502091277 10/11/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Levi A. CAMPBELL	10/08/2012
Richard C. CHU	10/11/2012
Milnes P. DAVID	10/08/2012
Michael J. ELLSWORTH Jr.	10/08/2012
Madhusudan K. IYENGAR	10/08/2012
Robert E. SIMONS	10/05/2012
Prabjit SINGH	10/05/2012
Jing ZHANG	10/05/2012

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
App	plication Number:	13649334

CORRESPONDENCE DATA

502091277

5184525579 Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

518-452-5600 Phone: Email: sdm@hrfmlaw.com Kevin P. Radigan, Esq. Correspondent Name:

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Address Line 2: **5 COLUMBIA CIRCLE** Address Line 4: ALBANY, NEW YORK 12203

PATENT

REEL: 029111 FRAME: 0751

ATTORNEY DOCKET NUMBER:	POU920120202US1
NAME OF SUBMITTER:	Kevin P. Radigan, Esq.
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 8 source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S source=POU920120202US1_Assignment-S	Statement#page2.tif Statement#page3.tif Statement#page4.tif Statement#page5.tif Statement#page5.tif Statement#page6.tif Statement#page6.tif

PATENT REEL: 029111 FRAME: 0752

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: COOLING SYSTEM WITH AUTOMATED SEASONAL FREEZE PROTECTION

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	
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.

IBM DOCKET NUMBER: POU920120202US1

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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: Levi A. CAMPBELL	
Signature: 2 chil	_Date:
(2) Legal Name of Inventor: Richard C. CHU	
Signature: (See Substitute Statement in Lieu of Oath or Declaration)	_ Date:
(3) Legal Name of Inventor: Milnes P. DAVID	
Signature: Pavid	Date: 10/08/12
(4) Legal Name of Inventor: Michael J. ELLSWORTH, Jr.	
Signature: Makey Ellowo	
(5) Legal Name of Inventor: Madhusudan K. IYENGAR	
Signature;	. Date:

(6) Legal Name of Inventor; Robert E. SIMONS	
Signature: AESimons	Date: 10/5/12
Signature: Prabjit SINGH	Date: 10/5/2012
(8) Legal Name of Inventor: Jing ZHANG	
Signature: Im Thomas	Date: (0/5/20/2

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

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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.

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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.

Page 1 of 3

IBM DOCKET NUMBER: POU9201202020181

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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.

Signature:	Date:	
) Legal Name of Inventor: Richard C. CHU		
Signature: (See Substitute Statement in Lieu of Oath or Declaration)	Date:	
B) Legal Name of Inventor: Milnes P. DAVID		
Signature:	Date:	
Legal Name of Inventor: Michael J. ELLSWORTH, Jr.		
Signature:	Date:	
Legal Name of Inventor: Madhusudan K. IYENGAR		
Signature:	10	/ / -

Page 2 of 3

Signature:	***************************************	000000		Date:	
Legal Name of Inven	or: Prabiit S	SINGH			
		<u> </u>			
Signature:				Date:	
Signature:				Date:	
Signature:				Date:	
Signature: Legal Name of Invent	or: Jing ZH A	ìNG		Date:	
	or: Jing ZH A	ING		Date:	

Doc code: Oath

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Title of Invention	COOLING SYSTEM WI	TH AUTOMATED S	SEASONAL FR	EEZE PROTECTION
This stateme	nt is directed to:			
The atta	ched application,			
OR				
United S	tates application or PCT internations	al application number		filed on
***************************************	ME of inventor to whom this su		-	
(E.g., Given	Name (first and middle (if any)) and i			
****		Richard C. CH	IU	***************************************
Residence (e	xcept for a deceased or legally incar	pacitated inventor):		***************************************
City		State	Country	
-	s (except for a deceased or legally incap	***************************************		
City		State	Zip	Country
I believe the in the app	above-named inventor or joint invent dication.	tor to be the original inven	tor or an original joir	nt inventor of a claimed invention
The above-io	lentified application was made or aut	thorized to be made by me	. ,	
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.				
Relationship	to the inventor to whom this substit	ute statement applies:		
Legal Representative (for deceased or legally incapacitated inventor only),				
As	signee,			
Pe	rson to whom the inventor is under a	in obligation to assign,		
Pe	rson who otherwise shows a sufficier	nt proprietary interest in th	e matter (petition un	nder 37 CFR 1.46 is required), or
Joi	nt Inventor.			***************************************

[Page 1 of 2]

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO**: **Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**.

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SUBSTITUTE STATEMENT

£		***************************************	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~			
Circumstances permitting execution of this substitute statement:						
Inventor is deceased,						
Inventor is under legal incapacity,						
Inventor cannot be found or reached after diligent effort, or						
Inventor has refused to execute the oath or declaration under 37 CFR 1.63.						
If there are joint inventors, please check the appropriate box below:						
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.						
OR						
Statement Supplemental Sheet (PTO/A	An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).					
	WARNING:					
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PERSON EXECUTING THIS SUBSTITUTE STATI	EMENT;					
Kevin P. Radigan, Esq.	***************************************	Dε	/0/11/12 ate (Optional):			
Signature: Len P. Radisa-	GERRALITA AND AND AND AND AND AND AND AND AND AN	***************************************				
Residence (unless provided in an application data sheet, PTO/SB/14 or equivalent):						
_{City} Burnt Hills	***************************************	Country US				
Mailing Address (unless provided in an application data sheet, PTO/SB/14 or equivalent)						
HESLIN ROTHENBERG FARLEY & MESITI P.C. 5 COLUMBIA CIRCLE						
_{City} Albany	_{State} NY	_{Zip} 12203	Country US			
Note: Use an additional PTO/AIA/02 form for each reached after diligent effort, or has refused to execute the second seco	n inventor who is deceased, cute the oath or declaration	legally incapacitated, can under 37 CFR 1.63.	not be found or			

[Page 2 of 2]

RECORDED: 10/11/2012