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PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
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KUG JIN YUN	11/26/2018
YOUNGSOO PARK	11/27/2018

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PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16309595

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DATE SIGNED:	12/13/2018	

Total Attachments: 3

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PATENT REEL: 047765 FRAME: 0370 505234794

출원 자료서를 이용한 실용 또는 디자인 특히 출원 선언 및 완도서 (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

PR20160367USa

Bug의 명정 Title of Invention	METHOD AND APPARATUS FOR PROVIDING 360 DEGREE VIRTUAL REALITY BROADCASTING SERVICE
	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:
	☑ 청부된 총원, 또는 The attached application, or ☐ 미국 총원 또는 PCT 국제 출원 번호 총원 일자
선전	United States application or PCT international application number <u>PCT/KR2017/007784</u> filed on <u>July 19, 2017</u> . 상기 기재된 출원은 본인이 작성하였거나, 본인의 허락하에 본인 작성으로
Declaration	신고되었습니다. The above-identified application was made or authorized to be made by me. 본인은 본인이 단독 또는 공동 발명자와 함께 출원서에 주장된 발명사항器 발명한 사람이라고 믿습니다.
	자용이라고 물름니다. I believe that I am the original or an original joint inventor of a claimed invention in the application. 본만은 의도적인 허위 진술이 등 선언서에 기재되었을 경우 18 U.S.C. 1001 에 의기,
	발금형 또는 (5) 년 이하의 장역형 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.
	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)
양도 Assignment	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

용원 자료서를 이용한 실용 또는 디자인 복해 출원 선인 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

PR20160367USa 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. Gun BANG 발명자 성명(이름, 성): Inventor Name (First Middle LAST): 발명자의 법적 성명 :智林 依留望 Legal Name Inventor Signature: Of Inventor S. XI: Date: Kug Jin YUN 발명자 설명(이쁨, 설): ₹ ₹ Inventor Name (First Middle LAST): 발명자의 발적 성영 발명자 서명: Legal Name Inventor Signature: Of Joint inventor, if 잃자를 Any Date: Youngsoo PARK 발명자 성영(이혼, 성): 33.8 Inventor Name (First Middle LAST): 監理和의 법적 성명 : 명사 대명별 Legal Name inventor Signature: Of Joint Inventor, if 製刀: Any Date:

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

응원 기료서를 이용한 성용 또는 디자인 혹하 출원 선인 및 필도서 (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

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	compensation any power of altomey. 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 easignee(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 filigation 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.		
## 91 X P.S.	활동자 성영(이용, 성): Inventor Name (First Middle LAST):	Gun BANG	
製造 対象 Legal Name Of Inventor	발명자 서명: Inventor Signature:		
	있지: Date:		

#8114 88	봤용가 성용(이용, 설): Inventor Name (First Middle LAST):	Kug Jin YUN
변곡 성명 Legal Name Of Joint	활영지 서영: Inventor Signature	Jun 1
inventor, if Any	製以: Date:	26 Nov. 2018

#374 #8	발명자 성영(이율, 성): Inventor Name (First Middle LAST):	Youngsoo PARK
물목성용 Legal Name Of Joint	불용자 서영 : Inventor Signature:	
Inventor, If Any	复以) Date:	

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