505185264 11/11/2018

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DONG GYU SIM	11/01/2018
SEA NAE PARK	11/01/2018

RECEIVING PARTY DATA

Name:	KWANGWOON UNIVERSITY INDUSTRY-ACADEMY COLLABORATION FOUNDATION	
Street Address:	20, GWANGUN-RO	
Internal Address:	al Address: NOWON-GU	
City:	SEOUL	
State/Country:	KOREA, REPUBLIC OF	
Postal Code:	01897	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16184581

CORRESPONDENCE DATA

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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.

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ATTORNEY DOCKET NUMBER:	122823-5002-US
NAME OF SUBMITTER:	TAE-WOONG KOO
SIGNATURE:	/Tae-Woong Koo/
DATE SIGNED:	11/11/2018

Total Attachments: 2

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PATENT 505185264 REEL: 047468 FRAME: 0510

ASSIGNMENT

(2)	WHEREAS, WE (1), (1) Still, Long Gyd resident of, 110-1803, 49, Seoxiye-10, Nowon-gd, Seoul 01901 Republic of Korea. 2) PARK, Sea Nae resident of 301, 6, Gwangun-ro 3-gil, Nowon-gd, Seoul 01898 Republic of Korea		
AS	SSIGNOR(S), are (am) the inventor(s) of the invention in		
ΑN	METHOD AND AN APPARATUS FOR ENCODING/DECODING RESIDUAL COEFFICIENT	·	
des	escribed in an application for a Patent of the United States		
×	I which is executed on ⊠ even date herewith		
	which was filed on, Application No		
	which claims priority on U.S. Provisional Patent Application No(s).		
Ø	We (I) hereby authorize and request our (my) attorney, Tac-Woong Koo, of Morgan, Lewis & Bocki here in parenthesis (Application number 16/184,581, filed November 8, 2018, and Morg Bockius LLP docket no.122823-5002US) the filing date, application number, and the attorney docket		
	application when known.		
ano	nd WHEREAS, KWANGWOON UNIVERSITY INDUSTRY-ACADEMY COLLABORATION FOUNDATION	ASSIGNEE,	
ha	aving a place of business at 20, Gwangun-ro, Nowon-gu, Secul 01897 Republic of Korea	·	
is o	desirous of obtaining our (my) entire right, title and interest in, to and under the said invention and the	said application:	

NOW, THEREFORE, let it be known that for and in consideration of the sum of One Dollar (\$1.00) to me paid, and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, we (I), the said ASSIGNOR(S), have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, its successors, legal representatives and assigns, our (my) entire right, title and interest in, to and under the said invention, and the said United States application and all divisions, renewals and continuations thereof, and any substitute applications therefore, and all Patents of the United States which may be granted thereon and all reissues and extensions thereof; the said United States provisional patent application(s), if any, on which the said United States application claims priority; and all applications for industrial property protection, including, without limitation, all applications for patents, utility models, and designs which may hereafter be filed for said invention in any country or countries foreign to the United States, together with the right to file such applications and the right to claim for the same the priority rights derived from said United States application and said United States provisional patent application(s), if any, under the Patent Laws of the United States, the International Convention for the Protection of Industrial Property, or any other international agreement or the domestic laws of the country in which any such application is filed, as may be applicable; and all forms of industrial property protection, including, without limitation, patents, utility models, inventors' certificates and designs which may be granted for said invention in any country or countries foreign to the United States and all extensions, repewals and reissues thereof;

AND WE (I) HEREBY authorize and request the Commissioner of Patents and Trademarks of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents or other evidence or forms of industrial property protection on applications as aforesaid, to issue the same to the said ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE (I) HEREBY covenant and agree that we (I) have full right to convey the entire interest herein assigned, and that we (I) have not executed, and will not execute, any agreement in conflict herewith.

AND WE (I) HEREBY further covenant and agree that we (I) will communicate to the said ASSIGNEE, its successors, legal representatives and assigns, any facts known to us (me) respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuing, reissue and foreign applications, make all rightful oaths, and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper protection for said invention in all countries.

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MORGAN, LEWIS & BOCKIUS LLF

IN TESTIMONY WHEREOF, We (I) hereunto set our (my) hands and seals the day and year set opposite our (my) respective signature(s). Date Nov. 1, 2018 Date 1. Nov., 20/8 PARK, Sea Nae ____L.S. Date

> PATENT REEL: 047468 FRAME: 0512

RECORDED: 11/11/2018