## 504090652 11/10/2016

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
XIANG LIU	09/28/2016
LIN CHENG	09/27/2016
FRANK EFFENBERGER	09/28/2016

### **RECEIVING PARTY DATA**

Name:	Futurewei Technologies, Inc.	
Street Address:	5340 Legacy Drive	
Internal Address:	Suite 175	
City:	Plano	
State/Country:	TEXAS	
Postal Code:	75024	

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15262906

## **CORRESPONDENCE DATA**

**Fax Number:** (972)731-2289

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:** 972-731-2288

**Email:** dallaspatents@dfw.conleyrose.com

Correspondent Name: GRANT RODOLPH

Address Line 1: 5601 GRANITE PARKWAY, SUITE 500

Address Line 4: PLANO, TEXAS 75024-6616

ATTORNEY DOCKET NUMBER:	4502-11501 (84653766US02)
NAME OF SUBMITTER:	GRANT RODOLPH
SIGNATURE:	/Grant Rodolph/
DATE SIGNED:	11/10/2016

### **Total Attachments: 4**

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PATENT 504090652 REEL: 040278 FRAME: 0262

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PATENT REEL: 040278 FRAME: 0263

## ASSIGNMENT

WHEREAS, I/We, the undersigned inventor(s) (or one of the undersigned joint inventors), of residence as listed below, having invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, the said application having been executed on the date set forth below; and

WHEREAS, Futurewei Technologies, Inc. ("Assignee"), a corporation organized and existing under the laws of Texas, with its principal office at 5340 Legacy Drive, Suite 175, Plano, TX 75024 is desirous of acquiring my/our entire right, title and interest in the said invention, and to the said application and any Letters Patent that may issue thereon in the United States and all other countries throughout the world;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, I/we will assign, and hereby assign and transfer to the Assignee and the Assignee's legal representatives, successors and assigns the full and exclusive right, title and interest in and to the invention in the United States and every foreign country and the entire right, title, and interest in and to the patent application and other such applications (e.g., provisional applications, non-provisional applications, continuations, continuations-in-part, divisional, reissues, reexaminations, National Phase applications, including petty patent applications, and utility model applications) that may be filed in the United States and every foreign country on the invention, and the patents, extensions, or derivations thereof, both foreign and domestic, that may issue thereon, and I/we do hereby authorize and request the Commissioner for Patents to issue U.S. patents for said invention, or patent resulting therefrom, insofar as my interest is concerned, to the Assignee agreeably with the terms of this assignment document.

I also hereby agree to sell and to assign, and sell and assign to Assignee, its successors and assigns, my foreign rights to the invention disclosed in said application, in all countries of the world, including, but not limited to, the right to file applications and obtain patents under the terms of the International Convention, and further agree to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such patent rights.

I hereby further agree that I will communicate to Assignee, or its successors, assigns, and legal representative, any facts known to me respecting said invention or the file history thereof, and at the expense of said assignee company, testify in any legal proceedings, sign all lawful papers, execute all divisional, continuation, reissue and substitute applications, make all lawful oaths, and generally do everything possible to aid such Futurewei, its successors, assigns and nominees to obtain and enforce proper patent protection for said invention in all countries.

Futurewei Technologies, Inc. Patent Reference No. 84653766USo2 Conley Rose File: 4502-11501 Page 1 of 2

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IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

Title of Invention	Sub-Nyquist Sampling for Bandwidth- and Hardware-Efficient Mobile Fronthaul with MIMO Processing		
	Appl. No. 15/262,906	Filing Date: September 12, 2016	
Signature of Inventor			
Inventor Name	Xiang Liu	Frank Effenberger	
Date	9/28/2016		
Residence (City/State)	Mariboro, New Jersey	Colts Neck, New Jersey	
Signature of Inventor			
Inventor Name	Lin Cheng		
Date			
Residence (City/State)	Atlanta, Georgia		

Futurewei Technologies, Inc. Patent Reference No. 84653766US02 Conley Rose File: 4502-11501

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# ASSIGNMENT

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

Title of Invention	Sub-Nyquist Sampling for Bandwidth- and Hardware-Efficient Mobile Fronthaul with MIMO Processing		
	Appl. No. 15/262,906	Filing Date: September 12, 2016	
Signature of Inventor			
Inventor Name	Xiang Liu	Frank Effenberger	
Date			
Residence (City/State)	Marlboro, New Jersey	Colts Neck, New Jersey	
Signature of Inventor	L-QL-3		
Inventor Name	Lin Cheng		
Date	9/27/2016		
Residence (City/State)	Atlanta, Georgia		

Futurewei Technologies, Inc. Patent Reference No. 84653766US02 Conley Rose File: 4502-11501 Page 2 of 2

# ASSIGNMENT

IN WITNESS WHEREOF, I hereunto set my hand and seal this day and year;

Title of Invention	Sub-Nyquist Sampling for Bandwidth- and Hardware-Efficient Mobile Fronthaul with MIMO Processing		
	Appl. No. 15/262,906	Filing Date: September 12, 2016	
Signature of Inventor		Fall [1/2]	
Inventor Name	Xiang Liu	Frank Effenberger	
Date		28 Sep 2016	
Residence (City/State)	Marlboro, New Jersey	Colts Neck, New Jersey	
Signature of Inventor			
Inventor Name	Lin Cheng		
Date			
Residence (City/State)	Atlanta, Georgia		

Futurewei Technologies, Inc. Patent Reference No. 84653766US02 Conley Rose File: 4502-11501

**RECORDED: 11/10/2016** 

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