

## PATENT ASSIGNMENT COVER SHEET

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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
TOSHIBA MEDICAL SYSTEMS CORPORATION	11/17/2014
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CHICAGO, THE UNIVERSITY OF
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<b>Name:</b>	TOSHIBA MEDICAL SYSTEMS CORPORATION
<b>Street Address:</b>	1385 SHIMOISHIGAMI
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<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	324-8550
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	13960819
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
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<b>Address Line 1:</b>	1628 JOHN F. KENNEDY BOULEVARD
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<b>Address Line 4:</b>	PHILADELPHIA, PENNSYLVANIA 19103
<b>ATTORNEY DOCKET NUMBER:</b>	TOSHIBA-1064
<b>NAME OF SUBMITTER:</b>	KEN I. YOSHIDA
<b>SIGNATURE:</b>	/KEN I YOSHIDA/
<b>DATE SIGNED:</b>	11/24/2014

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**Total Attachments: 4**

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DOCKET NO.: TOSHIBA-1064  
TOSHIBA Ref. No.: 98G210571-USAA (TMRU-301)  
SUZUE Ref. No.: T3KH-13S0566

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### ASSIGNMENT

WHEREAS, **TOSHIBA MEDICAL SYSTEMS CORPORATION**, a corporation of **JAPAN**, hereinafter referred to as the assignor, is the applicant of certain inventions or improvements for which it has made application for Letters Patent to the United States, identified as **Attorney Docket No. TOSHIBA-1064**, entitled **"IMAGE DOMAIN PANSHARPENING METHOD AND SYSTEM FOR SPECTRAL CT WITH LARGE PIXEL ENERGY DISCRIMINATING DETECTORS"** filed on **August 7, 2013** and accorded US Patent Application No. **13/960,819**.

WHEREAS, **THE UNIVERSITY OF CHICAGO**, and **TOSHIBA MEDICAL SYSTEMS CORPORATION**, hereinafter referred to as the assignees, of **5640 South Ellis Ave., Suite 405, Chicago, IL 60637 U.S.A** and **1385 Shimoishigami, Otawara-shi, Tochigi-ken, 324-8550 JAPAN**, are desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries:

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) to said assignor in hand paid by said assignees, and other good and valuable consideration, the receipt of which is hereby acknowledged, said assignor, has sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignees, the entire right, title and interest in and to said inventions or improvements and said applications including the right to claim priority to the applications in any foreign application entitled to claim such priority under national law, international conventions, treaties or otherwise, and any and all continuations, divisions and renewals of and substitutes for said applications, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, and assign to and authorize said assignees, to file in its name applications for Letters Patent in all countries, the same to be held and enjoyed by said assignees, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

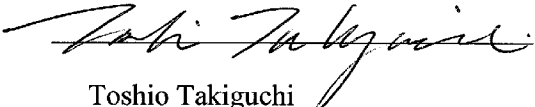
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SUZUE Ref. No.: T3KH-13S0566

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AND said assignor hereby covenant that it has full right to convey the entire interest herein assigned, and that it has not executed and will not execute any agreement in conflict herewith, and it further covenants and agrees that it will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignees, its successors, assigns, nominees, or legal representatives, all known facts respecting said inventions or improvements, said applications and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything possible to aid said assignees, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND said assignor hereby authorizes and requests the Director – U.S. Patent and Trademark Office and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignees, as assignees of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the applications aforesaid, in accordance with the terms of this assignment.

IN WITNESS WHEREOF, the assignor has hereunto set its hand and seal.


Dated: Nov. 17, 2014  (L. S.)  
Toshio Takiguchi Printed Name  
President and Chief Executive Officer Title  
Toshiba Medical Systems Corporation

AFFIDAVIT BY KEN YOSHIDA  
FOR THE ASSIGNMENT OF  
US Patent Application 13/960,819 Filed on August 7, 2013

1. The undersigned Ken Yoshida of Yoshida & Associates, LLC Philadelphia, PA is registered to practice before the United States Patent and Trademark Office (USPTO), and his registration number is 37,009. The undersigned is also an attorney of the record for prosecuting the above referenced patent application (13/960,819) and is associated with customer number 107962.
2. The undersigned has been retained by Toshiba Medical Systems Corporation of Japan for preparing and prosecuting its US patent applications. The undersigned is prepared the above referenced patent application based upon the disclosure from Adam Petschke and filed at the USPTO the above referenced patent application on August 7, 2013.
3. Prior to filing the above referenced patent application, the undersigned prepared an assignment form with intent that the inventors assign their entire patent rights associated with the invention and their improvements to the designated assignees. For the above intent, the assignment form was prepared to assign the invention rights from the inventor assignors including David Rigie, Patrick La Riviere and Adam Petschke to the applicant assignees including The University of Chicago and Toshiba Medical Systems Corporation.
4. Adam Petschke is an employee of Toshiba Medical Research Institute USA, Inc located in Vernon Hills, IL while David Rigie and Patrick La Riviere are employees of the University of Chicago located in Chicago, IL.
5. The undersigned prepared the above assignment form based upon the belief that each of the above inventors had authority to assign his invention rights.
6. The undersigned distributed the above described assignment form to each of the three inventors and requested to sign the assignment form. David Rigie and Patrick La Riviere executed the assignment form on June 27, 2013 while Adam Petschke executed the assignment form on June 28, 2013. An executed copy of the assignment form is attached to the Affidavit.
7. The executed copy of the assignment form was recorded by the undersigned at the assignment branch of the USPTO on September 9, 2013 for perfection. A copy of Notice of Recordation of Assignment Document is attached to the Affidavit.

8. After perfection of the assignment form at the USPTO, the undersigned was notified by a representative of the University of Chicago that their inventors David Rigie and Patrick La Riviere did not have the authority to sign the assignment. According to the representative of University of Chicago, as a condition of working for the University of Chicago, the inventors had signed the University employment agreement which clearly addresses their rights associated with intellectual property. As a result of the University employment agreement, the inventors have already assigned their rights in the above referenced patent application to the University of Chicago.
9. The undersigned was not aware of the University employment agreement so that David Rigie and Patrick La Riviere could not execute the assignment form that the undersigned had prepared to assign their rights to Toshiba Medical Systems Corporation.
10. In summary, the undersigned had prepared the assignment form without proper knowledge of the University employment agreement and had recorded the executed copy of the assignment form at the USPTO. The undersigned believes that the assignment form was erroneously signed by the inventors and improperly recorded at the USPTO.

IN WITNESS WHEREOF, I have hereunto set my hand and seal.

Dated: May 13, 2014  (L. S.)  
Ken I. Yoshida