Form PTO-1595 (Rev. 09/04) OMB No. 0651-0027 (exp. 6/30/2005)	05-20-	2005	U.S. DEPARTMENT OF COMMERCE _United States Patent and Trademark Office.
· R) (BT(D) ((\$1) TB(D) ((()) BE(() BE(())		
5/16/05			Docket No.: A35151-PCT-USA-A (070
To the Director of the U.S. Patent and	103006	3484	ocuments or the new address(es) below.
1. Name of conveying party(ies)/Exe	ecution Date(s):	2. Name and add	ress of receiving party(ies)
Tiecheng Liu John R. Kender MAY 1 6 2005		Name: The Trustees of Columbia University In The City Of New York	
		Internal Address:	
Ser. Ser.			
Execution Date(s) 03/02/2008 05/03/2005		Street Address: 116th Street and Broadway	
Additional name(s) of conveying party(ies) attac		Offeet Address. Trour Street and Broadway	
3. Nature of conveyance:			
Assignment Merger		City: New York	
Security Agreement Change of Name		State: New York	
Government Interest Assignment		Country: United States Zip: 10027	
Executive Order 9424, Confirmatory License			
Other		Additional name(s) & address(es) attached? Yes Vo	
4. Application or patent number(s):	☐ This	document is being	filed together with a new application.
A. Patent Application No.(s)		B. Patent No.(s)	
10/964,264, filed October 13, 2004			
A	No		
5. Name and address to whom correspondence concerning document should be mailed:		6. Total number of applications and patents involved:	
Name: Baker Botts L.L.P.		7. Total fee (37 C	FR 1 21(h) & 3 41) \$ 40.00
Internal Address:		7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Authorized to be charged by credit card	
			be charged to deposit account
Street Address: 30 Rockefeller Plaza, 44th Floor		✓ Enclosed	
		None require	d (government interest not affecting title)
City: New York		8. Payment Information	
State: New York Zip: 10112		a. Credit Card Last 4 Numbers	
			Expiration Date
Phone Number: 212-408-2500		b. Deposit Account Number <u>02-4377</u>	
Fax Number: 212-408-2501 Email Address:		Authorized User Name Baker Botts L.L.P.	
9. Signature:			
o. eignature.	Signature		05/13/2005 Date
/	Jighalale		Dale

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

Name of Person Signing

Paul A. Ragusa

PATENT REEL: 016572 FRAME: 0873

Total number of pages including cover sheet, attachments, and documents:

ASSIGNMENT

WHEREAS, WE, TIECHENG LIU and JOHN R. KENDER, citizens of Republic of China and The United States of America respectively, having post office addresses at 500 Harbison Boulevard, Apt. 1502, Columbia, South Carolina 29212 and 169 Ames Avenue, Leonia, NJ 07605, respectively, have made an invention entitled "METHODS FOR SELECTING A SUBSEQUENCE OF VIDEO FRAMES FROM A SEQUENCE OF VIDEO FRAMES," as set forth and described in patent application Serial No. 10/964,264, filed October 13, 2004 and

WHEREAS, THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, having its principal place of business at 116th Street and Broadway, New York, New York 10027, is desirous of acquiring the whole right, title and interest in and to said application for Letters Patent, and any continuations, divisions, extensions, substitutions, reissues and reexaminations thereof;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN, BE IT KNOWN, that WE, the said inventors, TIECHENG LIU and JOHN R. KENDER, for and in consideration of the sum of One Dollar (\$1.00), lawful money of the United States, to me in hand paid by said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, and other valuable considerations unto us moving from said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, at or before the ensealing and delivery of these presents, the receipt of which is hereby acknowledged, have sold, assigned, transferred and conveyed and by these presents do sell, assign, transfer and convey, unto said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, its successors and assigns, the entire right, title and interest in and to the said invention "METHODS FOR SELECTING A SUBSEQUENCE OF VIDEO FRAMES FROM A SEQUENCE OF VIDEO FRAMES" and any and all improvements thereon, and in and to said application and any division, continuation or continuation-in-part thereof, and in and to any Letters Patent of the United States which may be issued on any of said applications, and any reissues thereof, and in and to any and all applications for Letters Patent filed in foreign countries for said invention or improvements, and any and all Letters Patent which may be granted in foreign countries therefor, TO HAVE AND TO HOLD THE SAME to the full end of the term or terms for which any and all said Letters Patent may be granted;

AND WE, the TIECHENG LIU and JOHN R. KENDER, do hereby authorize and request the Commissioner of Patents and Trademarks to issue the said Letters Patent of the United States to said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, as the assignee of the entire right, title and interest in and to the same, for the sole use and benefit of said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, its successors and assigns;

AND WE, the said TIECHENG LIU and JOHN R. KENDER, for the considerations aforesaid, do hereby covenant and agree to and with said THE TRUSTEES OF COLUMBIA NY02:503530.1

PATENT REEL: 016572 FRAME: 0874 UNIVERSITY IN THE CITY OF NEW YORK, its successors and assigns, that I have the full power to make this assignment, and that the rights assigned are not encumbered by any grant, license or right heretofore given, and that I, my executors or administrators, shall and will do all lawful acts and things and make, execute and deliver without further compensation, any and all other instruments in writing, further applications, papers, affidavits, powers of attorney, assignments, and other documents which, in the opinion of counsel for said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, its successors and assigns, may be required or necessary more effectively to secure to and vest in said THE TRUSTEES OF COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, its successors and assigns, the entire right, title and interest in and to said invention and improvements, applications, Letters Patent, rights, titles, benefits, privileges, and advantages hereby sold, assigned, transferred and conveyed, and that I will sign any applications for reissue which may be desired by the owner of the patent or patents which may be issued for the said invention or improvements.

IN WITNESS WHEREOF, I, the said TIECHENG LIU, have hereunto set my hand and seal.

TIECHENĞ LIU

STATE OF ζ ()

COUNTY OF Richland

BE IT KNOWN, that on this <u>and</u> day of <u>March</u>, 2005, before me personally came TIECHENG LIU, to me known and known to me to be the person mentioned in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed for the use and purposes therein mentioned. SUBSCRIBED AND SWORN before me, the undersigned authority, by on this day of March, 2005.

Notary Public

My Commission Expires February & Sugar

NY02:503530.1

2

PATENT REEL: 016572 FRAME: 0875

A35151-PCT-USA (070050.2642)

IN WITNESS WHEREOF, I, the said JOHN R. KENDER, have hereunto set my hand
and seal.
JOHN R. KENDER
STATE OF)
STATE OF) :ss: COUNTY OF)
BE IT KNOWN, that on this day of, 2005, before me personally came JOHN R. KENDER, to me known and known to me to be the person mentioned in and who executed the foregoing assignment, and he acknowledged to me that he executed the same as his free act and deed for the use and purposes therein mentioned. SUBSCRIBED AND SWORN before me, the undersigned authority, by on this day of
Notary Public

NY02:503530.1

RECORDED: 05/16/2005

3

PATENT REEL: 016572 FRAME: 0876