

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4663770

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	TAE SOO KIM	10/09/2017
	SHAOHUA KEVIN ZHOU	10/10/2017
	DAVID LIU	10/10/2017
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	SIEMENS MEDICAL SOLUTIONS USA, INC.	
<b>Street Address:</b>	40 LIBERTY BOULEVARD	
<b>City:</b>	MALVERN	
<b>State/Country:</b>	PENNSYLVANIA	
<b>Postal Code:</b>	19355	
<b>PROPERTY NUMBERS Total: 2</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Application Number:</b>	15727677	
<b>Application Number:</b>	62415075	
<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>		
<b>Phone:</b>	4077362472	
<b>Email:</b>	IPDADMIN.US@SIEMENS.COM	
<b>Correspondent Name:</b>	SIEMENS CORPORATION, INTELLECTUAL PROPERTY DEPT.	
<b>Address Line 1:</b>	3501 QUADRANGLE BLVD., SUITE 230	
<b>Address Line 4:</b>	ORLANDO, FLORIDA 32817	
<b>ATTORNEY DOCKET NUMBER:</b>	2016P22444US01	
<b>NAME OF SUBMITTER:</b>	ELIZABETH PATLA	
<b>SIGNATURE:</b>	/Elizabeth Patla/	
<b>DATE SIGNED:</b>	10/30/2017	
<b>Total Attachments: 4</b>		
source=2016P22444US01_KIM_ZHOU_LIU_to_SMS#page1.tif		
source=2016P22444US01_KIM_ZHOU_LIU_to_SMS#page2.tif		
source=2016P22444US01_KIM_ZHOU_LIU_to_SMS#page3.tif		



## ASSIGNMENT

For good and valuable consideration, I (We),

**Mingqing Chen**, residing at 1213 Fox Run Drive, Plainsboro, NJ 08536, US, citizen of CN

**Tae Soo Kim**, residing at 3019 Romaric Ct, Baltimore, MD, 21209 US, citizen of KR

**Shaohua Kevin Zhou**, residing at 94 Marion Drive, Plainsboro, NJ 08536, US, citizen of CN

**David Liu**, residing at 7009 Ebony Ct., Plano, TX 75024, US, citizen of TW

hereafter individually or collectively referred to as "Assignor(s)";

Hereby, (I) acknowledge having previously assigned, sold and transferred to **Siemens Medical Solutions USA, Inc.**, a corporation organized and existing under the laws of UNITED STATES OF AMERICA, having its principal place of business at 40 Liberty Blvd., Malvern, PA 19355, US, hereinafter "Assignee", its successors, assigns and legal representatives, or to a predecessor of Assignee, pursuant to (A)(i) the laws of UNITED STATES OF AMERICA or (ii) a Patent & Secrecy Agreement or similar legal document such as, without limitation, an employee agreement executed at the time of entering into the employment of, or executed as a condition of continuing employment with, the Assignee or a predecessor of the Assignee, the entire right, including any and all priority rights, title and interest, in and for the United States and all foreign countries, in and to any and all inventions or improvements which are disclosed in an invention disclosure and/or in the below-identified documents currently filed with this Assignment, already filed or granted for Letters Patent (in which case, any provision of the subject Assignment that is in conflict with or is in addition to any provision in the prior agreement(s) or assignment(s) then this Assignment shall govern, take precedence, and be of legal effect), or

(B)(i) to the extent such laws of UNITED STATES OF AMERICA or such Patent & Secrecy Agreement or similar legal document failed or fails, in whole or part, to have assigned, sold or transferred the entire right (including priority rights), title and interest, in and for the United States and all foreign countries, in and to all inventions or improvements which are disclosed in the below-identified application(s) or pending application(s) or granted Letters Patent, or (ii) if no such agreement(s) exist assigning, selling or transferring any such right (including priority rights), title or interest; then for good and valuable consideration, Assignor(s) now and hereby, effective Nunc Pro Tunc on the filing date of the below identified patent application(s), pending patent application(s) or granted Letter Patent(s), assign, sell and transfer(s) to Assignee, its successors, assigns and legal representatives, the entire right, (including all priority rights), title and interest in and for the United States and all foreign countries, in and to any and all inventions and/or improvements which are disclosed in the following identified; patent application(s), pending patent application(s) or granted Letter Patent(s)

Patent Application Title: **Deep Learning Based Bone Removal in Computed Tomography Angiography**

Filing Date: **09 Oct 2017**

Filing Number: **15/727,677**

Internal Case Number(s): **2016P22444 US01**

Patent Application Title: **Deep Learning Based CT(A) Bone Removal and Vascular Analysis**

Filing Date: **31 Oct 2016**

Filing Number: **62/415,075**

Internal Case Number(s): **2016P22444 US**

and in and to said application(s) or granted patents and all applications claiming priority to said application or granted patent, including, without limitation, and all divisional, continuing, substitute, renewal, reissue, and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of the inventions and/or improvements; and in and to all original and reissued patents which have been or shall be filed in the United States and all foreign countries on the inventions and/or improvements;

(II) Agree that said Assignee may apply for and receive Letters Patent for said inventions and/or improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the undersigned will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions and/or improvements; execute all rightful oaths, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns, and legal representatives, all facts known to the undersigned relating to said inventions and/or improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns or legal representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and/or improvements and for vesting title to said inventions and or improvements and all applications for patents and all patents on said inventions and/or improvements, in said Assignee, its successors, assigns and legal representatives; and

(III) Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
Mingqing Chen

\_\_\_\_\_  
printed name

\_\_\_\_\_  
Date

7/14/17  
Witness Signature

[Signature]  
Tae Soo Kim

TAE SOO KIM  
printed name

October 09, 2017  
Date

[Signature]  
Witness Signature

[Signature]  
Shaohua/ Kevin Zhou

Elizabeth A. Patta  
printed name

October 10, 2017  
Date

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
David Liu

\_\_\_\_\_  
printed name

\_\_\_\_\_  
Date

Companies Representative(s)  
Siemens Medical Solutions USA, Inc.

Signature(s): \_\_\_\_\_

Name(s): Michele L. Conover

Title: Senior Counsel

Date: \_\_\_\_\_

\_\_\_\_\_  
Witness Signature

\_\_\_\_\_  
Tae Soo Kim

\_\_\_\_\_  
printed name

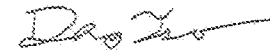
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Witness Signature

\_\_\_\_\_  
Shachua Kevin Zhou

\_\_\_\_\_  
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Date

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David Liu

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Danju Tso

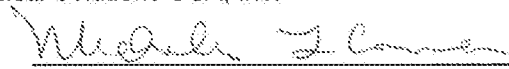
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10/10/2017

\_\_\_\_\_  
printed name

\_\_\_\_\_  
Date

Companies Representative(s)  
Siemens Medical Solutions USA, Inc.

Signature(s):

\_\_\_\_\_  


Name(s): Michele L. Conover

Title: Senior Counsel

Date:

10/30/17