

11-12-03

11-12-2003

FORM PTO-1594



U.S. DEPARTMENT OF COMMERCE
TRADEMARKS ONLY

To the Honorable Commissioner

102597777

Original documents or copy thereof.

<p>1. Name of conveying party(ies): CARDIODYNAMICS INTERNATIONAL CORPORATION</p> <p>Individual(s) citizenship: Association: General Partnership: Limited Partnership: Corporation - State: CALIFORNIA Other:</p> <p>Additional name(s) of conveying party(ies) attached? [] Yes [X] No</p> <p>3. Nature of Conveyance: [] Assignment [] Merger [X] Security Agreement [] Change of Name [] Other</p> <p>Execution Date: September 14, 2003</p>	<p>2. Name and address of receiving party(ies): Name: COMERICA BANK, successor by merger to Comerica Bank-California Address: 9920 S. LA CIENEGA BLVD., SUITE 1401 City: INGLEWOOD State: CA Zip: 90301</p> <p>Individual(s) citizenship: Association: General Partnership: Limited Partnership: Corporation - State: Other: a Michigan banking corporation</p> <p>If assignee is not domiciled in the United States, a domestic representative designation is attached: [] Yes [] No (Designations must be a separate document from assignment) Additional name(s) & address(es) attached? [] Yes [x] No</p>
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<p>4. Application number(s) or trademark number(s): A. Trademark Application No.(s) 78/288,236</p>	<p>B. Trademark Registration No.(s) 2,598,941 2,324,026 2,435,659 2,419,598 2,327,215 2,547,569 2,238,595</p>
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<p>5. Name and address of party to whom correspondence concerning document should be mailed: Name: Erin O'Brien Internal Address: GRAY CARY WARE & FREIDENRICH 4365 Executive Drive, Suite 1100 San Diego, California 92121-2133</p>	<p>6 Total number of applications and registrations involved: 8</p> <p>7. Total fee (37 CFR 3.41) \$215.00 [X] Enclosed [] Authorized to be charged to deposit account</p> <p>8. Deposit account number: (Attach duplicate copy of this page if paying by deposit account)</p>
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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.

Erin O'Brien
Name of Person Signing

Erin O'Brien
Signature

November 11, 2003
Date

Total number of pages comprising cover sheet: [6]

Mail Documents to be recorded with required cover sheet information to:

U.S. Patent and Trademark Office, Office of Public Records
1213 Jefferson Davis Highway, 3rd Floor
Arlington, VA 22202

11/12/2003 ECDOPER 00000279 78288236

01 FC:8521 40.00 DP
02 FC:8522 175.00 DP

Gray Cary\GT\6373688.1
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TRADEMARK
REEL: 002861 FRAME: 0219

AMENDED AND RESTATED
INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Amended and Restated Intellectual Property Security Agreement is entered into as of September 14, 2003, by and between COMERICA BANK, successor by merger to Comerica Bank-California ("Bank") and CARDIODYNAMICS INTERNATIONAL CORPORATION, a California corporation ("Grantor").

RECITALS

A. Bank has agreed to make certain advances of money and to extend certain financial accommodations to Grantor (the "Loans") in the amounts and manner set forth in that certain Amended and Restated Loan and Security Agreement by and between Bank and Grantor dated as of even date herewith, as amended from time to time (as the same may be amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement). Bank is willing to enter into the Loan Agreement, but only upon the condition, among others, that Grantor shall grant to Secured Party a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.

B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement and all other agreements now existing or hereafter arising between Grantor and Bank, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement and under any other agreement now existing or hereafter arising between Grantor and Bank, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property Collateral (including without limitation those Copyrights, Patents and Trademarks listed on Schedules A, B and C hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof.

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

Grantor represents and warrants that Exhibits A, B, and C attached hereto set forth any and all intellectual property rights in connection to which Grantor has registered or filed an application with either the United States Patent and Trademark Office or the United States Copyright Office, as applicable.

This Agreement may be executed in two or more counterparts, each of which shall be deemed an original but all of which together shall constitute the same instrument.

IN WITNESS WHEREOF, the parties have caused this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.


GRANTOR:

CARDIODYNAMICS INTERNATIONAL CORPORATION

Address of Grantor:

6175 Nancy Ridge Road, Suite 300
San Diego, CA 92121

Attn: Chief Financial Officer

By: 
Title: CEO

BANK:

COMERICA BANK, successor by merger to
Comerica Bank-California

Address of Bank:

9920 S. La Cienega Blvd., Suite 1401
Inglewood, CA 90301

Attn: Manager

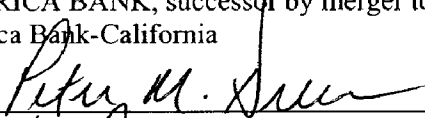
By: 
Title: Vice President - Technology & Life Sciences

EXHIBIT A

Copyrights

Title

Registration Number

Registration Date



EXHIBIT B

Patents

<u>Description</u>	<u>Registration/Serial Number</u>	<u>Registration/Application Date</u>
Apparatus and method for determining cardiac output in a living subject	6,602,201	08/05/03
Electrode for use on a living subject with removable protective electrode carrier	D475,138	05/27/03
Method and apparatus for hemodynamic assessment including fiducial point detection	6,561,986	05/13/03
Electrode for use on a living subject	D471,281	03/04/03
Electrode for use on a living subject	D468,433	01/07/03
Non-invasive real time blood pressure measurement system*	4,343,314	08/10/82
System for therapeutic management of hemodynamic state of patient*	5,103,828	04/14/92
Noninvasive continuous cardiac output monitor*	4,450,527	05/22/84
Espophageal electrode array for electrical bioimpedance measurement*	4,836,214	06/06/89
Diastolic clamp for bioimpedance measuring device*	4,870,578	09/26/89
Noninvasive continuous mean arterial blood pressure monitor*	4,807,638	02/28/89

*subject of Bank's recorded security interest at the US Patent and Trademark Office

A handwritten signature in black ink is written over a circular stamp. The stamp contains the text "Patent Office" and "U.S. Patent and Trademark Office" around the perimeter.

EXHIBIT C

Trademarks

<u>Description</u>	<u>Registration/Application Number</u>	<u>Registration/Application Date</u>
The sixth vital sign	78/288,236	08/15/03
Bioztect	2,598,941	07/23/02
Z care	2,324,026	02/29/00
Z marc	2,435,659	03/13/01
Bioz.sim	2,419,598	01/09/01
Bioz.com	2,327,215	03/07/00
Disq	2,547,569	03/12/02
Bioz	2,238,595	04/13/99

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RECORDED: 11/12/2003

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