

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Satish GOPALAKRISHNA</td> <td>03/01/2012</td> </tr> <tr> <td>Monali CHAKRABARTY</td> <td>03/01/2012</td> </tr> <tr> <td>Bryan FREESTONE</td> <td>03/01/2012</td> </tr> </tbody> </table>		Name	Execution Date	Satish GOPALAKRISHNA	03/01/2012	Monali CHAKRABARTY	03/01/2012	Bryan FREESTONE	03/01/2012		
Name	Execution Date										
Satish GOPALAKRISHNA	03/01/2012										
Monali CHAKRABARTY	03/01/2012										
Bryan FREESTONE	03/01/2012										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Ciena Corporation</td> </tr> <tr> <td>Street Address:</td> <td>1201 Winterson Road</td> </tr> <tr> <td>City:</td> <td>Linthicum</td> </tr> <tr> <td>State/Country:</td> <td>MARYLAND</td> </tr> <tr> <td>Postal Code:</td> <td>21090</td> </tr> </table>		Name:	Ciena Corporation	Street Address:	1201 Winterson Road	City:	Linthicum	State/Country:	MARYLAND	Postal Code:	21090
Name:	Ciena Corporation										
Street Address:	1201 Winterson Road										
City:	Linthicum										
State/Country:	MARYLAND										
Postal Code:	21090										
PROPERTY NUMBERS Total: 1											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13409682</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13409682						
Property Type	Number										
Application Number:	13409682										
CORRESPONDENCE DATA											
<p>Fax Number: (704)366-9744          Phone: 704-790-3600          Email: bbrown@worldpatents.com  <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Clements Bernard PLLC          Address Line 1: 1901 Roxborough Road          Address Line 2: Suite 250          Address Line 4: Charlotte, NORTH CAROLINA 28211</p>											
ATTORNEY DOCKET NUMBER:	10.2091										
NAME OF SUBMITTER:	Christopher L. Bernard										
Total Attachments: 1 source=10_2091_Assignment#page1.tif											

OP \$40.00 13409682

ASSIGNMENT

WHEREAS, **Satish Gopalakrishna, Monali Chakrabarty, and Bryan Freestone** (hereinafter referred to as "ASSIGNORS") have invented certain new and useful improvements in an invention entitled:

**UNIDIRECTIONAL ASYMMETRIC TRAFFIC PATTERN SYSTEMS AND METHODS IN SWITCH MATRICES**


for which U.S. Patent Application No. 13/409,682 was filed on 3-1-2012.

WHEREAS, **CIENA CORPORATION**, 1201 Winterson Road, Linthicum, Maryland 21090 USA (hereinafter referred to as "ASSIGNEE") is desirous of acquiring the entire right, title, and interest in and to said invention, and in and to said application and any Letters Patent that may issue thereon;

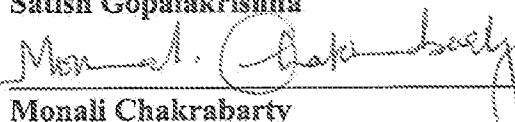
NOW, THEREFORE, in accordance with obligations entered into pursuant to an Employment Agreement or other agreement and/or for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNORS hereby sell, transfer and assign to said ASSIGNEE, and to ASSIGNEE'S successors and assigns, ASSIGNORS' entire right, title, and interest in and to said invention and improvements invented and originated by ASSIGNORS in the United States and its territorial possessions and in any and all foreign countries and to all Letters Patent or similar legal protections in the United States and its territorial possessions and in any and all foreign countries to be obtained for said invention by said application or any application claiming priority to/from the application, or any continuation, division, continuation-in-part, reexamination, renewal, substitute, extension, or reissue thereof or any legal equivalent thereof in a foreign country for the full term(s) for which the same may be granted; and authorize and request the Commissioner for Patents of the United States and any official of any foreign country whose duty it is to issue patents or legal equivalents thereof, to issue same for this invention to ASSIGNEE, its lawful successors and assigns.

ASSIGNORS further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention, said application, and said Letters Patent and legal equivalents thereof in foreign countries as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEE or its legal representative any and all papers, instruments, or affidavits required to apply for, obtain, maintain, issue, and/or enforce said invention, said application, and said Letters Patent and legal equivalents thereof in foreign countries which may be necessary or desirable to carry out the purposes thereof.

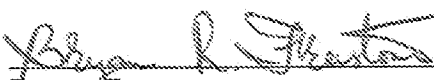
IN WITNESS WHEREOF, we have hereunto set hand and signed on the date indicated below:

  
\_\_\_\_\_  
**Satish Gopalakrishna**

Date: 3/1/2012

  
\_\_\_\_\_  
**Monali Chakrabarty**

Date: 3/01/2012

  
\_\_\_\_\_  
**Bryan Freestone**

Date: 3/01/2012