# PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
Joseph Lawrence	08/13/2007
Nassar El-Aawar	08/09/2007
Darren Loher	10/19/2007
Steven Craig White	12/12/2007
Raoul Alcala	08/17/2007
Niclas Comstedt	08/10/2007

### **RECEIVING PARTY DATA**

Name: Level 3 Communications, LLC		
Street Address: 1025 Eldorado Boulevard		
City: Broomfield		
State/Country: COLORADO		
Postal Code:	80021	

### PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	11565563	

### **CORRESPONDENCE DATA**

500452480

Fax Number: (720)377-0779

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 720-377-0770

Email: smcpeak@hkh-law.com

Correspondent Name: Damon A. Rieth

Address Line 1: 1660 Lincoln Street, Suite 3000
Address Line 2: Hensley Kim & Holzer, LLC
Address Line 4: Denver, COLORADO 80264

ATTORNEY DOCKET NUMBER: 519-055-CIP

PATENT

REEL: 020439 FRAME: 0678

DP \$40.00 11565

# Total Attachments: 11 source=PA\_Assignment\_519\_055\_CIP#page1.tif source=PA\_Assignment\_519\_055\_CIP#page2.tif source=PA\_Assignment\_519\_055\_CIP#page3.tif source=PA\_Assignment\_519\_055\_CIP#page4.tif source=PA\_Assignment\_519\_055\_CIP#page5.tif

source=PA\_Assignment\_519\_055\_CIP#page8.tif source=PA\_Assignment\_519\_055\_CIP#page9.tif source=PA\_Assignment\_519\_055\_CIP#page10.tif source=PA\_Assignment\_519\_055\_CIP#page11.tif

source=PA\_Assignment\_519\_055\_CIP#page6.tif source=PA\_Assignment\_519\_055\_CIP#page7.tif

## ASSIGNMENT

WHEREAS, I/we, Joseph Lawrence, residing at 2989 Tin Cup, Boulder, CO 80305; Nassar El-Aawar, residing at 1 466 South Downing, Denver, CO 80209; Darren Loher, 6554 Orion Court, Arvada, CO 80007; Steven Craig White, 3711 Florentine Drive, Longmont, CO 80503; Raoul Alcala, 986 Monroe Way, Superior, CO 80027; and Niclas Comstedt, 14000 Winding River Court, Unit R2, Broomfield, CO 80020; (hereinafter, individually and collectively the "Assignor"), have invented a certain new and useful invention entitled "SYSTEMS AND METHODS FOR NETWORK ROUTING IN A MULTIPLE BACKBONE NETWORK ARCHITECTURE" for which an application for Letters Patent of the United States have been prepared and filed on November 30, 2006 receiving Application No. 11/565,563,and further identified as Attorney Docket No. 519-055-CIP;

NOW THEREFORE, for good and valuable consideration, receipt of which is acknowledged, Assignor has agreed to assign and transfer and do hereby assign and transfer unto Level 3 Communications, LLC ("Company"), 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 divisional or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by Assignor (provided any such improvement is made during, or within one year after the termination, of the employment by said Company of Assignor), 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 me had this assignment and transfer not been made:

Assignor further agrees for Assignor and for Assignor's heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as Assignor 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 to obtain to maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And Assignor 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.

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

STATE OF COLORADO )	
CITY OF CERTON ) ss.	
COUNTY OF COUNTY	
2. NOTARY EL	$\triangle$
a managed of the second of the	By:
A PUBLIC.	Joseph Lawrence
	5/12/07
Toring of the second of the se	Dated:
Missey market and the second s	

Before me, a Notary Public in and for said County and State, personally appeared Joseph Lawrence, 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 13th day of August, 2007

otary Public My Commission Expires: WWW 142010

2 of 7

STATE OF COLORADO ) CITY OF ) ss. COUNTY OF SERIES )	
SNOTARY SE	By: Messar El-Aawar
	Dated:
Before me, a Notary Public in and	for said County and State, personally appeared Nassar

El-Aawar, 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 May of May o

Win Rhyte Carity Public My Commission Expires: MWW14 2010

STATE OF COLORADO	)		
CITY OF	) ss.		
COUNTY OF A RY	) By:		
PUBLIC	•	Darren Loher	TOTAL MARKA MA
	Dated	1:	
Beforeme, a Notary I Loher, known to me to be the acknowledged to me that he e expressed.	person whose name is su	inty and State, personally a obscribed to the foregoing i purposes and consideration	nstrument, and
Given under my hand	and seal of office this	day of	, 2007.
Notary Public	M	ly Commission Expires:	

STATE OF COLORADO )		
CITY OF ) ss.		
COUNTY OF		
A ROBERTS AO	Ву:	
	Steven Craig White	
PUBLIC	Dated:	
Craig winte, known to me to be me	a and for said County and State, personally appeared Stever person whose name is subscribed to the foregoing that he executed the same for the purposes and	1
Given under my hand and sea	l of office this day of, 2007.	
Notary Public	My Commission Expires:	

STATE OF COLORADO ) CITY OF ) ss. COUNTY OF	
S. NOTAR	By: Dead alcala
PU COUNTY	Raoul Alcala  Dated: 2007/8/17
Before me, a Notary Public in and for said Alcala, known to me to be the person whose name acknowledged to me that he executed the same for expressed.	County and State, personally appeared Raoul is subscribed to the foregoing instrument, and the purposes and considerations therein
Given under my hand and seal of office the	is 17th day of, 2007.
Motary Public Notary Public	My Commission Expires: MWW 4 8010

STATE OF CO	LORADO	)
CITY OF	A STATE OF THE PARTY OF THE PAR	) ss.
COUNTY OF	ROBERTS	Q.
13.		2
# 5.	NOTARY	SE
	150000	m
an:	PUBLIC.	
Ty,		0/
	OF COLORS	
74	ACOUNTEREST   18   18   18   18   18   18   18   1	

By: Niclas Comstedt

Dated: 8/10/07

Before me, a Notary Public in and for said County and State, personally appeared Niclas Comstedt, 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 What day of MAST, 2007.

My Commission Expires: MWW 14 3010

W	ŒG	<u>Z</u> (	I	W	E
Щ	OCT	2	2	200	7 <b>W</b>
В	Y	അവര	<b>0.00</b>	·	8 # D m m n

# **ASSIGNMENT**

WHEREAS, I/we, Joseph Lawrence, residing at 2989 Tin Cup, Boulder, CO 80305; Nassar El-Aawar, residing at 1 466 South Downing, Denver, CO 80209; Darren Loher, 6554 Orion Court, Arvada, CO 80007; Steven Craig White, 3711 Florentine Drive, Longmont, CO 80503; Raoul Alcala, 986 Monroe Way, Superior, CO 80027; and Niclas Comstedt, 14000 Winding River Court, Unit R2, Broomfield, CO 80020; (hereinafter, individually and collectively the "Assignor"), have invented a certain new and useful invention entitled "SYSTEMS AND METHODS FOR NETWORK ROUTING IN A MULTIPLE BACKBONE NETWORK ARCHITECTURE" for which an application for Letters Patent of the United States have been prepared and filed on November 30, 2006 receiving Application No. 11/565,563,and further identified as Attorney Docket No. 519-055-CIP;

NOW THEREFORE, for good and valuable consideration, receipt of which is acknowledged, Assignor has agreed to assign and transfer and do hereby assign and transfer unto Level 3 Communications, LLC ("Company"), a limited liability company 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 divisional or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by Assignor (provided any such improvement is made during, or within one year after the termination, of the employment by said Company of Assignor), 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 me had this assignment and transfer not been made;

Assignor further agrees for Assignor and for Assignor's heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as Assignor 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 to obtain to maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And Assignor hereby authorizes and requests 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.

Darren Loher

Dated: 10-19-2-00 /

# **ASSIGNMENT**

WHEREAS, I/we, Joseph Lawrence, residing at 2989 Tin Cup, Boulder, CO 80305; Nassar El-Aawar, residing at 1 466 South Downing, Denver, CO 80209; Darren Loher, 6554 Orion Court, Arvada, CO 80007; Steven Craig White, Flat 1, 11 Kingscroft Road, London, NW2 3QE, UK; Raoul Alcala, 986 Monroe Way, Superior, CO 80027; and Niclas Comstedt, 14000 Winding River Court, Unit R2, Broomfield, CO 80020; (hereinafter, individually and collectively the "Assignor"), have invented a certain new and useful invention entitled "SYSTEMS AND METHODS FOR NETWORK ROUTING IN A MULTIPLE BACKBONE NETWORK ARCHITECTURE" for which an application for Letters Patent of the United States have been prepared and filed on November 30, 2006 receiving Application No. 11/565,563,and further identified as Attorney Docket No. 519-055-CIP;

NOW THEREFORE, for good and valuable consideration, receipt of which is acknowledged, Assignor has agreed to assign and transfer and do hereby assign and transfer unto Level 3 Communications, LLC ("Company"), a limited liability company 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 divisional or continuation (in whole or in part) of said application, and in and to any and all improvements in said invention made by Assignor (provided any such improvement is made during, or within one year after the termination, of the employment by said Company of Assignor), 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 me had this assignment and transfer not been made;

Assignor further agrees for Assignor and for Assignor's heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as Assignor 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 to obtain to maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries;

And Assignor hereby authorizes and requests 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.

Steven Craig White

Dated: \_\_\_/2 - Ucc - 700 )

2 of 2