BE0208521	11/13/91
Support and anchoring mechanism for membranes in selectively responsive field effect devices	BE0075410	01/14/87
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	BE0208520	04/15/92
Improved automated diastolic blood pressure monitor with data enhancement	BE0207807	11/30/94
Neuroxymeter sensor	BE0651968	01/29/97
Automatic identification of cuff size in automated blood pressure monitors	BE0122123	12/27/90
Improved sphygmomanometric cuff pressurizing system	BE0207805	09/09/92

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
BRAZIL		
Improved automated mean arterial blood pressure monitor with data enhancement	P18603140-6	03/29/94
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	P18603142-2	04/26/94
Improved sphygmomanometric cuff pressurizing system	P18603129-5	11/30/93
Pulse oximeter sensor	P18805229-0	01/31/95

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
CANADA		
Detection of blood pressure complexes in automated vital signs monitors	1235466	04/19/88
Automated blood pressure measurement during physical exercise	1163327	03/06/84
Finger sensor for pulse oximetry system	1334209	01/31/95
Pneumotachograph with pitot-like tubes	1139965	01/25/83
Pulse oximetry system	1326267	01/18/94
Pneumotachograph with pitot-like tubes	1156494	11/08/83
Pulse oximeter sensor	1326265	01/18/94
Improve method of automated blood pressure detection	1240175	08/09/88
Automatic identification of cuff size in automated blood pressure monitors	1209241	08/05/86
A housing for an automated blood pressure and other vital signs monitoring device	61489	09/06/88
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	1278704	01/08/91
Improved automated mean arterial blood pressure monitor with data enhancement	1263186	11/21/89
Improved automated systolic blood pressure monitor with data enhancement	1270565	06/19/90

TITLE	REG. NO.	DATE
CANADA		
Support and anchoring mechanism for membranes in selectively responsive field effect devices	1190328	07/09/85
System for measurement of oxygen uptake and respiratory quotient	1108039	09/01/81
Disposable polarographic gas sensor system	1141434	02/15/83
Improved sphygmomanometric cuff pressurizing system	1279774	02/05/91
Improved automated diastolic blood pressure monitor with data enhancement	1263185	11/21/89
Pulse oximeter sensor control system	1326266	01/18/94
Electrochemical sensor with temperature compensation means	1142227	03/01/83
Communications protocol for distributed station network	1322391	09/21/93

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
CANADA		
Peripheral vascular analytical instruments	2032564	12/18/90
Patient monitoring unit and care station	2081194	10/22/92
Interchangeable pneumatic connector for blood pressure monitors	2100854	07/19/93
Peripheral arterial monitoring instruments	2122687	05/02/94
Character distinguishing sized blood pressure cuff system	2141161	01/26/95

TITLE	APP. NO.	DATE
CANADA		
Method for determining dominant heart rates	2120691	04/06/94
Neuroxymeter sensor	20233559	08/15/90
Method for oscillometric blood pressure determination employing curve fitting	2129907	08/11/94
Oscillometric blood pressure monitor employing deflation periods of alternating durations	2159428	09/28/95
Mitigation of respiratory artifact in blood pressure signal using line segment smoothing	2224831	12/15/97
Clock frequency coordination for electromagnetic compatibility	2193546	12/19/96
Oscillometric blood pressure monitor with enhanced cuff pressure control	2167010	01/11/96
Pacemaker pulse detection and artifact rejection	2176454	05/13/96
Oscillometric blood pressure monitor which automatically determines when to take blood pressure measurements	2166430	01/02/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
CHILE		
Pulse oximetry system	38022	08/23/91

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
DENMARK		
Neurooxymeter sensor	DK0651968	07/30/97

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
EPO		
Neuroxymeter sensor	0651968	01/29/97
Neuroxymeter sensor	0413588	03/06/96
Peripheral vascular analytical instruments	0434399	09/04/96
Improved automated systolic blood pressure monitor with data enhancement	0207806	06/19/96
Support and anchoring mechanism for membranes in selectively responsive field effect devices	0075410	01/14/87
Electrochemical sensor with temperature compensation means	0013611	07/13/83
Finger sensor for pulse oximetry system	0357249	07/27/94
Communications protocol for distributed station network	0312264	06/15/94
Improved sphygmomanometric cuff pressurizing system	0207805	09/09/92
Improved automated mean arterial blood pressure monitor with data enhancement	0208521	11/13/91
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	0208520	04/15/92
Automatic identification of cuff size in automated blood pressure monitors	0122123	12/27/90
Pulse oximetry system	0314331	06/16/93
Pulse oximeter sensor	0313238	09/21/94
Pulse oximeter sensor control system	0314324	09/14/94

TITLE	REG. NO.	DATE
EPO		
Automated blood pressure measurement during physical exercise	0029349	06/05/85
Improved automated diastolic blood pressure monitor with data enhancement	0207807	11/30/94

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
EPO		
Method for determining dominant heart rates	94302450.5	04/07/94
Peripheral arterial monitoring instruments	94303197.1	05/03/94
Patient monitoring unit and care station	92309746.3	10/23/92
Oscillometric blood pressure monitor which automatically determines when to take blood pressure measurements	96300035.1	01/03/96
Apparatus for non-invasive measurement within a human or animal body	96305572.8	07/30/96
Method of quantitatively determining one or more characteristics of a substance	96306179.1	08/23/96
Surface sensor device	96305571.0	07/30/96
Apparatus and method for non-invasive measurement of a substance	97307309.1	09/19/97
Automatic lead switching for ECG monitor	97307964.0	10/07/97
Surface sensor device	96305567.8	07/30/96

TITLE	APP. NO.	DATE
EPO		
Non-invasive medical sensor	96900653.5	01/24/96
NIBP playback device	96303506.8	05/17/96
Mitigation of respiratory artifact in blood pressure signal using line segment smoothing	97310136.3	12/16/97
Oscillometric blood pressure monitor with enhanced cuff pressure control	96300241.5	01/12/96
Pacemaker pulse detection and artifact rejection	96303371.7	05/14/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
FRANCE		
Improved automated diastolic blood pressure monitor with data enhancement	FR0207807	11/30/94
Improved automated mean arterial blood pressure monitor with data enhancement	FR0208521	11/13/91
Improved automated systolic blood pressure monitor with data enhancement	FR0207806	06/19/96
Support and anchoring mechanism for membranes in selectively responsive field effect devices	FR0075410	01/14/87
Improved sphygmomanometric cuff pressurizing system	FR0207805	09/09/92
Peripheral vascular analytical instruments	FR0434399	09/04/96
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	FR0208520	04/15/92
Neuroxymeter sensor	0651968	01/29/97
Automatic identification of cuff size in automated blood pressure monitors	FR0122123	12/27/90
Patient monitor with articulating display	973409	06/12/97
Modular patient monitor	973410	06/12/97

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
GERMANY		
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	P3684823.9-08	04/15/92
Improved automated systolic blood pressure monitor with data enhancement	P3650531.5-08	06/19/96
Improved automated mean arterial blood pressure monitor with data enhancement	P3682449.6-08	11/13/91
Automatic identification of cuff size in automated blood pressure monitors	P3483846.5-08	12/27/90
Improved automated diastolic blood pressure monitor with data enhancement	P3650149.2-08	11/30/94
Neuroxymeter sensor	69029869.2-08	01/29/97
Improved sphygmomanometric cuff pressurizing system	P3686678.4-08	09/09/92
Peripheral vascular analytical instruments	69028380.6-08	09/04/96
Patient monitor with articulating display	M9705459.3	09/24/97

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
GERMANY		
Character distinguishing sized blood pressure cuff system	19502573.3	01/27/95

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
GREAT BRITAIN		
Pulse oximeter sensor	GB0313238	09/21/94
Improved automated mean arterial blood pressure monitor with data enhancement	GB0208521	11/13/91
Automatic identification of cuff size in automated blood pressure monitors	GB0122123	12/27/90
Improved sphygmomanometric cuff pressurizing system	GB0207805	09/09/92
Improved automated systolic blood pressure monitor with data enhancement	GB0207806	06/19/96
Improved automated diastolic blood pressure monitor with data enhancement	GB0207807	11/30/94
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	GB0208520	04/15/92
Peripheral vascular analytical instruments	GB0434399	09/04/96
Support and anchoring mechanism for membranes in selectively responsive field effect devices	GB0075410	01/14/87
Pulse oximetry system	GB0314331	06/16/93
Neuroxymeter sensor	GB0651968	01/29/97
Patient monitor with articulating display	2066341	01/26/98

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
GREAT BRITAIN		
Non-invasive medical sensor	9501663.0	01/27/95
Apparatus and method for non-invasive measurement of a substance	9619693.6	09/20/96
Method of quantitatively determining one or more characteristics of a substance	9517366.2	08/24/95
Apparatus for non-invasive measurement within a human or animal body	9515648.5	07/31/95
Surface sensor device	9515649.3	07/31/95
Surface sensor device	9515660.0	07/31/95

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
GREECE		
Pulse oximeter sensor	1000789	08/28/92
Pulse oximeter sensor control system	1000788	08/28/92
Pulse oximetry system	1000790	08/28/92
Neuroxymeter sensor	1001029	12/11/92
Method for determining dominant heart rates	1002375	06/09/96
Finger sensor for pulse oximetry system	1000781	08/24/92
Communications protocol for distributed station network	1000361	09/12/91

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
HONG KONG		
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	440/1993	05/06/93

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
ITALY		
Communications protocol for distributed station network	IT0312264	06/15/94
Pulse oximetry system	IT0314331	06/16/93
Peripheral vascular analytical instruments	IT0434399	09/04/96
Improved automated mean arterial blood pressure monitor with data enhancement	IT0208521	11/13/91
Improved sphygmomanometric cuff pressurizing system	IT0207805	09/09/92
Support and anchoring mechanism for membranes in selectively responsive field effect devices	IT0075410	01/14/87
Finger sensor for pulse oximetry system	IT0357249	07/27/94
Pulse oximeter sensor control system	IT0314324	09/14/94
Pulse oximeter sensor	IT0313238	09/21/94
A housing for an automated blood pressure and other vital signs monitoring device	52719	10/13/89
Improved automated diastolic blood pressure monitor with data enhancement	IT0207807	11/30/94
Automatic identification of cuff size in automated blood pressure monitors	IT0122123	12/27/90
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	IT0208520	04/15/92
Improved automated systolic blood pressure monitor with data enhancement	IT0207806	06/19/96

TITLE	REG. NO.	DATE
ITALY		
Neuroxymeter sensor	IT0651968	01/29/97
Neuroxymeter sensor	IT0413588	03/06/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
JAPAN		
A housing for an automated blood pressure and other vital signs monitoring device	795274	06/14/90
Pulse oximeter sensor	2682662	08/08/97
Improved sphygmomanometric cuff pressurizing system	1821662	02/10/94
Pulse oximetry system	2628717	04/18/97
Improved automated diastolic blood pressure monitor with data enhancement	1843515	05/12/94
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	1843516	05/12/94
Support and anchoring mechanism for membranes in selectively responsive field effect devices	1634749	01/20/92
Method and apparatus for encapsulation of chemically sensitive field effect device	1855862	07/07/94
Automatic identification of cuff size in automated blood pressure monitors	1581581	10/11/90
System for encapsulation of semiconductor chips devices	1662001	05/19/92

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
JAPAN		
Method for determining dominant heart rates	92839/94	
Neuroxymeter sensor	218009/90	
Peripheral vascular analytical instruments	411901/90	
Clock frequency coordination for electromagnetic compatibility	254670/88	
Character distinguishing sized blood pressure cuff system	28905/95	
Communication protocol for distributed station network	3285/98	
Interchangeable pneumatic connector for blood pressure monitors	199994/93	
Patient monitoring unit and care station	307861/92	
Electrochemical sensor with temperature compensation means	164	
Oscillometric blood pressure monitor which automatically determines when to take blood pressure measurements	24539/96	
Oscillometric blood pressure monitor with enhanced cuff pressure control	20641/96	
Pacemaker pulse detection and artifact rejection	142352/96	
Non-invasive medical sensor	522718/96	
Apparatus and method for non-invasive measurement of a substance	271914/97	
Automatic lead switching for ECG monitor	290529/97	
Method of quantitatively determining one or more characteristics of a substance	240013/96	

TITLE	APP. NO.	DATE
JAPAN		
Failsafe supervisor system for a patient monitor	278003/97	
Apparatus for non-invasive measurement within a human or animal body	215907/96	
Surface sensor device	215906/96	
Oscillometric blood pressure monitor employing deflation periods of alternating durations	275103/95	
NIBP playback device	146490/96	
Surface sensor device	215908/96	07/30/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
KOREA		
Pulse oximeter sensor control system	109297	12/16/96
Pulse oximetry system	109295	12/16/96
Pulse oximeter sensor	109296	12/16/96
Communications protocol for distributed station network	112104	02/17/97

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
KOREA		
Neuroxymeter sensor	90-12643	

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
LUXEMBORG		
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	LU0208520	04/15/92
Improved automated systolic blood pressure monitor with data enhancement	LU0207806	06/19/96
Neuroxymeter sensor	LU0651968	01/29/97
Improved sphygmomanometric cuff pressurizing system	LU0207805	09/09/92
Automatic identification of cuff size in automated blood pressure monitors	LU0122123	12/27/90
Improved automated diastolic blood pressure monitor with data enhancement	LU0207807	11/30/94
Improved automated mean arterial blood pressure monitor with data enhancement	LU0208521	11/13/91

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
MEXICO		
Improved automated mean arterial blood pressure monitor with data enhancement	165538	11/19/92
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	168538	05/31/93
Improved automated systolic blood pressure monitor with data enhancement	171712	11/11/93
Improved sphygmomanometric cuff pressurizing system	165075	10/21/92

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
MONACO		
Carbon dioxide detector	0620918	07/30/97

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
NETHERLANDS		
Neuroxymeter sensor	NL0651968	01/29/97
Neuroxymeter sensor	NL0413588	03/06/96
Improved automated diastolic blood pressure monitor with data enhancement	NL0207807	11/30/94
Automatic identification of cuff size in automated blood pressure monitors	NL0122123	12/27/90
Improved automated systolic blood pressure monitor with data enhancement	NL0207806	06/19/96
Support and anchoring mechanism for membranes in selectively responsive field effect devices	NL0075410	01/14/87
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	NL0208520	04/15/92
Improved automated mean arterial blood pressure monitor with data enhancement	NL0208521	11/13/91
Improved sphygmomanometric cuff pressurizing system	NL0207805	09/09/92
	NL0312264	06/15/94
	NL0313238	09/21/94
	NL0314324	09/14/94
	NL0357249	07/27/94
	NL0314331	06/16/93
	NL0413588	0/06/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
NEW ZEALAND		
Pulse oximetry system	226517	11/08/91
Pulse oximeter sensor	226501	10/19/90
Pulse oximeter sensor control system	235287	01/15/92
Pulse oximeter sensor control system	226500	12/10/91

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
PATENT COOPERATION TREATY		
Carbon dioxide detector	GB93/00049	01/11/93
Hot wire anemometer	GB91/02191	12/10/91
Non-invasive medical sensor	GB96/00140	01/24/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
PEOPLES REPUBLIC OF CHINA		
Communications protocol for distributed station network	15676	09/16/92

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
PHILIPPINES		
Pulse oximeter sensor control system	25268	03/27/91
Pulse oximeter sensor	26006	01/29/92
Pulse oximetry system	25635	08/21/91

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
PORTUGAL		
Pulse oximeter sensor	88705	07/01/93
Pulse oximeter sensor control system	88704	10/15/93
Communications protocol for distributed station network	88702	09/01/93
Pulse oximetry system	88724	06/21/93
A housing for an automated blood pressure and other vital signs monitoring device	19929	04/04/90

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
SINGAPORE		
Pulse oximetry system	885/93	08/18/93
Pulse oximeter sensor	9491781.2	01/30/95
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	9290954.8	11/12/92

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
SINGAPORE		
Peripheral arterial monitoring instruments	9605787-2	02/23/96
Peripheral vascular analytical instruments	9605414-3	02/23/96

PATENT REGISTRATIONS

TITLE	REG. NO.	ISSUE DATE
SOUTH AFRICA		
Pulse oximeter sensor	88/7555	06/27/90
Improved automated mean arterial blood pressure monitor with data enhancement	86/5001	02/24/88
Improved sphygmomanometric cuff pressurizing system	86/5003	02/24/88
A housing for an automated blood pressure and other vital signs monitoring device	87/0829	01/25/88
Method for oscillometric blood pressure determination employing curve fitting	94/6101	04/24/96
Peripheral arterial monitoring instruments	94/3014	01/31/96
Pulse oximetry system	88/7580	06/27/90
Peripheral vascular analytical instruments	90/10238	08/26/92
Method for determining dominant heart rates	94/2408	12/27/95
Pulse oximeter sensor control system	88/7554	06/27/90
Improved automated diastolic blood pressure monitor with data enhancement	86/5007	02/24/88
Character distinguishing sized blood pressure cuff system	95/0676	09/25/96
Interchangeable pneumatic connector for blood pressure monitors	93/5245	03/29/95
Communications protocol for distributed station network	88/7553	06/27/90

TITLE	REG. NO.	ISSUE DATE
SOUTH AFRICA		
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	86/5008	02/24/88
Improved automated systolic blood pressure monitor with data enhancement	86/5004	02/24/88
Oscillometric blood pressure monitor which automatically determines when to take blood pressure measurements	96/0035	09/23/97
Oscillometric blood pressure monitor with enhanced cuff pressure control	96/0263	09/23/97

PATENT REGISTRATIONS

TITLE	REG. NO.	ISSUE DATE
SPAIN		
Finger sensor for pulse oximetry system	ES0357249	07/27/94
Pulse oximeter sensor	ES0313238	09/21/94
Pulse oximetry system	ES0314331	06/16/93
A housing for an automated blood pressure and other vital signs monitoring device	114240	05/31/88
Peripheral vascular analytical instruments	ES0434399	09/04/96
Pulse oximeter sensor control system	ES0314324	09/14/94
Neuroxymeter sensor	ES0651968	01/29/97
Neuroxymeter sensor	ES0413588	03/06/96

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
SWEDEN		
Support and anchoring mechanism for membranes in selectively responsive field effect devices	0075410	01/14/87
Neuroxymeter sensor	0651968	01/29/97
Improved automated systolic blood pressure monitor with data enhancement	0207806	06/19/96
Peripheral vascular analytical instruments	0434399	09/04/96
Improved sphygmomanometric cuff pressurizing system	0207805	09/09/92
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	0208520	04/15/92
Improved automated mean arterial blood pressure monitor with data enhancement	0208521	11/13/91
Automatic identification of cuff size in automated blood pressure monitors	0122123	12/27/90
Improved automated diastolic blood pressure monitor with data enhancement	0207807	11/30/94

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
SWITZERLAND		
Improved sphygmomanometric cuff pressurizing system	CH0207805	09/09/92
Pulse oximeter sensor control system	CH0314324	09/14/94
Improved automated mean arterial blood pressure monitor with data enhancement	CH0208521	11/13/91
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	CH0208520	04/15/92
Support and anchoring mechanism for membranes in selectively responsive field effect devices	CH0075410	01/14/87
Neuroxymeter sensor	CH0651968	01/29/97
Improved automated diastolic blood pressure monitor with data enhancement	CH0207807	11/30/94
Improved automated systolic blood pressure monitor with data enhancement	CH0207806	06/19/96
Pulse oximetry system	CH0314331	06/16/93
Automatic identification of cuff size in automated blood pressure monitors	CH0122123	12/27/90

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
TAIWAN		
Communications protocol for distributed station network	36265	02/27/92
Neuroxymeter sensor	54580	06/09/92
Pulse oximetry system	53995	05/13/92
Neuroxymeter sensor	54859	06/18/92

PATENT REGISTRATIONS

TITLE	REG. NO.	DATE
VENEZUELA		
Improved sphygmomanometric cuff pressurizing system	49669	01/31/94
Communications protocol for distributed station network		06/05/95
A housing for an automated blood pressure and other vital signs monitoring device	3460	06/23/94
Improved automated systolic blood pressure monitor with data enhancement	49670	01/31/94
Improved automated diastolic blood pressure monitor with data enhancement	49671	01/31/94
Oscillometric blood pressure monitor employing non-uniform pressure decrementing steps	50.117	03/25/94

PATENT APPLICATIONS

TITLE	APP. NO.	DATE
VENEZUELA		
Method for determining dominant heart rates	0612-94	05/04/94
Pulse oximetry system	1574/88	10/07/88
Oscillometric blood pressure monitor employing deflation periods of alternating durations	1732-95	09/28/95