PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the spelling of conveying party's name from Yuir Kiryanov to Yuri Kiryanov previously recorded on Reel 023235 Frame 0841. Assignor(s) hereby confirms the Assignment of the entire right title and interest to.

CONVEYING PARTY DATA

Name	Execution Date
Derick J. Clack	07/10/2009
Bryan D. Vergato	07/07/2009
Mark D. Bertoglio	07/09/2009
Shaun Botha	07/20/2009
Edward E. Buchwalter	07/09/2009
Guillaume F. Rava	07/10/2009
Yuri Kiryanov	07/17/2009
Thomas Richard Bogart	07/15/2009
Michael A. Passinsky	07/10/2009

RECEIVING PARTY DATA

Name:	Twisted Pair Solutions, Inc.
Street Address:	3131 Elliott Avenue, Suite 200
City:	Seattle
State/Country:	WASHINGTON
Postal Code:	98121

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12494728

CORRESPONDENCE DATA

Fax Number: 2066826031

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

Phone: 206-622-4900

Email: YvetteC@SeedIP.com

Correspondent Name: Jeremiah J. Baunach

PATENT 502080391 REEL: 029062 FRAME: 0251

\$40.00 12494728

Address Line 1: 701 Fifth Avenue Address Line 4: Seattle, WASH	ue, Suite 5400 INGTON 98104
ATTORNEY DOCKET NUMBER:	910150.403
NAME OF SUBMITTER:	Jeremiah J. Baunach
Total Attachments: 10 source=AssignmentCorrection#page1.tif source=AssignmentCorrection#page2.tif source=AssignmentCorrection#page3.tif source=AssignmentCorrection#page4.tif source=AssignmentCorrection#page5.tif source=AssignmentCorrection#page6.tif source=AssignmentCorrection#page7.tif source=AssignmentCorrection#page8.tif source=AssignmentCorrection#page9.tif source=AssignmentCorrection#page9.tif source=AssignmentCorrection#page10.tif	

PATENT REEL: 029062 FRAME: 0252

PATENT ASSIGNMENT

Electronic Version v1.1 09/15/2009 Stylesheet Version v1.1 500963106

SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Derick J. Clack	07/10/2009
Bryan D. Vergato	07/07/2009
Mark D. Bertoglio	07/09/2009
Shaun Botha	07/20/2009
Edward E. Buchwalter	07/09/2009
Guillaume F. Rava	07/10/2009
Yuir Kiryanov	07/17/2009
Thomas Richard Bogart	07/15/2009
Michael A. Passinsky	07/10/2009

RECEIVING PARTY DATA

Name:	Twisted Pair Solutions, Inc.
Street Address:	3131 Elliott Avenue
Internal Address:	Suite 200
City:	Seattle
State/Country:	WASHINGTON
Postal Code:	98121

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12494728

CORRESPONDENCE DATA

Fax Number: (206)682-6031

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

Phone: 206-622-4900 Email: janicek@seedip.com

Correspondent Name: SEED IP LAW GROUP PLLC

Address Line 1: 701 FIFTH AVENUE

PATENT

REEL: 029062 FRAME: 0253

12494728

1 \$40.00

source=910150_403_ASSIGNMENT#page7.tif source=910150_403_ASSIGNMENT#page8.tif

Address Line 2: SUITE 5400
Address Line 4: SEATTLE, WASHINGTON 98104

ATTORNEY DOCKET NUMBER: 910150.403

NAME OF SUBMITTER: E. Russell Tarleton

Total Attachments: 8
source=910150_403_ASSIGNMENT#page1.tif
source=910150_403_ASSIGNMENT#page2.tif
source=910150_403_ASSIGNMENT#page3.tif
source=910150_403_ASSIGNMENT#page4.tif
source=910150_403_ASSIGNMENT#page5.tif
source=910150_403_ASSIGNMENT#page5.tif
source=910150_403_ASSIGNMENT#page6.tif

PATENT REEL: 029062 FRAME: 0254

ASSIGNMENT

WHEREAS, we, Derick J. Clack, Bryan D. Vergato, Mark D. Bertoglio, Shau Botha, Edward E. Buchwalter, Guillaume F. Rava, Yuri Kriyanov, Thomas Richard Bogart, and Michael A. Passinsky (hereinafter referred to as ASSIGNORS), having mailing addresses of 222 W. Comstock Street, Seattle, Washington 98119; 5230 SW Forest Street, Seattle, Washington 98116, 1623 34th Avenue, Seattle, Washington 98122, 7409 Woodlawn Avenue NE, Seattle, Washington 98115, 2233 102nd Place SE, Bellevue, Washington 98004, 12026 10th Avenue NW, Seattle, Washington 98177, 9910 NE 137th Street, C309, Kirkland, Washington 98034, 203 W. Comstock Street, Apt. 5, Seattle, Washington 98119, and 2516 14th Avenue W., #308, Seattle, Washington 98119, respectively, are the joint inventors of an invention entitled "METHOD, APPARATUS, SYSTEM, AND ARTICLE OF MANUFACTURE FOR RELIABLE LOW-BANDWIDTH INFORMATION DELIVERY ACROSS MIXED-MODE UNICAST AND MULTICAST NETWORKS," as described and claimed in the specification for which an application for United States letters patent was filed on June 30, 2009, and assigned Application No. 12/494,728; and an international application was filed on June 30, 2009, and assigned Application No. PCT/US2009/049181. This application claims the benefit of U.S. Provisional Application No. 61/077,413, filed on July 1, 2008 and U.S. Provisional Application No. 61/101,466, filed on September 30, 2009.

WHEREAS, Twisted Pair Solutions, Inc. (hereinafter referred to as ASSIGNEE), a corporation of the State of Washington having a place of business at 3131 Elliott Avenue, Suite 200, Seattle, Washington 98121, is desirous of acquiring the entire right, title and interest in and to the patent application and in and to any letters patent(s) that claim the priority benefit of the patent application in the United States and in any and all foreign countries;

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, ASSIGNORS hereby sell, assign and transfer unto said ASSIGNEE the entire right, title and interest in and to said invention, said application and any and all letters patent which may be granted for said invention in the United States of America and its territorial possessions including any extensions or adjustments in term thereof and in any and all foreign countries, and in any and all divisions, reissues and continuations thereof, including the right to file foreign applications directly in the name of ASSIGNEE and to claim priority rights deriving from said United States application to which said foreign applications are entitled by virtue of international convention, treaty or otherwise, said invention, application and all letters patent on said invention to be held and enjoyed by ASSIGNEE and

PATENT REEL: 029062 FRAME: 0255 its successors and assigns as fully and entirely as the same would have been held and enjoyed by ASSIGNORS had this assignment, transfer and sale not been made. ASSIGNORS hereby authorize and request the Commissioner of Patents and Trademarks to issue all letters patent on said invention to ASSIGNEE. ASSIGNORS agree to execute all instruments and documents required for the making and prosecution of applications for United States and foreign letters patent on said invention, for litigation regarding letters patent, or for the purpose of protecting title to said invention or letters patent therefor.

This assignment is considered effective as of June 29, 2009.

_			_
-	~		
•	٦,	٠+	_

State of

County of

Derick J. Clack

SS.

I certify that I know or have satisfactory evidence that Derick J. Clack is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.



Signature of Notary Public

Dated

Printed Name

My appointment expires

Aug 5, 201

7/7/04	BOUT
Date	Bryan D. Vergato
State of Washington)) ss.
County of Snohom. Sh	<u>, </u>
·	know or have satisfactory evidence that Bryan D. Vergato is the person said person acknowledged that he signed this instrument and acknowledged
it to herbis free and voluntary a	act for the uses and purposes mentioned in the instrument.
ANN W	Dated _ druby 17, 2009
NOTARY PUBLIC	Signature of Notary Public Scra Ann Walking
A 40000000 A 4 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	Printed Name Sara Ann Watkins
WASHINITE	My appointment expires Aug 5, 2010
7/9/09	MRS
Date /	Márk D. Bertoglio
State of Washington) ss.
County of Syncham &	<u>/ </u>
I certify that I	know or have satisfactory evidence that Mark D. Bertoglio is the person

on who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.



Dated Signature of Notary Public Printed Name

My appointment expires

11-010	
Date	Chaun Botha
State of WASHIN	MEN) ss.
County of Sho Ho	moh ss.
I certify	that I know or have satisfactory evidence that Shaun Botha is the person who
appeared before me, and	d said person acknowledged that he signed this instrument and acknowledged it to
be his thee and vocuntary	act for the uses and purposes mentioned in the instrument.
STEP CHARGE STORY	Dated July 20, 2009
NOTARY E TO PUBLIC	Signature of Notary Public Sora Am Working
The stores of the	Printed Name <u>Soura Ann Watkins</u>
WASHIMIN	My appointment expires Aug 5, 2010
7-9-09	Edward Elichualth
Date	Edward E. Buchwalter
State of Lashing	ton)
County of Snoho	mish) ss.

I certify that I know or have satisfactory evidence that Edward E. Buchwalter is the person who appeared before me, and said person acknowledged that he signed this instrument and acknowledged it to be his free and voluntary act for the uses and purposes mentioned in the instrument.

Dated



7/27/09

Signature of **Notary Public** Printed Name My appointment expires

$\frac{1/10/2009}{Date}$	Guillaume F. Rava
State of Washing	Sumaume 1. Rava
County of Sochon	200 So.
•	hat I know or have satisfactory evidence that Guillaume F. Rava is the person
	and said person acknowledged that he signed this instrument and acknowledged arry act for the uses and purposes mentioned in the instrument.
THE ANN WAS THE	Dated July 10, 2009
NOTARY PUBLIC	Signature of Notary Public Size And Atunk
9/06/2019	Printed Name Sava Ann Watkins
OF WASHINITE	My appointment expires <u>Aug 5, 2010</u>
Date	Yuri Kiryanov
State of	
County of) ss.)
I certify t	hat I know or have satisfactory evidence that Yuri Kiryanov is the person who
• •	said person acknowledged that he signed this instrument and acknowledged it to
be his free and voluntary a	act for the uses and purposes mentioned in the instrument.
	Dated
	Signature of Notary Public
3	Printed Name
	My appointment expires

7-15-09	Thomas bogant	
Date	Thomas Richard Bogart	
State of Washington County of Snonomish)) ss.	
I certify that I	know or have satisfactory evidence that Thomas Richard Bogart is the	
person who appeared before r	ne, and said person acknowledged that he signed this instrument and	
acknowledged it to be his free a	nd voluntary act for the uses and purposes mentioned in the instrument.	
S OF SHOW OF THE SHOW	Dated July 15, 2009	
NOTARY PUBLIC	Signature of Notary Public Sara Inn Watkerns	
The Market of the Control of the Con	Printed Name Sara Ann Watkins	
Way Wayning	My appointment expires Quy 5, 2010	
7/10/2009	Millilli	
Date	Michael A. Passinsky	
State of Washing for	<u>\</u>	
County of Shortu		
I certify that I k	now or have satisfactory evidence that Michael A. Passinsky is the person	
who appeared before me, and said person acknowledged that he signed this instrument and acknowledged		

d it to be his free and voluntary act for the uses and purposes mentioned in the instrument.



Dated Signature of Notary Public Printed Name My appointment expires

6

Date	Guillaume F. Rava
State of	
County of) ss.)
I certify that	I know or have satisfactory evidence that Guillaume F. Rava is the person
	said person acknowledged that he signed this instrument and acknowledged
	act for the uses and purposes mentioned in the instrument.
	Dated
	Signature of Notary Public
	Printed Name
	My appointment expires
7/17/2009	- Land
Date	Yuri/Kiryanov
State of	
County of) SS.)
I certify that I	know or have satisfactory evidence that Yuri Kiryanov is the person who
appeared before me, and said j	person acknowledged that he signed this instrument and acknowledged it to
be his free and voluntary act for	or the uses and purposes mentioned in the instrument.
	Dated
	Signature of Notary Public See attached
3	Printed Name
	My appointment expires

<u>6\6\6\6\6\6\6\6\6\6\6\6\6\6\6\6\6\6\6\</u>	X-01-01-01-01-01-01-01-01-01-01-01-01-01-
State of California County of Santa Clara	}
County of	arc Friedman, Notary Public, Here Insert Name and Tille of the Officer
On before me, 110	Here Insert Name and Tille of the Officer
personally appeared Yuri kir	Yanov Name(s) of Signer(s)
	* * * * * * * * * * * * * * * * * * * *
	who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal. Signature Signature of Notary Public
and could prevent fraudulent removal and i	it may prove valuable to persons relying on the document reattachment of this form to another document.
Description of Attached Document	¿ Filing
Title or Type of Document:	Number of Pages: 5
.! !	
Signer(s) Other Than Named Above:	
Capacity(ies) Claimed by Signer(s)	
Signer's Name: Individual Corporate Officer — Title(s): Partner — Limited General Attorney in Fact Trustee Guardian or Conservator Officer Top of thumb ho	☐ Individual ☐ Corporate Officer — Title(s): ☐ Partner — ☐ Limited ☐ General ☐ Attorney in Fact ☐ Attorney in Fact ☐ Total thumb here

© 2007 National Notary Association • 9350 De Soto Ave., P.O. Box 2402 • Chatsworth, CA 91313-2402 • www.NationalNotary.org | Recorder 1 2009062 FRAME: 0262