

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5474991

|                                                                                                                                                                                                 |                                          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|
| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                           |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                               |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                          |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                    |
| YANG LIU                                                                                                                                                                                        | 12/03/2014                               |
| TOM BAEHR-JONES                                                                                                                                                                                 | 11/11/2014                               |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                          |
| <b>Name:</b>                                                                                                                                                                                    | SILICON LIGHTWAVE SERVICES, LLC          |
| <b>Street Address:</b>                                                                                                                                                                          | 51 EAST MAIN STREET                      |
| <b>Internal Address:</b>                                                                                                                                                                        | SUITE 22                                 |
| <b>City:</b>                                                                                                                                                                                    | NEWARK                                   |
| <b>State/Country:</b>                                                                                                                                                                           | DELAWARE                                 |
| <b>Postal Code:</b>                                                                                                                                                                             | 19711                                    |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                          |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                            |
| Application Number:                                                                                                                                                                             | 16384517                                 |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                          |
| <b>Fax Number:</b>                                                                                                                                                                              |                                          |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i> |                                          |
| <b>Phone:</b>                                                                                                                                                                                   | 858-519-2319                             |
| <b>Email:</b>                                                                                                                                                                                   | ipadmin@stratfordmanagers.com            |
| <b>Correspondent Name:</b>                                                                                                                                                                      | STRATFORD MANAGERS CORPORATION C/O JORDA |
| <b>Address Line 1:</b>                                                                                                                                                                          | 11790 CARMEL CREEK RD                    |
| <b>Address Line 2:</b>                                                                                                                                                                          | UNIT 301                                 |
| <b>Address Line 4:</b>                                                                                                                                                                          | SAN DIEGO, CALIFORNIA 92130              |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | 0200-2USC5                               |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | AFSHIN (MEHDI) ZAMANPOUR                 |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /Mehdi Zamanpour, Reg. No. 77,241/       |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 04/15/2019                               |
| <b>Total Attachments: 3</b>                                                                                                                                                                     |                                          |
| source=074381-2USC4 Assignment1#page1.tif                                                                                                                                                       |                                          |
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## JOINT ASSIGNMENT

WE, **Yang Liu** and **Tom Baehr-Jones**, believe that we are the inventors of the subject matter disclosed in the application for patent (hereinafter “the invention or inventions”) identified herein as

### **ULTRA-RESPONSIVE PHASE SHIFTERS FOR DEPLETION MODE SILICON MODULATORS**

and further identified by Attorney Docket Number **SLS-0002US** which application for patent was filed on **October 22, 2013** and has been assigned Serial No. **14/060,058** by the United States Patent and Trademark Office.

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, the receipt and sufficiency of which is hereby acknowledged, each of the undersigned agrees to assign, and hereby does assign, transfer and set over to **SILICON LIGHTWAVE SERVICES, LLC**, a limited liability company organized under the laws of the State of Delaware, and having a principal place of business at **51 East Main Street, Suite 220, Newark, DE 19711** (hereinafter designated as the Assignee) his or her entire right, title and interest in the invention or inventions as represented by the application for patent identified herein (the “application”) in the United States, its territories, dependencies and possessions, his or her entire right, title, and interest in the application, and his or her entire right, title and interest in the invention or inventions as regards all other national jurisdictions and international entities that have the power to grant patents, wherever situated, including without limitation all applications for patent which claim priority to and/or the benefit of the subject matter disclosed in the application for patent identified herein, including any provisional application, utility application, design application, and/or plant application, as well as any continuation application, divisional application, continuation-in-part application, reissue application, reexamination application, patent interference proceeding, foreign national application and/or any application filed or to be filed under a patent treaty such as the International Convention for Protection of Industrial Property and/or the Patent Cooperation Treaty, and any Letters Patent which may be granted therefor in any jurisdiction.

In addition to the above assignment, each of the undersigned agrees to execute all papers necessary in connection with the application and any continuing applications, divisional applications, or continuations-in-part thereof, and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

Each of the undersigned agrees to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation or division thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

Each of the undersigned agrees to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

Each of the undersigned agrees to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

Joint Assignment

US Serial No.: 14/060,058

Date Filed: October 22, 2013

Attorney Docket No.: SLS-0002US

Each of the undersigned hereby authorizes and requests the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any divisions or continuing applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he or she has full right to convey the entire interest herein assigned, and that he or she has not executed and will not execute, any agreement in conflict herewith.

In witness whereof, this instrument has been executed by the undersigned on the date opposite the respective name of the undersigned.

This assignment should preferably be signed before: (a) a Notary Public if within the U.S.A. or (b) a U.S. Consul if outside the U.S.A. If neither, then it should be signed before at least two witnesses.

Date: 3/12/2014 Signature: Yang Liu (SEAL)  
Yang Liu

California  
STATE OF DELAWARE )  
COUNTY OF San Francisco )ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 201\_\_\_\_, before me personally came **Yang Liu** to me known and known to me to be the person described in and who executed the within instrument and he/she acknowledged to me that he/she executed the same.

\_\_\_\_\_  
Notary Public

Joint Assignment  
US Serial No.: 14/060,058  
Date Filed: October 22, 2013  
Attorney Docket No.: SLS-0002US

Date: 11/11/13 Signature: [Signature] (SEAL)  
Tom Baehr-Jones

STATE OF DELAWARE )  
COUNTY OF \_\_\_\_\_ )ss.:

On this 11th day of November, 2013, before me personally came **Tom Baehr-Jones** to me known and known to me to be the person described in and who executed the within instrument and he/she acknowledged to me that he/she executed the same.

[Signature]  
Notary Public Michael Hochberg  
140 Evans Hall  
Newark DE 19716

Date: 11/11/13 Signature: \_\_\_\_\_ (SEAL)  
[Typed name of inventor]

STATE OF DELAWARE )  
COUNTY OF \_\_\_\_\_ )ss.:

On this \_\_\_\_\_ day of \_\_\_\_\_, 2013, before me personally came \_\_\_\_\_ to me known and known to me to be the person described in and who executed the within instrument and he/she acknowledged to me that he/she executed the same.

\_\_\_\_\_  
Notary Public