

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT3209776

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
DANIEL J. POINDEXTER	01/23/2015
GREGORY G. FREEMAN	01/17/2015
SIYURANGA O. KOSWATTA	01/15/2015
J. CAMPBELL SCOTT	01/26/2015
LEON J. SIGAL	01/18/2015
JAMES D. WARNOCK	01/16/2015
<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>	14612683
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>	
<b>Phone:</b>	845-894-3363
<b>Email:</b>	EFIPLAW@US.IBM.COM
<b>Correspondent Name:</b>	INTERNATIONAL BUSINESS MACHINES CORPORAT
<b>Address Line 1:</b>	BLDG. 321-482
<b>Address Line 2:</b>	2070 ROUTE 52
<b>Address Line 4:</b>	HOPEWELL JUNCTION, NEW YORK 12533
<b>NAME OF SUBMITTER:</b>	H. DANIEL SCHNURMANN
<b>SIGNATURE:</b>	/H. Daniel Schnurmann/
<b>DATE SIGNED:</b>	02/03/2015
This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 18**

source=FIS920140298US1\_signeddecassign#page1.tif  
source=FIS920140298US1\_signeddecassign#page2.tif  
source=FIS920140298US1\_signeddecassign#page3.tif  
source=FIS920140298US1\_signeddecassign#page4.tif  
source=FIS920140298US1\_signeddecassign#page5.tif  
source=FIS920140298US1\_signeddecassign#page6.tif  
source=FIS920140298US1\_signeddecassign#page7.tif  
source=FIS920140298US1\_signeddecassign#page8.tif  
source=FIS920140298US1\_signeddecassign#page9.tif  
source=FIS920140298US1\_signeddecassign#page10.tif  
source=FIS920140298US1\_signeddecassign#page11.tif  
source=FIS920140298US1\_signeddecassign#page12.tif  
source=FIS920140298US1\_signeddecassign#page13.tif  
source=FIS920140298US1\_signeddecassign#page14.tif  
source=FIS920140298US1\_signeddecassign#page15.tif  
source=FIS920140298US1\_signeddecassign#page16.tif  
source=FIS920140298US1\_signeddecassign#page17.tif  
source=FIS920140298US1\_signeddecassign#page18.tif

IBM DOCKET NUMBER: FIS920140298US1

**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: METHOD FOR AN EFFICIENT MODELING OF THE IMPACT OF DEVICE-  
LEVEL SELF-HEATING ON ELECTROMIGRATION LIMITED CURRENT SPECIFICATIONS

As a below named and undersigned 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, I ("ASSIGNOR") 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 (herein referred to as the "ASSIGNEE"), a  
corporation of New York having a place of business at Armonk, New York, desires to acquire, and I  
desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have  
transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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  
therefore 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my  
entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this  
Assignment not been made; and I agree 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 the ASSIGNEE, its successors, legal representatives, and assigns,  
whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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: DANIEL J. POINDEXTER

Signature:  Date: 1/23/15

(2) Legal Name of Inventor: GREGORY G. FREEMAN

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(3) Legal Name of Inventor: SIYURANGA O. KOSWATTA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(4) Legal Name of Inventor: JOHN C. SCOTT

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(5) Legal Name of Inventor: LEON J. SIGAL

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(6) Legal Name of Inventor: JAMES D. WARNOCK

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**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: METHOD FOR AN EFFICIENT MODELING OF THE IMPACT OF DEVICE-  
LEVEL SELF-HEATING ON ELECTROMIGRATION LIMITED CURRENT SPECIFICATIONS

As a below named and undersigned 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, I ("ASSIGNOR") 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 (herein referred to as the "ASSIGNEE"), a  
corporation of New York having a place of business at Armonk, New York, desires to acquire, and I  
desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have  
transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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  
therefore 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my  
entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this  
Assignment not been made; and I agree 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 the ASSIGNEE, its successors, legal representatives, and assigns,  
whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.


I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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: DANIEL J. POINDEXTER

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(2) Legal Name of Inventor: GREGORY G. FREEMAN

Signature:  \_\_\_\_\_ Date: 1/17/2015

(3) Legal Name of Inventor: SIYURANGA O. KOSWATTA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(4) Legal Name of Inventor: JOHN C. SCOTT

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(5) Legal Name of Inventor: LEON J. SIGAL

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(6) Legal Name of Inventor: JAMES D. WARNOCK

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**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: METHOD FOR AN EFFICIENT MODELING OF THE IMPACT OF DEVICE-  
LEVEL SELF-HEATING ON ELECTROMIGRATION LIMITED CURRENT SPECIFICATIONS

As a below named and undersigned 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, I ("ASSIGNOR") 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 (herein referred to as the "ASSIGNEE"), a  
corporation of New York having a place of business at Armonk, New York, desires to acquire, and I  
desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have  
transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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  
therefore 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my  
entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this  
Assignment not been made; and I agree 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 the ASSIGNEE, its successors, legal representatives, and assigns,  
whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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: DANIEL J. POINDEXTER

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(2) Legal Name of Inventor: GREGORY G. FREEMAN

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(3) Legal Name of Inventor: SIYURANGA O. KOSWATTA

Signature:  \_\_\_\_\_ Date: 01/15/2015

(4) Legal Name of Inventor: JOHN C. SCOTT

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(5) Legal Name of Inventor: LEON J. SIGAL

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(6) Legal Name of Inventor: JAMES D. WARNOCK

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

IBM DOCKET NUMBER: FIS920140298US1

**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: METHOD FOR AN EFFICIENT MODELING OF THE IMPACT OF DEVICE-  
LEVEL SELF-HEATING ON ELECTROMIGRATION LIMITED CURRENT SPECIFICATIONS

As a below named and undersigned 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, I ("ASSIGNOR") 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 (herein referred to as the "ASSIGNEE"), a  
corporation of New York having a place of business at Armonk, New York, desires to acquire, and I  
desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have  
transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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  
thereof 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my  
entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this  
Assignment not been made; and I agree 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 the ASSIGNEE, its successors, legal representatives, and assigns,  
whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

IBM DOCKET NUMBER: FIS920140298US1

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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: DANIEL J. POINDEXTER

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(2) Legal Name of Inventor: GREGORY G. FREEMAN

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(3) Legal Name of Inventor: SIYURANGA O. KOSWATTA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(4) Legal Name of Inventor: ~~JOHN C. SCOTT~~ J CAMPBELL SCOTT *JS*

Signature: *J Campbell Scott* Date: *1/26/15*

IBM DOCKET NUMBER: F18920140298US1

(5) Legal Name of Inventor: LEON J. SIGAL

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(6) Legal Name of Inventor: JAMES D. WARNOCK

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**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: METHOD FOR AN EFFICIENT MODELING OF THE IMPACT OF DEVICE-  
LEVEL SELF-HEATING ON ELECTROMIGRATION LIMITED CURRENT SPECIFICATIONS

As a below named and undersigned 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, I ("ASSIGNOR") 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 (herein referred to as the "ASSIGNEE"), a  
corporation of New York having a place of business at Armonk, New York, desires to acquire, and I  
desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have  
transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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  
thereof 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my  
entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this  
Assignment not been made; and I agree 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 the ASSIGNEE, its successors, legal representatives, and assigns,  
whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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: DANIEL J. POINDEXTER

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(2) Legal Name of Inventor: GREGORY G. FREEMAN

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(3) Legal Name of Inventor: SIYURANGA O. KOSWATTA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(4) Legal Name of Inventor: JOHN C. SCOTT

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



(5) Legal Name of Inventor: LEON J. SIGAL

Signature: Leon J Sigal Date: 1/18/2015

(6) Legal Name of Inventor: JAMES D. WARNOCK

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**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: METHOD FOR AN EFFICIENT MODELING OF THE IMPACT OF DEVICE-  
LEVEL SELF-HEATING ON ELECTROMIGRATION LIMITED CURRENT SPECIFICATIONS

As a below named and undersigned 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, I ("ASSIGNOR") 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 (herein referred to as the "ASSIGNEE"), a  
corporation of New York having a place of business at Armonk, New York, desires to acquire, and I  
desire to grant to the ASSIGNEE, my 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, I hereby sell or have sold, assign or have assigned, and otherwise transfer or have  
transferred to the ASSIGNEE, its successors, legal representatives, and assigns, my 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  
thereof 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, I hereby authorize and request 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 the ASSIGNEE, its successors, legal representatives, and assigns, my  
entire worldwide right, title, and interest in and to the same to be held and enjoyed by the ASSIGNEE, 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 me had this  
Assignment not been made; and I agree 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 the ASSIGNEE, its successors, legal representatives, and assigns,  
whenever requested by the ASSIGNEE, its successors, legal representatives, or assigns.

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to the ASSIGNEE and am unaware of any reason why I may not have the full and unencumbered right to sell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will not execute, any document or instrument in conflict herewith. I also hereby grant the ASSIGNEE, 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: DANIEL J. POINDEXTER

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(2) Legal Name of Inventor: GREGORY G. FREEMAN

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(3) Legal Name of Inventor: SIYURANGA O. KOSWATTA

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

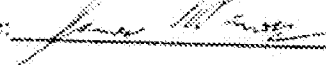
(4) Legal Name of Inventor: JOHN C. SCOTT

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(5) Legal Name of Inventor: LEON J. SIGAL

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

(6) Legal Name of Inventor: JAMES D. WARNOCK

Signature:  \_\_\_\_\_ Date: 1/16/15