	US Department of Commerce
Form PTO-1595 RECORDATION FO	· · · · · · · · · · · · · · · · · · ·
Docket No. 64693-110 PATENTS ONLY To the Hon. Commissioner of Patents & Trademarks. Please record the attached original documents or copy thereof.	
To the Hon. Commissioner of Patents & Trademarks. Please	
Name of conveying party(ies) Eduardo H. Rubinstein; Oscar U. Scremin; Damel P. Holschneider, Jean-Michel I. Maarek Additional name of conveying party attached? Yes XX No	Name and address of receiving party(1e8) Name Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California Internal Address:
3. Nature of conveyance	Street Address: 1042 <u>Downey Way / DRB B21</u>
X Assignment Merger	
Security Agreement Change of Name	City Los Angeles State CA ZIP 90089-1112
Other	Additional name(s) and address(es) attached?YesXX_ No
Execution Date: <u>August 25, 2004 (Rubinstein)</u> ; <u>September 27, 2004 (Holschneider & Maarek)</u> ; <u>October 4, 2004 (Scremin)</u>	
4. Application number(s) or patent numbers: 10/865,629 film	ng date: June 10, 2004
testic decument is being filed together with a new applicable	on, the execution date of the application is:
It this document is nemd that tolerare, want a new abbusance	
A. Patent Application No.(s)	B Patent No.(s)
Additional numbers attached	
 Name and address party to whom correspondence concerning document should be mailed: 	6. Total number of applications and patents involved:
Name Marc E. Brown	
McDermon, Will & Emery	
Internal Address: 34th Floor	
Street Address 2049 Century Park East	7. Total fee (37 CFR 3.41) \$40.00
Ciry: Los Angeles State CA ZIP 90067	Enclosed
	X Please charge to deposit account
	8. Deposit Account number:
	501946/
	(Attack duplicate copy of this page if paying by deposit account)
	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.	
Marc E. Brown	October 5, 2004
Cigna	nire Date
Name of Person Signing Total number of pages including cover sheet, attachments, a	and document: 2

THE DESCRIPTION OF THE REPORT OF THE RESPONDING THE PROPERTY OF THE PROPERTY O 700120579

	US Department of Commerce	
Perm PTO-1593		
PATENTS ON	I.V	
Docket No. 64693-110 PATENTS ONLY To the Hon. Commissioner of Patents & Trademarks: Please record the anached original documents of copy thereof.		
	2 Name and address of receiving party(ues)	
1. Name of conveying party(les): Eduardo H. Bubinstein: Oscar U. Scremm. Damel P. Holschneider; John-Michel I. Mastek Additional name of conveying party anached? YesX&_ No	Name Altico E Mann Insulate for Biomedical Sugmeeting at the University of Southern California Internal Address	
	Street Address 1042 Downey Way / DRB B21	
3. Nature of conveyance:	24 cct with ear 174 minutes 1 at 1 at 11 a	
X-Assignment Merger		
Security Agreement Change of Name	City: Los Anacies State CA ZIF 90089-1112	
Other	Additional name(s) and address (ex) attached? VesXX_No	
Execution Date: August 25, 2004 (Rubinstem): September 27, 2004 (Holschneider & Maurek); October 4, 2004 (Septemb)		
4. Application number(s) or parent numbers: 10/865,629 filin	g date. June 10, 2004	
If this document is being filed together with a new applicant	on, the execution date of the application is.	
	B Patent No.(s)	
A. Pagent Application No.(s)	\$	
	s 5 90/V Da	
Andutonal mathems stracted	Yes XXX No 5. Total number of applications and	
 Name and address party to whom currespondence concerning document should be mailed: 	patents involved:	
Name Marc E. Brown		
McDermon, Will & Emery		
Internal Address: 34th Floor		
•	7. Total fee (37 CFR 3-41) \$40.00	
Street Address 2049 Company Park Fast	11 + Mind dan Par an an ar and	
City: Los Angeles State CA ZIP 90067	Enclosed	
	X Please charge to deposit account	
	8 Deposit Account mumber:	
	501945/	
	1 <i>7</i>	
	(Americ duplicate copy of this page if paying by deposit account)	
DO NOT USE	THE SPACE	
9. Statement and signature.		
To the best of my knowledge and belief, the foregoing information is true and correct and any quached copy is a true copy of the		
original document	October 5, 2004	
Marc E. Brown		
Name of Person Signing	and document:	
Mare E. Brown Name of Person Signing Name of Person Signing Total number of pages including cover sheet, spinghamps, and document: 5		

Serial No. 10/865,629

3-04 04:29pm

Docket No. 64693-110

ASSIGNMENT

WHEREAS, We, Eduardo H. Rubinstein, Oscar U. Scremin, Daniel P. Holschneider, and Jean-Michel I. Maarek, the undersigned inventors (ASSIGNORS), have invented "Measurement of Cardiac Output and Blood Volume by Noninvasive Detection of Indicator Dilution," the specification of which was filed as a continuation-in-part patent application on June 10, 2004 and assigned application serial number 10/865,629. This application is a continuation-in-part of United States Patent No. 6,757,554, which claims priority to U.S. provisional application serial number 60/292,580, filed May 22, 2001; each of us has executed the application concurrently with executing this assignment; we are the joint owners of this invention and improvements; and

WHEREAS, Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California, (ASSIGNEE) is a corporation organized and existing under the laws of Delaware having a place of business at 1042 Downey Way, DRB B21, Los Angeles 90089-1112. ASSIGNEE desires to acquire the entire right, title and interest in and to the inventions, applications and letters patent to be granted and issued for the inventions and applications;

WHEREAS, ASSIGNEE desires to acquire the entire right, title and interest in and to the Invention and Application and to all patents based on the Application;

NOW, THEREFORE, for valuable consideration, the receipt and legal sufficiency of which ASSIGNORS acknowledge, ASSIGNORS have and hereby do assign and transfer to ASSIGNEE, its successors and assigns, the entire right, title and interest in and to:

- 1. The Invention;
- The Application;
- 3. All applications based on or claiming priority from the Application, including all divisionals and continuations ("Application Family");
- 4. All patents which may be granted on the Invention, Application and Application Family by the United States of America, its territories and possessions, and by all foreign countries, including all priority rights and all reissues thereof ("Patents");
- 5. The right to sue for past infringement of the Invention, Application, Application Family and Patents.

ASSIGNORS agree, at the request of ASSIGNEE, to sign any and all papers reasonably needed to file and prosecute the Application and Application Family, to obtain the Patents, and to perfect and vest in ASSIGNEE the entire right, title and interest in the Invention, Application, Application Family and Patents. ASSIGNORS also agree to provide assistance that is reasonably needed to prepare and prosecute the Application and Application Family.

ASSIGNORS authorize and empower ASSIGNEE, its successors and assigns, to apply for and obtain, in its own name, the Application, Application Family and Patents before competent International Authorities, including the World Intellectual Property Organization and in any and all foreign countries in which applications for patents can be made or patents obtained.

PATENT REEL: 015425 FRAME: 0262

Senai No. 10/865,629	Docket No. 64693-110
Dated: My. 25, 2004	Name: Eduardo H. Rubinstein, M.D., Ph.D. Address: 601 Lorna Lane Los Angeles, California 90049
STATE OF CALIFORNIA) ss.	
COUNTY OF LOS ANGELES)	
Rubinstein, personally known to me to be the person(s) whose name(s) is are to me that he/she/they executed the same	BERN D. OTOQUE
Dated:, 2004	Name: Oscar U. Scremin, M.D., Ph.D. Address: 2824 Westwood Blvd. Los Angeles, California 90064-4115
STATE OF CALIFORNIA) ss.	
COUNTY OF LOS ANGELES)	
person(s) whose name(s) is/are subscrib	personally appeared Oscar U. Scremin to me on the basis of satisfactory evidence) to be the sed to the within instrument and acknowledged to me that er/their authorized capacity(ies), and that by his/her/their son(s), or the entity upon behalf of which the person(s)
WITNESS my hand and official	seal.
	(SEAL)
Notary Public	

– 2 –

LAS99 1358895-1.064693.0110

PATENT REEL: 015425 FRAME: 0263 Serial No. 10/865,629

Docket No. 64693-110

Dated:, 2004	Name: Eduardo H. Rubinstein, M.D., Ph.D. Address: 601 Lorna Lane Los Angeles, California 90049
STATE OF CALIFORNIA)) ss.
COUNTY OF LOS ANGELES	
to be the person(s) whose name to me that he/she/they executed	personally appeared Eduardo H. on to me or proved to me on the basis of satisfactory evidence) (s) is/are subscribed to the within instrument and acknowledged the same in his/her/their authorized capacity(ies), and that by instrument, the person(s), or the entity upon behalf of which the strument.
WITNESS my hand and	official seal.
Notary Public	(SEAL)
Dated:	Name: Oscar U. Scremin, M.D. Ph.D. Address: 2824 Westwood Blvd. Los Angeles, California 90064-4115
STATE OF CALIFORNIA COUNTY OF LOS ANGELES)) ss.)
On <u>act. 1</u> , 2004 before <u>Be</u> personally known to me or <u>k</u> person(c) whose name(c) is the same	
WITNESS my hand and	official seal. (SEAL)
	BERN D. OTOOLE Commission # 1470174 Notary Public - Collings

Senal No 10/865,629	Docket No. 64693-110
Dated: 4/27, 2004	Name: Daniel P. Holschneider, M.D. Address: 931 Chantilly Road Los Angeles, California 90077
evidence) to be the person(s) whose name(s acknowledged to me that he/she/they executed that by his/her/their signature(s) on the which the person(s) acted, executed the instantial search and official search.	is/are subscribed to the within instrument and ted the same in his/her/their authorized capacity(ies), instrument, the person(s), or the entity upon behalf of rument.
WITNESS my hand and official sea Notary Public Dated: 09/27, 2004	(SEAL) NOTARY PUBLIC CALIFORNIA LOS ANGELES COUNTY My Comm. Expires Dec. 15, 1864 Name: Jean-Michel I. Maarek, Ph.D.
personally known to me or proved person(s) whose name(s) is/are subscribed	Address: 30220 Via Borica Rancho Palos Verdes, California 90275 personally appeared Jean-Michel I. Maarek, to me on the basis of satisfactory evidence) to be the to the within instrument and acknowledged to me that heir authorized capacity(ies), and that by his/her/their (s), or the entity upon behalf of which the person(s)
WITNESS my hand and official se	ELLEN FOON COMM. #1284488 NOTARY PUBLIC CALIFORNIA LOS ANGELES COUNTY

Notary Public



-3-