

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT														
NATURE OF CONVEYANCE:	Corrective Assignment to correct the listing of inventor names previously recorded on Reel 029906 Frame 0925. Assignor(s) hereby confirms the listing of inventors identified herein.														
CONVEYING PARTY DATA															
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Amilcar R. ARVELO</td> <td>04/01/2013</td> </tr> <tr> <td>Mark A. BRANDON</td> <td>04/01/2013</td> </tr> <tr> <td>Levi A. CAMPBELL</td> <td>04/01/2013</td> </tr> <tr> <td>Michael J. ELLSWORTH Jr.</td> <td>04/01/2013</td> </tr> <tr> <td>Randall G. KEMINK</td> <td>03/28/2013</td> </tr> <tr> <td>Eric J. McKEEVER</td> <td>04/02/2013</td> </tr> </tbody> </table>		Name	Execution Date	Amilcar R. ARVELO	04/01/2013	Mark A. BRANDON	04/01/2013	Levi A. CAMPBELL	04/01/2013	Michael J. ELLSWORTH Jr.	04/01/2013	Randall G. KEMINK	03/28/2013	Eric J. McKEEVER	04/02/2013
Name	Execution Date														
Amilcar R. ARVELO	04/01/2013														
Mark A. BRANDON	04/01/2013														
Levi A. CAMPBELL	04/01/2013														
Michael J. ELLSWORTH Jr.	04/01/2013														
Randall G. KEMINK	03/28/2013														
Eric J. McKEEVER	04/02/2013														
RECEIVING PARTY DATA															
Name:	INTERNATIONAL BUSINESS MACHINES CORPORATION														
Street Address:	New Orchard Road														
City:	Armonk														
State/Country:	NEW YORK														
Postal Code:	10504														
PROPERTY NUMBERS Total: 1															
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13782384</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13782384										
Property Type	Number														
Application Number:	13782384														
CORRESPONDENCE DATA															
Fax Number:	5184525579														
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>															
Phone:	(518) 452-5600														
Email:	sdm@hrfmlaw.com														
Correspondent Name:	Kevin P. Radigan, Esq.														
Address Line 1:	HESLIN ROTHENBERG FARLEY & MESITI P.C.														
Address Line 2:	5 COLUMBIA CIRCLE														
Address Line 4:	ALBANY, NEW YORK 12203														

ATTORNEY DOCKET NUMBER:	POU920130014US1
NAME OF SUBMITTER:	Kevin P. Radigan, Esq.
Signature:	/Kevin P. Radigan, Esq./
Date:	08/01/2013
	This document serves as an Oath/Declaration (37 CFR 1.63).
<p><b>Total Attachments: 10</b>  source=POU920130014US1_CorrectiveAssignment#page1.tif  source=POU920130014US1_CorrectiveAssignment#page2.tif  source=POU920130014US1_CorrectiveAssignment#page3.tif  source=POU920130014US1_CorrectiveAssignment#page4.tif  source=POU920130014US1_CorrectiveAssignment#page5.tif  source=POU920130014US1_CorrectiveAssignment#page6.tif  source=POU920130014US1_CorrectiveAssignment#page7.tif  source=POU920130014US1_CorrectiveAssignment#page8.tif  source=POU920130014US1_CorrectiveAssignment#page9.tif  source=POU920130014US1_CorrectiveAssignment#page10.tif</p>	



**UNITED STATES PATENT AND TRADEMARK OFFICE**

UNDER SECRETARY OF COMMERCE FOR INTELLECTUAL PROPERTY AND  
DIRECTOR OF THE UNITED STATES PATENT AND TRADEMARK OFFICE

MARCH 4, 2013

PTAS

KEVIN P. RADIGAN, ESQ.  
HESLIN ROTHENBERG FARLEY & MESITI P.C.  
5 COLUMBIA CIRCLE  
ALBANY, NY 12203

**502249989**

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT RECORDATION BRANCH OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE ASSIGNMENT RECORDATION BRANCH AT 571-272-3350. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, MAIL STOP: ASSIGNMENT RECORDATION BRANCH, P.O. BOX 1450, ALEXANDRIA, VA 22313.

RECORDATION DATE: 03/01/2013

REEL/FRAME: 029906/0925  
NUMBER OF PAGES: 4

BRIEF: ASSIGNMENT OF ASSIGNORS INTEREST (SEE DOCUMENT FOR DETAILS).

DOCKET NUMBER: POU920130014US1

ASSIGNOR:

ARVELO, AMILCAR R.

DOC DATE: 02/25/2013

ASSIGNOR:

BRANDON, MARK A.

DOC DATE: 02/25/2013

ASSIGNOR:

CAMPBELL, LEVI A.

DOC DATE: 02/25/2013

ASSIGNOR:

ELLSWORTH, MICHAEL J., JR.

DOC DATE: 02/25/2013

ASSIGNOR:

MCKEEVER, ERIC J.

DOC DATE: 02/25/2013

ASSIGNEE:

INTERNATIONAL BUSINESS MACHINES  
CORPORATION  
NEW ORCHARD ROAD  
ARMONK, NEW YORK 10504

APPLICATION NUMBER: 13782384

FILING DATE:

PATENT NUMBER:

ISSUE DATE:

TITLE: THERMAL TRANSFER STRUCTURE WITH IN-PLANE TUBE LENGTHS AND  
OUT-OF-PLANE TUBE BEND(S)

ASSIGNMENT RECORDATION BRANCH  
PUBLIC RECORDS DIVISION

**PATENT ASSIGNMENT**

Electronic Version v1.1  
 Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	<b>NEW ASSIGNMENT</b>
<b>NATURE OF CONVEYANCE:</b>	<b>ASSIGNMENT</b>
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Amilcar R. ARVELO	02/25/2013
Mark A. BRANDON	02/25/2013
Levi A. CAMPBELL	02/25/2013
Michael J. ELLSWORTH Jr.	02/25/2013
Eric J. McKEEVER	02/25/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	INTERNATIONAL BUSINESS MACHINES CORPORATION
<b>Street Address:</b>	New Orchard Road
<b>City:</b>	Armonk
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10504
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13782384
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	5184525579
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>	
<b>Phone:</b>	518-452-5600
<b>Email:</b>	sdm@hrfmlaw.com
<b>Correspondent Name:</b>	Kevin P. Radigan, Esq.
<b>Address Line 1:</b>	HESLIN ROTHENBERG FARLEY & MESITI P.C.
<b>Address Line 2:</b>	5 COLUMBIA CIRCLE
<b>Address Line 4:</b>	ALBANY, NEW YORK 12203
<b>ATTORNEY DOCKET NUMBER:</b>	POU920130014US1
<b>NAME OF SUBMITTER:</b>	Kevin P. Radigan, Esq.

CH \$40.00 13782384

<b>PATENT ASSIGNMENT</b>
--------------------------

Electronic Version v1.1

Stylesheet Version v1.1

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
Amilcar R. ARVELO	02/25/2013
Mark A. BRANDON	02/25/2013
Levi A. CAMPBELL	02/25/2013
Michael J. ELLSWORTH, Jr.	02/25/2013
Eric J. McKEEVER	02/25/2013
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	INTERNATIONAL BUSINESS MACHINES CORPORATION
<b>Street Address:</b>	New Orchard Road
<b>City:</b>	Armonk
<b>State/Country:</b>	NEW YORK
<b>Postal Code:</b>	10504
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	13782384
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	5184525579
<b>Phone:</b>	518-452-5600
<b>Email:</b>	sdm@hrfmlaw.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Correspondent Name:</b>	Kevin P. Radigan, Esq.
<b>Address Line 1:</b>	HESLIN ROTHENBERG FARLEY & MESITI P.C.

Address Line 2: 5 COLUMBIA CIRCLE	
Address Line 4: ALBANY, NEW YORK 12203	
ATTORNEY DOCKET NUMBER:	POU920130014US1
NAME OF SUBMITTER:	Kevin P. Radigan, Esq.
Signature:	/Kevin P. Radigan, Esq./
Date:	03/01/2013
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 2</b> source=POU920130014US1_Declaration-Assignment#page1.tif source=POU920130014US1_Declaration-Assignment#page2.tif	
<b>RECEIPT INFORMATION</b>	
EPAS ID:	PAT2290446
Receipt Date:	03/01/2013
Fee Amount:	\$40

**DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT**

Title of Invention: **THERMAL TRANSFER STRUCTURE WITH IN-PLANE TUBE LENGTHS AND OUT-OF-PLANE TUBE BEND(S)**

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

United States application or PCT international application number \_\_\_\_\_ filed on \_\_\_\_\_.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document;

Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.



Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants IBM, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.


(1) Legal Name of Inventor: **Amilcar R. ARVELO**

Signature:  Date: 2/25/2013

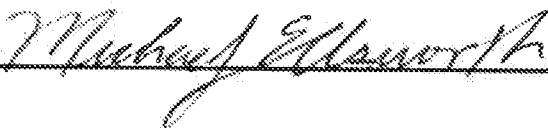
(2) Legal Name of Inventor: **Mark A. BRANDON**

Signature:  Date: 2/25/13

(3) Legal Name of Inventor: **Levi A. CAMPBELL**

Signature:  Date: 2/25/13

(4) Legal Name of Inventor: **Michael J. ELLSWORTH, Jr.**

Signature:  Date: 2/25/2013

(5) Legal Name of Inventor: **Eric J. McKEEVER**

Signature:  Date: 2/25/13

DECLARATION (37 C.F.R. 1.63) FOR UTILITY PATENT APPLICATION USING AN APPLICATION DATA SHEET (37 C.F.R. 1.76) AND ASSIGNMENT

Title of Invention: **THERMAL TRANSFER STRUCTURE WITH IN-PLANE TUBE LENGTHS AND OUT-OF-PLANE TUBE BEND(S)**

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application, or (if following box is checked):

United States application or PCT international application number *13/782,384*, filed on *March 1, 2013*.

The above-identified application was made or authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") disclosed in the above-identified patent application and further identified by the IBM Docket Number provided above in the header of this document;


Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "IBM"), desires to acquire, and each undersigned inventor desires to grant to IBM, the entire worldwide right, title, and interest in and to the Invention and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor ("ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the Invention, the above-identified United States patent application, and any and all other patent applications and patents for the Invention which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the Invention, to IBM, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by IBM, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the Invention and all related patents and applications, in IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

Each undersigned inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IBM and is unaware of any reason why they may not have the full and unencumbered right to sell, assign, and transfer the rights hereby sold, assigned, and transferred, and has not executed, and will not execute, any document or instrument in conflict herewith. Each undersigned inventor also hereby grants IBM, its successors, legal representatives, and assigns, the right to insert in this Assignment any further identification (including, but not limited to, patent Application Number) which may be necessary or desirable for recordation of this Assignment. This Assignment is governed by the substantive laws of the State of New York, and any disputes will be resolved in a New York state court or federal court sited in New York.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

(1) Legal Name of Inventor: **Amilcar R. ARVELO**

Signature:  Date: 4/1/13


(2) Legal Name of Inventor: **Mark A. BRANDON**

Signature:  Date: 4/1/13

(3) Legal Name of Inventor: **Levi A. CAMPBELL**

Signature:  Date: 4/1/13

(4) Legal Name of Inventor: **Michael J. ELLSWORTH, Jr.**

Signature:  Date: 4/1/2013

(5) Legal Name of Inventor: **Randall G. KEMINK**

Signature: *Randall G. Kemink* Date: *March 28, 2013*

(5) Legal Name of Inventor: **Eric J. McKEEVER**

Signature: *Eric McKeever* Date: *4/2/13*