Electronic Version v1.1 Stylesheet Version v1.1

 SUBMISSION TYPE:
 NEW ASSIGNMENT

 NATURE OF CONVEYANCE:
 SECURITY AGREEMENT

CONVEYING PARTY DATA

Name	Execution Date
Cardiodynamics International Corporation	03/22/2004

RECEIVING PARTY DATA

Name:	Comerica Bank
Street Address:	9920 S. La Cienega Blvd.
Internal Address:	Suite 1401
City:	Inglewood
State/Country:	CALIFORNIA
Postal Code:	90301

PROPERTY NUMBERS Total: 10

Property Type	Number
Patent Number:	6602201
Patent Number:	D475138
Patent Number:	6561986
Patent Number:	D471281
Patent Number:	D468433
Patent Number:	6636754
Application Number:	10616126
Application Number:	10329129
Application Number:	10393544
Application Number:	10453820

CORRESPONDENCE DATA

Fax Number: (714)513-5130

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 714-513-5100

PATENT REEL: 015083 FRAME: 0194

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Email: pfowlie@sheppardmullin.com Correspondent Name: Pamela Fowlie c/o Sheppard Mullin Address Line 1: 650 Town Center Drive Address Line 2: Fourth Floor Costa Mesa, CALIFORNIA 92626 Address Line 4: NAME OF SUBMITTER: Pamela Fowlie **Total Attachments: 6** source=IPSA_1#page1.tif source=IPSA_2#page1.tif source=IPSA_3#page1.tif source=IPSA_4#page1.tif source=IPSA_5#page1.tif

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PATENT REEL: 015083 FRAME: 0195

SECOND AMENDED AND RESTATED INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Second Amended and Restated Intellectual Property Security Agreement is entered into as of March 22, 2004 by and between COMERICA BANK ("Bank") and CARDIODYNAMICS INTERNATIONAL CORPORATION, a California corporation ("Grantor").

RECITALS

- 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 Second Amended and Restated Loan and Security Agreement by and between Bank and Grantor dated of even date herewith (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 make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks and Patents to secure the obligations of Grantor under the Loan Agreement.
- 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.

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> PATENT REEL: 015083 FRAME: 0196

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:

Α.	Ad.	ress	αf	G_{i}	mm	tor
Δ	1111	Cas	ω	VJ.	411	w.

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

Attn: Chief Executive Officer

CARDIODYNAMICS INTERNATIONAL

CORPORATION

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BANK:

Address of Bank:

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

Attn: Manager

COMERICA BANK

n /

Title: Vice Trendent

EXHIBIT A

Copyrights

	Registration Number	Registration Date
Description		
Bioztect sensor package	VAu-594-348	09/29/03
Heart failure & hypertension IC5 treatment algorithms	VA-1-204-887	06/23/03

EXHIBIT B

Patents

	Registration/ Application <u>Number</u>	Registration/ Application <u>Date</u>
<u>Description</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
Espohageal 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
Apparatus and method for determining cardiac output in a living subject	6,636,754	10/21/03
Apparatus and method for determining cardiac output in a living subject	10/616,126	07/08/03
Method and apparatus for Waveform Assessment	10/329,129	12/24/02

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Apparatus and method for defibrillation in a living subject	10/393,544	03/19/03
Physiologic stimulator tuning apparatus and method	10/453,820	06/02/03

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EXHIBIT C

Trademarks

Description	Registration/ Application <u>Number</u>	Registration/ Application <u>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: 09/07/2004

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PATENT REEL: 015083 FRAME: 0201