#### 503822915 05/12/2016

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

**SUBMISSION TYPE: NEW ASSIGNMENT NATURE OF CONVEYANCE: ASSIGNMENT** 

EPAS ID: PAT3869564

#### **CONVEYING PARTY DATA**

Name	Execution Date
CAO SHI	05/15/2013
AMIR H. FAZLOLLAHI	05/13/2013
JIANHUA LIU	05/15/2013

# **RECEIVING PARTY DATA**

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

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

Property Type	Number
Application Number:	15066947

# **CORRESPONDENCE DATA**

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**Correspondent Name: GRANT RODOLPH** 

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ATTORNEY DOCKET NUMBER:	4194-57103 (83475388US06)
NAME OF SUBMITTER:	WILLIAM H. DIETRICH
SIGNATURE:	/William H. Dietrich/
DATE SIGNED:	05/12/2016

### **Total Attachments: 4**

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**PATENT REEL: 038556 FRAME: 0100** 503822915

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PATENT REEL: 038556 FRAME: 0101

#### ASSIGNMENT

WHEREAS, the Undersigned has invented certain new and useful improvements as below entitled, for which application for United States Letters Patent is made, said application having been executed on the date set forth below; and

WHEREAS, Futurewei Technologies, Inc. (hereinafter referred to as "Assignee"), a corporation organized and existing under the laws of the State of Texas, United States of America, Assignee, having its principal office and place of business at 5340 Legacy Drive, Suite 175, Plano, Texas 75024, desires to acquire the Undersigned's entire right, title and interest in and to the invention, and in and to said application and any Letters Patent that may issue thereon;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00), and other good and valuable consideration, the receipt of which is hereby acknowledged, the Undersigned:

Hereby sells, assigns and transfers to Assignee, its successors, assigns and legal representatives, the entire right, title and interest for the United States and all foreign countries, in and to any and all improvements which are disclosed in the application for United States Letters Patent, Application No. 13/875,447 filed May 2, 2013 or, if not identified here by filing date and application number, executed by me on even date, entitled:

Aligning the Upstream DMT Symbols of Multiple Lines in a TDD DSL System

and in and to said application and all applications that claim priority to said Application No. 13/875,447 and all provisional, non-provisional, divisional, continuing, continuations-in-part, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said improvements; and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said improvements; and in and to all utility models, industrial models, certificates of invention, and designs on said improvements;

Agrees that said Assignee may apply for and receive Letters Patent for said improvements in its own name; and that, when requested, without charge to but at the expense of said Assignee, its successors, assigns and legal representatives, to carry out in good faith the intent and purpose of this assignment, the Undersigned will execute all divisional, continuing, substitute, renewal, reissue and all other patent applications, and all other like rights of exclusion in any country on any and all said improvements; execute all rightful oaths, declarations, assignments, powers of attorney and other papers; communicate to said Assignee, its successors, assigns and representatives, all facts known to the Undersigned relating to said improvements and the history thereof; and generally do everything possible which said Assignee, its successors, assigns and representatives shall consider desirable for aiding in securing and maintaining proper patent protection for said improvements and vesting title to said improvements and all applications for patents and all patents on said improvements, in said Assignee, its successors, assigns and legal representatives; and

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PATENT REEL: 038556 FRAME: 0102 Agrees that the Undersigned will upon request of Assignee, render prompt assistance and cooperation in the prosecution of legal proceedings involving said improvements, said applications and patents granted thereon, including reexaminations, reissues, interferences, priority contests, public use proceedings and court proceedings, and testify in such proceedings if requested, provided, however, that the expense which may be incurred by the Undersigned in lending such assistance and cooperation be paid by Assignee; and

Covenants with said Assignee, its successors, assigns and legal representatives that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by the Undersigned, except as set forth below, and that full right to convey the same as herein expressed is possessed by the Undersigned.

This assignment shall be binding on the heirs and legal representatives of the Undersigned.

Full	name	of first	inventor:
5 (717	2.14.22.3.2	252 121 31	TILLY SECTION :

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Cao Shi	(Date)

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(Date)

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<u> 2013 - 05 - 15</u> (Date)

**RECORDED: 05/12/2016**