OLA:					
FORM PTO-1595 COMMERCE (Rev. 6-93) OMB No. 0651-0011 (exp. 404)	09-24-2004	U.S. DEPARTMENT OF Patent and Trademark Office			
To the Honorable Chamissioner of Patent.	102844368	.ed original documents or copy thereof.			
1. Name of conveying party(ies): James Agutter, Noah Syroid, Julio C. Bermudez, Michael E. Holmes, Frank Drews, David Lee Stra William Albert, and Dwayne R. Westenskow	2. Name and a Yinqi Zhang, yer, Robert Name: <u>Univer</u>	nddress of receiving party(ies) sity of Utah ss:			
Additional name(s) of conveying parties attached? 🛄 Yes	X No				
3. Nature of conveyance: ☑ Assignment ☑ Merger ☑ Security Agreement ☑ Change of Na ☑ Other	ame Salt Lake City	Street Address: <u>615 Arapeen Dr., Suite 110</u> <u>Salt Lake City, UT 84108</u> Additional Name(s) & address(es) attached? Yes 🛛 No			
4. Application number(s) or patent number(s):					
If this document is being filed together with a new application A. Patent Application No(s). 10/846,956		date of the application is: B. Patent No(s).			
Additional numbers attached?	No				
 Name and address of party to whom correspo concerning document should be mailed: Name: <u>Steve M. Perry</u> 	7. Total fee (2	er of applications and patents involved: <u>1</u> 7 CFR 3.41)\$40 nclosed			
Mailing Address:		uthorized to be charged to deposit account			
P.O. Box 1219	8. Deposit acc	ount number:			
Sandy, UT 84091-1219	20-0100	20-0100 (Deficiencies Only)			
Street Address: 8180 South 700 East	(Attach du	plicate copy of this page if paying by deposit account)			
City: Sandy State: Utah Zip: 840 DO NOT USE THIS SPACE	70				
 9. Statement and signature. To the best of my knowledge and belief, the for the original document. <u>Steve M. Perry</u> Name of Person Signing Total number of pages including this cover sheet, attachment 	M. Peny	correct and any attached copy is a true copy			
	o be recorded with required cover st	neet information to:			
//21/2004 SSITHIB1 00000072 200100 10846956 2 F0:8021 40.00 DP	Mail Stop Assignment Recordation Services Commissioner For Patents P.O. Box 1450				

PATENT REEL: 015804 FRAME: 0908

P.O. Box 1450 Alexandria, VA 22313-1450

WHEN RECORDED RETURN TO:

US PATENT APPLICATION ATTORNEY DOCKET NO. 22843.CIP

+33 Third Avenue, Apt. 5 1280 E South Temple, Apt E

Jß

Steve M. Perry THORPE NORTH & WESTERN, LLP P.O. BOX 1219 SANDY, UTAH 84091-1219

ASSIGNMENT

WHEREAS, We,

Residence: (City, State): Post Office Address: James Agutter Salt Lake City, Utah 835 E. 600 S. Salt Lake City, Utah 84102

Residence: (City, State): Post Office Address: Noah Syroid Salt Lake City, Utah 3611 E. Kings Hill Circle Salt Lake City, Utah 84121

Salt Lake City, Utah 84102 JB

Julio C. Bermudez

Yinqi Zhang

Salt Lake City, Utah

Salt Lake City, Utah

Michael E. Holmes

402 University Village

Salt Lake City, Utah 84108

Residence: (City, State): Post Office Address:

Residence: (City, State): Post Office Address:

Residence: (City, State): Post Office Address: Muncie, Indiana 301 S. Walnut St. #303 Muncie, Indiana 47305-2310

Residence: (City, State): Post Office Address: Frank Drews Salt Lake City, Utah 3432 So. Crestwood Dr. Salt Lake City, Utah 84109

Residence: (City, State): Post Office Address:

David Lee Strayer Salt Lake City, Utah 336 F Street Salt Lake City, Utah 84103

Residence: (City, State): Post Office Address:	Robert William Albert Salt Lake City, Utah 682 E. 12 th Ave. Salt Lake City, Utah 84103
Residence: (City, State): Post Office Address:	Dwayne R. Westenskow Salt Lake City, Utah 3439 Winesap Road Salt Lake City, Utah 84121

(hereinafter "Assignors") have invented a certain new and useful improvement in a METHOD AND APPARATUS FOR MONITORING DYNAMIC CARDIOVASCULAR FUNCTION USING N-DIMENSIONAL REPRESENTATIONS OF CRITICAL FUNCTIONS for which a non-provisional application for United States Letters Patent was filed on May 14, 2004 as THORPE NORTH & WESTERN, LLP Docket No. 22843.CIP, and given U.S. Patent Application Serial No. 10/846,956; and

WHEREAS, University of Utah, an institution of higher education and a nonprofit organization organized and existing under the laws of the State of Utah, located at Salt Lake City, UT (hereinafter "Assignee"), is desirous of acquiring the entire right, title, and interest in the same;

NOW, THEREFORE, in consideration of one dollar (\$1.00) and other good and valuable consideration paid to us by the Assignee, the receipt and sufficiency whereof is hereby acknowledged, we the said Assignors, hereby grant and assign unto the said Assignee, our entire right, title and interest in said invention and in all patent applications based thereon, including but not limited to the above identified United States Patent Application and in all nonprovisionals, divisions, continuations, and continuations-in-part of said application, or reissues or extensions of Letters Patent or Patents granted thereon, and in all corresponding applications filed in countries foreign to the United States, and in all patents issuing thereon in the United States and foreign countries; the right, power and authority to file and prosecute U.S. and foreign patent applications on said invention, and to do so in its own name wherever such right may be legally exercised, and including the right to claim the priority and benefits of the International Convention for such applications; and the right to bring actions for infringement of any right in said invention in its own name, including past infringement, in any jurisdiction.

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We hereby authorize and request the United States Commissioner of Patents and Trademarks, and such Patent Office officials in foreign countries as are duly authorized by their patent laws to issue patents, to issue any and all Letters Patent on said invention to the said Assignee as the owner of our entire interest, for the sole use and behoof of the said Assignee, its successors, assigns and legal representatives, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by us had this assignment and sale not been made.

We hereby agree, without further consideration and without expense to us, to sign all lawful papers and to perform all other lawful acts which the Assignee may request of us to make this Assignment fully effective, including, by way of example but not of limitation, the following: prompt execution of all original, nonprovisional, divisional, substitution, reissue, and other United States and foreign patent applications on said invention, and all lawful documents as requested by the Assignee to further the prosecution of any of such patent applications; cooperation to the best of our ability including, but not limited to, the execution of all lawful documents, the production of evidence in any actions or proceedings concerning the invention, including, but not limited to, nullification, reissuing, extension, and infringement proceedings involving said invention.

> Page 3 of 12 PATENT REEL: 015804 FRAME: 0911

This assignment and agreement shall be binding upon our heirs and legal representatives. Signed at $\underbrace{ \mathcal{L} \mathcal{L} \mathcal{L} \mathcal{T}}_{\text{city, state, country (if not USA)}}$, this $\underbrace{ \text{day of } \mathcal{T} \mathcal{L} \mathcal{L} }_{\text{month}}$, $\underbrace{ \mathcal{L} \mathcal{L} \mathcal{L} \mathcal{L} }_{\text{year}}$. Signed: $\underbrace{ \text{James Agutter} }_{\text{James Agutter}}$ STATE OF $\underbrace{ \mathcal{H} \mathcal{H} }_{\text{JABW}}$: ss

otary Public



Page 4 of 12 PATENT REEL: 015804 FRAME: 0912

This assignment and agreement shall be binding upon our heirs and legal representatives.

Signed at <u>Salt Lake (ity UT</u>, this <u>2978</u> day of <u>June</u>, <u>Zw4</u>. city, state, country (if not USA) <u>day</u> month year Solt Lod' Signed: <u>MAL</u> <u>Noah Syroid</u>

STATE OF Utak : ss County of Salt Jake

Before me personally appeared Noah Syroid and acknowledged the foregoing instrument to be his/her free act and deed this $29^{\frac{11}{10}}$ day of $\overline{\text{June}}$, 2004.

Notary tublic



Page 5 of 12

This assignment and agreement shall be binding upon our heirs and legal representatives.

Signed at ζ	Salt-Lake City State of Utal, city, state, country (if not USA)	this	25th day	of _	Avgust,	<u>2004.</u> year
	Sign	.ed:	\mathbf{X}	Λ		·
5 N - (ulio C. Berr	hude		

STATE OF Utenh) : SS County of Sallake

Before me personally appeared Julio C. Bermudez and acknowledged the foregoing instrument to be his/her free act and deed this _25th day of _Aug._, 2004.



Midi Valla

Page 6 of 12

This assignment and agreement shall be binding upon our heirs and legal representatives.



County of Salt Lake)

Before me personally appeared Yinqi Zhang and acknowledged the foregoing instrument to be his/her free act and deed this 1^{4} day of Juby, 2004.

NOTARY PUBLIC LESLIE S. ALBAUGH 615 Arapeen Dr., Ste. 310 Salt Lake City Hah 84108 My Commission Expires March 12, 2008 STATE OF UTAH

Leslie Salbary L

Page 7 of 12

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This assignment and agreement shall be binding upon our heirs and legal representatives.

	is <u>get</u> day of <u>July</u> , <u>2009</u> .
city, state, country (if not USA)	day month year
	n 1 Ma
Signed:	
\cap	Michael E. Holffes
STATE QE TEL	
: ss County of Claure	
Before me personally appeared Michael E. H	olmes and acknowledged the foregoing
instrument to be his/her free act and deed this \mathscr{Z}	- day of Jely, 2004.

0 L. Marvell

Page 8 of 12



Before me personally appeared Frank Drews and acknowledged the foregoing instrument to be his/her free act and deed this day of during day o



Jane Hann

Notary Public

Page 9 of 12

This assignment and agreement shall be binding upon our heirs and legal representatives.

Signed at SMFIAUCH. this 28 day of Auc 7000 city, state, country (if not USA) month vea day Signed: Leestrayer

STATE OF (HAN)

: ss County of <u>Filt Lute</u>)

Before me personally appeared David Lee Strayer and acknowledged the foregoing instrument to be his/her free act and deed this $\underline{13}$ day of $\underline{1000}$, 2004.



Notary Public

Page 10 of 12

This assignment and agreement shall be binding upon our heirs and legal representatives.

STATE OF Utah)

County of Saltlake)

Before me personally appeared Robert William Albert and acknowledged the foregoing instrument to be his/her free act and deed this 28^{th} day of July, 2004.

NOTARY PUBLIC LESLIE S. ALBAUGH 615 Arapeen Dr., Ste. 310 Salt Lake City, Utah 84108 My Commission Expires March 12, 2008 STATE OF UTAH

: SS

Leslee S albauge Notary Public

Page 11 of 12

Signed at	Salt Lake City, UT city, state, country (if not USA)	this	8 day	·	uly_, month	<u>2004</u> year
			\sim	(1.		

Signed: <u>Dwayne Allefundor</u> Dwayne R. Westenskow

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STATE OF Utal : ss County of salt ake

Before me personally appeared Dwayne R. Westenskow and acknowledged the foregoing instrument to be his/her free act and deed this $\underline{8 + h}$ day of \underline{Jaly} , 2004.

Notary Public



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RECORDED: 09/20/2004