Form PTO-1595 (Rev. 03/01)

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

OMB No. 0651-0027 (exp. 5/31/2002)	SONLY			
To the Honorable Commissioner of Patents and Trademarks: P	Please record the attached original documents or copy thereof			
Name of conveying party(ies):	2. Name and address of receiving party(ies)			
Abiomed R&D, Inc.	Name: ABIOMED, INC. Internal Address:			
Additional name(s) of conveying party(ies)  Yes  X No	Street Address: 22 Cherry Hill Drive			
3. Nature of Conveyance:				
x Assignment Merger				
Security Agreement Change of Name	City: Danvers			
Other	State: <u>MA</u> Zip: <u>01923</u>			
Execution Date:	Additional name(s) & Yes X No address(es) attached:			
4. Application number(s) or patent number(s):				
A. Patent Application No.(s): 09/223,645  Additional numbers attach	B. Patent No.(s):			
5. Name and address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved:			
Name: Lisa J. Michaud NUTTER MCCLENNEN & FISH LLP	7. Total fee (37 CFR 3.41) \$ 40.00			
Internal Address: Atty. Dkt.: 102619-0041	x Enclosed			
Street Address: One International Place	Authorized to be charged to deposit account			
	8. Deposit account number: 141449			
City:         State:         Zip:           Boston         MA         02110-2699	(Attach duplicate copy of this page if paying by deposit account)			
DO NOT USE	THIS SPACE			
9. Statement and signature.	ormation is true and correct and any attached copy			
To the best of my knowledge and belief, the foregoing infinis a true copy of the original document.				
Lisa J. Michaud	November 2, 2001 Date			
Name of Person Signing Signature				
Total number of pages including cover sheet, attachments, and documents: 3				

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## ASSIGNMENT

WHEREAS, Abiomed R&D, Inc., a Delaware corporation (hereinafter "Assignor"), is the sole and exclusive owner, by assignment, of the following United States Patent(s) and/or application(s) for Letters Patent and the inventions described therein:

- U.S. Patent No. 5,643,172, issued July 1, 1997, entitled "Tubular Circulatory Assist Device";
- U.S. Patent No. 5,713,954, issued February 3, 1998, entitled "Extra Cardiac Ventricular Assist Device";
- U.S. Patent No. 5,800,528, issued September 1, 1998, entitled "Passive Girdle for Heart Ventricle for Therapeutic Aid to Patients Having Ventricular Dilatation";
- U.S. Application No. 09/223,242, filed December 30, 1998, entitled "Passive and Active Cardiac Girdle and Assist Device";
- U.S. Application No. 09/223,645, filed December 30, 1998, entitled "Passive and Active Cardiac Girdle and Assist Device";
- U.S. Application No. 09/693,541, filed October 20, 2000, entitled "Method for Assisting Pumping Action of a Natural Heart";
- U.S. Patent No. 6,224,540, issued May 1, 2001, entitled "Passive Girdle for Heart Ventricle for Therapeutic Aid to Patients Having Ventricular Dilatation"; and
- U.S. Application No. 09/017,632, filed February 3, 1998, entitled "Method for Assisting Pumping Action of a Natural Heart" (as amended).

WHEREAS, Abiomed, Inc., a Delaware corporation (hereinafter "Assignee"), is desirous of acquiring the right, title and interest in, to and under said Patent application(s) and the inventions covered thereby:

NOW, THEREFORE, in consideration of and in exchange for the sum of One Dollar (\$1.00) to be paid by assignee and other good and valuable consideration, the receipt of which is hereby acknowledged, assignor has sold, assigned, and transferred, and does hereby sell, assign, and transfer the entire right, title and interest in and to the above-mentioned inventions, application(s) for Letters Patent, and any and all applications for Letters Patent in the United States of America and in all foreign countries and in all Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and in and to any and all divisions, continuations, and continuations-in-part of said application(s), or reissues or extensions of said Letters Patent or Patents, and all rights under the International Convention for

the Protection of Industrial Property, the same to be held and enjoyed by the said assignees, for their own use and the use of their successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent or Patents, may be granted, as fully and entirely as the same would have been held and enjoyed by the assignors, had this sale and assignment not been made.

AND for the same consideration, the said assignor hereby covenants and agrees to and with the assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, the said assignor is the sole and lawful owner of the entire right, title and interest in and to the said inventions and the application(s) for Letters Patent abovementioned, and that the same are unencumbered and that the said assignor has good and full right and lawful authority to sell and convey the same in the manner herein set forth.

AND assignor hereby authorizes and requests the Commissioner of Patents and Trademarks to issue any and all Letters Patent or Patents of the United States on said inventions or resulting from said applications and any continuations, divisionals and reissues thereof to assignee as assignee of the entire interest, and hereby covenants that it has full right to convey the entire interest herein assigned, and that it has not executed, and will not execute, any agreements inconsistent herewith.

WITNESS my hand and seal this 23 day of october, 2001.

Treasurer

Abiomed R&D, Inc.

Massachusetts )ss

Then personally appeared the above named John F. Thero and acknowledged the foregoing instrument to be his free act and deed, before me, this 23 day of october, 2001.

Notary Public My commission expires: 5/10/07

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PATENT REEL: 012480 FRAME: 0003

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Patents and Patent Applications for: ABIOMED R&D, Inc.

Certificate of Mailing (37 C.F.R. 1.8(a))					
I hereby certify that this correspondence is being deposited with the United States Postal Service Post					
Office as first class mail in an envelope addressed to: Assistant Commissioner for Patents,					
Washington, D.C. 20231 on the date set forth below.					
11/2/01	By:				
Date of Signature and Mail	Lisa J. Michaud				
Deposit	Reg. No: 44,238				

Commissioner for Patents Washington, DC 20231

## STATEMENT UNDER 37 CFR 3.73(b)

Dear Sir:

ABIOMED R&D, Inc. states that they are the assignee of the entire right, title and interest in the patents and patent applications identified below by virtue of an assignment from the inventor(s) of the patents and patent applications identified. The assignments were recorded in the Patent and Trademark Office at the Reel and Frame indicated, or copies of assignments or other documents in the chain of title are attached.

- U.S. Patent No. 5,643,172, issued July 1, 1997, entitled "Tubular Circulatory Assist Device," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7387, Frames 0185;
- U.S. Patent No. 5,713,954, issued February 3, 1998, entitled "Extra Cardiac Ventricular Assist Device," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7527, Frames 0756;
- U.S. Patent No. 5,800,528, issued September 1, 1998, entitled "Passive Girdle for Heart Ventricle for Therapeutic Aid to Patients Having Ventricular Dilatation," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7892, Frames 0893;

PATENT REEL: 012480 FRAME: 0004

In Re Patents and Patent Applications for:
Abiomed R&D, Inc.
Atty. Docket No.: 102619-1

U.S. Application No. 09/223,242, filed December 30, 1998, entitled "Passive and Active Cardiac Girdle and Assist Device," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7892, Frames 0893;

U.S. Application No. 09/223,645, filed December 30, 1998, entitled "Passive and Active Cardiac Girdle and Assist Device," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7892, Frames 0893;

U.S. Application No. 09/693,541, filed October 20, 2000, entitled "Method for Assisting Pumping Action of a Natural Heart," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7892, Frames 0893;

U.S. Patent No. 6,224,540, issued May 1, 2001, entitled "Passive Girdle for Heart Ventricle for Therapeutic Aid to Patients Having Ventricular Dilatation," assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7892, Frames 0893-0895; and

U.S. Application No. 09/017,632, filed February 3, 1998, entitled "Me thod for Assisting Pumping Action of a Natural Heart" (as amended), assigned to Abiomed R&D, Inc. by an assignment recorded at Reel 7527, Frames 0756.

The undersigned (whose title is supplied below) is empowered to sign this STATEMENT UNDER 37 CFR 3.73(b) on behalf of the assignee.

Respectfully submitted,

Dated: 19/13/01

John F Thero

Treasurer

Authorized Representative of: ABIOMED R&D, Inc.

NUTTER, McCLENNEN & FISH, LLP One International Place Boston, MA 02110-2699

Tel: (617)439-2550 Fax: (617)310-9550

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Approved for use through 10/31/2002. OMB 0651-0031

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

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## **TRANSMITTAL FORM**

(to be used for all correspondence after initial filing)

Application Number	09/223,645-1293	
Filing Date	December 30, 1998	
First Named Inventor	Robert T.V. Kung	_
Group Art Unit	3738	
Examiner Name	D. Willse	_
Attorney Docket Number	102619-0041	_

ENCLOSURES (check all that apply)					
Fee Transm	ittal Form	X Assignment Papers (for an Application)	After Allowance Communication to Group		
Fee At	tached	Drawing(s)	Appeal Communication to Board of Appeals and Interferences		
Amendment	/Reply	Licensing-related Papers	Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)		
After F	inal	Petition	Proprietary Information		
Affidav	vits/declaration(s)	Petition to Convert to a Provisional Application	Status Letter		
Extension of Time Request		Power of Attorney, Revocation Change of Correspondence Address	X Other Enclosure(s) (please identify below)		
Express Abandonment Request		Terminal Disclaimer	1. Statement Under 37 CFR 3.73(b)		
Information Disclosure Statement		Request for Refund	Return Postcard		
Certified Copy of Priority Document(s)		CD, Number of CD(s)			
Response to Missing Parts/ Incomplete Application		Remarks			
Response to Missing Parts under 37 CFR 1.52 or 1.53					
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT					
Firm or	NUTTER MCCLENNEN & FISH LLP Lisa J. Michaud				
Individual Name	ndividual Name				
Signature	nature Typh				
Date	November 2, 2001				

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**RECORDED: 01/15/2002** 

**PATENT REEL: 012480 FRAME: 0006**