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| <b>PATENT ASSIGNMENT COVER SHEET</b> |
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Electronic Version v1.1  
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EPAS ID: PAT4618162

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| <b>SUBMISSION TYPE:</b>   | NEW ASSIGNMENT                           |
| <b>NATURE OF CONVEYANCE:</b>  | ASSIGNMENT                               |
| <b>CONVEYING PARTY DATA</b>   |  |
| <b>Name</b>   | <b>Execution Date</b>                    |
| KENNETH V. BUER   | 09/13/2017                               |
| MARK J. MILLER  | 09/18/2017                               |
| CHRISTOPHER J. CRONIN   | 09/13/2017                               |
| MARK D. DANKBERG  | 09/19/2017                               |
| DONALD L. RUNYON  | 09/26/2016                               |
| <b>RECEIVING PARTY DATA</b>   |  |
| <b>Name:</b>  | VIASAT, INC.                             |
| <b>Street Address:</b>  | 6155 EL CAMINO REAL                      |
| <b>City:</b>  | CARLSBAD                                 |
| <b>State/Country:</b>   | CALIFORNIA                               |
| <b>Postal Code:</b>   | 92009                                    |
| <b>PROPERTY NUMBERS Total: 1</b>  |  |
| <b>Property Type</b>  | <b>Number</b>                            |
| <b>Application Number:</b>  | 15719186                                 |
| <b>CORRESPONDENCE DATA</b>  |  |
| <b>Fax Number:</b>  | (303)770-0152                            |
| <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>   | 720-562-5500                             |
| <b>Email:</b>   | ptomail@mfblaw.com                       |
| <b>Correspondent Name:</b>  | VIASAT, INC. C/O MARSH FISCHMANN & BREYF |
| <b>Address Line 1:</b>  | 8055 E. TUFTS AVE.                       |
| <b>Address Line 2:</b>  | SUITE 450                                |
| <b>Address Line 4:</b>  | DENVER, COLORADO 80237                   |
| <b>ATTORNEY DOCKET NUMBER:</b>  | VS2046-US-1                              |
| <b>NAME OF SUBMITTER:</b>   | DANIEL J. SHERWINTER/                    |
| <b>SIGNATURE:</b>   | /Daniel J. Sherwinter/                   |
| <b>DATE SIGNED:</b>   | 09/28/2017                               |
| <b>Total Attachments: 10</b>  |  |

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**ASSIGNMENT & APPOINTMENT OF COMMON REPRESENTATIVE**

WHEREAS, we, **Kenneth V. Buer**, of Gilbert, AZ, **Mark J. Miller**, of Vista, CA, **Christopher J. Cronin**, of Monrovia, MD, **Mark D. Dankberg**, of Encinitas, CA, and **Donald L. Runyon**, of Duluth, GA, have invented a certain new and useful invention entitled, "**SATELLITE FOR END-TO-END BEAMFORMING WITH ACCESS NODE CLUSTERS**", for which a patent application is being prepared for filing with the United States Patent & Trademark Office, said application being identified as Attorney File No. **VS2046-US-1**.

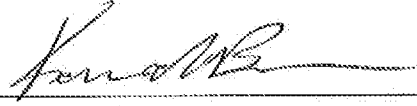
NOW THEREFORE, be it known that we together and each of us individually, for and in consideration of certain good and valuable consideration, the sufficiency and receipt of which is hereby acknowledged, at the request of the assignee do sell, assign and transfer unto said assignee, **ViaSat, Inc.**, a California corporation having a place of business at **6155 El Camino Real, Carlsbad, California, 92009** its successors, legal representatives and assigns, the aforesaid application and all rights to claim priority directly or indirectly to the aforesaid application and all non-provisional utility, continuation, divisional, continuation-in-part and reissue applications, all patent applications that claim priority directly or indirectly to the aforesaid application, all patent applications in foreign countries, all applications pursuant to the Patent Cooperation Treaty and all applications for extension filed or to be filed for the invention(s), and all Letters Patent, Invention Registrations, Utility Models, Extensions or Reissues and other patent rights, obtained for the invention(s) in the United States or any other country; each of us also assigns any right, title or interest in and to the invention(s) that has not already been transferred to the assignee; each of us warrants that no assignment of the invention(s), application or patent therefore has been made to a party other than **ViaSat, Inc.**; each of us warrants that there is no obligation to make any assignment of the invention(s), application, or any patent therefore to any party other than **ViaSat, Inc.**; and each of us further agrees to cooperate with the assignee hereunder in the obtaining and sustaining of any and all such Letters Patent and in confirming assignee's exclusive ownership of the invention(s), but at the expense of said assignee.

The Commissioner for Patents is hereby authorized and requested to issue the Letters Patent solely in accordance with the terms of this Assignment to **ViaSat, Inc.**, its successors, legal representatives and assigns, as the assignee of the entire right, title and interest therein.

Furthermore, we together and each individually hereby irrevocably appoint **ViaSat, Inc.**, its successors, legal representatives and assigns, as common representative for any and all international patent applications filed pursuant to the Patent Cooperation Treaty, and all national phase applications derived therefrom, concerning the invention(s) or claiming priority from the aforesaid application.

IN WITNESS WHEREOF, the party hereto has executed this Assignment & Appointment of Common Representative as of the date indicated hereunder.

Date: 9/13/17

By:   
Kenneth V. Buer

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Mark J. Miller

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Christopher J. Cronin

Date: \_\_\_\_\_

By: \_\_\_\_\_  
Mark D. Dankberg

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By: \_\_\_\_\_  
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Mark D. Dankberg

Date: 26 SEP 2017

By: 

Donald L. Runyon