

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT4500983

<b>SUBMISSION TYPE:</b>	CORRECTIVE ASSIGNMENT								
<b>NATURE OF CONVEYANCE:</b>	Corrective Assignment to correct the ASSIGNMENT RECORDS OF THE USPTO BY REMOVING THE ASSIGNMENT previously recorded on Reel 036469 Frame 0785. Assignor(s) hereby confirms the ASSIGNMENT RECORDATION OF APPLICATION S/N 14008374 WAS INCORRECT. IT SHOULD HAVE BEEN FOR APPLICATION S/N 14088374.								
<b>CONVEYING PARTY DATA</b>									
	<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>MARK ALBERT CROWDER</td> <td>11/21/2013</td> </tr> <tr> <td>CHANGQING ZHAN</td> <td>11/21/2013</td> </tr> <tr> <td>PAUL J. SCHUELE</td> <td>11/21/2013</td> </tr> </tbody> </table>	Name	Execution Date	MARK ALBERT CROWDER	11/21/2013	CHANGQING ZHAN	11/21/2013	PAUL J. SCHUELE	11/21/2013
Name	Execution Date								
MARK ALBERT CROWDER	11/21/2013								
CHANGQING ZHAN	11/21/2013								
PAUL J. SCHUELE	11/21/2013								
<b>RECEIVING PARTY DATA</b>									
<b>Name:</b>	Sharp Laboratories of America, Inc.								
<b>Street Address:</b>	5750 NW Pacific Rim Boulevard								
<b>City:</b>	Camas								
<b>State/Country:</b>	WASHINGTON								
<b>Postal Code:</b>	98607								
<b>PROPERTY NUMBERS Total: 1</b>									
	<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>14088374</td> </tr> </tbody> </table>	Property Type	Number	Application Number:	14088374				
Property Type	Number								
Application Number:	14088374								
<b>CORRESPONDENCE DATA</b>									
<b>Fax Number:</b>	(360)817-8505								
<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>	360 834-8754								
<b>Email:</b>	dripma@sharplabs.com								
<b>Correspondent Name:</b>	DAVID C. RIPMA								
<b>Address Line 1:</b>	SHARP LABORATORIES OF AMERICA, INC.								
<b>Address Line 2:</b>	5750 NW PACIFIC RIM BLVD.								
<b>Address Line 4:</b>	CAMAS, WASHINGTON 98607								
<b>ATTORNEY DOCKET NUMBER:</b>	SLA3086.2								
<b>NAME OF SUBMITTER:</b>	DAVID C. RIPMA								
<b>SIGNATURE:</b>	/David C. Ripma/								
<b>DATE SIGNED:</b>	07/12/2017								
<b>Total Attachments: 3</b>									

source=SLA3086.2 Incorrect Recordation Cover Sheet Inventors-to-SLA#page1.tif

source=SLA3086.2 Signed Assignment to SLA#page1.tif

source=SLA3086.2 Signed Assignment to SLA#page2.tif

<b>PATENT ASSIGNMENT COVER SHEET</b>
--------------------------------------

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3508696

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
MARK ALBERT CROWDER	11/21/2013
CHANGQING ZHAN	11/21/2013
PAUL J. SCHUELE	11/21/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SHARP LABORATORIES OF AMERICA, INC.
<b>Street Address:</b>	5750 NW PACIFIC RIM BOULEVARD
<b>City:</b>	CAMAS
<b>State/Country:</b>	WASHINGTON
<b>Postal Code:</b>	98607
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	14008374
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(360)817-8505
<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>	360 834-8754
<b>Email:</b>	farra@sharplabs.com
<b>Correspondent Name:</b>	DAVID C. RIPMA
<b>Address Line 1:</b>	5750 NW PACIFIC RIM BLVD.
<b>Address Line 4:</b>	CAMAS, WASHINGTON 98607
<b>ATTORNEY DOCKET NUMBER:</b>	SLA3086.2
<b>NAME OF SUBMITTER:</b>	ANGIE C. FARR
<b>SIGNATURE:</b>	/Angie C. Farr/
<b>DATE SIGNED:</b>	09/01/2015
<b>Total Attachments: 2</b>	
source=SLA3086.2 Signed Assignment to SLA#page1.tif	
source=SLA3086.2 Signed Assignment to SLA#page2.tif	

## ASSIGNMENT

WHEREAS, the undersigned Mark Albert CROWDER, a resident of Portland, Oregon; Chingqing ZHAN, a resident of Vancouver, Washington; and Paul J. SCHUELE, a resident of Washougal, Washington, (hereinafter termed "Inventors") have invented certain new and useful improvements in:

Light Emitting Diode (LED) using Three-Dimensional Gallium Nitride (GaN) Pillar Structures

and have executed a declaration and oath for an application for a United States patent disclosing and identifying the invention:

Declaration executed on 11/21/2013

or

Having been previously filed and assigned Serial Number \_\_\_ and filing date \_\_\_; and

WHEREAS Sharp Laboratories of America, Inc., a corporation of the State of Washington, (hereinafter termed "Assignee"), having a place of business at 5750 NW Pacific Rim Boulevard, Camas, Washington 98607, wishes to acquire the entire right, title and interest in and to said application and the invention disclosed therein, and in and to all embodiments of the invention, heretofore conceived, made or discovered by said Inventors (all collectively hereinafter termed "said invention"), and in and to any and all patents, certificates of invention and other forms of protection thereon (hereinafter termed "patents") applied for or granted in the United States and/or other countries.

NOW THEREFORE, for good and valuable consideration acknowledged by said Inventors to have been received in full from said Assignee:

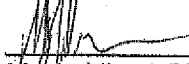


1. Said Inventors hereby sell, assign, transfer and convey unto said Assignee, the entire right, title and interest (a) in and to said application and said invention; (b) in and to all rights to apply in any and all countries of the world for patents, certificates of inventions or other government grants on said invention, including the right to apply for patents pursuant to the International Convention for the Protection of Industrial Property or pursuant to any other convention, treaty, agreement or understanding; (c) in and to any and all applications filed and any and all patents, certificates of inventions or other governmental grants granted on said invention in the United States or any other country, including each and every application filed and each and every patent granted on any application which is a division, substitution, or continuation of any of said applications; (d) in and to each and every reissue or extension of any of said patents; and (e) in and to each and every patent claim resulting from a reexamination certificate for any and all of said patents.

2. Said Inventors hereby covenant and agree to cooperate with said Assignee to enable said Assignee to enjoy to the fullest extent the right, title and interest herein conveyed in the United States and other countries. Such cooperation by said Inventors shall include prompt production of pertinent facts and documents, giving of testimony, executing of petitions, oaths, specifications, declarations or other papers, and other assistance all to the extent deemed necessary or desirable by said Assignee (a) for perfecting in said Assignee the right, title and interest herein conveyed; (b) for complying with any duty of disclosure; (c) for prosecuting any of said applications; (d) for filing and prosecuting substitute, divisional, continuing or additional applications covering said invention; (e) for filing and prosecuting applications for reissue of any of said patents; (f) for interference or other priority proceedings involving said invention; and (g) for legal proceedings involving said invention and any applications therefore and any patents granted thereon, including without limitation opposition proceedings, cancellation proceedings, priority contests, public use proceedings, reexamination proceedings, compulsory licensing proceedings, infringement actions and court actions; provided, however, that the expense incurred by said Inventors in providing such cooperation shall be paid for by said Assignee.

3. The terms and covenants of this Assignment shall inure to the benefit of said Assignee, its successors, assigns and other legal representatives, and shall be binding upon said Inventors, said Inventors' heirs, legal representatives and assigns.

4. Said Inventors hereby warrant and represent that said Inventors have not entered and will not enter into any assignment, contract, or understanding in conflict with this Assignment.

IN WITNESS WHEREOF, the said Inventors have executed this Assignment on the date given below:

(1)		11/21/13
	Mark Albert CROWDER (Signature)	(Date)
(2)		11/21/13
	Changqing ZHAN (Signature)	(Date)
(3)		11/21/13
	Paul J. SCHUELE (Signature)	(Date)

\*\*\*\*\*