



Form PTO-1595 102247922 U.S. Department of Commerce R. Docket No. 064693-0023 (2044) **PATENTS ONLY** To the Hon. Commissioner of Patents & Trademarks: Please record the attached original documents or copy thereof. Name of conveying party(ies): 2. Name and address of receiving party(ies) Vasilis Z. Marmarelis Name Alfred E. Mann Institute for Biomedical Engineering Additional name of conveying party attached? ___ Yes XX No at the University of Southern California 10.9102 Internal Address: Street Address: 1042 Downey Way 3. Nature of conveyance: X Assignment Merger DRB B21 Security Agreement Change of Name City: Los Angeles State CA ZIP 90089-1112 Other_____ Execution Date: April 5, 2002 Additional name(s) and address(es) attached? ____Yes __XX_ No Application number(s) or patent numbers: If this document is being filed together with a new application, the execution date of the application is: A. Patent Application No.(s) 10/117,763 B. Patent No.(s) Additional numbers attached? Yes XXX No Name and address party to whom correspondence 6. Total number of applications and concerning document should be mailed: patents involved: _1 Name McDERMOTT, WILL & EMERY_____ Internal Address: 34th Floor Street Address 2049 Century Park East Total fee (37 CFR 3.41) \$40.00 State CA ZIP 90067 X Enclosed City: Los Angeles X Any discrepancy or overpayment is authorized to be charged to deposit account Deposit Account number: 501946 (Attach duplicate copy of this page if paying by deposit account) DO NOT USE 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 Name of Person Signing Total number of pages including cover sheet, attachments, and document:

REEL: 13361 FRAME: 0825

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| Docket No. 2044!-17 PATENTS ONLY To the Hon. Commissioner of Patents | | |
| | iginal documents or copy thereof. Name and address of receiving party(ies) | |
| Vasilis Z. Marmarelis | | |
| Additional name of conveying party attached?YesXX_ No | Name Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California | |
| APR 0 5 2062 | Internal Address: | |
| 3. Nature of conveyance: | Street Address: 1042 Downey Way | |
| _X_Assignment Merger | DRB B21 | |
| Security Agreement Change of Name | | |
| Other | City: Los Angeles State CA ZIP 90089-1112 | |
| Execution Date: April 5, 2002 | Additional name(s) and address(es) attached? Yes _XX_ No | |
| 4. Application number(s) or patent numbers: | | |
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| 10/117,763 | | |
| Additional numbers attached | | |
| 5. Name and address party to whom correspondence concerning document should be mailed: | 6. Total number of applications and patents involved: 1 | |
| Name Marc E. Brown | | |
| Oppenheimer Wolff & Donnelly LLP | | |
| Internal Address: 38th Floor | | |
| Street Address 2029 Century Park East | 7. Total fee (37 CFR 3.41) \$40.01 | |
| City: Los Angeles State CA ZIP 90067 | X Enclosed | |
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| original document. | aph is true and correct and any attached copy is a true copy of the | |
| Charles Berman, Esq. Chulu | April 5, 2002 | |
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LA: 3217 v01 07/30/2001

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| To the Hon. Commissioner of Patents | iginal documents or copy thereof. |
| Name of conveying party(ies): Vasilis Z. Marmarelis | Name and address of receiving party(ies) |
| Additional name of conveying party attached? Yes XX No | Name_Alfred E. Mann Institute for Biomedical Engineering at the University of Southern California |
| APR 0 5 2002 | Internal Address: |
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| Charles Berman, Esq. Chulu | April 5, 2002 |
| Name of Person Signing Signat Total number of pages including cover sheet, attachments, a | |

LA: 3217 v01 07/30/2001

LA: 318435 v01 04/04/2002

Docket No. 20441-17

ASSIGNMENT

WHEREAS, I, Vasilis Z. Marmarelis, the undersigned inventor (ASSIGNOR), have invented HIGH RESOLUTION 3D ULTRASONIC TRANSMISSION IMAGING, for which I am about to file application for letters patent of the United States. I have executed the application concurrently with executing this assignment. I am sole owner of this invention and improvements.

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 California, having a piace of business at University of Southern California, 1042 Downey Way DRB B21, Los Angeles, CA 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.

NOW, THEREFORE, for and in consideration of valuable consideration by the ASSIGNEE to me paid, the receipt and legal sufficiency of all of which I acknowledge, I, the ASSIGNOR, have sold and do hereby sell, assign, transfer and set over unto the ASSIGNEE, its successors and assigns, the entire right, title and interest:

in and to the inventions.

in and to the application for letters patent thereon.

in and to applications pertaining to or based upon the inventions and applications, including divisional and continuing applications and continuations-in-part,

in and to any and all letters patent which may be granted and issued on the inventions and applications, or any of them, not only for, to and in the United States of America, its territories and possessions, but for, to and in all foreign countries, together with and including all priority rights based upon any and all applications in the United States of America covered by this Assignment, and

in and to any right to sue for past infringement of the inventions, improvements, applications and letters patent.

and for the above-named consideration, I agree that I will, at the request of the ASSIGNEE, execute any and all applications for letters patent for the inventions and any and all other papers and documents and do all other and further lawful acts that the ASSIGNEE may deem necessary or desirable to obtain letters patent on the inventions, to secure the grant of such letters patent and to perfect and vest in the ASSIGNEE the entire right, title and interest in the inventions, applications and letters patent.

And for the above-named consideration, I authorize and empower the ASSIGNEE, its successors and assigns, to apply for and obtain, in its or their own names, letters patent for the inventions before competent International Authorities including the World Intellectual Property Organization and in any and all foreign countries in which applications for letters patent can be so made or letters patent so obtained.

| Dated: April 5 , 2002 | Various Z. Man | unstration |
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| | Vasilis Z. Marmarelis | • • |
| | Address: 26 Whistler Court, irvine, | CA 92612 |
| State of California)) ss. | | |
| County of Los Angeles) | | |
| On, 2002, before | personally appeared | , person- |
| ally known to me or proved to me on the is/arc subscribed to the within instrument are his/her/their authorized capacity(ies), and the | e basis of satisfactory evidence) to be the p nd acknowledged to me that he/she/they en nat by his/her/their signature(s) on the inst | person(s) whose name(s) xecuted the same in |
| the entity upon behalf of which the persones | s) acted, executed the instrument. | |
| WITNESS my hand and official sea | վ. | |
| | (SEAL) | |
| Notary Public | | |

LA: 318435 v01 04/04/2002

Docket No. 20441-17

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NOW, THEREFORE, for and in consideration of valuable consideration by the ASSIGNEE to me paid, the receipt and legal sufficiency of all of which I acknowledge, I, the ASSIGNOR, have sold and do hereby sell, assign, transfer and set over unto the ASSIGNEE, its successors and assigns, the entire right, title and interest:

in and to the inventions,

in and to the application for letters patent thereon,

in and to applications pertaining to or based upon the inventions and applications, including divisional and continuing applications and continuations-in-part,

in and to any and all letters patent which may be granted and issued on the inventions and applications, or any of them, not only for, to and in the United States of America, its territories and possessions, but for, to and in all foreign countries, together with and including all priority rights based upon any and all applications in the United States of America covered by this Assignment, and

in and to any right to sue for past infringement of the inventions, improvements, applications and letters patent.

and for the above-named consideration. I agree that I will, at the request of the ASSIGNEE, execute any and all applications for letters patent for the inventions and any and all other papers and documents and do all other and further lawful acts that the ASSIGNEE may deem necessary or desirable to obtain letters patent on the inventions, to secure the grant of such letters patent and to perfect and vest in the ASSIGNEE the entire right, title and interest in the inventions, applications and letters patent.

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| article for the control of the contr | Vasilis Z. Marmarelis |
| | Address: 26 Whistler Court, Irvine, CA 92612 |
| State of California) | |
|) ss. | |
| County of Los Angeles) | |
| | |
| On, 2002, before | personally appeared, person- |
| ally known to me or proved to me on t | the basis of satisfactory evidence) to be the person(s) whose name(s) |
| | and acknowledged to me that he/she/they executed the same me |
| | that by his/her/their signature(s) on the instrument, the person(s), or |
| the entity upon benalf of which the persor | i(s) acted, executed the instrument. |
| WITNESS my hand and official s | eal. |
| | (SEAL) |
| Notary Public | |
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LA: 318435 v01 04/04/2002

PATENT REEL: 13361 FRAME: 0829

RECORDED: 10/09/2002