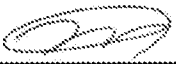
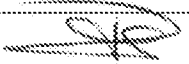


## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4189373

|                                                                                                                                                                                                 |                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                     |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                         |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                    |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>              |
| MOON JIN JEON                                                                                                                                                                                   | 11/28/2016                         |
| SEONG BIN LIM                                                                                                                                                                                   | 11/28/2016                         |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                    |
| <b>Name:</b>                                                                                                                                                                                    | KOREA AEROSPACE RESEARCH INSTITUTE |
| <b>Street Address:</b>                                                                                                                                                                          | 169-84, GWAHAK-RO, YUSEONG-GU      |
| <b>City:</b>                                                                                                                                                                                    | DAEJEON                            |
| <b>State/Country:</b>                                                                                                                                                                           | KOREA, REPUBLIC OF                 |
| <b>Postal Code:</b>                                                                                                                                                                             | 34133                              |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                    |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                      |
| <b>Application Number:</b>                                                                                                                                                                      | 15381483                           |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                    |
| <b>Fax Number:</b>                                                                                                                                                                              | (919)999-2798                      |
| <i>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.</i> |                                    |
| <b>Phone:</b>                                                                                                                                                                                   | 919-595-6500                       |
| <b>Email:</b>                                                                                                                                                                                   | Docketing@kdbfirm.com              |
| <b>Correspondent Name:</b>                                                                                                                                                                      | KACVINSKY DAISAK BLUNI, PLLC       |
| <b>Address Line 1:</b>                                                                                                                                                                          | 430 DAVIS DRIVE                    |
| <b>Address Line 2:</b>                                                                                                                                                                          | SUITE 150                          |
| <b>Address Line 4:</b>                                                                                                                                                                          | MORRISVILLE, NORTH CAROLINA 27560  |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | 7130MP20160480                     |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | PAUL SKWIERAWSKI                   |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /Paul Skwierawski/                 |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 12/16/2016                         |
| <b>Total Attachments: 1</b>                                                                                                                                                                     |                                    |
| source=7130MP20160480_Assignment#page1.tif                                                                                                                                                      |                                    |

| ASSIGNMENT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                       | ATTY. DOCKET NO.                                                                     |                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--------------------------------|
| WHEREAS the below named inventor (if only one inventor is named below) or inventors (if plural inventors are named below) hereinafter referred to as the ASSIGNOR invented a certain improvement relating to                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                       |                                                                                      |                                |
| APPARATUS AND METHOD FOR CONTROLLING SPEED OF SATELLITE ANTENNA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                       |                                                                                      |                                |
| <input checked="" type="checkbox"/> for which an application for Letters Patent will be filed in the United States Patent and Trademark Office                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                       |                                                                                      |                                |
| for which U.S. Application No                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                       | for Letters Patent was filed in the U.S. Patent and Trademark Office on              |                                |
| for which an International Application was filed on                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                       | as                                                                                   | designating the United States. |
| AND WHEREAS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Korea Aerospace Research Institute<br>169-84, Gwahak-ro, Yuseong-gu, Daejeon 34133, Republic of Korea |                                                                                      |                                |
| hereinafter referred to as the ASSIGNEE, is desirous of acquiring the entire right, title, and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted thereon, including any and all renewals, reissues, reexaminations and extensions thereof.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                       |                                                                                      |                                |
| NOW, WITNESSETH that for good and valuable consideration, the receipt whereof is hereby acknowledged, ASSIGNOR hereby assigns, sells, and transfers to ASSIGNEE, its assigns and legal representatives, the entire and exclusive right, title and interest in and to said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, and in and to any and all priority and/or convention rights or benefits accruing or to accrue with respect to the filing or securing of patents in the United States and/or any countries foreign thereto, SAID ASSIGNEE, its assigns and legal representatives to have, hold, exercise, and enjoy said invention and application, including any and all divisions and continuations thereof, and any and all Letters Patent which may be granted therefor, including any and all renewals, reissues, reexaminations and extensions thereof, for the use and benefit of ASSIGNEE and its assigns and legal representatives, in as ample and beneficial a manner to all intents and purposes as the ASSIGNOR might or could have held and enjoyed the same, if the assignment had not been made. |                                                                                                       |                                                                                      |                                |
| AND ASSIGNOR hereby agrees to execute all papers that may be necessary to file applications in the United States and foreign countries for said invention and to assign the same to said ASSIGNEE, its assigns and legal representative and to execute any other papers that may be needed in connection with filing said applications and securing Letters Patents thereon.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                       |                                                                                      |                                |
| AND ASSIGNOR authorizes and requests the Commissioner of Patents and Trademarks to issue a Letters Patent on said application, and on any and all divisions and continuations thereof, to ASSIGNEE, its assigns and legal representatives, in accordance herewith.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                       |                                                                                      |                                |
| The undersigned hereby grant(s) the law firm of Kaevinsky Daisak Blum PLLC the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recording of this document.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                       |                                                                                      |                                |
| IN TESTIMONY WHEREOF this assignment is executed by ASSIGNOR                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                       |                                                                                      |                                |
| 201                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FULL NAME OF SOLE OR FIRST NAMED INVENTOR                                                             | INVENTOR'S SIGNATURE                                                                 | DATE                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Moon Jin JEON                                                                                         |  | 11/28/2016                     |
| 202                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FULL NAME OF SECOND JOINT INVENTOR                                                                    | INVENTOR'S SIGNATURE                                                                 | DATE                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Seong Bin LIM                                                                                         |  | 11/28/2016                     |
| 203                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FULL NAME OF THIRD JOINT INVENTOR                                                                     | INVENTOR'S SIGNATURE                                                                 | DATE                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                       |                                                                                      |                                |
| 204                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | FULL NAME OF FOURTH JOINT INVENTOR                                                                    | INVENTOR'S SIGNATURE                                                                 | DATE                           |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                       |                                                                                      |                                |