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PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5850106

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| YONG JU LEE | | | | | | 06/05/2015 | 5 |
| JEONG IL SEO | | | | | | 06/08/2015 | 5 |
| SEUNG KWON BEACK | | | | | | 06/05/2015 | 5 |
| KYEONG OK KANG | | | | | | 06/05/2015 | 5 |
| JIN WOONG KIM | | | | | | 06/08/2015 | 5 |
| JAE HYOUN YOO | | | | | | 06/05/2015 | 5 |
| RECEIVING PARTY DA | | | | | | | |
| Name: | - | FRONICS | AND TELECOM | MUNICATIO | NS RES | SEARCH INSTIT | UTE |
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| City: | DAEJE | DAEJEON | | | | | |
| State/Country: | KOREA, REPUBLIC OF | | | | | | |
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DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

PR20130209US(IP20130221)_무한

| Title of Invention | APPARATUS AND METHOD FOR AUDIO SIGNAL | PROCESSING MULTI-CHANNEL | | |
|---------------------------|---|---|--|--|
| | As the below named inventor(s), I heret | ov declare that: | | |
| | The declaration is directed to: | | | |
| | The attached application, or | | | |
| | | CT international application number | | |
| | PCT/KR2014/003424 filed on | | | |
| Declaration | The above-identified application was ma | ade or authorized to be made by me. | | |
| | I believe that I am the original or an or application. | iginal joint inventor of a claimed invention in th | | |
| | | I false statement made in this declaration i or imprisonment of not more than five (5) year | | |
| | | of the sum of one dollar (\$1), the receipt wherec table consideration, 1, by these presents do set | | |
| | Electronics and Telecom | imunications Research Institute | | |
| | 218 Gajeong-ro, Yuseong-gu, D | aejeon 34129 , Republic of Korea | | |
| Assignment | and exclusive right to the said inventi- possessions and in any and all foreign of entire rights, title and interest in and t- therefore in the United States. I hereby Patent and Trademark Office to issue said entire right, title, and interest in and to the legal representatives, to the full end of the | legal representatives of the assignee(s) the it ion in the United States and in its territoric countries any and all improvements thereof, th o any and all Patents which may be grante authorize and request the Director of the U.S i United States Patent to said assignee(s), of th he same, for his sole use and for the use of hi is term for which said Patent may be granted, a been held by me had this assignment and sal | | |
| Assignment | legal representatives of the assignee(s) t the patent and the invention set forth the | assignee(s), its heirs, successors, assigns an o communicate any facts known to it respectin rrein, and to execute and deliver without furthe , Assignment, application, whether origina r papers that may be necessary. | | |
| | I hereby covenant that no assignment, a be made or entered into which would conf | sale agreement or encumbrance has been or wi lict with this assignment and sale. | | |
| | I further covenant that assignee(s) will, upon its request, be provided promptly with a 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 an itigation 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 purpose thereof. | | | |
| | | | | |
| | Inventor Name (First Middle LAST): | Yong Ju LEE | | |
| Legal Name Of Inventor | Inventor Name (First Middle LAST): Inventor Signature: | | | |

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76) AND ASSIGNMENT

PR20130209US(IP20130221)_무한

| Legal Name | Inventor Name (First Middle LAST): | Jeong II SEO |
|--------------------------|------------------------------------|---------------|
| Of Joint Inventor, If | Inventor Signature: | |
| Any | Date: | 08 June, 2015 |

| Legal Name | Inventor Name (First Middle LAST): | Seung Kwon BEACK |
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| Of Joint Inventor, If | Inventor Signature: | lin |
| Any | Date: | 5. June 2015 |

| Legal Name | Inventor Name (First Middle LAST): | Kyeong Ok KANG |
|---------------------------------|------------------------------------|----------------|
| Of Joint Inventor, If Any | Inventor Signature: | <u>3-23</u> |
| S X CS Y | Date: | 5. True in 15, |

| Legal Name | Inventor Name (First Middle LAST): | Jin Woong KIM |
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| Of Joint Inventor, If | Inventor Signature: | - MAS. |
| Any | Date: | Mr. Jane, 2015 |

| Legal Name | Inventor Name (First Middle LAST): | Jae Hyoun YOO |
|--------------------------|------------------------------------|-----------------|
| Of Joint Inventor, If | Inventor Signature: | Ì |
| Any | Date: | 5th. June, 2017 |