PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5278266

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KENNETH V BUER	09/10/2018
MARK J MILLER	11/27/2018
CHRISTOPHER J CRONIN	09/07/2018
MARK D DANKBERG	09/14/2018
DONALD L RUNYON	09/07/2018

RECEIVING PARTY DATA

Name:	VIASAT, INC.
Street Address:	6155 EL CAMINO REAL
City:	CARLSBAD
State/Country:	CALIFORNIA
Postal Code:	92009

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16055703

CORRESPONDENCE DATA

Fax Number:

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: 7604764622

Email: patent-admin@viasat.com

Correspondent Name: VIASAT, INC.

Address Line 1: 6155 EL CAMINO REAL

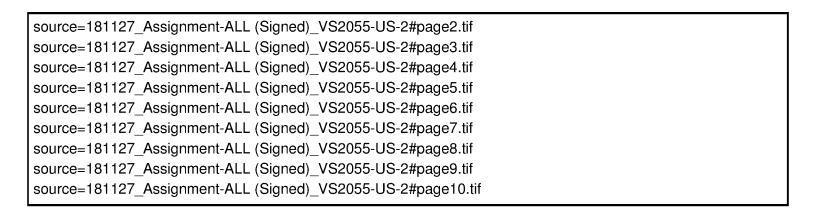
Address Line 4: CARLSBAD, CALIFORNIA 92009

ATTORNEY DOCKET NUMBER:	VS2055-US-2
NAME OF SUBMITTER:	SHELLEY SWEDO
SIGNATURE:	/Shelley Swedo/
DATE SIGNED:	12/12/2018

Total Attachments: 10

source=181127_Assignment-ALL (Signed)_VS2055-US-2#page1.tif

PATENT REEL: 047748 FRAME: 0927



PATENT REEL: 047748 FRAME: 0928

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to ViaSat, Inc., having a place of business at 6155 El Camino Real, Carlsbad CA 92009 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

1.	MATTER") that are disclosed in the applic SYSTEM FOR END-TO-END BEAM ACCESS NODES ("APPLICATION"), v is to be filed herewith (attorney do	
2.	substitute, renewal, reissue, and other relat	est in and to: at of priority; (b) any divisional, continuation, ed applications which have been or may be filed in the ad (c) any patents which may be granted on the
INVEN ASSIGNEE's c	7 27 7	r and receive patents for SUBJECT MATTER in
carry out the into other papers no. (2) communical lawful acts that protection relati conveyed. INV	ntent of this Assignment: (1) execute all oath ecessary or desirable to fully secure to ASSIC te to ASSIGNEE all known facts relating to t ASSIGNEE shall consider desirable for sec ting to the SUBJECT MATTER and for vest	nested, and without further consideration, in order to s, assignments, powers of attorney, applications, and GNEE the rights, titles and interests herein conveyed; the SUBJECT MATTER; and (3) generally do all curing, maintaining, and enforcing worldwide patenting in ASSIGNEE the rights, titles, and interests herein essor, assign, or legal representative of ASSIGNEE creunder.
and covenants v		ight, title, and interests to convey as set forth herein, nade or will make hereafter no assignment, grant, itles, and interests herein conveyed.
	assignment may be executed in one or more of the may be taken together as one and the same	counterparts, each of which shall be deemed an original e Assignment.
	by authorize and request the attorney of recorniber when known, if applicable.	rd for this application to insert above the filing date and
Name & Signat	<u>ture</u>	Date of Signature
Kar		9/10/18
Kenneth V. Bue	er	

Page 1 of 2

Name & Signature	Date of Signature
Mark J. Miller	
Christopher J. Cronin	
Mark D. Dankberg	
Donald L. Runyon	· · · · · · · · · · · · · · · · · · ·

ASSIGNMENT

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The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT

1.

SYSTEM FOR END-TO-END BEAMFORMING W	
ACCESS NODES ("APPLICATION"), which:	×
is to be filed herewith (attorney docket no.) 15 - 15 N. 16 10 5 5 702
was filed on 06-Aug-2018, now bearing U.S. Ap	oplication No.: 16/055,703
2. The entire worldwide right, title, and interest in and to:	•
(a) the APPLICATION, including any right of priority; (b	any divisional, continuation,
substitute, renewal, reissue, and other related applications	
United States or elsewhere in the world; and (c) any pater	its which may be granted on the
applications set forth in (a) and (b) above.	
INVENTOR agrees that ASSIGNEE may apply for and receive po ASSIGNEE's own name.	atents for SUBJECT MATTER in
INVENTOR agrees to do the following, when requested, and with carry out the intent of this Assignment: (1) execute all oaths, assignments, other papers necessary or desirable to fully secure to ASSIGNEE the right (2) communicate to ASSIGNEE all known facts relating to the SUBJECT lawful acts that ASSIGNEE shall consider desirable for securing, maintain protection relating to the SUBJECT MATTER and for vesting in ASSIGN conveyed. INVENTOR further agrees to provide any successor, assign, o with the benefits and assistance provided to ASSIGNEE hereunder.	powers of attorney, applications, and its, titles and interests herein conveyed; MATTER; and (3) generally do all ning, and enforcing worldwide patent IEE the rights, titles, and interests herein
INVENTOR represents that INVENTOR has the right, title, and in and covenants with ASSIGNEE that the INVENTOR has made or will ma mortgage, license, or other agreement affecting the rights, titles, and interest	ke hereafter no assignment, grant,
This Assignment may be executed in one or more counterparts, ea and all of which may be taken together as one and the same Assignment.	nch of which shall be deemed an original
I hereby authorize and request the attorney of record for this appli application number when known, if applicable.	cation to insert above the filing date and
Name & Signature 1	Date of Signature
Kenneth V. Buer	

Name & Signature		Date of Signature
My Mi		11-27-248
Mark J. Miller		
Christopher J. Cronin	:	<u> </u>
Mark D. Dankberg		-
Donald L. Runvon		

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The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT

	ACCESS NODES ("APPLICATION"), wh	ORMING WITH MULTI-FREQUENCY nich; tet no)	
2.	The entire worldwide right, title, and interest (a) the APPLICATION, including any right of	of priority; (b) any divisional, continuation, I applications which have been or may be filed in the	B
INVEN ASSIGNEE's (7 70 7	and receive patents for SUBJECT MATTER in	
carry out the in other papers no (2) communical lawful acts that protection relationveyed. INV with the benefit	stent of this Assignment: (1) execute all oaths, accessary or desirable to fully secure to ASSIGN ate to ASSIGNEE all known facts relating to the ASSIGNEE shall consider desirable for securing to the SUBJECT MATTER and for vesting to the SUBJECT MATTER and for vesting VENTOR further agrees to provide any success its and assistance provided to ASSIGNEE here NTOR represents that INVENTOR has the right	sted, and without further consideration, in order to assignments, powers of attorney, applications, and NEE the rights, titles and interests herein conveyed; ne SUBJECT MATTER; and (3) generally do all ring, maintaining, and enforcing worldwide patent g in ASSIGNEE the rights, titles, and interests here sor, assign, or legal representative of ASSIGNEE aunder. Int, title, and interests to convey as set forth herein, de or will make hereafter no assignment, grant,	in
This A	nse, or other agreement affecting the rights, tith assignment may be executed in one or more conthinance to the may be taken together as one and the same A	unterparts, each of which shall be deemed an origin	al
I hereb		for this application to insert above the filing date an	ıd
Name & Signa	<u>fure</u>	Date of Signature	
Kenneth V. Bu	er ;		

Page 1 of 2

Name & Signature	Date of Signature
Mark J. Miller Christopher J. Cronin	9/7/18
Mark D. Dankberg	
Donald L. Runyon	

ASSIGNMENT

For good and valuable consideration, the receipt of which is hereby acknowledged, the person(s) named below (referred to as "INVENTOR" whether singular or plural) has sold, assigned, and transferred and does hereby sell, assign, and transfer to ViaSat, Inc., having a place of business at 6155 El Camino Real, Carlsbad CA 92009 ("ASSIGNEE"), for itself and its successors, transferees, and assignees, the following:

mortg and al	l of whic I hereb	Assignment may be executed in one or more counterparts, each of which shall be deemed an original chimay be taken together as one and the same Assignment. By authorize and request the attorney of record for this application to insert above the filing date an other when known, if applicable.
mortg		
	venants	NTOR represents that INVENTOR has the right, title, and interests to convey as set forth herein, with ASSIGNEE that the INVENTOR has made or will make hereafter no assignment, grant, use, or other agreement affecting the rights, titles, and interests herein conveyed.
other ; (2) co lawful protec conve	out the in papers no mmunical acts that tion relatived. INV	NTOR agrees to do the following, when requested, and without further consideration, in order to ntent of this Assignment: (1) execute all oaths, assignments, powers of attorney, applications, and eccessary or desirable to fully secure to ASSIGNEE the rights, titles and interests herein conveyed; ate to ASSIGNEE all known facts relating to the SUBJECT MATTER; and (3) generally do all at ASSIGNEE shall consider desirable for securing, maintaining, and enforcing worldwide patent thing to the SUBJECT MATTER and for vesting in ASSIGNEE the rights, titles, and interests herein VENTOR further agrees to provide any successor, assign, or legal representative of ASSIGNEE fits and assistance provided to ASSIGNEE hereunder.
ASSI		NTOR agrees that ASSIGNEE may apply for and receive patents for SUBJECT MATTER in own name.
	2.	The entire worldwide right, title, and interest in and to: (a) the APPLICATION, including any right of priority; (b) any divisional, continuation, substitute, renewal, reissue, and other related applications which have been or may be filed in the United States or elsewhere in the world; and (c) any patents which may be granted on the applications set forth in (a) and (b) above.
		MATTER") that are disclosed in the application for United States Letters Patent entitled: SYSTEM FOR END-TO-END BEAMFORMING WITH MULTI-FREQUENCY ACCESS NODES ("APPLICATION"), which: is to be filed herewith (attorney docket no) was filed on 06-Aug-2018, now bearing U.S. Application No.: 16/055,703

Page 1 of 2

Name & Signature	Date of Signature	
Mark J. Miller		
Christopher J. Cronin	 14-Sen-2018	
Mark D. Dankberg		
Donald L. Runyon		

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The entire worldwide right, title, and interest in all inventions and improvements ("SUBJECT

1.

	••	e application for United States Letters Patent entitled: BEAMFORMING WITH MULTI-FREQUENCY	
	ACCESS NODES ("APPLICATION OF THE PROPERTY OF		
	is to be filed herewith (attor	rney docket no)	
	was filed on 06-Aug-2018	, now bearing U.S. Application No.: 16/055,703	
2.	The entire worldwide right, title, and interest in and to:		
	(a) the APPLICATION, including a	any right of priority; (b) any divisional, continuation,	
		er related applications which have been or may be filed in the	
		orld; and (c) any patents which may be granted on the	
	applications set forth in (a) and (b)	above.	
INVI ASSIGNEE'		pply for and receive patents for SUBJECT MATTER in	
carry out the other papers in (2) communical awful acts the protection relucion conveyed. In with the bene	intent of this Assignment: (1) execute a necessary or desirable to fully secure to cate to ASSIGNEE all known facts related to ASSIGNEE shall consider desirable lating to the SUBJECT MATTER and a NVENTOR further agrees to provide are fits and assistance provided to ASSIGNEE and represents that INVENTOR has	as the right, title, and interests to convey as set forth herein,	
		R has made or will make hereafter no assignment, grant, rights, titles, and interests herein conveyed.	
	Assignment may be executed in one or ich may be taken together as one and the	more counterparts, each of which shall be deemed an original he same Assignment.	
	eby authorize and request the attorney oumber when known, if applicable.	of record for this application to insert above the filing date and	
Name & Sign	ature	Date of Signature	
Kenneth V. B	Buer		
	,	n + 0.0	

Name & Signature	Date of Signature
Mark J. Miller	
Christopher J, Cronin	
Mark D. Dankberg Douald L. Runyon	0755P20/8