

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT												
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT												
<b>CONVEYING PARTY DATA</b>													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:70%;">Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Joshua D. Voigt</td> <td>09/06/2005</td> </tr> <tr> <td>Christopher T. Coston</td> <td>09/06/2005</td> </tr> <tr> <td>Robert J. Feuerstein</td> <td>09/14/2005</td> </tr> <tr> <td>Daniel Youngblood</td> <td>02/13/2006</td> </tr> <tr> <td>Dan Rosenstock</td> <td>02/15/2006</td> </tr> </tbody> </table>		Name	Execution Date	Joshua D. Voigt	09/06/2005	Christopher T. Coston	09/06/2005	Robert J. Feuerstein	09/14/2005	Daniel Youngblood	02/13/2006	Dan Rosenstock	02/15/2006
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Daniel Youngblood	02/13/2006												
Dan Rosenstock	02/15/2006												
<b>RECEIVING PARTY DATA</b>													
<b>Name:</b>	Level 3 Communications, Inc.												
<b>Street Address:</b>	1025 Eldorado Boulevard												
<b>City:</b>	Broomfield												
<b>State/Country:</b>	COLORADO												
<b>Postal Code:</b>	80021												
<b>PROPERTY NUMBERS Total: 1</b>													
<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th style="width:30%;">Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>11259448</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	11259448								
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Application Number:	11259448												
<b>CORRESPONDENCE DATA</b>													
Fax Number:	(303)447-7800												
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>													
Phone:	303-447-7741												
Email:	tquillin@faegre.com												
Correspondent Name:	Terrie Quillin												
Address Line 1:	2200 Wells Fargo Center												
Address Line 2:	Faegre & Benson LLP												
Address Line 4:	Minneapolis, MINNESOTA 55402-3901												
<b>ATTORNEY DOCKET NUMBER:</b>	74120-316804												
<b>NAME OF SUBMITTER:</b>	Terrie Quillin												

**OP \$40.00 11259448**

Total Attachments: 7

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# RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patents and Trademark Office: Please record the attached documents or the new address(es) below.

**1. Name of conveying party(ies)/Execution Date(s):**

Joshua D. Voigt  
Christopher T. Coston  
Robert J. Feuerstein  
Daniel Youngblood  
Dan Rosenstock  
Execution Date(s) 09/06/2005, 09/14/2005, 02/13/2006,  
02/15/2006

Additional name of conveying party(ies) attached?  Yes  No

**2. Name and address of receiving party(ies)**

Name: Level 3 Communications, Inc.

Internal Address: \_\_\_\_\_

Street Address: 1025 Eldorado Boulevard

City: Broomfield

State: Colorado

Country: US Zip: 80021

Additional Name(s) & address(es) attached?  Yes  No

**3. Nature of conveyance:**

- Assignment  Merger
- Security Agreement  Change of Name
- Government Interest Assignment
- Executive Order 9424, Confirmatory License
- Other \_\_\_\_\_

**4. Application number(s) or patent number(s):**

A. Patent Application No.(s)  
11/259,448

This document is being filed together with a new application.

B. Patent No.(s)

Additional numbers attached?  Yes  No

**5. Name and address of party to whom correspondence concerning this document should be mailed:**

Name: Terrie Quillin

Internal Address: Faegre & Benson LLP

Street Address: 2200 Wells Fargo Center

90 South Seventh Street

City: Minneapolis

State: MN Zip: 55402-3901

Phone Number : 303-447-7739

Fax Number: 303-447-7800

Email Address: drieth@faegre.com

**6. Total number of applications and patents involved: 1****7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40**

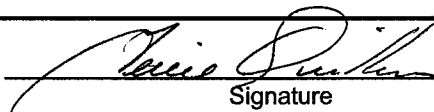
- Authorized to be charged by credit card
- Authorized to be charged to deposit account
- Enclosed
- None required (government interest not affecting title)

**8. Payment Information**

a. Credit Card Last 4 Numbers 1363  
Expiration Date 03/09

b. Deposit Account Number 06-0029

Authorized User Name Clifford J. Seitles

**9. Signature :**

Signature

Jun 6, 2006

Date

Terrie Quillin

Total number of pages including cover sheet, attachments, and documents 7

Name of Person Signing

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

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## ASSIGNMENT

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WHEREAS, we, **Joshua D. Voigt**, residing at 10040 Wolff Street, Westminster, Colorado 80031, **Christopher T. Coston**, residing at 3632 Blanca Peak Drive, Superior, Colorado 80027, **Robert J. Feuerstein**, residing at 1780 Lombardy Dr., Boulder, Colorado 80304, **Daniel Youngblood**, residing at 2880 Callan Ct., Broomfield, Colorado 80020 and **Dan Rosenstock**, residing at 1230 W 11<sup>th</sup> Ct., Broomfield, Colorado 80020-3423, have invented a certain new and useful invention entitled "**SYSTEMS AND METHODS FOR DISCOVERING NETWORK TOPOLOGY**" for which an application for Letters Patent of the United States has been prepared and filed on 10/26/2005, receiving Serial No. 11/259,448, and further identified as Attorney File No. **74120-316804**;

NOW THEREFORE, for good and valuable consideration, receipt of which is acknowledged, we have individually and jointly agreed to assign and transfer and do hereby assign and transfer unto **Level 3 Communications, Inc.** ("Company"), a corporation a corporation organized and existing under the laws of the State of Delaware, having its principal office at 1025 Eldorado Boulevard, Broomfield, Colorado 80021, its successors and assigns, the entire right, title, and interest in and to said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by us or any of us or made jointly with others (provided any such improvement is made during, or within one year after the termination of, the employment by said Company of whichever of us, solely or jointly with one or more others, has made the same), 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 foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications 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, to be held and enjoyed as fully and exclusively as they would have been by us or any of us had this assignment and transfer not been made;

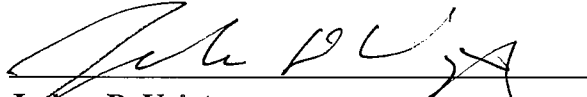
We do further agree for ourselves and for our heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as we lawfully may, that may be deemed necessary by said Company, its successors,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

And we do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of said applications, to said Company, as the assignee of the entire right, title, and interest therein.

Atty. Docket No.: 74120-316804

IN WITNESS WHEREOF, we have hereunto signed our names on the days and years set forth below:

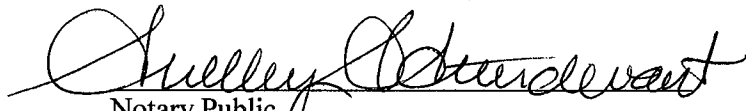
Date: Sept 6, 2005

  
Joshua D. Voigt

STATE OF COLORADO )  
 ) ss.  
COUNTY OF BROOMFIELD )

Before me, a Notary Public in and for said County and State, personally appeared **Joshua D. Voigt**, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 6<sup>th</sup> day of September, 2005.

  
Notary Public

My Commission Expires: 9/1/06



Atty. Docket No.: 74120-316804

Date: 9/14/05

Robert J. Feuerstein  
Robert J. Feuerstein

STATE OF CO )  
COUNTY OF Broomfield ) ss.

Before me, a Notary Public in and for said County and State, personally appeared **Robert J. Feuerstein**, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

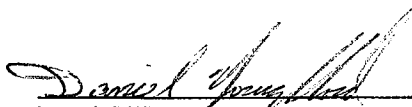
Given under my hand and seal of office this 14<sup>th</sup> day of September 2005.

Shelley Sturdevant  
Notary Public

My Commission Expires: 9/1/06

Atty. Docket No.: 74120-316804


Date: 2/13/06

  
Daniel Youngblood

STATE OF Colorado )  
COUNTY OF Broomfield ) ss.

Before me, a Notary Public in and for said County and State, personally appeared **Daniel Youngblood**, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 13<sup>th</sup> day of February, ~~2005~~ 2006,

  
Notary Public

My Commission Expires: 9/1/06



Atty. Docket No.: 74120-316804

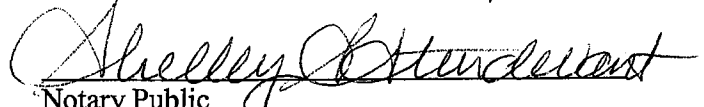
Date: 2-15-2006

  
Dan Rosenstock

STATE OF Colorado )  
COUNTY OF Broomfield ) ss.

Before me, a Notary Public in and for said County and State, personally appeared **Dan Rosenstock**, known to me to be the person whose name is subscribed to the foregoing instrument, and acknowledged to me that he executed the same for the purposes and considerations therein expressed.

Given under my hand and seal of office this 15<sup>th</sup> day of February, ~~2005~~ 2006.

  
Notary Public

My Commission Expires: 9/1/06