Form PTO-1595 RECORI 12-22 (Rev. 10/02)	2-2004 U.S. DEPARTMENT OF COMMERCE U.S. Patent and Trademark Office
Tab settings ⇔⇔⇔ ▼ ▼ 1029 To the Honorable Commissioner of Patents and Tragemarks.	
To the Honorable Commissioner of Patents and Trademarks.	Pieast Future
1. Name of conveying party(ies): Richard D. Terpstra	2. Name and address of receiving party(ies)
Daryl W. Malas	Name: Level 3 Communications, Inc.
Additional name of conveying party(ies) attached? Yes X No	Internal Address:
3. Nature of conveyance: ☑ Assignment □ Merger	Street Address: <u>1025 Eldorado Boulevard</u>
Security Agreement Change of Name Other	City: Broomfield State: CO Zip: 80021
Execution Date: December 8, 2004	Additional Name(s) & address(es) attached? Yes X No
Additional numbers att	ached? 🔲 Yes 🖾 No
 Name and address of party to whom correspondence concerning this document should be mailed: 	6. Total number of applications and patents involved: 1
Name: Douglas M. Hamilton	7. Total fee (37 CFR 3.41) \$ <u>40.00</u>
Internal Address:	
	Authorized to be charged to deposit account
Street Address: 2200 Wells Fargo Center	8. Deposit account number:
90 South 7th Street	
City: Minneapolis State: MN Zip: 55402	(Attach duplicate copy of this page if paying by deposit account)
DO NOT USE	E THIS SPACE
9. Statement and signature.	
To the best of my knowledge and belief, the foregoing inform is a true copy of the original document. Douglas M. Hamilton Name of Person Signing	<u>December 9,2004</u>
	Signature Date
Total number of pages including of Total number of pages including of 2004 WASFAW1 00000002 11009204 Commissioner of Patents & T 8021 40.00 0P	
	PATENT

REEL: 016081 FRAME: 0569

	Attorn	ey Docket No.:	74120-309648	Page 1 of 2
ASSIGNMENT	First Named Inventor: Robert A. Hagens et al.			
	Title: SYSTEMS AND METHODS FOR DYNAMICALLY REGISTERING ENDPOINTS IN A COMMUNICATION NETWORK			

WHEREAS, we, **Richard D. Terpstra** residing at 3001 North Torrey's Peak Drive, Superior, Colorado 80027; and **Daryl W. Malas**, residing at 4667 Winona Place, Broomfield, Colorado 80020, have invented certain new and useful improvements as described in an application for a United States Patent entitled **SYSTEMS AND METHODS FOR DYNAMICALLY REGISTERING ENDPOINTS IN A COMMUNICATION NETWORK**, which application may be identified in the United States Patent Office as U.S. Patent Application Serial No. __/____, filed on ______ (Attorney Docket No. 74120-309648); and

WHEREAS, Level 3 Communications, Inc. a corporation organized and existing under the laws of the State of Delaware, and having offices at 1025 Eldorado Boulevard, Broomfield, Colorado 80021, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the application, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we transfer to Assignee, its successors and assigns, our entire right, title, and interest in and to the invention, the above-identified patent application, corresponding domestic applications (including divisionals, continuations, and continuations-inpart), corresponding foreign applications, all Letters Patent or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and we authorize the Commissioner of Patents and Trademarks of the United States or foreign equivalent thereof to issue the Letters Patent or similar legal protection to the Assignee.

We authorize the Assignee, its successors and assigns, to insert in this instrument the filing dates and application numbers of the applications when ascertained. We authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We, our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

PATENT REEL: 016081 FRAME: 0570

ASSIGNMENT

Attorn	ey Docket No.:	74120-309648	Page 2 of 2
First N	amed Inventor:	Robert A. Hagens	et al.
Title:	SYSTEMS AN	D METHODS FOR	DYNAMICALLY
	REGISTERING	ENDPOINTS IN A	
	COMMUNICA	TION NETWORK	

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on the date indicated below:

Dated: 12-8-2004

Richard D. Terpstra

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF (of orado)		
COUNTY OF Broom juli	-	HANN BARTLE XIIII
Subscribed and sworn to before me, a Notary Public, this <u>Sth</u> day of <u>December</u> , 2004	HWUHHUH	NOTARY
Kim Bartlett	5	PUBLIC
Notary Public My Commission Expires: <u>9.30.04</u>	3111	ALL OF COLORINIUM

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on the date indicated below:

Dated: 12-08-04

All Males

CERTIFICATE OF ACKNOWLEDGMENT STATE OF (olorado) COUNTY OF Broom else Subscribed and sworn to before me, a Notary Public, this 8th December , 2004 Him Bartlett Notary Public My Commission Expires: 9-30.06



day of

ASSIGNMENT	Attorney Docket No.: 74120-309648 Page 1 of 2		
	First Named Inventor: Robert A. Hagens et al.		
	Title: SYSTEMS AND METHODS FOR DYNAMICALLY REGISTERING ENDPOINTS IN A COMMUNICATION NETWORK		

WHEREAS, we, **Richard D. Terpstra** residing at 3001 North Torrey's Peak Drive, Superior, Colorado 80027; and **Daryl W. Malas**, residing at 4667 Winona Place, Broomfield, Colorado 80020, have invented certain new and useful improvements as described in an application for a United States Patent entitled **SYSTEMS AND METHODS FOR DYNAMICALLY REGISTERING ENDPOINTS IN A COMMUNICATION NETWORK**, which application may be identified in the United States Patent Office as U.S. Patent Application Serial No. __/____, filed on ______(Attorney Docket No. 74120-309648); and

WHEREAS, Level 3 Communications, Inc. a corporation organized and existing under the laws of the State of Delaware, and having offices at 1025 Eldorado Boulevard, Broomfield, Colorado 80021, ("Assignee") is desirous of acquiring the entire right, title and interest in and to the invention, the application, and any and all Letters Patent or similar legal protection, foreign or domestic, to be obtained therefor;

NOW, THEREFORE, for good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we transfer to Assignee, its successors and assigns, our entire right, title, and interest in and to the invention, the above-identified patent application, corresponding domestic applications (including divisionals, continuations, and continuations-inpart), corresponding foreign applications, all Letters Patent or similar legal protection issuing thereon, and all rights and benefits under any applicable treaty or convention; and we authorize the Commissioner of Patents and Trademarks of the United States or foreign equivalent thereof to issue the Letters Patent or similar legal protection to the Assignee.

We authorize the Assignee, its successors and assigns, to insert in this instrument the filing dates and application numbers of the applications when ascertained. We authorize the Assignee, its successors and assigns, or anyone it may properly designate, to apply for Letters Patent or similar legal protection, in its own name if desired, in any and all foreign countries.

We represent to the Assignee, its successors and assigns, that we have not and shall not execute any writing or do any act whatsoever conflicting with this Assignment. We, our executors or administrators, will at any time upon request, without additional consideration, but at the expense of the Assignee, its successors and assigns, execute such additional writings and do such additional acts as the Assignee, its successors and assigns, may deem desirable to perfect its enjoyment of this grant, and render all assistance in making application for and obtaining, maintaining, and enforcing the Letters Patent or similar legal protection on the invention in any and all countries.

PATENT REEL: 016081 FRAME: 0572

ASSIGNMENT

 Attorney Docket No.:
 74120-309648
 Page 2 of 2

 First Named Inventor:
 Robert A. Hagens et al.

 Title:
 SYSTEMS AND METHODS FOR DYNAMICALLY REGISTERING ENDPOINTS IN A COMMUNICATION NETWORK

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on the date indicated below:

Dated: 12-8-2004

Richard D. Terpstra

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF Colorado) MANIMULL COUNTY OF Broom Subscribed and sworn to before me, a Notary Public, this <u>Sth</u> day of ecember .2004 -0 00 α Notary Public My Commission Expires: 9.30.04

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal on the date indicated below:

Dated: 12-08-04

alas alas

CERTIFICATE OF ACKNOWLEDGMENT

STATE OF Colora SS. COUNTY OF 1/2000 Subscribed and sworn to before me, a Notary Public, this 8+1day of remper . 2004 Notary)Public My Commission Expires: 9-30.06