

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2


EPAS ID: PAT5091137

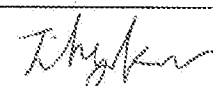
<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MIN HYUN KIM	07/17/2018
JI HYUNG KIM	07/17/2018
JU HO PARK	07/17/2018
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<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16059790
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<b>ATTORNEY DOCKET NUMBER:</b>	ESA-159
<b>NAME OF SUBMITTER:</b>	ROBERT H. BERDO, JR.
<b>SIGNATURE:</b>	/Robert H. Berdo, Jr./
<b>DATE SIGNED:</b>	08/09/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 2</b>	
source=03_ESA-159_ASG-DEC#page1.tif	
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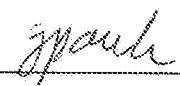
출원 자료를 이용한 실용 또는 디자인 특허 출원 선언 및 양도서 (37 CFR 1.76)  
 DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
 USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

<p>발명의 명칭 Title of Invention</p>	<p>METHOD FOR DATA COMMUNICATIONS USING MULTI-BEAMFORMING IN MOBILE COMMUNICATION SYSTEM AND APPRATUS THEREFOR</p>
<p>선언 Declaration</p>	<p>아래에 기명된 발명자로서, 본인은 아래와 같이 선언합니다:                  As the below named inventor(s), I hereby declare that:                  동 선언서 제출처:                  The declaration is directed to:  <input checked="" type="checkbox"/> 첨부된 출원, 또는                  The attached application, or  <input type="checkbox"/> 미국 출원 또는 PCT 국제 출원 번호 _____ 및                  출원 일자 _____                  United States application or PCT international application number                  _____ filed on _____                  상기 기재된 출원은 본인이 작성하였거나, 본인의 허락하에 본인 작성으로                  신고되었습니다.                  The above-identified application was made or authorized to be made by me.                  본인은 본인이 단독 또는 공동 발명자와 함께 출원서에 주장된 발명사항을 발명한                  사람이라고 믿습니다.                  I believe that I am the original or an original joint inventor of a claimed invention in the                  application.                  본인은 의도적인 허위 진술이 동 선언서에 기재되었을 경우 18 U.S.C. 1001 에 의거,                  벌금형 또는 (5) 년 이하의 징역형 또는 두 가지 형벌을 모두 받을 수 있음을 인지합니다.                  I hereby acknowledge that any willful false statement made in this declaration is                  punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years                  or both.</p>
<p>양도 Assignment</p>	<p>NOW, THEREFORE, in consideration of the sum of one dollar (\$1), the receipt whereof                  is acknowledge, and other good and valuable consideration, I, by these presents do sell,                  assign and transfer unto said assignee(s)                    Electronics and Telecommunications Research Institute                  218 Gajeong-ro, Yuseong-gu, Daejeon, 34129, KOREA                  Republic of Korea                    and the heirs, successors, assigns and legal representatives of the assignee(s) the full                  and exclusive right to the said invention in the United States and in its territorial                  possessions and in any and all foreign countries any and all improvements thereof, the                  entire rights, title and interest in and to any and all Patents which may be granted                  therefore in the United States. I hereby authorize and request the Director of the U.S.                  Patent and Trademark Office to issue said United States Patent to said assignee(s), of the                  entire right, title, and interest in and to the same, for his sole use and for the use of his                  legal representatives, to the full end of the term for which said Patent may be granted, as                  fully and entirely as the same would have been held by me had this assignment and sale                  not been made.                  I agree promptly upon request of the assignee(s), its heirs, successors, assigns and                  legal representatives of the assignee(s) to communicate any facts known to it respecting                  the patent and the invention set forth therein, and to execute and deliver without further</p>

출원 자료를 이용한 실용 또는 디자인 특허 출원 선언 및 양도서 (37 CFR 1.76)  
 DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION  
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	compensation any power of attorney, Assignment, application, whether original, continuation, divisional or reissue, or other papers that may be necessary. I hereby covenant that no assignment, sale agreement or encumbrance has been or will be made or entered into which would conflict with this assignment and sale. I further covenant that assignee(s) will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to me and will testify as to the same in any litigation related thereto and will promptly execute and deliver to assignee(s) or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.	
발명자의 법적 성명 Legal Name Of Inventor	발명자 성명(이름, 성): Inventor Name (First Middle LAST):	Min Hyun KIM
	발명자 서명: Inventor Signature:	
	일자: Date:	July 17, 2018

공동 발명자의 법적 성명 Legal Name Of Joint Inventor, If Any	발명자 성명(이름, 성): Inventor Name (First Middle LAST):	Ji Hyung KIM
	발명자 서명: Inventor Signature:	
	일자: Date:	July 17, 2018

공동 발명자의 법적 성명 Legal Name Of Joint Inventor, If Any	발명자 성명(이름, 성): Inventor Name (First Middle LAST):	Ju Ho PARK
	발명자 서명: Inventor Signature:	
	일자: Date:	July 17, 2018

A total of \_\_\_\_\_ supplemental sheet(s) are attached hereto for additional inventors, if any.