

PATENTS ONLY

To The Honorable Commissioner of Patents and Trademarks, Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

Boris Leonidovich Volodin January 4, 2005
 First Assignor Date of Execution

Sergei Dolgy January 4, 2005
 Second Assignor Date of Execution

Vladimir Sinisa Ban January 4, 2005
 Third Assignor Date of Execution

2. Name and address of receiving party(ies):

PD-LD, Inc.

Street Address: 30-B Pennington-Hopewell Road

City: Pennington

State: New Jersey ZIP: 08534

Additional name(s) & address attached? YES NO

Additional name(s) of conveying party(ies) attached? YES NO

3. Nature of Conveyance (check only one):

New Assignment Merger
 License Agreement Security Agreement
 Change of Name Other:

4. Identification of Application number(s), patent number(s) OR date of execution of application to which assignment refers:

Application Nos.:	Patent Nos.:	Date application was signed by the first named executing inventor
10/947,990		

(Fill-in this date only if assignment is filed together with a new application)

5. Name and address of party to whom correspondence concerning documents should be mailed:

Name:
 WOODCOCK WASHBURN LLP
 One Liberty Place - 46th Floor
 Philadelphia, Pennsylvania 19103-7301
 215-568-3100

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41): \$40.00

Enclosed
 Authorized to be charged to Deposit Account Number 23-3050

CLIENT MATTER NUMBER: PDL0-0020

8. Please charge any deficiency or credit any overpayment to Deposit Account Number 23-3050

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

Janet T. Griffin - Patent Prosecution Paralegal

Name of Person Signing/Reg. No.

Signature

2/17/05
Date

Total number of pages including cover sheet, assignment document and additional pages attached thereto: 5

Mail documents to be recorded with required cover sheet information to:

Mail Stop Assignment Recordation Services
 Commissioner for Patents
 P.O. Box 1450
 Alexandria, VA 22313-1450

CH \$40.00 233050 10947990

DOCKET NO.: PDL D-0020

**PATENT
Joint Inventors
(Pending Application;
Application No. Known)**

ASSIGNMENT

WHEREAS, we **Boris Leonidovich Volodin**, residing at **93 Windsor Pond Road, West Windsor, New Jersey, 08550**; **Sergei Dogy**, residing at **31 Elm Street, Apartment E, Lambertville, New Jersey 08530**; **Vladimir Sinisa Ban**, residing at **1061 Great Road, Princeton, New Jersey 08540**; hereinafter referred to as the assignors, are the joint inventors of certain inventions or improvements for which we have made application for Letters Patent to the United States, identified as Application No. **10/947,990**, filed **September 23, 2004**, entitled **Methods For Manufacturing Volume Bragg Grating Elements**; and

WHEREAS, **PD-LD, Inc.**, hereinafter referred to as the assignee, of **30-B Pennington-Hopewell Road, Pennington, New Jersey, 08534**, a corporation of **New Jersey**, is desirous of acquiring the entire right, title and interest in and to the said inventions or improvements and in and to the said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in any and all countries.

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, and intending to be legally bound hereby, we, the said assignors, have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over to said assignee, the entire right, title and interest in and to said inventions or improvements and said application and any and all continuations, divisions and renewals of and substitutes for said application, and in, to and under any and all Letters Patent which may be granted on or as a result thereof in the United States and any and all other countries, and any reissue or reissues or extension or extensions of said Letters Patent, including the full right to sue for and collect damages for past violations of provisional rights having arisen from any publication of said application or any continuations, divisions, or renewals of or substitutes for said application. We further assign to and authorize said assignee, to file in our names applications for Letters Patent in all countries, the same to be held and enjoyed by said assignee, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by us had this assignment, sale and transfer not been made.

AND we hereby covenant that we have full right to convey the entire interest herein assigned, and that we have not executed and will not execute any agreement in conflict herewith, and we further covenant and agree that we will each time request is made and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said inventions or improvements, said application and said Letters Patent to said assignee, its successors, assigns, nominees, or legal representatives, and each of us agrees to communicate to said assignee or to its nominee all known facts respecting said inventions or improvements, said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers to execute all disclaimers and divisional, continuing, reissue and foreign applications, to make all rightful oaths, and generally to do everything

DOCKET NO.: PDL-0020

PATENT
Joint Inventors
(Pending Application;
Application No. Known)

possible to aid said assignee, its successors, assigns, nominees and legal representatives to obtain and enforce for its or their own benefit proper patent protection for said inventions or improvements in any and all countries.

AND we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to said assignee, as assignee of the entire right, title and interest, any and all Letters Patent for said inventions or improvements, including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

AND this Assignment may be executed in multiple counterparts, each of which shall be deemed to be an original of this Assignment. Additionally, we hereby authorize our attorneys to collect the signature pages of each executed counterpart and to attach those signature pages to a single copy of this instrument, which single copy and attached signature pages together shall constitute an original of this Assignment.

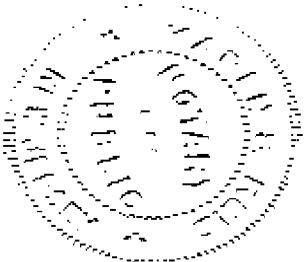
IN WITNESS WHEREOF, we have hereunto set our hands and seals.

Jan 4, 2005
Date

Boris Leonidovich Volodin (L.S.)
Boris Leonidovich Volodin

STATE OF New Jersey :
: SS
COUNTY OF Mercer :

On this 4th day of January, year of 2005, before me personally came the above named Boris Leonidovich Volodin to me personally known and known to me to be the same individual who executed the foregoing assignment, and who acknowledged to me that execution of the same was of that person's own free will for the use and purposes therein set forth.




Karen S. Reid
Notary Public

KAREN S. REID
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES AUG. 29, 2007

DOCKET NO.: PDL-0020

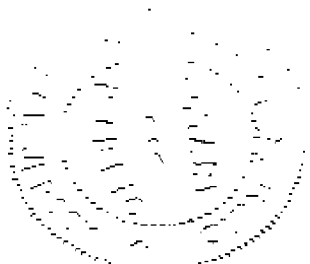
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Joint Inventors
(Pending Application;
Application No. Known)

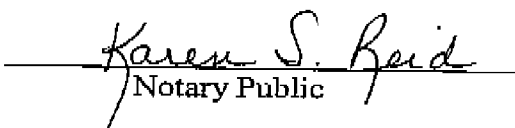
Date 1/4/2005

 (L.S.)
Vladimir Sinisa Ban

STATE OF New Jersey :
COUNTY OF Mercer : SS

On this 4th day of January, year of 2005, before me personally came the
above named Vladimir Sinisa Ban to me personally known and known to me
to be the same individual who executed the foregoing assignment, and who acknowledged to
me that execution of the same was of that person's own free will for the use and purposes
therein set forth.




Notary Public

KAREN S. REID
NOTARY PUBLIC OF NEW JERSEY
MY COMMISSION EXPIRES AUG. 29, 2007



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DATE: February 14, 2005
OFFICIAL PAPER

JOB CODE: 353 741

Please deliver this and the following pages to:

U.S.P.T.O. Group Art Unit: **Assignment Branch**

Telecopier No.: **703-306-5995**

U.S. Serial No.: **10/947,990**

Client/Matter No.: **PDL D-0020**

Sender's Name: **Janet T. Griffin**

Pages to Follow: **5**

If transmission is not complete, please call our **Philadelphia Office** at (215) 568-3100.

COVER MESSAGE:

OFFICIAL FACSIMILE. PLEASE DELIVER TO EXAMINER IMMEDIATELY.

Attached hereto is/are the following documents:

- 1) Recordation Cover Sheet
- 2) Assignment Document
- 3) Authorization to Charge Deposit Account

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW. IF THE READER OF THIS MESSAGE IS NOT THE INTENDED RECIPIENT, OR THE EMPLOYEE OR AGENT RESPONSIBLE FOR DELIVERY OF THE MESSAGE TO THE INTENDED RECIPIENT, YOU ARE HEREBY NOTIFIED THAT ANY DISSEMINATION, DISTRIBUTION OR COPYING OF THIS COMMUNICATION IS STRICTLY PROHIBITED. IF YOU HAVE RECEIVED THIS COMMUNICATION IN ERROR, PLEASE NOTIFY US IMMEDIATELY BY TELEPHONE AND RETURN THE ORIGINAL TO US AT THE ABOVE ADDRESS VIA THE U.S. POSTAL SERVICE. THANK YOU.

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