PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

<table>
<thead>
<tr>
<th>SUBMISSION TYPE:</th>
<th>NEW ASSIGNMENT</th>
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<tbody>
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<td>NATURE OF CONVEYANCE:</td>
<td>ASSIGNMENT</td>
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CONVEYING PARTY DATA

<table>
<thead>
<tr>
<th>Name</th>
<th>Execution Date</th>
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</thead>
<tbody>
<tr>
<td>William M. Green</td>
<td>09/04/2007</td>
</tr>
<tr>
<td>Hendrik F. Hamann</td>
<td>09/04/2007</td>
</tr>
<tr>
<td>Yuri A. Vlasov</td>
<td>09/04/2007</td>
</tr>
</tbody>
</table>

RECEIVING PARTY DATA

Name: International Business Machines Corporation
Street Address: One New Orchard Road
City: Armonk
State/Country: NEW YORK
Postal Code: 10504

PROPERTY NUMBERS Total: 1

<table>
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<tr>
<th>Property Type</th>
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<tr>
<td>Application Number</td>
<td>11849591</td>
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CORRESPONDENCE DATA

Fax Number: (305)595-9579
Correspondence will be sent via US Mail when the fax attempt is unsuccessful.
Phone: 305 273-8007
Email: ana@buchenhorner.com
Correspondent Name: Michael J. Buchenhorner
Address Line 1: 8540 SW 83 STREET
Address Line 4: Miami, FLORIDA 33143

ATTORNEY DOCKET NUMBER: YOR920070400US1

NAME OF SUBMITTER: Michael J. Buchenhorner

Total Attachments: 2
source=YOR920070400US1_RecordationCoverSheet#page1.tif
source=YOR920070400US1_ExecutedAssignment#page1.tif
**RECORDATION FORM COVER SHEET**  
**PATENTS ONLY**

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

### 1. Name of conveying party(ies)
- William M. Green  
- Hendrik F. Hamann  
- Yuri V. Vlasov

Additional name(s) of conveying party(ies) attached? [ ] Yes [x] No

### 2. Name and address of receiving party(ies)
- Name: International Business Machines Corporation  
- Internal Address:  
- Street Address: One New Orchard Road  
- City: Amonk  
- State: New York  
- Country: USA  
- Zip: 10504

Additional name(s) & address(es) attached? [ ] Yes [x] No

### 3. Nature of conveyance/Execution Date(s):
- Execution Date(s): September 4, 2007  
- Assignment [x]  
- Merger [ ]  
- Security Agreement [ ]  
- Change of Name [ ]  
- Joint Research Agreement [ ]  
- Government Interest Assignment [ ]  
- Executive Order 9424, Confirmatory License [ ]  
- Other [ ]

### 4. Application or patent number(s):
- This document is being filed together with a new application.
- A. Patent Application No.(s)  
  - 11/849,591  
  - Attorney Docket Number YOR920070400US1

Additional numbers attached? [ ] Yes [x] No

### 5. Name and address to whom correspondence concerning document should be mailed:
- Name: Michael J. Buchenhorner  
- Internal Address:  
- Street Address: 6540 SW 83 STREET  
- City: Miami  
- State: Florida  
- Zip: 33143  
- Phone Number: 305 273-8007  
- Fax Number: 305 595-9579  
- Email Address: michael@buchenhorner.com

### 6. Total number of applications and patents involved:
- One

### 7. Total fee (37 CFR 1.21(h) & 3.41) $40.00  
- [ ] Authorized to be charged by credit card  
- [x] Authorized to be charged to deposit account  
- [ ] Enclosed  
- [ ] None required (government interest not affecting title)

### 8. Payment Information
- a. Credit Card Last 4 Numbers  
- Expiration Date
- b. Deposit Account Number 500510  
  - Authorized User Name Michael J. Buchenhorner

### 9. Signature:
- Signature: [Signature]
- Date: September 4, 2007
- Total number of pages including cover sheet, attachments, and documents: 2

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Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450  
**PATENT**  
**REEL: 019778 FRAME: 0182**
ASSIGNMENT

Whereas, we

INVENTOR
AND CITY
(1) William Michael John Green
County of Queens
and (2) Hendrik F. Hamann
County of Westchester
and (3) Yurii A. Vlasov
County of Westchester

have invented certain improvements in

TITLE
SILICIDE THERMAL HEATERS FOR SILICON-ON-INSULATOR NANOPHOTONIC DEVICES

DATES THAT INVENTORS SIGNED THE DECLARATION
and executed, respectively, a United States patent application therefor on

(1) 09/07, 2007, (2) 09/04, 2007,
(3) 09/04, 2007

Whereas, INTERNATIONAL BUSINESS MACHINES CORPORATION, a corporation of New York, having a place of business at Armonk, New York 10504, (hereinafter called IBM), desires to acquire the entire right, title and interest in the said application and invention, and to any United States and foreign patents to be obtained therefor;

Now therefore, for a valuable consideration, receipt whereof is hereby acknowledged, we, the above named, hereby sell, assign, and transfer to IBM, its successors and assigns, the entire right, title and interest in the said application and invention therein disclosed for the United States and foreign countries, and in all foreign countries, and all rights of priority resulting from the filing of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the inventions set forth in said application to IBM, its successors and assigns; and we hereby agree that IBM may apply for foreign Letters Patent on said invention and we will execute all papers necessary in connection with the United States and foreign applications when called upon to do so by IBM.

Signed and sealed:

[Signature]
William M. Green on 09/07, 2007

[Signature]
Hendrik F. Hamann on 09/04, 2007

[Signature]
Yurii A. Vlasov on 09/04, 2007

RECORDED: 09/04/2007

PATENT
REEL: 019778 FRAME: 0183