PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3428143

| SUBMISSION TYPE: | NEW ASSIGNMENT | |
|-----------------------|----------------|--|
| NATURE OF CONVEYANCE: | ASSIGNMENT | |

CONVEYING PARTY DATA

| Name | Execution Date |
|-------------------|----------------|
| VIKAS CHANDAN | 05/08/2015 |
| ZAINUL CHARBIWALA | 05/14/2015 |
| ROHIT CHINTALA | 05/10/2015 |
| SUNIL KUMAR GHAI | 05/13/2015 |

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

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14793066 |

CORRESPONDENCE DATA

Fax Number: (203)255-6570

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.

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Email: car@rml-law.com

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Address Line 1: 1175 POST ROAD EAST

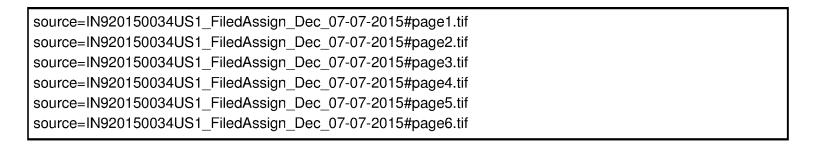
Address Line 2: RYAN, MASON & LEWIS, LLP

Address Line 4: WESTPORT, CONNECTICUT 06880

| ATTORNEY DOCKET NUMBER: | IN920150034US1 |
|--------------------------------|--|
| NAME OF SUBMITTER: | MICHAEL J. COOPER |
| SIGNATURE: /Michael J. Cooper/ | |
| DATE SIGNED: 07/07/2015 | |
| | This document serves as an Oath/Declaration (37 CFR 1.63). |
| | |

Total Attachments: 6

PATENT REEL: 036011 FRAME: 0664



PATENT REEL: 036011 FRAME: 0665 FORM PTO-1595 (Rev.6-93)

RECORDATION FORM COVER SHEET PATENTS ONLY

U.S. DEPARTMENT OF COMMERCE Patent and Trademark Office

| To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof. | | |
|---|---|--|
| 1. Name of conveying party(ies): Vikas Chandan, Zainul Charbiwala, Rohit | 2. Name and address of receiving party(ies) | |
| Chintala, Sunil Kumar Ghai Additional name(s) of conveying party(ies) attached? Yes X No | Name: International Business Machines Corporation Internal Address: | |
| 3. Nature of conveyance: X Assignment Merger | Street Address: New Orchard Road | |
| _ Security Agreement _ Change of Name _ Other | City: Armonk State: NY ZIP: 10504 | |
| Execution Date: May 8, 2015, May 14, 2015, May 10, 2015, May 13, 2015 | Additional name(s) & address(es) attached? _ Yes X No | |
| 4. Application number(s) or patent number(s): If this document is being filed together with a new application, the execution date of the application is: | | |
| A. Patent Application No.(s) 14/793,066 Filed July 7, 2015 B. Patent No.(s) Additional numbers attached?Yes X_No | | |
| 5. Name and address of party to whom correspondence concerning document should be | 6. Total number of applications and patents involved: <u>1</u> | |
| mailed: Name: Michael J. Cooper | 7. Total Fee (37 CFR 3.41) \$ <u>40.00</u> Enclosed | |
| Internal Address: Ryan, Mason & Lewis, LLP Street Address: 1175 Post Road East, Second Floor | X Authorized to be charged to deposit account | |
| City: Westport State: CT ZIP: 06880 | 8. Deposit account number 09-0441 | |
| 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. | | |
| Michael J. Cooper July 7, 2015 | | |
| Reg. No. 57,749 Signature Date | | |
| Total number of pages including cover sheet, attachments, and document: | | |
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| Washington, DC 20231 Public burden reporting for this sample cover sheet is estimated to average about 30 minutes per document to be recorded, including time for reviewing the document and gathering the data needed, and completing and reviewing the sample cover sheet. Send comments regarding this burden estimate to the U.S. Patent and Trademark Office, Office of Information Systems, PK2-1000C, Washington, DC, 20231, and to the Office of Management and Budget, Paperwork Reduction Project (0651-0011), Washington, DC 20503. | | |

IN920150034US1

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 MANAGEMENT OF BUILDINGS USING INTELLIGENT AND AUTONOMOUS SET-POINT ADJUSTMENTS

| 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 | | |
| The above-identified application was made or authorized to be made by me. | | |
| The above-identified application was made of audiorized to be made by file. | | |
| 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 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 I desire to grant to IBM, 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 ("ASSIGNOR") hereby sell or have sold, assign or have assigned, and otherwise transfer or have transferred to IBM (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 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, 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 IBM, its successors, legal representatives, and assigns, my 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 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 IBM, its successors, legal representatives, and assigns, whenever requested by IBM, its successors, legal representatives, or assigns.

Page 1 of 2

I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to IBM 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 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. Vikas Chandan | |
|---|--------------------|
| Signature: | Date: 08 MAY, 2015 |
| (2) Legal Name of Inventor: Zainul Charbiwala | |
| Signature: | Date: |
| | |
| (3) Legal Name of Inventor: Rohit Chintala | |
| | • |
| Signature: | Date: |
| | |
| (4) Legal Name of Inventor: Sunil Kumar Ghai | |
| ing | |
| Signature: | Date: |

Page 2 of 2

I acknowledge my prior and ongoing obligations to self, assign, and transfer my rights under this Assignment to IBM and am unaware of any reason why I may not have the full and unencumbered right to self, 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 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.

11) I and Maria of humana. When Chanden

| (1) Legal (value of inventor. That Chandan | |
|--|----------------------|
| Signature: | Date: |
| (2) Legal Name of Inventor: Zainul Charbiw | · |
| Signature: | Date: MAY 14th, 2015 |
| (3) Legal Name of Inventor: Rohit Chintala | |
| Signature: | Date: |
| (4) Legal Name of Inventor: Sunil Kumar G | hai |
| | 75 . |

acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this assignment to IBM and am unaware of any reason why I may not have the full and unencumbered right to ell, assign, and transfer my rights hereby sold, assigned, and transferred, and have not executed, and will ot execute, any document or instrument in conflict herewith. I also hereby grant IBM, its successors, legal epresentatives, and assigns, the right to insert in this Assignment any further identification (including, but ot 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 isputes will be resolved in a New York state court or federal court sited in New York.

hereby acknowledge that any willful false statement made in this declaration is punishable under 18~U.S.C. 001 by fine or imprisonment of not more than five (5) years, or both.

| Legal Name of Inventor: Vikas Chandan | |
|--|------------------|
| Signature: | Date: |
| 2) Legal Name of Inventor: Zainul Charbiwala | |
| | |
| Signature: | Date: |
| | |
| 3) Legal Name of Inventor: Rohit Chintala | |
| Signature: John | Date: 05/10/2015 |
| 1) Legal Name of Inventor: Sunil Kumar Ghai | |
| Signature: | Date: |

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I acknowledge my prior and ongoing obligations to sell, assign, and transfer my rights under this Assignment to IBM 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 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: Vikas Chandan | |
|-----|---|------------------|
| | Signature: | Date: |
| (2) | Legal Name of Inventor: Zainul Charbiwala | |
| | Signature: | Date: |
| (3) | Legal Name of Inventor: Rohit Chintala | |
| | Signature: | Date: |
| (4) | Legal Name of Inventor: Sunil Kumar Ghai | |
| - | Signature: | Date: 13.05.2015 |

Page 2 of 2