#### PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5061294

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
	Corrective Assignment to correct the SPELLING OF THE LAST NAME OF INVENTOR #2 previously recorded on Reel 020328 Frame 0379. Assignor(s) hereby confirms the ASSIGNMENT.

#### **CONVEYING PARTY DATA**

Name	Execution Date
RICK A. HAMILTON II	01/04/2008
JAMES R. KOZLOSKI	01/04/2008
PAUL M. MOSKOWITZ	01/04/2008
BRIAN M. O'CONNELL	01/06/2008
CLIFFORD A. PICKOVER	01/04/2008
KEITH R. WALKER	01/04/2008

#### **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
Patent Number:	8910043

#### **CORRESPONDENCE DATA**

Fax Number:

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.

**Phone:** 541-592-2352

Email:Iddrev@us.ibm.comCorrespondent Name:IBM CORPORATIONAddress Line 1:1701 NORTH STREET

Address Line 2: BUILDING 256-3

Address Line 4: ENDICOTT, NEW YORK 13760

NAME OF SUBMITTER:	CHERYL RUBY
SIGNATURE:	/Cheryl Ruby/
DATE SIGNED:	07/22/2018

PATENT REEL: 046601 FRAME: 0073

Total Attachments: 12
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PATENT REEL: 046601 FRAME: 0074

#### PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date	
Rick A. Hamilton II	01/04/2008	
James R. Kozlowski	01/04/2008	
Paul A. Moskowitz	01/04/2008	
Brian M. O'Connell	01/06/2008	
Clifford A. Pickover	01/04/2008	
Keith R. Walker	01/04/2008	

#### **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:	11970290

#### **CORRESPONDENCE DATA**

Fax Number: (512)301-7301

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

Phone: 512-692-7297

Email: clara.wallin@sonlaw.com

Correspondent Name: Schubert Osterrieder & Nickelson PLLC

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Address Line 2: 45557

Address Line 4: Austin, TEXAS 78749

ATTORNEY DOCKET NUMBER: AUS920070595US1(4257)

**PATENT REEL: 020028 FRAWE: 037** 

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# ASSIGNMENT

Whereas, we,

(1) Rick A. Hamilton II
County of Albemarie

of Charlottesville and State of Virginia

(2) <u>James R. Kozloski</u> County of Fairfield

of New Fairfield and State of Connecticut

(3) Paul A. Moskowitz
County of Westchester

of Yorktown Heights and State of New York

(4) Brian M. O'Connell County of Wake

of Cary and State of North Carolina

(5) Clifford A. Pickover County of Westchester

of Yorktown Heights and State of New York

(6) Keith R. Walker County of Travis

of Austin and State of Texas

have invented certain improvements in

#### **MODIFYING SPACES IN VIRTUAL UNIVERSES**

	ed, respectively, a United Stat		
(Dates Inve	entors Signed Declaration) (	1) <u>Jan 4th</u> , (2008); (2)	, (2008);
(3)	, (2008); (4)	, (2008); (5)	, (2008); and
(6)	(2008).		

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 therefore;

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 invention 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.

**PATENT REEL: 0.20028 FRANKE:** 0.0381

(1) Signed at <u>C</u>	adoffeni	11. VA on	Jan 4 th, 2008.	
	(City)	: <b>&lt;</b>	(Date)	Al-st
			Rick A. Hamilton II	
(2) Signed at	(City)	on _	, 2008. (Date)	
	(Ony)		(Date)	
			James R. Kozloski	
(3) Signed at	(City)	on	(Date) , 2008.	
	(Oily)		(Date)	
		_	Paul A. Moskowitz	
(4) Signed at	1006.5	on	, 2008. (Date)	
	(City)		(Date)	
		<del>,,,</del>	Brian M. O'Connell	
(5) Signed at		on	, 2008, (Date)	
	(City)		(Date)	
		ر معینین	Clifford A. Pickover	
(6) Signed at		on	, 2008.	
	(City)		(Date) , 2008,	
		***************************************	Keith R. Walker	<del></del>

**PATENT REEL: 020028 FRAWE: 038**2

### ASSIGNMENT

Whereas, we, of Charlottesville (1) Rick A. Hamilton II and State of Virginia County of Albemarle of New Fairfield and State of Connecticut James R. Kozloski County of Fairfield of Yorktown Heights (3) Paul A. Moskowitz and State of New York County of Westchester of Cary (4) Brian M. O'Connell and State of North Carolina County of Wake of Yorktown Heights (5) Clifford A. Pickover and State of New York County of Westchester of Austin (6) Keith H. Walker and State of Texas County of Travis

and executed, respectively, a United States patent application therefore on

have invented certain improvements in

## MODIFYING SPACES IN VIRTUAL UNIVERSES

and executed, respectively, a britted oration parties	120081:12) January 4, (2008);
(Dates Inventors Signed Declaration) (1)	(2008); (a) (2008); and
(Dates Inventors Signed Declaration) (1), (2008); (4), (2008)	8); (b) <u>V</u>
(6) (2008).	·
Whereas, INTERNATIONAL BUSINESS MAC New York, having a place of business at Armonk, N desires to acquire the entire right, title and interest in any United States and foreign patents to be obtained t	the said application and invention, and to

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 filling of said United States application, and we request the Commissioner of Patents to issue any Letters Patent granted upon the invention 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.

IBM Docket No.: AUS920070595US1(4257)		
(1) Signed aton (City)	(Date) , 2008.	
	Rick A. Hamilton II	
(2) Signed at Yorktown Heights, MY on (City)	January + , 2008.	¥
<b>X-19</b> , <b>X</b>	James R. Kozloski	<u></u>
(3) Signed atororor	, 2008. (Date)	
	Paul A. Moskowitz	
(4) Signed atO	n, 2008. (Date)	
*	Brian M. O'Connell	
(5) Signed at JORNSTOWN HEIGHT C	on <u>SA</u> , 2008.	
es established and the second	Clifford A. Pickover	
(6) Signed at(City)	on, 2008. (Date)	
	Kelth R. Walker	

#### ASSIGNMENT

Whereas, we,

(1) Rick A. Hamilton II County of Albemarle of Charlottesville and State of Virginia

(2) James R. Kozloski County of Fairfield

of New Fairfield and State of Connecticut

(3) Paul A. Moskowitz County of Westchester of Yorktown Heights and State of New York

(4) Brian M. O'Connell County of Wake

of Cary and State of North Carolina

(5) Clifford A. Pickover County of Westchester

of Yorktown Heights and State of New York

(6) Keith R. Walker County of Travis of Austin and State of Texas

have invented certain improvements in

#### MODIFYING SPACES IN VIRTUAL UNIVERSES

and executed, respectively, a United States pa	tent application therefore or	<b>)</b> .
(Dates Inventors Signed Declaration) (1)	, (2008); (2)	, (2008);
(3) Janage 4, (2008); (4)	, (2008); (5)	, (2008); and
(6) (2008).		

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 therefore;

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 invention 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.

> PATENT REEL: 040003 FRANKE: 00885

IBM Docket No.: AUS920070595US1(4257)	
(1) Signed ato (City)	n, 2008. (Date)
	Rick A. Hamilton II
(2) Signed aton (City)	(Date) , 2008.
	James R. Kozloski
(3) Signed at Haw thouse, NY on (City)	<u>Jaruan</u> 4, 2008. (Date)
	Paul A. Moskowitz
(4) Signed at on _	(Date) , 2008.
	Brian M. O'Connell
(5) Signed aton _	(Date) , 2008.
	Clifford A. Pickover
(6) Signed aton	, 2008. (Date)
ښ	Keith R Walker

# REEL: 020028 FRANTE: 00386

#### ASSIGNMENT

Whereas, we	vvr	er	eas	, W	е
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(1) Rick A. Hamilton II
County of Albemarle

of Charlottesville and State of Virginia

(2) <u>James R. Kozloski</u> County of Fairfield

of New Fairfield and State of Connecticut

(3) Paul A. Moskowitz
County of Westchester

of Yorktown Heights and State of New York

(4) Brian M. O'Connell County of Wake

of Cary and State of North Carolina

(5) <u>Clifford A. Pickover</u> County of Westchester

of Yorktown Heights and State of New York

(6) <u>Keith R. Walker</u> County of Travis

of Austin and State of Texas

have invented certain improvements in

#### **MODIFYING SPACES IN VIRTUAL UNIVERSES**

and execute	d, respectively, a United States pa	atent application therefore or	)
(Dates Inver	ntors Signed Declaration) (1)	, (2008); (2)	, (2008)
(3)	, (2008); (4) 1 / 6	, (2008); (5)	, (2008); and
	, (2008).		

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(1)	Signed at _	(City)	on	, 2008. (Date)
(2)	Signed at _	(City)	on	Rick A. Hamilton II, 2008. (Date)
(3)	Signed at _	(City)	on	James R. Kozloski , 2008. (Date)
(4)	Signed at _	Cary (City)	on	Paul A. Moskowitz  1 / 6 2008. (Date)  Bru m Cand
(5)	Signed at _	(City)	on	Brian M. O'Conneil , 2008. (Date)
6)	Signed at	(City)	on	Clifford A. Pickover, 2008. (Date)  Keith R. Walker

#### ASSIGNMENT

Whereas, w	œ.
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(1) <u>Rick A. Hamilton II</u> County of Albemarle of Charlottesville and State of Virginia

(2) James R. Kozloski County of Fairfield

of New Fairfield and State of Connecticut

(3) Paul A. Moskowitz
County of Westchester

of Yorktown Heights and State of New York

(4) Brian M. O'Connell
County of Wake

of Cary
and State of North Carolina

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#### **MODIFYING SPACES IN VIRTUAL UNIVERSES**

and execute	ed, respectively, a United States p	atent application therefore or	ñ
(Dates Inve	entors Signed Declaration) (1)	, (2008); (2)	, (2008);
(3)	, (2008); (4)	, (2008); (5)	, (2008); and
(6) Jan.	<u>4, (2008).</u>		

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 therefore;

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Page 1 of 1

**PATENT** REEL: **02002**8 F**RAW**E: 00859

(1)	Signed at _	(City)	on	(Date)	, 2008.	
				Rick A. Ha		
(2)	Signed at	(City)	on	(Date)	, 2008.	
				James R. I		
(3)	Signed at	(City)	on	(Date)	, 2008.	
			_	Paul A. Mo	skowitz	
(4)	Signed at	(City)	on	(Date)	, 2008.	
			<del></del>	Brian M. Oʻ	Connell	
(5)	Signed at	(City)	on	(Date)	, 2008.	
		A A	·	Clifford A. I		
(6)	Signed at	(City)		Jan, 4 (Date) Keith R Walk		
				Koith D Wa		****************

Page 2 of 2

PATENT REEL: 020028 FRAWE: 00850