507790971 03/09/2023

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7838099

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| HAN GIL CHOI | 03/09/2023 |
| SANG HEUNG LEE | 03/08/2023 |
| SEONG HWAN CHO | 03/09/2023 |

RECEIVING PARTY DATA

| Name: | ELECTRONICS AND TELECOMMUNICATIONS RESEARCH INSTITUTE |
|-----------------|---|
| Street Address: | 218, GAJEONG-RO, YUSEONG-GU |
| City: | DAEJEON |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 34129 |
| Name: | KOREA ADVANCED INSTITUTE OF SCIENCE AND TECHNOLOGY |
| Street Address: | 291, DAEHAK-RO, YUSEONG-GU |
| City: | DAEJEON |
| State/Country: | KOREA, REPUBLIC OF |
| Postal Code: | 34141 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 17513657 |

CORRESPONDENCE DATA

Fax Number: (703)573-2514

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.

Phone: (202)371-8976
Email: firm@rabinberdo.com
Correspondent Name: RABIN & BERDO, P.C.

Address Line 1: 2650 PARK TOWER DRIVE, SUITE 800

Address Line 4: VIENNA, VIRGINIA 22180

| ATTORNEY DOCKET NUMBER: | JIM-191-2A |
|-------------------------|-----------------|
| NAME OF SUBMITTER: | JUN-HWA JEONG |
| SIGNATURE: | /Jun-Hwa Jeong/ |

PATENT REEL: 062938 FRAME: 0823

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DATE SIGNED: 03/09/2023

Total Attachments: 2
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PATENT REEL: 062938 FRAME: 0824

Attorney Reference: JIM-191-2A

ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

WHEREAS Han Gil CHOI; Sang Heung LEE; and Seong Hwan CHO, hereinafter referred to collectively as the assignor(s) and inventor(s), has (have) invented a certain improvement relating to

FREQUENCY MODULATION SYSTEM BASED ON PHASE-LOCKED LOOP CAPABLE OF PERFORMING

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| FAST MODULATION INDEPENDENT OF E | BANDWIDTH AND ME | THOO OF THE SAME |
| [] said application being attached hereto; [x] said application having been filed in the United State Application Serial No. <u>17/513,657</u> , and was amended o [] the specification of which was filed under the Patent Serial No, the United State | Conneration Treaty of | (if applicable); |
| AND WHEREAS <u>ELECTRONICS AND TELECOMED AND MALE OF SECTION AND TELECOMED AND TELECOMED</u> | icience And Technol s), is (are) desirous o Il divisions and contin | f acquiring the entire right, title and uations thereof, and in and to said |
| NOW THIS WITNESSETH, that for and in or valuable consideration paid by said assignee to said as assignor hereby assigns, sells and transfers to said assignill and exclusive right, title and interest in and to said application, and in and to said invention and any and all pair renewals, reissues and prolongations thereof; said as have, hold, exercise and enjoy the said application, incit the said invention and any and all patents which may be and prolongations thereof, with all the rights, powers appertaining thereto, for and during the tarm or terms and all renewals, reissues and prolongations thereof, to successors and assigns, in as ample and beneficial a renjoyed the same, if this assignment had not been man | signor, the receipt of a signee, and said assigning an including an idents which may be gradied, and assignee, and said assignee, and all divisions and all divisions and all divisions and advantages and advantages and advantages and any arid all such profit of any arid all such pro | which is hereby acknowledged, said gnee's subcessors and assigns, the y and all divisions and continuations anted therefor, including any and all ignee's successors and assigns, to sions and continuations thereof, and uding any and all renewals, reissues antages in anywise arising from or patents when granted, including any if said assignee's |
| AND said assignor hereby agrees to perform successors or assigns, any and all acts relating to the and all renewals, reissues and prolongations thereof. | i, upon the request o obtaining or to the ass | f said assignee, or said assignee's serting of said patents, including any |
| AND said assignor authorizes and requests Letters Patent on said application, and on any and all said assignee's successors and assigns, in accordance | divisions and continu | f Patents and Trademarks to issue ations thereof, to said assignce, and |
| As an above-named inventor, I hereby dec authorized to be made by me, and that I am the original in the application. | lare that the above- Linventor or an origina | identified application was made or if joint inventor of a claimed invention |
| I hereby acknowledge that any willful false st U.S.C. 1001 by fine or imprisonment of not more than | atement made in this five (5) years, or both | declaration is punishable under 18 |
| Address all correspondence and telephone ca 800, Vienna, Virginia 22180, Telephone: (202) 371-89 | alls to Rabin & Berdo, 76, Fax: (703) 573-25 | P.C., 2650 Park Tower Drive, Suite 14, Customer No. 23995. |
| | ASSIGNOR (SOL | E OR FIRST INVENTOR): |
| | Signature: | we the |
| | | Han Gil CHOI |

PATENT REEL: 062938 FRAME: 0825

Date: 2023 03.09

Attorney Reference: JIM-191-2A

Continued – Page 2 ASSIGNMENT OF AND DECLARATION FOR APPLICATION FOR UNITED STATES LETTERS PATENT

| 86 | JUNU INVENTURY: | |
|--|-----------------|------|
| Signature: | and Hung Lee | 0000 |
| Legal Name: | Sang Heung LEE | |
| Date: Mayal | , 8, 2023 | |
| | | |
| en de la companya de | | |
| ASSIGNOR (THI | RD INVENTORY: | |
| Signature: | | 000 |
| Legal Name: | Seong Hwan CHO | |
| Porto | 2023 04 09 | |

RABIN & BERDO, P.C.

PATENT REEL: 062938 FRAME: 0826

RECORDED: 03/09/2023