## PATENT ASSIGNMENT

**Electronic Version v1.1**  
**Stylesheet Version v1.1**

### SUBMISSION TYPE:  
NEW ASSIGNMENT

### NATURE OF CONVEYANCE:  
ASSIGNMENT

### CONVEYING PARTY DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>Execution Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Toshiki Hirano</td>
<td>02/14/2011</td>
</tr>
<tr>
<td>Fu-Ying Huang</td>
<td>02/02/2011</td>
</tr>
<tr>
<td>Jia-Yang Juang</td>
<td>02/17/2011</td>
</tr>
<tr>
<td>Barry Cushing Stipe</td>
<td>02/14/2011</td>
</tr>
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### RECEIVING PARTY DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>Hitachi Global Storage Technologies Netherlands B.V.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Street Address</td>
<td>Locatellikade 1</td>
</tr>
<tr>
<td>Internal Address</td>
<td>Pamassustoren</td>
</tr>
<tr>
<td>City</td>
<td>1076 AZ Amsterdam</td>
</tr>
<tr>
<td>State/Country</td>
<td>NETHERLANDS</td>
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### PROPERTY NUMBERS Total: 1

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<tr>
<td>Application Number</td>
<td>13033489</td>
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### CORRESPONDENCE DATA

- **Fax Number:** (408)971-4660  
  *Correspondence will be sent via US Mail when the fax attempt is unsuccessful.*
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- **Email:** april@zilakotab.com  
- **Correspondent Name:** Zilka-Kotab, PC  
- **Address Line 1:** P.O. Box 721120  
- **Address Line 4:** San Jose, CALIFORNIA 95172

### ATTORNEY DOCKET NUMBER:

| HSJ920100065US1/HIT1P561 |

### NAME OF SUBMITTER:

| Dominic M. Kotab |

Total Attachments: 4  
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ASSIGNMENT OF PATENT APPLICATION

Whereas I/we the undersigned inventor(s) have invented certain new and useful improvements as set forth in the patent application entitled:

Extended Cavity VCSEL Mounted to Substrate with Electrical and Thermal Contact to Substrate and Optical Power Directed Toward Substrate

(Atty. Docket No.: HIT1P561/HJS920100065US1) for which I (we) have executed an application for a United States Letters Patent.

For good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I/we the undersigned inventor(s) hereby:

1) Sell(s), assign(s) and transfer(s) to Hitachi Global Storage Technologies Netherlands B.V., a corporation having a place of business at Locatellikade 1, Parnassustoren, 1076 AZ Amsterdam, The Netherlands, (hereinafter referred to as “ASSIGNEE”), the entire right title and interest in any and all improvements and inventions disclosed in, application(s) based upon, and Patent(s) (including foreign patents) granted upon the information which is disclosed in the above referenced application.

2) Authorize and request the Commissioner of Patents to issue any and all Letters Patents resulting from said application or any division(s), continuation(s), substitutes(s) or reissue(s) thereof to the ASSIGNEE.

3) Agree to execute all papers and documents and, entirely at the ASSIGNEE’s expense, perform any acts which are reasonably necessary in connection with the prosecution of said application, as well as any derivative and applications thereof, foreign applications based thereon, and/or the enforcement of patents resulting from such applications.

4) Agree that the terms, covenants and conditions of this assignment shall inure to the benefit of the Assignee, its successors, assigns and other legal representative, and shall be binding upon the inventor(s), as well as the inventor’s heirs, legal representatives and assigns.

5) Warrant and represent that I/we have not entered, and will not enter into any assignment, contract, or understanding that conflicts with this assignment.

Signed on the date(s) indicated beside my (our) signature(s).

1) Signature: ___________________________ Date: 2/18/20 L
Typed Name: Toshiki Hirano

2) Signature: ___________________________ Date: __________
Typed Name: Fu-Ying Huang

Atty Docket No.: HIT1P561/HJS920100065US1
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1) Signature: ___________________________ Date: ___________________________
   Typed Name: Toshiki Hirano

2) Signature: ___________________________ Date: 2/2/2011
   Typed Name: Fu-Ying Huang

Atty Docket No.: HIT1P561/HSJ920100065US1
3) Signature: ____________________________
   Typed Name: Jia-Yang Juang
   Date: 7/12/2011

4) Signature: ____________________________
   Typed Name: Barry Cushing Stipe
   Date: ______
3) Signature: ________________________________  Date: ____________
Typed Name: Jia-Yang Juang

4) Signature: ________________________________  Date: 2/14/2011
Typed Name: Barry Cushing Stip