02-05-2001 U.S. Department of Commerce FORM PTO-1619A Expires 06/30/99 Patent and Trademark Office OMB 0651-0027 **PATENT** 101604711 RECORDATION FORM COVER SHEET **PATENTS ONLY** TO: The Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies). **Submission Type** Conveyance Type New New Assignment ☐ Security Agreement Resubmission (Non-Recordation) License Change of Name Document ID # Merger Other Correction of PTO Error Reel# Frame # U.S. Government (For Use ONLY by U.S. Government Agencies) Corrective Document Frame # Reel# ■ Departmental File ☐ Secret File Mark if additional names of conveying parties attached Conveying Party(ies) **Execution Date** Month Day Year Name (line 1) John D. G. Rather 11 00 16 IAN 2 9 2001 Name (line 2) Execution Date Second Party Month Day Year Name (line 1) H. John Caulfield 11 16 00 Name (line 2) Mark if additional names of receiving parties attached **Receiving Party** Name (line 1) Barbara Ann Karmanos Cancer Institute If document to be recorded is an assignment and the Name (line 2) receiving party is not domiciled in the United States, an appointment of a domestic Address (line 1) Wertz Clinical Cancer Center representative is attached. (Designation must be a separate document from Address (line 2) 4100 John R Assignment.) Address (line 3) 48201 Detroit MI **Domestic Representative Name and Address** Enter for the first Receiving Party only. Name Address (line 1) Address (line 2) Address (line 3) Address (line 4) FOR OFFICE USE ONLY Public burden reporting for this collection of information is estimated to average approximately 30 minutes per Cover Sheet to be recorded, including time for reviewing the document and gathering the data needed to complete the Cover Sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Chief Information Office, Washington, D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651 0027), Washington, D.C. 20503. See OMB Information Collection Budget Package 0651-0027, Patent and Trademark Assignment Practice. DO NOT SEND REQUESTS TO RECORD ASSIGNMENT DOCUMENTS TO THIS ADDRESS. Mail documents to be recorded with required cover sheet(s) information to:

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ı	Name and Address Area Code and Tele	ephone Number (303) 571-4000		
Name	Patrick M. Boucher (Reg. No. 44,037)			
Address (line 1)	Townsend and Townsend and Crew LLP	P E VC		
Address (line 2)	Two Embarcadero Center - 8th Floor	JAN 2 9 2001 E		
Address (line 3)	San Francisco, CA 94111-3834	<u> </u>		
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Patrick M. Boucher (Reg. No. 44,037)	ص January 25, 2001		
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RECORDATION FORM COVER SHEET CONTINUATION PATENTS ONLY

U.S. Department of Commerce Patent and Trademark Office **PATENT**

Conveying Party(i				
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Name (line 1) Ri	chard D. Doolittle 11 16 2000			
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Name (line 1) G	enn W. Zeiders 11 16 2000			
Name (line 2)				
Name (line 1) G	Execution Date Month Day Year			
Name (inte 1)	regory W. Auner 01 25 01			
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Application Number(s) or Patent Number(s)				
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Patent Ap	pplication Number(s) Patent Number(s)			
DE 7031997 v1				

Attorney Docket No.: 20222-000300US

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, John D.G. Rather, of 330 Lincoln Road, Grosse Pointe, MI, 48230, H. John Caulfield, of 4626 Delina Road, Cornersville, TN 37047, Richard D. Doolittle, of 6691 MacArthur Boulevard, Bethesda, MD 20816, Glenn W. Zeiders, of 2803 Downing Court, Huntsville, AL 35801, and Gregory W. Auner, of 16284 Aldrich Court, Livonia, MI 48154, hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: REAL-TIME THREE-DIMENSIONAL

ACOUSTOELECTRONIC IMAGING AND CHARACTERIZATION OF OBJECTS

Date of execution of Declaration: John D.G. Rather November 16, 2000

H. John Caulfield November 16, 2000
Richard D. Doolittle November 16, 2000
Glenn W. Zeiders November 16, 2000
Gregory W. Auner January 25, 2001

Filing Date: August 29, 2000

Application No.: 09/650,306; and

WHEREAS, Barbara Ann Karmanos Cancer Institute, Wertz Clinical Cancer Center, 4100 John R, Detroit, MI 48201, hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

WITNESS my hand and official seal.

Assignment

LESUE M. TRIMBLE
Notary Public. Oaldand County. MI
My Commission Expires July 8, 2002

Lesli M. Innola NOTARY PUBLIC

My Commission Expires: $0.7 - 0.8^{\circ} - 0.2$

Assignment

Attorney Docket No.: 20222-000300US

Page 3

Dated: 16 Noy DE

STATE OF Michigan)
COUNTY OF Wayne)

SS.

On Nov. 16 2000, before me, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

LESLIE M. Thinkel Notary Public, Oaldand County, MI My Commission Expires July 8, 2002

My Commission Expires: 07-08-02

Attorney Docket No.: 20222-000300US Page 4
Dated: 11/16/00 Richard D. Doolittle
STATE OF Michigan) JAN 29 mm &
STATE OF Michigan) ss. COUNTY OF Wayne) On Nov. 16, 2000 before me. Lesure TRADERING TRADERING.
personally appeared Richard D. Doolittle, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.
WITNESS my hand and official seal.
Notary Public, Oakland County. MI My Commission Expires July 8, 2002 My Commission Expires July 8, 2002
NOTARY PUBLIC

My Commission Expires: 07-08-02

Attorney Docket No.: 20222-000300US Page 5	
Dated: Glenn W. Zeiders	
STATE OF Michigan) ss.	
STATE OF Michigan) ss. COUNTY OF Wayne) ss. On Nov. 16, 2000, before me, Letter inble	
personally appeared Glenn W. Zeiders , personally known to me (or proved to me on	the
basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, a acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.	and

WITNESS my hand and official seal.

LESUE M. TRIMBLE
Notary Public, Caldand County, MI
My Commission Expires July 8, 2002

Les Ci M. Durksa NOTARY PUBLIC

My Commission Expires: 0.7-08-03

:313 **96**6 8741

Assignment

Attorney Docket No.: 20222-000300US

Page 6

Dated: 0/25/01

STATE OF Michigan

COUNTY OF Wayne

January 25, 2001, before me, Carol S. Heckmann Gregory W. Auner , personally known to me (or proved to me on the personally appeared_ basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

My Commission Expires: May 1, 2002

DE 7026759 v1

RECORDED: 01/29/2001