10-05-2004

Form **PTO-1595** (Rev. 06/04) OMB No. 0651-0027 (exp. 6/30/2005)



Attorney Docket No. 020707-002510US U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

__ 102852442 PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below. Name of conveying party(ies)/Execution Date(s): 2. Name and address of receiving party(ies) John Edward Bowers, July 23, 2003 Calient Networks, Inc. Shifu Yuan, July 24, 2003 5853 Rue Ferrari Roger Helkey, July 23, 2003 Xuezhe Zheng, July 23, 2003 San Jose, CA 95138 James R. Sechrist, August 23, 2003 Additional name(s) of conveying party(ies) attached? 3. Nature of conveyance: ☐ Merger ☐ Security Agreement ☐ Change of Name ☐ Government Interest Assignment ☐ Executive Order 9424, Confirmatory License Additional name(s) & address(es) attached? 4. Application or patent number(s): This document is being filed together with a new application. A. Patent Application No.(s) 10/616,244 B. Patent No.(s) Additional numbers attached? Yes No 5. Name and address to whom correspondence 6. Total number of applications and patents involved: concerning document should be mailed: Name: Robert C. Colwell 7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00 Internal Address: Authorized to be charged by credit card Authorized to be charged to deposit account TOWNSEND AND TOWNSEND AND CREW LLP Street Address: Two Embarcadero Center, Eighth Floor None required (government interest not affecting title) City: San Francisco 8. Payment Information a. Credit Card Last 4 numbers California Zip: 94111-3834 State: **Expiration Date** Phone Number: (415) 576-0200 b. Deposit Account Number 20-1430 Fax Number: (415) 576-0300 Authorized User Name Email Address: rcc@townsend.com 9. Signature: September 23, 2004 Signature Date Robert C. Colwell Total number of pages including cover Name of Person Signing Atty. Reg. No. 27,431 sheet, attachments, and documents:

Documents to be recorded (including cover sheet) should be faxed to (703) 306-5995, or mailed to:

Form PTO-1595 (Rev. 10-02) OMB No. 0651-0027 (exp. 5/31/2002)	neet U.S. Department of Comme U.S. Patent and Trademark Of	
Tab settings ⇔⇔♥ ▼	▼ ▼ ▼	
To the Honorable Commissioner of Patents and Trademarks.	Please record the attached original documents or copy thereof	
1. Name of conveying party(ies): John Edward Bowers 3:15-04	Name and address of receiving party(ies)	
John Edward Bowers 373 07	Name: Calient Networks, Inc.	
Additional name(s) of conveying party(ies) attached? ⊠ Yes ☐ No.	Internal Address:	
3. Nature of conveyance:		
	Street Address: 5853 Rue Ferrari	
Z / toolgilliont	City: San Jose State: CA ZIP: 95138	
☐ Security Agreement ☐ Change of Name	,	
Other:	Additional name(s) and address(es) attached? ☐ Yes ☒ No	
Execution Date:		
4. Application number(s) or patent number(s):		
	e execution date of the application is: B. Patent No(s):	
If this document is being filed together with a new application, the	e execution date of the application is:	
A. Patent Application No(s): 10/616,244	B. Patent No(s):	
, , , , , , , , , , , , , , , , , , , ,	2 3	
Additional numbers atta	chod? Yes X No	
Name and address of party to whom correspondence	T	
concerning document should be mailed:	6. Total number of applications and patents involved 1	
N 1 1 0 0 1 11	7. Tabal for (27 CED 2 44).	
Name: Robert C. Colwell TOWNSEND AND TOWNSEND AND CREW LLP	7. Total fee (37 CFR 3.41):\$40.00	_
Two Embarcadero Center, Eighth Floor	☐ Enclosed	
San Francisco, California 94111-3834		
(415) 576-0200	Za Admonzed to be charged to deposit account	
	8. Deposit account number: 20-1430	
	(Attach duplicate copy of this page if paying by deposit account)	
DO NOT USE	THIS SPACE	
Statement and signature.		
To the best of my knowledge and belief, the foregoing informati is a true copy of the original document.	ion is true and correct and any attached copy	
	Zlolon	
Robert C. Colwell	Signature	_
Name of Person Signing S Atty. Reg. No. 27,431	ngriature Date	
	about attachments and decreases	
/ Total number of pages including cover sheet, attachments and documents: 4 Mail documents to be recorded with required cover sheet information to:		

Mail Stop Assignment Recordation Services

Director of the U.S. Patent and Trademark Office

P.O. Box 1450 Alexandria, VA 22313-1450

03/17/2004 ECOOPER 00000013 201430

40.00 BA

01 FC:8021

10616244

PATENT REEL: 015869 FRAME: 0810

Attorney Docket No.: 020707-002510 Client Ref. No. P084

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, the below-listed individuals, herein referred to as "Assignors," are the inventors of the invention described and set forth in the following application for United States Letters Patent:

Optical Switch with Adjustable Optical Loss

WHEREAS, Calient Networks, Inc., 5853 Rue Ferrari, San Jose, CA 95138-1851, hereinafter referred to as "Assignee," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Date: 7/23/07	900
	John Edward Bowers
Date: 7/24/03	SWr y
	V Shifu Yuan
Date: 23-Jul-03	Roger Jelle
	(Roger Helkey
Date: $\frac{7/23/03}{}$	Xneshe 2/
	Xuezhe Zheng
Date:	Nute: Signed on Separate sheet AJH) James R. Sechrist
	James R. Sechrist

Page 1 of 2

PA 3316944 v1

Client Ref. No. P084

ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, the below-listed individuals, herein referred to as "Assignors," are the inventors of the invention described and set forth in the following application for United States Letters Patent:

Optical Switch with Adjustable Optical Loss

WHEREAS, Calient Networks, Inc., 5853 Rue Ferrari, San Jose, CA 95138-1851, hereinafter referred to as "Assignee," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same;

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Date: 7/23/03

John Edward Bowers

Shifu Yuan

Date: 23-Jul-03

Roger Helkey

Date: 7/23/03

Xue ne Zheng

Date: 8-23-3

James R. Sechrist

Page 2 of 2

PA 3316944 v1

RECORDED: 03/15/2004