

## PATENT ASSIGNMENT

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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>Mitsuhiro Kobayashi</td> <td>11/14/2012</td> </tr> <tr> <td>Nozomu Takahashi</td> <td>11/14/2012</td> </tr> </tbody> </table>		Name	Execution Date	Mitsuhiro Kobayashi	11/14/2012	Nozomu Takahashi	11/14/2012		
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<table border="1"> <tr> <td>Name:</td> <td>Kabushiki Kaisha Toshiba</td> </tr> <tr> <td>Street Address:</td> <td>1-1, Shibaura 1-chome</td> </tr> <tr> <td>City:</td> <td>Minato-ku, Tokyo</td> </tr> <tr> <td>State/Country:</td> <td>JAPAN</td> </tr> </table>		Name:	Kabushiki Kaisha Toshiba	Street Address:	1-1, Shibaura 1-chome	City:	Minato-ku, Tokyo	State/Country:	JAPAN
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CORRESPONDENCE DATA									
<p>Fax Number: 2028243001  <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 202-824-3000        Email: bwptopat@bannerwitcoff.com, nbutler@bannerwitcoff.com        Correspondent Name: BANNER &amp; WITCOFF, LTD. ATTORNEYS FOR CLI        Address Line 1: 1100 13th STREET, N.W.        Address Line 2: SUITE 1200        Address Line 4: WASHINGTON, DISTRICT OF COLUMBIA 20005-4051</p>									
ATTORNEY DOCKET NUMBER:	005341.00306								
NAME OF SUBMITTER:	Darrell G. Mottley								
<p>Total Attachments: 2        source=Assignment#page1.tif        source=Assignment#page2.tif</p>									

CH \$40.00 29438237

ASSIGNMENT

**WHEREAS, Mitsuhiro KOBAYASHI and Nozomu TAKAHASHI**

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hereinafter (collectively) referred to as the Assignor(s), have invented certain new and useful improvements in

LIGHT-EMITTING DIODE

for which an application for Letters Patent of the United States has been prepared,

- the Declaration for said application executed on even date herewith;
- said application having been filed in the United States Patent and Trademark Office on  
November 28, 2012 and accorded Serial Number 29/438,237, and was amended on \_\_\_\_\_  
(if applicable);
- said application having been filed under the Patent Cooperation Treaty on \_\_\_\_\_ and  
accorded Application No. \_\_\_\_\_, the United States of America being designated;

**WHEREAS, Kabushiki Kaisha Toshiba  
1-1, Shibaura 1-chome, Minato-ku, Tokyo, Japan**

hereinafter referred to as the Assignee(s), is desirous of acquiring the entire right, title and interest in and to the aforesaid invention and in and to any Letters Patent of the United States which may be granted therefor;

**NOW THEREFORE**, for good and valuable consideration the Assignor(s) by these presents do sell, assign, and transfer unto the Assignee(s), its successors, legal representatives and assigns, the full and exclusive right to the invention as described in said application, and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in and to any and all divisions, reissues, continuations and extensions thereof;

**AND** said Assignor(s) authorizes and requests the Commissioner of Patents and Trademarks to issue all said Letters Patent to said Assignee;

**AND** said Assignor(s) warrant and covenant that I/We have full right to convey the entire interest herein assigned and that I/We have not executed and will not execute any instrument or assignment in conflict herewith;

**AND** said Assignor(s) agree to communicate to said Assignee(s) or its representatives any facts known to me/us respecting said invention, to execute all divisional, continuation, reissue and foreign applications, sign all lawful documents and make all rightful oaths relating to said invention, and to testify in any judicial or administrative proceeding and generally do everything possible to aid the said Assignee to obtain and enforce said Letters Patent in the United States when requested so to do by said Assignee.

Attorney Docket No.  
Client Reference No. OK-2012DF0037-1

AND the undersigned hereby grant(s) the firm of Banner & Witcoff, LTD the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document

IN WITNESS WHEREOF, I/We have hereunto set my/our hand and seal.

Date: 14 Nov. 2012

Signature: Mitsuhiro Kobayashi  
Name: Mitsuhiro KOBAYASHI

Date: 14 Nov, 2012

Signature: Nozomu Takahashi  
Name: Nozomu TAKAHASHI