## 504449972 07/10/2017

# PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT4496673

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
JOON-MO YANG	06/30/2017
CHAE UN KIM	06/30/2017

### **RECEIVING PARTY DATA**

Name:	UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY)
Street Address:	50, UNIST-GIL, EONYANG-EUP
Internal Address:	ULJU-GUN
City:	ULSAN
State/Country:	KOREA, REPUBLIC OF
Postal Code:	44919

### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15645969

### **CORRESPONDENCE DATA**

**Fax Number:** (503)595-5301

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.

**Phone:** 503-595-5300

Email:Carolyn.Schlabach@klarquist.comCorrespondent Name:KLARQUIST SPARKMAN, LLPAddress Line 1:121 SW SALMON STREET

Address Line 2: SUITE 1600

Address Line 4: PORTLAND, OREGON 97204

ATTORNEY DOCKET NUMBER:	9022-99264-01/RJP
NAME OF SUBMITTER:	CAROLYN SCHLABACH
SIGNATURE:	/Carolyn Schlabach/
DATE SIGNED:	07/10/2017

#### **Total Attachments: 3**

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PATENT 504449972 REEL: 042956 FRAME: 0582

#### ASSIGNMENT

WHEREAS, we, Joon-Mo YANG, of Daejeon, Republic of Korea, and Chae Un KIM, of Ulsan, Republic of Korea, have invented a certain invention, entitled PHOTOACOUSTIC AND ULTRASONIC ENDOSCOPY SYSTEM INCLUDING A COAXIALLY CONFIGURED OPTICAL AND ELECTROMAGNETIC ROTARY WAVEGUIDE ASSEMBLY AND IMPLEMENTATION METHOD THEREOF, for which an application for Letters Patent of the United States of America, Application No. 15/645,969 \_\_\_\_\_\_, is being filed on \_\_\_\_\_\_July 10 \_\_\_\_\_\_, 2017, which application is referred to herein as the "United States patent application," with a claim for priority to Korean Patent Application No. 10-2016-0107773, filed on August 24, 2016; and

WHEREAS, UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), a foundation organized under the laws of Korea, having a place of business at 50, UNIST-gil, Eonyang-eup, Ulju-gun, Ulsan 44919 Republic of Korea, owns an interest therein and wishes to record that interest with the United States Patent and Trademark Office:

NOW, THEREFORE, we, Joon-Mo YANG and Chae Un KIM, acknowledge that UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY) is the owner of the full and exclusive right, title and interest in and to the invention, United States patent application, and all corresponding United States divisions, continuations, and continuations-in-part, any resulting letters patent, and all reissues and extensions thereof, and for good and valuable consideration, the receipt of which is hereby acknowledged, we do hereby sell, assign and transfer to UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), all our right, title and interest in and to the invention, United States patent application, and all corresponding United States divisions, continuations, and continuations-in-part, any resulting letters patent, and all reissues and extensions thereof, to be held and enjoyed by UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), for its own use and benefit, and for its successors and assigns to the full end of the term for which letters patent may be granted by the United States, as fully and entirely as the same would have been held by us had this assignment and sale not been made.

Assignment - Photoacoustic and Ultrasonic Endoscopy System Including a Coaxially Configured Optical and Electromagnetic Rotary Waveguide Assembly and Implementation Method Thereof - Page 1 of 3

PATENT REEL: 042956 FRAME: 0583 9022-99264-01 GN-53749-US

We confirm that at the time the invention was made, we were under an obligation to assign the invention to UNIST(ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY).

We hereby grant the law firm of Klarquist Sparkman, LLP, the power to insert on this Assignment any further information which may be necessary or desirable in order to comply with all applicable legal requirements, including the rules of the United States Patent and Trademark Office, for submitting and recording this document.

Executed at the place and date opposite our signatures below.

Executed at	Daejeon, KR	, this <u>30</u> day of <u>June</u> , 2017.
	(City, Country)	Junet Journo Joon-Mo YANG
In the presenc	e of:	
ŀ	ZIM, JZVN	
Witnessed by	i	
Jiun Kin	า	
Name (print)		-
June 3	0, 2017	
Date		

Assignment - Photoacoustic and Ultrasonic Endoscopy System Including a Coaxially Configured Optical and Electromagnetic Rotary Waveguide Assembly and Implementation Method Thereof - Page 2 of 3

PATENT REEL: 042956 FRAME: 0584 9022-99264-01 GN-53749-US

**RECORDED: 07/10/2017** 

Executed at	Ulsan, KR	, this	30	day of	June	, 2017.
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		(	Chae	Un KIM		
In the presence	of:					,
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Witnessed by						
Jiun Kim						
Name (print)						
June 30, 20	)17					
Date	(A)					

Assignment - Photoacoustic and Ultrasonic Endoscopy System Including a Coaxially Configured Optical and Electromagnetic Rotary Waveguide Assembly and Implementation Method Thereof - Page 3 of 3

PATENT REEL: 042956 FRAME: 0585