

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT6461729

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
THOMAS C. WOLDAHL	11/07/2019
ERIK V. HELFRICH	11/07/2019
MICHAEL J. DURKIN	11/07/2019
LARRY J. NORTH	11/08/2019
ABID KHAN	11/07/2019
RECEIVING PARTY DATA	
Name:	LEVEL 3 COMMUNICATIONS, LLC
Street Address:	1025 ELDORADO BLVD.
City:	BROOMFIELD
State/Country:	COLORADO
Postal Code:	80021
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	17128737
CORRESPONDENCE DATA	
Fax Number:	
<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>	
Email:	patent.docketing@centurylink.com
Correspondent Name:	LEVEL 3 COMMUNICATIONS, LLC
Address Line 1:	1025 ELDORADO BLVD.
Address Line 4:	BROOMFIELD, COLORADO 80021
ATTORNEY DOCKET NUMBER:	0663-US-C1
NAME OF SUBMITTER:	DAVID D. WIER
SIGNATURE:	/DDW/
DATE SIGNED:	12/21/2020
Total Attachments: 7	
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ASSIGNMENT

PARTIES TO THE ASSIGNMENT:

Assignors/Inventors:

Name of Assignor: **Thomas C. Woldahl**
City and State of Residence: **Phoenix, Arizona, USA**

Name of Assignor: **Erik V. Helfrich**
City and State of Residence: **Queen Creek, Arizona, USA**

Name of Assignor: **Michael J. Durkin**
City and State of Residence: **Littleton, Colorado, USA**

Name of Assignor: **Larry J. North**
City and State of Residence: **Littleton, Colorado, USA**

Name of Assignor: **Abid Khan**
City and State of Residence: **Castle Rock, Colorado, USA**

Assignee:

Level 3 Communications, LLC
1025 Eldorado Boulevard
Broomfield, Colorado 80021

PATENT APPLICATION SUBJECT TO THE ASSIGNMENT (the "Application"):

U.S. Nonprovisional Application No.: **16/680,275**
Filing Date: **November 11, 2019**
Title: **SYSTEMS, METHODS, AND STORAGE MEDIA FOR TESTING
LOCAL LOOPS OF TELECOMMUNICATIONS NETWORKS**
Attorney Docket No. **0663-US-U1**

WHEREAS, Assignors have invented certain new and useful inventions (the "Invention") for which the Application have been prepared for filing with the United States Patent and Trademark Office.

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is acknowledged, Assignors have agreed to assign and transfer and do hereby assign and transfer unto Assignee, its successors and assigns, the entire right, title, and interest in and to the Invention and the Application, including any provisional or non-provisional application to which the Application claim priority, including but not limited to U.S. provisional patent application no. 62/768,589, in and to any United States of America and foreign applications that claim priority to the Application, any divisional or continuation (in whole or in part) of the

Application, and in and to any and all improvements in the Invention made by Assignors (provided any such improvement is made during, or within one year after the termination of the employment of Assignors by Assignee), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in the United States of America and all foreign countries in its own name and any priority rights for such United States of America and foreign applications to which such applications or Assignors are entitled under international conventions, treaties, or otherwise which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon said invention or improvements thereon, and any and all rights to collect past damages for infringement of any and all Letters Patent of the United States and countries and regions foreign thereto which may be published, to be held and enjoyed as fully and exclusively as they would have been by the Assignors had this assignment and transfer not been made;

Assignors further agree for Assignors and for Assignors' heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as Assignors lawfully may, that may be deemed necessary by said Assignee, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid to obtain to maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

Assignors hereby authorize Assignee, its successors and assigns, or anyone it may properly designate, to insert in this instrument the title, application number and filing date of the Application once known;

Assignors hereby acknowledge that Assignee's internal and external counsel have represented only Assignee and will continue to represent only Assignee with respect to the Invention;

Assignors hereby acknowledge an obligation of assignment and transfer of the Invention and Application to Assignee at the time the Invention was made; and

Assignors hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the applications, including the Application, to Assignee, as the assignee of the entire right, title, and interest therein.

Assignors and Assignee hereby agree that this assignment is governed by the laws of the state of Colorado of the United States of America and subject to the non-exclusive jurisdiction of the courts of the state of Colorado of the United States of America.

IN WITNESS WHEREOF, Assignors hereunto have executed this Assignment upon the date indicated below.

By: Thomas C Woldahl
Thomas C. Woldahl

Dated: 11/7/2019

By: _____
Erik V. Helfrich

Dated: _____

By: _____
Michael J. Durkin

Dated: _____

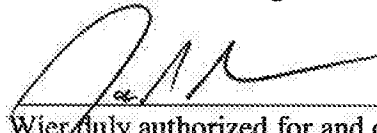
By: _____
Larry J. North

Dated: _____

By: _____
Abid Khan

Dated: _____

IN WITNESS WHEREOF, Assignee hereunto has executed this Assignment upon the date indicated below.

By: 
David Wier duly authorized for and on behalf of
Level 3 Communications, LLC

Dated: 11/14/2019

IN WITNESS WHEREOF, Assignors hereunto have executed this Assignment upon the date indicated below.

By: _____
Thomas C. Woldahl

Dated: _____

By: _____
Erik V. Helfrich
Erik V. Helfrich

Dated: 11/7/2019

By: _____
Michael J. Durkin

Dated: _____

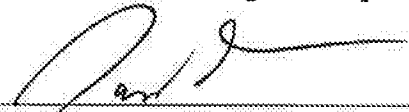
By: _____
Larry J. North

Dated: _____

By: _____
Abid Khan

Dated: _____

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By: _____
Thomas C. Woldahl

Dated: _____

By: _____
Erik V. Helfrich

Dated: _____

By: Michael J. Durkin
Michael J. Durkin

Dated: 11/7/2019

By: _____
Larry J. North

Dated: _____

By: _____
Abid Khan

Dated: _____

IN WITNESS WHEREOF, Assignee hereunto has executed this Assignment upon the date indicated below.

By: David Wier
David Wier duly authorized for and on behalf of
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Dated: 11/14/2019

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Dated: _____

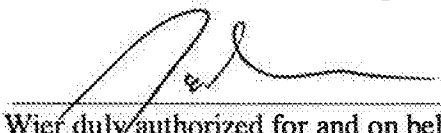
By: _____
Larry J. North

Dated: _____ 11/8/19

By: _____
Abid Khan

Dated: _____

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By:  _____
David Wier duly authorized for and on behalf of
Level 3 Communications, LLC

Dated: _____ 11/14/2019

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By: _____
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Dated: _____

By: _____
Erik V. Helfrich

Dated: _____

By: _____
Michael J. Durkin

Dated: _____

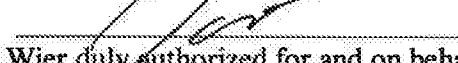
By: _____
Larry J. North

Dated: _____

By: A b i d K h a n
Abid Khan

Dated: 11/7/2019

IN WITNESS WHEREOF, Assignee hereunto has executed this Assignment upon the date indicated below.

By: 
David Wier duly authorized for and on behalf of
Level 3 Communications, LLC

Dated: 11/17/2019