

TRADEMARK ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT		
NATURE OF CONVEYANCE:	SECURITY INTEREST		
CONVEYING PARTY DATA			
Name	Formerly	Execution Date	Entity Type
World Heart Corporation		12/11/2007	CORPORATION: DELAWARE
RECEIVING PARTY DATA			
Name:	ABIOMED, Inc.		
Street Address:	22 Cherry Hill Drive		
City:	Danvers		
State/Country:	MASSACHUSETTS		
Postal Code:	01923		
Entity Type:	CORPORATION: DELAWARE		
PROPERTY NUMBERS Total: 5			
Property Type	Number	Word Mark	
Registration Number:	1415342	NOVACOR	
Registration Number:	1424720	NOVACOR	
Registration Number:	2866950	WORLDHEART	
Registration Number:	2480212	MEDQUEST	
Registration Number:	2750753	QUESTCOAT	
CORRESPONDENCE DATA			
Fax Number:	(617)832-7000		
	<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>		
Phone:	617.832.1000		
Email:	ustrademark@foleyhoag.com		
Correspondent Name:	Charles Weinstein, Esq., Foley Hoag LLP		
Address Line 1:	155 Seaport Boulevard		
Address Line 4:	Boston, MASSACHUSETTS 02210		
ATTORNEY DOCKET NUMBER:	21524-76		

CH \$140.00 1415342

NAME OF SUBMITTER:	Linda Casey, Sr. Paralegal
Signature:	/Linda Casey/
Date:	12/20/2007

Total Attachments: 11

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INTELLECTUAL PROPERTY SECURITY AGREEMENT

THIS INTELLECTUAL PROPERTY SECURITY AGREEMENT, dated as of December 11, 2007, is made by World Heart Corporation ("**Company**"), in favor of ABIOMED, Inc. (the "**Investor**").

WITNESSETH:

WHEREAS, pursuant to the Purchase Agreement, dated as of December 11, 2007 (as amended, restated, supplemented or otherwise modified from time to time, the "**Purchase Agreement**"), among the Company, WHI and the Investor, the Investor has agreed to make a loan to the Company upon the terms and subject to the conditions set forth therein;

WHEREAS, the Company has agreed, pursuant to a Security Agreement dated as of December 11, 2007 herewith in favor of the Investor (the "**Security Agreement**"), to grant a security interest in all assets to the Investor to secure payment of the Obligations of the Company;

NOW, THEREFORE, in consideration of the premises and to induce the Investor to enter into the Purchase Agreement and to make a loan to the Company thereunder, the Company hereby agrees with the Investor as follows:

1. Defined Terms. Capitalized terms used herein without definition are used as defined in the Security Agreement.

2. Grant of Security Interest in Intellectual Property Collateral. The Company, as collateral security for the prompt and complete payment and performance when due under the terms of the Note, of the Obligations, hereby mortgages, pledges and hypothecates to the Investor and grants to the Investor a Lien on and security interest in, all of its right, title and interest in, to and under the following Collateral of the Company (the "**Intellectual Property Collateral**"):

(a) Copyrights.

(i) all of its Copyrights and all IP Licenses providing for the grant by or to the Company of any right under any Copyright, including, without limitation, those referred to on Schedule 1A hereto;

(ii) all renewals, reversions and extensions of the foregoing;

(iii) all income, royalties, proceeds and liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for

any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.

(b) Patents.

(i) all of its Patents and all IP Licenses providing for the grant by or to the Company of any right under any Patent, including, without limitation, those referred to on Schedule 1B hereto;

(ii) all reissues, reexaminations, continuations, continuations-in-part, divisionals, renewals and extensions of the foregoing;

(iii) all income, royalties, proceeds and liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof.

(c) Trademarks.

(i) all of its Trademarks and all IP Licenses providing for the grant by or to the Company of any right under any Trademark, including, without limitation, those referred to on Schedule 1C hereto;

(ii) all renewals and extensions of the foregoing;

(iii) all goodwill of the business connected with the use of, and symbolized by, each such Trademark; and

(iv) all income, royalties, proceeds and liabilities at any time due or payable or asserted under and with respect to any of the foregoing, including, without limitation, all rights to sue and recover at law or in equity for any past, present and future infringement, misappropriation, dilution, violation or other impairment thereof, other than, in each case, with respect to Excluded Property.

3. Security Agreement. The security interest granted pursuant to this Intellectual Property Security Agreement is granted in conjunction with the security interest granted to the Investor pursuant to the Security Agreement and the Company hereby acknowledges and agrees that the rights and remedies of the Investor with respect to the security interest in the Intellectual Property Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

4. Company Remains Liable. The Company hereby agrees that, anything herein to the contrary notwithstanding, the Company shall assume full and complete responsibility for the prosecution, defense, enforcement or any other reasonably

necessary or desirable actions in connection with their Intellectual Property Collateral and IP Licenses subject to a security interest hereunder.

5. Counterparts. This Intellectual Property Security Agreement may be executed in any number of counterparts and by different parties in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement. Signature pages may be detached from multiple separate counterparts and attached to a single counterpart.

6. Governing Law. This Intellectual Property Security Agreement and the rights and obligations of the parties hereto shall be governed by, and construed and interpreted in accordance with, the law of the State of New York.

[SIGNATURE PAGES FOLLOW]

IN WITNESS WHEREOF, the Company has caused this Intellectual Property Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

WORLD HEART CORPORATION

By: J.P. S. J...
Name:
Title:

ACCEPTED AND AGREED
as of the date first above written:

ABIOMED, INC.

By: _____
Name:
Title:

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

IN WITNESS WHEREOF, the Company has caused this Intellectual Property Security Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

WORLD HEART CORPORATION

By: _____
Name:
Title:

ACCEPTED AND AGREED
as of the date first above written:

ABIOMED, INC.

By: Michael D. Minoprio
Name: Mike Minoprio
Title: CEO, Inc.

[SIGNATURE PAGE TO INTELLECTUAL PROPERTY SECURITY AGREEMENT]

**SCHEDULE 1A
TO
INTELLECTUAL PROPERTY SECURITY AGREEMENT**

A. REGISTERED COPYRIGHTS

None

B. COPYRIGHT APPLICATIONS

None

C. IP LICENSES

None

**SCHEDULE 1B
TO
INTELLECTUAL PROPERTY SECURITY AGREEMENT**

A. REGISTERED PATENTS

Current Owner/ Assignee of Record	Title	Jurisdiction	Patent Number	Issue/ Grant Date	Comments
World Heart Corp	Apparatus and method for calorimetrically determining battery charge state	US	5,012,176	4/30/1991	
World Heart Corp	Blood pump system	US	5,511,958	4/30/1996	
World Heart Corp	Blood pump system	US	5,599,173	2/4/1997	
World Heart Corp	Ventricular assist conduit with externally supported tissue valve	US	5,810,708	9/22/1998	
World Heart Corp	Ventricular assist device with valved blood conduit and method of making	US	6,102,845	8/15/2000	
World Heart Corp	Smooth ventricular assist device conduit	US	6,001,056	12/14/1999	
World Heart Corp	Implantable ventricular assist device	US	6,264,601	7/24/2001	
World Heart Corp	Miniature, pulsatile implantable ventricular assist devices and methods of controlling ventricular assist devices	US	6,969,345	11/29/2005	
World Heart Corp/ Baxter Int'l Inc.	Blood pump system	EP	743863	9/24/2003	
World Heart Corp/ Baxter Int'l Inc.	Blood pump system	DE	69531822.5	9/24/2003	
World Heart Corp	Blood pump system	CA	2,182,665	4/15/2003	
World Heart Corp/ Baxter Int'l Inc.	Blood pump system	FR	743863	9/24/2003	
World Heart Corp/ Baxter Int'l Inc.	Blood pump system	GB	743863	9/24/2003	

Current Owner/ Assignee of Record	Title	Jurisdiction	Patent Number	Issue/ Grant Date	Comments
World Heart Corp/ Baxter Int'l Inc.	Blood pump system	IT	743863	9/24/2003	
World Heart Corp	Blood pump system	JP	3600835	10/1/2004	
World Heart Corp/ Baxter Int'l Inc.	Ventricular assist device with valved blood conduit	EP	695198	7/16/2003	
World Heart Corp/ Edwards Lifesciences Corp	Ventricular assist device with valved blood conduit and method of making	CA	2,158,547	5/4/2004	
World Heart Corp/ Baxter Int'l Inc.	Ventricular assist device with valved blood conduit	DE	69531272.3	7/16/2003	
World Heart Corp/ Baxter Int'l Inc.	Ventricular assist device with valved blood conduit	FR	695198	7/16/2003	
World Heart Corp/ Baxter Int'l Inc.	Ventricular assist device with valved blood conduit	GB	695198	7/16/2003	
World Heart Corp/ Baxter Int'l Inc.	Ventricular assist device with valved blood conduit	IT	695198	7/16/2003	
World Heart Corp	Ventricular assist device with valved blood conduit and method of making	JP	3680949	5/27/2005	
World Heart Corp	Implantable ventricular assist device	EP	1191956	9/20/2006	
World Heart Corp	Implantable ventricular assist device	DE	P69933314. 8	9/20/2006	
World Heart Corp	Implantable ventricular assist device	FR	1191956	9/20/2006	
World Heart Corp	Implantable ventricular assist device	GB	1191956	9/20/2006	
World Heart Corp	Implantable ventricular assist device	IT	1191956	9/20/2006	
World Heart Corp	Smooth ventricular assist device conduit	CA	2,391,234	1/10/2006	

B. PATENT APPLICATIONS

Current Owner/ Applicant of Record	Title	Jurisdiction	Application Number	Filing Date	Comments
World Heart Corp	Miniature, pulsatile implantable ventricular assist devices and methods of controlling ventricular assist devices	EP	03790319.2	12/5/2003	
World Heart Corp	Miniature, pulsatile implantable ventricular assist devices and methods of controlling ventricular assist devices	CA	2,506,758	12/5/2003	
World Heart Corp	Miniature, pulsatile implantable ventricular assist devices and methods of controlling ventricular assist devices	JP	2004-559269	12/5/2003	
World Heart Corp	Implantable ventricular assist device	CA	2,368,200	12/15/1999	
World Heart Corp/ Edwards Lifesciences Corp	Implantable ventricular assist device	JP	2000-609121	12/15/1999	
World Heart Corp	Smooth ventricular assist device conduit	EP	99968849.2	11/9/1999	

C. IP LICENSES

Name of Agreement	Parties	Date	Patents
License Agreement	University of Utah Research Foundation and MedQuest Products, Inc	3/1/99	6,074,180 6,302,661 6,394,769 6,595,762
Assignment, Assumption and Amendment Agreement	University of Utah Research Foundation, MedQuest Products, Inc and World Heart Corp	6/8/05	
License Agreement	Virginia Patent Foundation and MedQuest Products, Inc	3/31/99	6,074,180 6,302,661 6,394,769 6,595,762
Consent to Assign and License Agreement	Virginia Patent Foundation, MedQuest Products, Inc and World Heart Corp	7/18/05	
License Agreement	University of Pittsburgh and MedQuest Products, Inc	2/13/02	6,015,272 6,244,835* 6,447,265 6,447,266* 5,888,242 6,066,086*
Assignment, Assumption and Amendment Agreement	University of Pittsburgh and MedQuest Products, Inc and World Heart Corp	7/11/05	* Some question exists re. U of Pitt's rights to these patents
Amended & Restated TET License Agreement	Ottawa Heart Institute Research Corporation and World Heart Corp.	9/28/07	5,350,413

**SCHEDULE 1C
TO
INTELLECTUAL PROPERTY SECURITY AGREEMENT**

A. REGISTERED TRADEMARKS

Current Owner/ Applicant of Record	Mark	Jurisdiction	Registration Number	Issue/ Grant Date	Comments
World Heart Corp	NOVACOR	US	1,415,342	10/28/1986	Service Mark
World Heart Corp	NOVACOR	US	1,424,720	1/13/1987	Trademark
World Heart Corp	NOVACOR	BR	820683426		
World Heart Corp	WORLDHEART	US	2,866,950	7/27/2004	
World Heart Corp	MEDQUEST	US	2,480,212	8/21/2001	No Material value; to be abandoned
World Heart Corp	QUESTCOAT	US	2,750,753	8/12/2003	No Material value; to be abandoned

B. TRADEMARK APPLICATIONS

None

C. IP LICENSES

None