PATENT	ASSIGNMENT
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04/26/2010 501157589

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
Smruti R. Sarangi	03/02/2010
Sikta Pany	04/03/2010

RECEIVING PARTY DATA

Neme:	International Business Machines Corporation	
Street Address:	New Orchard Road	
City:	Armonk	
State/Country:	NÉW YORK	
Postal Code:	10504	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12717601

CORRESPONDENCE DATA

Fax Number: (412)741-9292

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

Phone: 412-741-8400

Email: uspto@ferencelaw.com

Correspondent Name: Ference & Associates LLC

Address Line 1: 409 Broad Street

Address Line 4: Pittsburgh, PENNSYLVANIA 15143

ATTORNEY DOCKET NUMBER: 790.051

NAME OF SUBMITTER: Stanley D. Ference

Total Attachments: 4

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PATENT REEL: 024449 FRAME: 0876

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PATENT

REEL: 024449 FRAME: 0877

IBM DOCKET NUMBER: 1N920090125US1 (790.051)

ASSIGNMENT

Whereas, the undersigned Inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

Title of the invention: DISTRIBUTED SYMBOL TABLE WITH INTELLIGENT LOOKUP SCHEME

and further identified by the IBM Docket Number provided above in the header of this Assignment, for which an application for a United States Patent was executed concurrently herewith or was filed having.	
Seriai Number:	(insert series code and serial number here if/when available)
business at Armonk, New York (Machines Corporation, a corporation of New York having a place of herein referred to as "IBM"), desires to acquire, and each undersigned
	the entire worldwide right, title, and interest in and to the Invention and cations 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, assigns, and otherwise transfers 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 parents and applications, in IBM, its successors, logal 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 Serial 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.

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	IBM DOCKET NUMBER: 1N920090125US1 (790.051)
***************************************	Executed by Inventor 1 of 2
Signature:	Date:
Sikta Pany	
	Executed by Inventor 2 of 2
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Signature:Starting	Date: MARCH 2nd 2010

18M DOCKET NUMBER: 1N920090125US1 (790.051)

ASSIGNMENT

Whereas, the undersigned inventor(s) has/have made certain inventions, improvements, and discoveries (herein referred to as the "Invention") in:

Title of the Invention: DISTRIBUTED SYMBOL TABLE WITH INTELLIGENT LOOKUP SCHEME

	A Docket Number provided above in the header of this Assignment, for d States Patent was executed concurrently herewith or was filed having:
Serial Number:	(insert series code and serial number here if/when available)
	Machines Corporation, a corporation of New York having a place of (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 cations 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, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the levention, 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 filling 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 Serial 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.

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	IBM DOCKET NUMBER: 1N920090125US1 (790.051)
Executed by h	nventor 1 of 2
Signature: <u>Sikta Pany</u> Sikta Pany	Date: 04/03/2010
Executed by Ir	eventor 2 of 2
Signature: Smrufi R. Sarangi	Date:

HEM THEN KET NUMBER: 4N920090438US1 (790.051)

ASSIGNMENT

Whereas, the undersigned inventority has have made certain inventions, unprovenious, and discussible chemic referred to as the "invention"s me

Title of the invention: DISTRIBUTED SYMBOL TABLE WITH INTELLIGENT LOOKUP SCHEME

and further identified by the BBM Docket Number provided above in the header of this Assignment, for which no application for a United States Patent was executed concurrently herewith or was filed baying
Serial Number: (insert series code and serial number here it/when available)
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 eatire worldwide tight, title, and interest in and to the Invention as

in and to say 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, assigns, and otherwise transfers to BBM (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 jurisdictious, including all divisions. continuations, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filling 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 Trademork 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 IRM. its successors, legal representatives, and assigns to the full and 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 laventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting tide to the Invention and all related patents and applications, in IBM, its successors, legal representatives.

Each undersigned Inventor acknowledges their prior and ongoing obligations to sell, assign, and transfer the rights under this Assignment to IRM and is onewere of any reason why they may not have the full and unencombered 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 Serial 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.

and assigns, whenever requested by IRM, its successors, legal representatives, or assigns

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Sikta Pany	Date:
	secuted by Inventor 2 of 2
Rignature: Jades terms	Date: 1711 14 2nd 20

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Whereas, the underlyighed to contents i cus have much veriain inventions, respect occurs, as deficienceries therein referred to as the "line auton") in:

Title of the Invention DISTRIBUTED SYMBOL TOBES, WITH INTELLIGENT LOOKUP SCHEME

and further identified by the IBM Docket Number provided above in the header of this Assignment, for which an application for a United States Patent was executed concorrently herewith or was filed having:
Serial Number: (insert series code and serial number here is/when available)
Whereas, International Business Machines Corporation, a corporation of New York having a place of business at Armonk, New York (herein referred to as "19M"), desires to acquire, and each undersigned inventor desires to grant to 18M, 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, assigns, and otherwise transfers to IBM (the "ASSIGNEE"), its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the lavention, the above-identified United States patent application, and any and all other parent applications and parents 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, recomminations, renowals, 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 parent authorities to issue any foreign patent, grented 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 tBM, 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 entirety as would have been hold 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 onencumbered 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 Serial Number) which may be accessary 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.

(Inventor Signature Page Follows)

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Silita Pany	
Executed	by Inventor 2 of 2
Signature:	Date: