#### 504566570 09/26/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1

EPAS ID: PAT4613281 Stylesheet Version v1.2

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
KYUNG ROK KIM	09/19/2017
MIN WOO RYU	09/19/2017
SANG HYO AHN	09/19/2017

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

Property Type	Number
Application Number:	15561940

## **CORRESPONDENCE DATA**

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NAME OF SUBMITTER:	CHARLES S. RAUCH
SIGNATURE:	/charles s rauch/
DATE SIGNED:	09/26/2017

# **Total Attachments: 2**

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> **PATENT** REEL: 044018 FRAME: 0512 504566570

### ASSIGNMENT OF INVENTION

WHEREAS, I, KIM, Kyung Rok, 50, UNIST-gil, Eonyang-eup Ulju-gun Ulsan 689-798, Republic of Korea; RYU, Min Woo, 50, UNIST-gil, Eonyang-eup Ulju-gun Ulsan 689-798, Republic of Korea; and AHN, Sang Hyo, 50, UNIST-gil, Eonyang-eup Ulju-gun Ulsan 689-798, Republic of Korea, have invented certain new and useful improvements in a RING-TYPE FIELD EFFECT TRANSISTOR FOR TERAHERTZ WAVE DETECTION, WHICH USES GATE METAL AS ANTENNA, for which a national phase patent application for Letters Patent in the United States is being filed, based upon International Application No. PCT/KR2015/014578 filed on December 31, 2015;

AND WHEREAS, UNIST (ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY), 50, UNIST-gil, Eonyang-eup Uljugun Ulsan 44919, Republic of Korea, is desirous of acquiring all interest in said invention, said application, and in any Letters Patent which may be granted therefor;

AND WHEREAS, at the time the invention was made, I was under an obligation to assign all of my right, title, and interest in said invention to UNIST (ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY):

NOW THIS INDENTURE WITNESSETH, that for the sum of one dollar and other valuable consideration to me in hand paid, the receipt of which is hereby acknowledged, I hereby assign, sell, and transfer unto said UNIST (ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY) my entire right, title, and interest in said invention, said application, and in and to any and all Letters Patent of the United States, and countries foreign thereto, which may be granted for said invention, and in and to any and all priority rights, rights under the International Convention For The Protection Of Industrial Property, rights under the Patent Cooperation Treaty, and other benefits accruing or to accrue to me with respect to the filing of applications for patents or securing of patents in the United States and countries foreign thereto.

And I hereby authorize and request the Commissioner of Patents and Trademarks to issue said United States Letters Patent to said UNIST (ULSAN NATIONAL INSTITUTE OF SCIENCE AND TECHNOLOGY) as the assignee of the whole right, title, and interest thereto.

And I further agree to sign and properly execute such necessary and lawful papers for application for foreign patents, for filing subdivisions of said application for patent, and for obtaining any reissue or reissues of any Letters Patent which may be granted for my aforesaid invention, as the assignee thereof shall hereafter require and prepare at its own expense.

WITNESS, my signature and date of execution:		
1/2 ///	2017. 9. 19.	
KiM, Kyung Rok	Date	
	2017, 9, 19	
RYU, Min Woo	Date	****
	2019,07,19	
AHN, Sang Hyo	Date	