506086983 06/02/2020 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6133700

		NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	
CONVEYING PARTY DA	٩ΤΑ		
		Name	Execution Date
HUA ZHOU			03/04/2020
ESMAEL DINAN			03/04/2020
ALI CIRIK			03/04/2020
ALIREZA BABAEI			04/23/2020
HYOUNGSUK JEON			03/04/2020
KYUNGMIN PARK			03/04/2020
RECEIVING PARTY DA	 TA		
Name:	COMCAST CABLE COMMUNICATIONS, LLC		
Street Address:	1701 JFK BOULEVARD		
City:	PHILADELPHIA		
State/Country:	PENNSYLVANIA		
Postal Code:	19103		
PROPERTY NUMBERS Total: 1 Property Type		Number	
Application Number:		16370476	
<i>using a fax number, if p</i> Email: Correspondent Name: Address Line 1:	e sent to provided	<i>the e-mail address first; if that is uns</i> <i>I; if that is unsuccessful, it will be sen</i> smehr@bannerwitcoff.com, bwptopat@t BANNER & WITCOFF, LTD 1100 13TH ST NW SUITE 1200	t via US Mail.
Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Email: Correspondent Name:	e sent to provided	I; if that is unsuccessful, it will be sen smehr@bannerwitcoff.com, bwptopat@b BANNER & WITCOFF, LTD	t via US Mail.
Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2:	e sent to provided	<i>I; if that is unsuccessful, it will be sen</i> smehr@bannerwitcoff.com, bwptopat@b BANNER & WITCOFF, LTD 1100 13TH ST NW SUITE 1200	t via US Mail.
Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	e sent to provided	<i>I; if that is unsuccessful, it will be sen</i> smehr@bannerwitcoff.com, bwptopat@k BANNER & WITCOFF, LTD 1100 13TH ST NW SUITE 1200 WASHINGTON, D.C. 20005	t via US Mail.
Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	e sent to provided	I; if that is unsuccessful, it will be sen smehr@bannerwitcoff.com, bwptopat@k BANNER & WITCOFF, LTD 1100 13TH ST NW SUITE 1200 WASHINGTON, D.C. 20005 007412.04428\US	t via US Mail.
Fax Number: Correspondence will be using a fax number, if p Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER:	e sent to provided	I; if that is unsuccessful, it will be sen smehr@bannerwitcoff.com, bwptopat@k BANNER & WITCOFF, LTD 1100 13TH ST NW SUITE 1200 WASHINGTON, D.C. 20005 007412.04428\US DONGIL MOON	t via US Mail.

source=2020_05_05_007412.04428#page1.tif source=2020_05_05_007412.04428#page2.tif source=2020_05_05_007412.04428#page3.tif

> PATENT REEL: 052814 FRAME: 0828

ASSIGNMENT

Attorney Docket No.: 007412.04428 (18-1044) Serial Number: 16/370,476 Filing Date: March 29, 2019 Inventors: Hua Zhou, Esmael Hejazi Dinan, Ali Cirik, Alireza Babaei, Hyoungsuk Jeon, Kyungmin Park

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the undersigned hereby assign to:

COMCAST CABLE COMMUNICATIONS, LLC

having a place of business at 1701 JFK Boulevard, Philadelphia, PA 19103, its successors and assigns, the entire right, title and interest in the invention or improvements (including but not limited to all non-provisional, divisional, continuation, continuation-in-part, continuing prosecution applications, requests for continuing examinations, reissue, and substitute applications worldwide; all extensions of such applications; and all patent applications, patents, and/or other similar governmental grants or issuances worldwide that directly or indirectly claims or forms a basis for claiming priority thereto) of the undersigned disclosed in an application for Letters Patent of the United States, entitled:

Configuration for Beam Failure Recovery

and identified as Attorney Docket No. **007412.04428** in the offices of Banner & Witcoff, Ltd. and in said application and any and all other applications, both United States and foreign, which the undersigned may file, either solely or jointly with others, on said invention or improvements (including but not limited to all non-provisional, divisional, continuation, continuation-in-part, continuing prosecution applications, requests for continuing examinations, reissue, and substitute applications worldwide; all extensions of such applications; and all patent applications, patents, and/or other similar governmental grants or issuances worldwide that directly or indirectly claims or forms a basis for claiming priority thereto), and in any and all Letters Patent of the United States and foreign countries, which may be obtained on any of said applications, and in any reissue or extension of such patents, and further assigns to said assignee the priority right provided by the International Convention.

The undersigned hereby authorize and request the Commissioner of Patents and Trademarks to issue said Letters Patent to said assignee.

The undersigned hereby authorize and request the attorneys of record in said application to insert in this assignment the filing date and serial number of said application when officially known.

The undersigned warrant themselves to be the owners of the entire right, title and interest in said invention or improvements (including but not limited to all non-provisional, divisional, continuation, continuation-in-part, continuing prosecution applications, requests for continuing examinations, reissue, and substitute applications worldwide; all extensions of such applications; and all patent applications, patents, and/or other similar governmental grants or issuances worldwide that directly or indirectly claims or forms a basis for claiming priority thereto) and to have the right to make this assignment, and further warrant that there are no outstanding prior assignments, licenses, or other encumbrances on the interest herein assigned.

For said considerations and without additional charge the undersigned hereby agree, upon the request and at the expense of said assignee, its successors and assigns, to execute any and all non-provisional, divisional, continuation, continuation-in-part, continuing prosecution applications, requests for continuing examinations, reissue, and substitute applications worldwide, all extensions of such

applications, and all patent applications, patents, and/or other similar governmental grants or issuances worldwide that directly or indirectly claims or forms a basis for claiming priority thereto, for said invention or improvements, and any necessary oath, affidavit or declaration relating therete, and any application for the reissue or extension of any Letters Patent that may be granted upon said application and any and all applications and other documents for Letters Patent in foreign countries on said invention or improvements, that said assignee, its successors or assigns may deem necessary or expedient, and for the said considerations and without additional charge the undersigned authorize said assignee to apply for patents for said invention or improvements in its own name in such countries where such procedure is proper and further agree, upon the request of and without additional charge to said assignce, its successors and assigns, to cooperate to the best of the ability of the undersigned with said assignee, its successors and assigns, in any proceedings or transactions involving such applications or patents, including the preparation and execution of preliminary statements, giving and producing evidence, and performing any and all other acts necessary to obtain, maintain and enforce said Letters Patent, both United States and foreign, and vest all rights therein hereby conveyed in the assignce, its successors and assigns, whereby said Letters Patent will be held and enjoyed by the said assignee, its successors and assigns, to the full end of the term for which said Letters Patent will be granted, as fully and entirely as the same would have been held and enjoyed by the undersigned if this assignment had not been made.

	s s.	/
Date:	03/04/2020	lun
Date:	3/4/2000	Hua Zhon Sheufle Jolins Witness
Date:	3/4/2000	Mindsey Well
Date:	3/4/2020	Esmail Dira
Date:	34/2022	Sherft Julin
Date:	3/4/2020	Kindsey Welly Witness
Date:	31412020	Alifa Ali Cirik
Date:	3/4/2000	Sheyel John
Date:	314/2020	Witness Will
Date:	4123120	ANT

PATENT REEL: 052814 FRAME: 0830

Date:

Date:

Date:

Date:

Date:

Date:

Date:

Date:

Ŵ \mathbb{N}

Ŵ

2020

diro Witness Ŵ BBESS

Alireza Babaei,

Hyoungsuk Jeon M Witness Vitness

Kyungmin Park Ŵ Witness

RECORDED: 06/02/2020