

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;">Name</th> <th style="width: 30%;">Execution Date</th> </tr> </thead> <tbody> <tr> <td>Jong-jin Lee</td> <td>07/22/2009</td> </tr> <tr> <td>Hyun-seo Kang</td> <td>07/22/2009</td> </tr> <tr> <td>Jai-sang Koh</td> <td>07/22/2009</td> </tr> </tbody> </table>		Name	Execution Date	Jong-jin Lee	07/22/2009	Hyun-seo Kang	07/22/2009	Jai-sang Koh	07/22/2009		
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<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%;">Name:</td> <td>Electronics and Telecommunications Research Institute</td> </tr> <tr> <td>Street Address:</td> <td>161, Gajeong-dong, Yuseong-gu</td> </tr> <tr> <td>City:</td> <td>Daejeon-si</td> </tr> <tr> <td>State/Country:</td> <td>REPUBLIC OF KOREA</td> </tr> <tr> <td>Postal Code:</td> <td>305-700</td> </tr> </table>		Name:	Electronics and Telecommunications Research Institute	Street Address:	161, Gajeong-dong, Yuseong-gu	City:	Daejeon-si	State/Country:	REPUBLIC OF KOREA	Postal Code:	305-700
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: (408)720-8383</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 310-207-3800</p> <p>Email: alexis_karriker@bstz.com</p> <p>Correspondent Name: Blakely , Sokoloff, Taylor & Zafman LLP</p> <p>Address Line 1: 1279 Oakmead Parkway</p> <p>Address Line 4: Sunnyvale, CALIFORNIA 94085-4040</p>											
ATTORNEY DOCKET NUMBER:	007736.P047										
NAME OF SUBMITTER:	Eric S. Hyman										
<p>Total Attachments: 1</p> <p>source=7736p047_Assignment_090209#page1.tif</p>											

CH \$40.00 12552275

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PATENT
REEL: 023185 FRAME: 0787

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby acknowledged, I,
the undersigned, Jong-jin LEE, Hyun-seo KANG, Jai-sang KOH

Hereby sell, assign, and transfer to: Electronics and Telecommunications Research Institute a
corporation of Republic of Korea, having a principal place of business at: 161 Gajeong-dong, Yuseong-gu,
Daejeon-si, 305-700 Republic of Korea ("Assignee") its successors, assigns and legal representatives, the entire
right, title and interest for the United States and all foreign countries, in and to any and all improvements which
are disclosed in the application for United States Letters Patent,

☒ which has been executed by the undersigned concurrently herewith,

☐ which was filed _____ and assigned Serial No. 12/552,275

and is entitled:

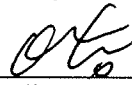
BIDIRECTIONAL OPTICAL TRANSCEIVER

and in and to said application and all divisional, continuing, substitute, renewal, reissue, and all other
applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on
any of said improvements; and in and to all original and reissued patents which have been or shall be issued in
the United States and all foreign countries on said improvements; and in and to all rights of priority resulting
from the filing of said United States application;

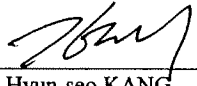
Agree that said Assignee may apply for and receive Letters Patent for said improvements in its own
name; and that, when requested, without charge to, but at the expense of, said Assignee, its successors, assigns
and legal representatives, to carry out in good faith the intent and purpose of this Assignment, the undersigned
will execute all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and
all said improvements; execute all rightful oaths, assignments powers of attorney and other papers; communicate
to said Assignee, its successors, assigns, and representatives, all facts known to the undersigned relating to said
improvements and the history thereof; and generally do everything possible which said Assignee, its successors,
assigns or representatives shall consider desirable for aiding in securing and maintaining proper patent protection
for said improvements and for vesting title to said improvements and all applications for patents and all patents
on said improvements, in said Assignee, its successors, assigns and legal representatives; and

Covenant with said Assignee, its successors, assigns and legal representatives that no assignment, grant,
mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others
by the undersigned, and that full right to convey the same as herein expressed is possessed by the undersigned.


Date: July 22, 2009


Name: Jong-jin LEE

Date: July 22, 2009


Name: Hyun-seo KANG

Date: July 22, 2009


Name: Jai-sang KOH