PAGE 03/11

TO:HOFFMAN WARNICK LLC COMPANY: 75 STATE STREET, 14TH FLOOR

PATENT ASSIGNMENT							
Electronic Version v Stylesheet Version v			10/15/2008 500676622	· · · · · · · · · · · · · · · · · · ·			
SUBMISSION TYPE: NEW ASSIGNMENT							
NATURE OF CONVEYANCE: Declaration Regarding Ownership of Application and supporting documents							
CONVEYING PARTY	DATA			<u></u>			
Steve Wang		· · · · ·		Execution Date			
RECEIVING PARTY D	DATA						
<u></u>				· · · · · · · · · · · · · · · · · · ·			
Name:			ss Machines Corporation				
Street Address:	New Orchard Armonk	Koad					
State/Country:	NEW YORK						
Postal Code:	10504						
PROPERTY NUMBER							
Application Number:		11962	Number				
- ppnotorr rember.		:1302					
CORRESPONDENCE	DATA						
Fax Number:	(518)44	9-0047					
Correspondence will b			oen the fax attempt is unsuccessful,				
Email: klukes-brown@hoffmanwamick.com							
Correspondent Name: Hoffman Warnick LLC Address Line 1: 75 State Street, 14th Floor							
Address Line 4: Albany, NEW YORK 12207							
ATTORNEY DOCKET NUMBER: CAM920070165US1							
NAME OF SUBMITTER	NAME OF SUBMITTER: John W. LaBatt						
Total Attachments: 7 source=CAM920070166US1_SignedDeclarationOwnership#page1.tif source=CAM920070166US1_SignedDeclarationOwnership#page2.tif source=CAM920070166US1_SignedDeclarationOwnership#page3.tif source=CAM920070168US1_SignedDeclarationOwnership#page4.tif source=CAM920070166US1_SignedDeclarationOwnership#page5.tif source=CAM920070166US1_SignedDeclarationOwnership#page6.tif							

TO:HOFFMAN WARNICK LLC COMPANY: 75 STATE STREET, 14TH FLOOR

source=CAM920070186US1_SignedDeclarationOwnership#page7.tif

10/22/2008 11:38 5	5184490047	HOFFMAN WARNICK DALE	PAGE	05/11
OCT 14 2008 3:40	PM FR LOTUS LEGAL	617 693 3847 70 91518449004	17 Р	.02

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:	Steve Wang	Conf. No.:	7519
Serial No.:	11/962,144	Art Unit:	2161
Filing Date:	12/21/2007	Examiner:	Unknown
	d and system for bit streaming ta centric applications	Docket No.:	CAM920070166US1 (IBMRA-0014)

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

DECLARATION REGARDING OWNERSHIP OF APPLICATION

Sir:

I, Ayla Lari, an Intellectual Property Law Attorney for International Business Machines Corp. (IBM), hereby declare that:

- On Information and belief, the attached Agreement Regarding Confidential Information, Intellectual Property, and Other Matters (the Agreement) was executed by Xiaodong (Steve) Wang in consideration of his employment with IBM;
- 2. On information and belief, the Agreement assigned all rights to any Developments, including inventions conceived by Steve Wang, which: (a) relate to the actual or anticipated business or research or development of IBM; or (b) are suggested by or result from any task or work performed by Steve Wang for or on behalf of IBM or its subsidiaries, while Steve Wang was employed by IBM;
- On information and belief, the Agreement obligated Steve Wang to disclose any such Developments in writing to the IBM Intellectual Property Law Department;

1

- 4. On information and belief, the attached Disclosure CAM8-2006-0398 (the Disclosure) was created by Steve Wang to disclose an invention conceived by Steve Wang to the IBM Intellectual Property Law Department as part of his obligation under the Agreement;
- 5. On information and belief, the Disclosure describes an invention conceived by Steve Wang that: (a) relates to the actual or anticipated business or research or development of IBM; and/or (b) was suggested by or resulted from a task or work performed by Steve Wang for or on behalf of IBM or its subsidiaries;
- On information and belief, the above-referenced patent application seeks patent protection for the invention described in the Disclosure; and
- On information and belief, as a result of items 1-6, IBM is the exclusive owner of the above-referenced patent application.

I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further; that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent which this verified statement is directed.

Ayla Lan/IP Law Attorney for IBM Reg. No. 43,739

Octobert 2008

11/962,144

2

-

Agreement Regarding Continuition, Indifferent on the cathologies of the experimental of Bulkerse Marcines Corporation or one of the subbilines mathematical Bulkerse in the cathologies of the experiment of the subbilines mathematical Bulkerse in the cathologies of the experiment of the subbilines mathematical Bulkerse in the subbilines mathematical Bul	Ŧ	EDE 966917	
The elements collection of the set which is deviced to anyone acceller at the set end of a set any or check program and a during or anticipation is any or and program. Lights an electron or matched is 10, or any information or any case, and any and case, and any and case, and any any any case, and any any any case, and any any any case, and any	÷	Agreented Regarding Confidential Information, Intellectu	al Property, and Other Matter
 Belly received nonlinely that Statty, or elluptication generality from thy fact setsjoned on the model of the analysis of the document on the model of the document of the document on the model of the document of t	or	anibales (Collectively, 1914"), Which Laokhowiscije is employment at will, and the payment to the of steal employment, Lagree as leterwa: I will not, without 1954's prior written permission, disclose to anyone outside of 1934 or use in other than after my employment, any confidential incurnation or material of 1814, or any information or material neo patties, such as supplians or customers, by IBM. If Leave the employ of IBM, I will neture to Held all pro- ing to IBM or received from any shift party by IBM. whether or not centable capital refer and the material per- ing to IBM or received from any shift party by IBM. whether or not centable capital refer to the material per- ing to IBM or received from any shift party by IBM.	lary or other compensation during 127/03 SMia buordaes, wher during or relived is confidence from third werthy in proceeding before
Indicative 2) this solicit of mixe an offer to enversion or IEM within the thraw been howeved or parfore services agregate of [SM, or b) solicit for comparitive basiness provides that its basiness, or educe that the two interview enversion of the mixed within the thraw part of my bit regruption. I will not disclose to IEM, use in its basiness, or educe it to use, any information or matabilities drapping the fair part, unless authorized by IEM. In a basiness, or educe it to use, any information or matabilities of my bit or graphing. I will not disclose to IEM, use in its basiness, or educe its up to duce used and/or eakley (EM, any completions of all covernments under which IEM does business.) (BM the reduce of authorized by IEM. I will control address of the address of all covernments of the complet, (a) will: the laws and rigotations of all covernments under which IEM does business. (b) with proceedings into address and IBM that reduce to integrative to the safegurating of lationarations, and (c) with a difference in a sub address and by IEM. I heredy serigits to IEM my entits right, title, and intensis in any lide, concept taxholize, howering address, and the less (b) integrate or ontegrate integrate and address integrate of authority, howering and (e) with a difference or authority, howering and (e) with a difference or authority, more that the decign to ' or ontervise), computer programm and (e) elabed documentation, and worke of authority, maximum on the list of address and the less (b) address. I hereduce the address add		IBM, recover from Any Third CaR(), O' subgested by or resulting from any fast assigned to one or work a of IBM, and (b) Which has not been made available generally to the public, Whether or not expressed in and whether or not marked "IBM Confidential" or with any similar legend of	parlomted by me tor or on behalf a.dock/next or offer medium (idantial intomnation or meteria) ent manufertration activities or
 authorized by IBM, In addition, I will not hexprorize the any broduct used and/or cold by IGM, any capylighted materinia of any brief to party, unkes authorized by IBM. i will comply, sind do all tillings necessary for IBM to capply, (a) will: Pre laws and regulations of all covernments under which IBM does not pack to contracts between any such government or its contractors and 1BM that relate to implate the broad by the broad to implay the broad to implay the broad to implay the broad to implay the broad to contract between any such government or its contractors and 1BM that relate to implay the broad to be be setting and the works of authorizing. Inventor, not design to the setting of the broad to be be setting to the broad to be been and the bias (a) with a concluster which or susceptible to any other broad to be broad to be setting to any broad to any broad to approximate any broad to approximate the accurate of the setting to a subset to approximate the approximate the any broad to any broad to a subset to approximate and the setting the accurate the approximate the provide the approximate approximate the approximate the approximate the approximate approximate the approximate approximate the approximate approximate	2.	Indirectly: a) hire, solidil or make an offer to say eraphyse of (SM) to be employed or perform services of competitive business burroses any customer of ISM with which there have bendered as not of not into its to	0 79(de of (SM: or b) solieit for 1780:00:00:00:00:00:00:00:00:00:00:00:00:0
 bitimess, (b) with provisions of contexts between any such govarsment or its contactors and 18.4 that relate to intellate the line. b) Thereby assign to IBM my antice right, title, and interest in any idea, concept technique, Invention, design (Mysthor the design is "emerane-right or the design is" contactors and provide or otherwise). Computer programs and related documentation, other works or durborship, maak works, and the like (at the related called three works) and there is an an extend or otherwise). Computer programs and related documentation, other works or durborship, maak works, and the like (at the related called three works or provide or providements are potentiable, subject to copyright protection or assosptible to any other three of providements are potentiable, subject to copyright protection or assosptible to any other three of providements are potentiable, subject to copyright protection or assosptible to any other three of providements are potentiable, subject to copyright protection or assosptible to any other three of providements are potentiable, subject to copyright protection or assosptible to any other three of providements are potentiable, subject to copyright protection or assosptible to any other three of authorship which meet both consistent (a) and (b) are suggested by an result from any task assigned to the or other of (b) are subject to any "other works of authorship", such assignment shall be limited to those works of authorship. I understand that indicate the provisions of section 2870 of the California tabor does not apply to a Development which questifies and ing anything above to the contrary, I understand that indicate and both to any provide or orbital of BM and a subject to any apply to a Development which contrary of provide and additions of Section 2870 of the California tabor does not apply to a Development which contrary of a possible related while I am employed by IBM in an associate, product more any other tradia action or approximation and subject	ς,	sufficitized by IBM. In eduction, I will not incorporate into any broduct used and/or sold by IGM, any cop	tklentist to any third party unless yrighted materials of any third
 ordersettal or otherwise), computer programs and related documentation, other were of authorship, mask motes, and the like (all hereinature called "Developments are patentable, subject to copyright protection or ausoaptible to any other like (a) which are patentable, subject to copyright protection or ausoaptible to any other like (b) which (b) instea to the actual or anticipated patiness or research or development and like (b) in a subject to copyright protection or ausoaptible to any other like (b) which (b) instea to the actual or anticipated patiness or research or development active/spinner of like (c) (B) or its each (like (c) (c) (c) (c) (c) (c) (c) (c) (c) (c)	4.	-bUsiness, (b) with previsions of contracts between any such towars and or its undracting and IRM (k-)	redata to infeitentiat presente or
 (a) end (b) above. Gattomia Notice: For Developments subject to Cattornia few, notwittsfamiling anything above to the contrary, i understand that into assignment does not apply to a Development which qualifies fully under the provisions of Section 2870 of the Cattornia Lator code. The above provisions concerning assignment of Developments apply to Developments created while Lain employed by RM is an exceedive, rearrange the provisions at second version product an antifacturing, systema, applied extended, network of programming, or organophic concerning casely (including development, product anaminaturing, systema, applied extence, and field engineering). Excluded are any Developments that I cannot assign to IBM because of prior agreement with	5.	ernemental or otherwise), computer programs and (elated documentation), other works of authorship, m hereinatur called "Developments"), horeattet stade, conceived, written, or shervice cested solfy or h Developments are patentiable, subject to copyright protection or susceptible to any other form of protect or anticipated (xia)reas or recently or development of IBM or its autoritierice or (it) are supressed two	eak modes, and the like (si While by me, whether or not such inh which: (a) relate to the actual
In a stephristent does not epoly to a Development which qualities fully under the provisions of Section 2870 of the California Labor Occle. The above provisions concerning assignment of Developments apply to Developments created while Lain employed by IBM is an executive, manufacturing, available of the California Labor development, product manufacturing, available of energy and field engineering. Excluded are any Developments that Leennot assign to IBM because of prior agreement with		In the case of any "other works of authorship", such acalgrament shall be limited to those works of authorship above.	iship wh ok meet both conditions
 executive, managonal, product or positive of loanning, texturical, research, programming, or organoeting closelity (induding development, product, manufacturing, systema, applied energe, and field engineering). Exeluded are any Developments that I connot assign to IBM because of prior agreement with		INS #SEphthent does not spply to a Development which qualities fully under the provisions of Sect	he contrury, I understand that ion 2870 of the Cattornia Labor
 A DNY		executive, managorial, professioned, product or locinalized planning, Leoharded, research, concrementer, or	in employed by IBM is an rengineering caescity (including
 I acknowladge that the copyright and any other intellectual property right in designs, computer programs and volutes documentation, and other works of authorship, assessed within the acops of my supployment, beforg to BM by operation of term. In connection with any of the Developments assigned by Paragreph 5: (a) I will promptly disclose them in writing to the IBM intellectual Property Law Department; and (b) I will, on IBM's request, promptly acceute a specific apolynament of itile to IBM or as designed, and doyling also reasonably necessary to enable (BM or such designed to promptly acceute a specific apolynament of itile to IBM or as designed, and doyling also reasonably necessary to enable (BM or such designed to account a polynament of title to IBM or as designed, and doyling also reasonably necessary to enable (BM or such designed to acount a polynament of the log of any polynament of addition, I agree to promptly notify the IBM intellectual Property daw Department is writing of any polynamic apolynamic activities, and which I and an inventor but which is not assigned by Paragreph 5 and which discloses or claime any Development mode, conceived, or written while I are employed by ISM. 		Excluded are any Developments that I cannot assign to IBM because of prior agreement with	
 I acknowladge that the copyright and any other intellectual property right in designs, computer programs and volutes documentation, and other works of authorship, assessed within the acops of my supployment, beforg to BM by operation of term. In connection with any of the Developments assigned by Paragreph 5: (a) I will promptly disclose them in writing to the IBM intellectual Property Law Department; and (b) I will, on IBM's request, promptly acceute a specific apolynament of itile to IBM or as designed, and doyling also reasonably necessary to enable (BM or such designed to promptly acceute a specific apolynament of itile to IBM or as designed, and doyling also reasonably necessary to enable (BM or such designed to account a polynament of title to IBM or as designed, and doyling also reasonably necessary to enable (BM or such designed to acount a polynament of the log of any polynament of addition, I agree to promptly notify the IBM intellectual Property daw Department is writing of any polynamic apolynamic activities, and which I and an inventor but which is not assigned by Paragreph 5 and which discloses or claime any Development mode, conceived, or written while I are employed by ISM. 		500h#	
4. In connection with any of the Developmenta assigned by Paragreph 5: (a) I will promptly disclose them in writing to the IBM intellectual Property (aw Department) and (b) / will, on IBM's reguest, promptly accurte a specific applyment of title to IBM or its designed, and double reguest the estimated attraction in the Linked States and to b) / will, on IBM's reguest, promptly accurte a specific applyment of title to IBM intellectual Property (aw Department) necessary to enable IBM or such designed to secure a patent, copyright or other form of protection therefore the united States and to b) / will, on IBM's reguest, promptly accurte a specific applyment of title to IBM intellectual Property (aw Department), and (b) / will, on IBM's reguest, and apply accurte a specific applyment, operating of any patent or performance of the IBM intellectual Property (aw Department is writing of any patent or perform explored to which I any on invertor but which is not assigned by Paragreph 5 and which discloses or chaine any Development made, conceived, or written while I are employed by IBM.			
Property (aw Department) and (b) / will be IBM's request, promptly execute a specific applymment of title to IBM or its designed, and designed to secure a patent, copyright or attending in a protection therefore the avoid designed to secure a patent, copyright or attending in the store in the factor of the countries. In addition, and designed to secure a patent, copyright or attending the protection therefore the avoid designed to secure a patent, copyright or attending the protection therefore the avoid designed to secure a patent, copyright or attending the avoid the land of any patent or performance in which I an en inventor but which is not assigned by Paragraph 5 and which discloses or chaine any Development made, conceived, or written while I are employed by ISM.		other works of shippotanip, steated within the scope of my stipleyment, belong to 3BM by operation of P	74.
N ZÚRANE VRANE TUR (N. P G. J.). I.A.	£.	Property Law Dessettment; and (b) / Will, on IBM's regular, promptly execute a specific applyament of tit anything else reasonably necessary to ensate (BM) or such designee to secure a potent, copyright or ant the United States and to enter countries. In addition, I agree to promptly notify the IBM intellectual Prop of any patient or perfort application is which I am an invertion to priving a not seating by Personer, it also of any patient or perfort application is which I am an invertion to priving a not seating by Personer, it also	ie le IBM of 45 designee, eng de lef form of protection tiserstore ir aftet av . Descriment in mitles
N ZÚRANE VRANE TUR (N. P G. J.). I.A.			
N ZÚRANE VRANE TUR (N. P G. J.). I.A.			
AREALE ON THE DAY PERSONNEL FOLDER			
	K-RAP/	14 (2011) UM (85 Polymetry 5 A	
			Personnel Foloer

.

Market is increased as an angle (and if such of period (accorded to Bigg) and the supervised in the above the supervised in the above the supervised in	which is actioned in Persparate 5, where it is districted, update or all events and the provide and any direct mark that and the provide and	(3) (99) · · · · · · · · · · · · · · · · · ·	
Indianeed free spription varies (in the abachted. Norseas, streaments hereby granest and make by An-abachted) and the abachted. Norseas, streaments and adapted to the abachted. Norseas, streaments and adapted to the abachted hereby and the ab	Indeterment were repleted in advances in a cardination in the information handling of sub-order and series in the information of the advances in a cardination of the advances in the information of the advances in the information of the advances in the information of the advances in the advances in the information of the advances in the advance in the advances in	which is subject to Paragraph S, when it is distributed, publicly of catheringe, or to assume my permission in change of ornervise alter i http:///////////////////////////////////	<u>معمر</u> (آب کا
The distinct of Development of and and the strength of a nuclear barry of right. The other and relations of the strength	The scheme and the an Previdence per per per per per per per per per pe		1 . H
If Tdg/Sch (harry reproducting): I here writen "brow" and blackins:	If Table Norm Statistication and the server when show - an tabilities. If 00000000000000000000000000000000000	16. 1 have identified all Developments not assigned by Persectal 4 in which i bero aver thin the ortropment and which users revolution	H.
Equipped Machine Concernity. 10. This can invest with a subset of this Aphament, means the employment with or without cause a structure motion. 11. The Agreement appreciated and a writen a commission of the Aphament and any encodence in the exploration of the aphaet end and any encodence of any encodence in the exploration of the aphaet end and any encodence of any encodence in the Aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the subset of the aphaetenet and any encodence of the aphaetenet and aphaetenet and approximate approximate and approximate approximate approximate and approximate approxim	Bup invest Measters Corporation. 10. The corm hypopyrisent avail, as used in this Agriamment, maans in anaptery must avail a surplice available of the term hypopyrisent available of the term hypopyrisent and available of the subscreen hypopyrisent and available of the subscreen hypopyrisent is approximately and a surplice available of the subscreen hypopyrisent and available of the subscreen hypopyrisent and available of the subscreen hypopyrisent hypopyrisent available of the subscreen hypopyrisent and available of the subscreen hypopyrisent available of the subscreen hypopyrisent available of the subscreen hypopyrisent hypopyrisent and available of the subscreen hypopyrise made in a writing subscreen the available of the subscreen hypopyrisent available of the subscreen hypopyrisen hypopyrisen hypopyrisen hypopyrisent available of the subscreen hypopyrisen hypop	- Did A	į
PBP, Miller EMM of from torminate the employment relationship at with or without occurs a determination of a million operative state preventions. 11. This Agreement appreciated a provide more of writem operative is and any anandment to this Agreement may only be made in a writem operative or interactive data provide and writem operative to the state of the provide or interactive data preventions. 12. This Agreement all be governed by the laws of the State of New York, at it high the constraint of the Agreement is unerformabile at an exclusion or interactive data interactive data interactive data interactive data preventions. 13. Income the any operative taxes and the approximate data and the state of New York, at it high prevention of the Agreement is unerformabile at law, preventions at the state of New York, at it high prevention of the Agreement is unerformabile at law, prevention of the Agreement is unerformabile at a state of New York, at it high prevention of the Agreement of the approximate data prevention of the Agreement and the state of the approximate data prevention of the Agreement and the state of New York. At it high prevention of the Agreement of the Agreement of the approximate data prevention of the Agreement and the state of New York at the state of the Agreement of the A	mply, attribute fill of i our torminate the employment relationship at will, a any time, with or without sectors and any time and any consolitations. Understandings, understanding, or agreement methods to the subject traiter tensor. Any waver of a term in field spreament acconstruction of the provision of the Agreement accompanisation is a provision of the Agreement accompanisation in the accompanisation. Sciences 20, and any table accompanisation is a subject to the provision of the Agreement accompanisation of the Agreement accompanisation in the accompanisation of the Agreement accompanisation accompanisation accompanisation of the Agreement accompanisation accompani	¹⁴ "8. "The term "substituties", as used in this Action will, includes any entity owned by controlled, choosy or indirectly, by learnational Business Machines Corporation."	-11
11. The Appearent supersedue all previous and or written communications to prescriptions; understandings, understandings, or agreement well writing signed by the Burney Vice President of Herme Previous Machines Deparation and Use State of the State of New York, at It had been executed and they previous and departs the state of the State of the State of New York, at It had been executed and they previous analyzes. 13. The Appearent and the State of the State of the State of New York, at It had been executed and they previous analyzes. 13. The Appearent and the Appearent of the State of New York, at It had been executed and they previous analyzes. 14. The Appearent and the Appearent of the State of New York, at It had been executed and they previous and they used and they u	11. This Agreement augesteeds all previous and or written communications, indexing and other the bits Agreement here only be made in a writting signal or previous and the bits Agreement here only be made in a writting signal or previous here in a written bits Agreement here in a writting signal or previous here in a writting signal bit and writting signal bits of the Agreement and writting signal bits of the Agreement, and writting signal bits. The Agreement and writting signal bits of the Agreement, and writting signal bits. The Agreement and writting signal bits of the Agreement, and writting signal bits. The Agreement and writting agreement, and writting agreement and agreement and agreement and agreement and writting agreement and writting agreement and agreement and agreement, and writting agreement and agreement and agre	10. The torm "employment at will," as used in this Agreement, mashs fire amologment at the mutual consent of both me and ISM. Access ingly, either IBM or i our terminets the employment relationship at will, at any fire, with or without cause or advance notice.	<u>[</u>
12. This Agreement shall be governed by the laws of the State of New York, as it is had been executed and fully performed within such size. It any provide the say yorkinon of the Agreement is unerformabile a law, the variable deal notation to the data in the state of the sector. 13. Incoming the the say yorkinon described previde sector data gate, equilable relief and sector system. End may acknowledge and the collect of copy of the Agreement, and hubbally the balant. If 27/2003 My Agreement, and may acknowledge and the collect of copy of the Agreement, and hubbally by us identify below. If 27/2003 My Agreement, and may acknowledge and the collect of copy of the Agreement, and hubbally by us identify below. If 27/2003 My Agreement, and may acknowledge and the collect of copy of the Agreement, and hubbally by the sector. If a may prove balant. My Agreement, and may acknowledge and the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. My Agreement, and may acknowledge and the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. My Agreement is developments not accompatible as the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. My Agreement is below and the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. If a may acknowledge and the sector. My Agreement is below a	12. This Agreement shall be governed by the faxe of the State of New York, as it is battlesen executed and fails, performed within such size. It any providence is the Agreement's understable state for the interaction state in the state. 13. I recognize the any violation of the Agreement's understable state are result in decompting action state. 14. I recognize the any violation of the Agreement's understable state are result in decompting action state. 15. I recognize the any violation of the Agreement's understable relief and recompting frees. 16. My Agreement, and my acknowledgment of recould of the Agreement's are buildstated by the statement by a statement by a statement by the statement of the agreement's and the statement by a statement b	11. This Agreement superasedes all previous and or written communications, representations, understandings, understandings, or agreement for a part of the subject statter toron, Any waker of a family following to the subject statter toron, Any waker of a family following the subject statter toron, Any waker of a family following to the subject statter toron.	Θ
Cher Applochte nellef for 1544 moluting money damagas, equilable relief and exempty free My Agreement, find my Acknowledgement of recourt of a copy of this Agreement, are hadrated by by signature below. XIAODONIG WANG Employee provide the copy of the function of the opportunity of the function of t	Cher opposition rolled for 1946 including money damages, equilable relief and abounge free My Agreement, and my extinctivelyneant of resolut of a copy of the Agreement, are tradicated by my signature below. XLNODONIS WANG Depriver and My extense priority (if you have entered frome in Presegnand 8, do not full in this section.) (if you have entered frome in Presegnand 8, do not full in this section.) The following are Developments not cover of by Presegnand 5, in which I have shy tight, the or interact, and which were provided by curceived or writes either whelly or in part by me, but mether published individe a prior of Witness ap Document We appeared that any of the above ware made, compared by my ended that of Witness ap Document (If is in your interest to totablet that any of the above ware made, compared by the villes and details of your explorations by EMM. You should na electron the americating Property and I constity Department at Compare Hostigue USM with were your web instance that when the VM and and electron the americating Property and I constity Department at Compare Hostigue USM with web provided your web instance there is highly then the IBMK in any of them approximate that any of the above ware made, compare Advecting them, it you uses to interact the instance of Property and I constity Department at Compare Hostigue USM with the interact for systement (SM in any of them approximate the instance) Property and I constity Department at Compare Hostigue USM with the interact and interact and interact and interact the interaction by its instance	12. This Acrocmont shall be governed by the laws of the State of New York, as it is at been executed and fully performed within such	
XIAODONG WANG Findered Bignists 766917 1727(2003) Employee Karager (Builder Findered Print) Employee Response Sector Date 1000 (If you have entered home in Pagence 0.8, do not fill in this section.)! Employee Karager (Builder Findered Response) Date 1000 (If you have entered home in Pagence 0.8, do not fill in this section.)! Employee X for an and the pagence 0.8, do not fill in this section.)! Employee X for an and the pagence 0.8, do not fill in this section.)! If in a 1146 The following all Developments not covers by Prespect 5. In which I have any light, the or interact, and which twee prodously cortesived of writen different holigo on the build between the pagence 0.8, do not fill in this section.)! If in a 1146 The following all Developments (I applements): Date of Declarents (I applements): None of Witese an Document Witese and Document Date of Document None of Witese and Document Signed: Signed: Employee's Full Name Date of Document in the deal of the above wave made. comparised or writes the sector for the sector of t	XLADDONS WANG Zerretory 766917 1727/2003 Employee Fill Hane (under e print) Employee a flore in Employee a flore in Date Employee in the maximum of the subset print) Employee a flore in Date Date If if If you have embraid from the subset print) Employee in the subset of the flore in the subset of the subset of the flore in the subset of the flore in the flore in the flore in the subset of the s	13. Franzymize thet any violation of my violgations described bandh on result in desizinary action, including disn'ssiel from IBM, and any the appropriate ratio for ISM including money demograph, equitable reliation and encourses (new).	
Benjoyaci Margari (Bhi Hen, sheare phri) Bit Strates Date Date (# jou have entered mone to Peragnach 8, do not file the ecology (# jou have entered mone to Peragnach 8, do not file the ecology The foldering and Developments not covered by Perspects 5, in which I have enty High, \$he, or interast, and which were previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously conceived of version either whelly on in part by ms, under the previously	Employees Marager (B)/ Hap, Science phr) EBA Science Date (# you have entered home to Paragraph 8, do not fit in this section.)! The foculting at Developments not converse by Paragraph 5, in which have any Hght, fits, or interact, and which were providently conceived or writen either whiley or in part by the inter published nor tiled is any Hght, fits, or interact, and which were providently conceived or writen either whiley or in part by the inter published nor tiled is any Hght, fits, or interact, and which were providently conceived or writen either while the published nor tiled is any Hght, fits, or interact, and which were providently conceived or writen either while the published in tiled is any Hght at the conceived or writen either published in tiled is any Hght at the conceived or writen either published in tiled is any Hght at the conceived or writen either published in tiled is any Hght at the conceived or writen either published in tiled is any Hght at the conceived or writen either published in the conceived or writen before your exployment by EM. You should not decive them in detail, but isently then only by the tiles and details of document discribing figure. If you uses the interact (BM in any of them, you may concern the interactional Property and Remaining Cepertment of Carporate Hoscharuters, which will provide you with isotracter there adminished the adminished or adminished exceedurations, which will provide you with isotracter there adminished in the BM is the tiles and details and carporate Hoscharuters, which will provide you with isotracter there adminished in the BM is adminished in the concernent of Carporate Hoscharuters, which will provide you with isotracter there adminished in the base of the concernent of the standard free adminished in the	XIAODONG WANG X ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	 ሜ'
If you have entered more in Paragraph 8, do not fill the two encounts: in the following also Developments not oversed by Paragraph 5, in which 1 have any Hight, the, or interact, and which were providually conceived or writen either whally or in part by ma, but neither published nor filled is any Patant Cifford. Description of Declaments (if applicable): Date of Document Name of Witeses as Document If is in your interest to establish that any of the above ware made. Conceived of writene store your employment by EM. You and not prove that full harry of the store and related of the comparison your employment by EM. You and not prove that is any of them, you may come of the intervent (EM) is any of the store that in deal is any of the store that is conceived. Comparison your employment by EM. You and not prove that is any of them to IBM. If is in your interaction of a mechanism of proventy and I constituty Department as Conscience Hoodquestrons, which will provide you with teatment to IBM. If is in your interaction of a mechanism of proventy and I constituty Department as Conscience Hoodquestrons, which will provide you with teatment to IBM. If is in your interaction of the mechanism of proventy and I constituty Department as Conscience Hoodquestrons, which will provide you with teatment to IBM. If is in your interaction of the Mechanism of IBM. If is in a store of the mechanism of proventy and I constituty Department as Conscience. If is in a store of a mechanism of proventy and I constituty Department as Conscience. If is in a store of the mechanism of the store of the stor	(* if you have entered 'none' in Paragraph 8, do not this this section.) (* (* if you have entered 'none' in Paragraph 8, do not this this section.) (* (* if you have entered to pare to over a by Paragraph 5, in which I have any fight, the, or interest, and which were providedly curvely do twriten either wholly or in part by the ind mellither you lished nor file (; appliestie): Description of Doctaments (; appliestie): The or Doctaments (; appliestie): The or Doctament (; appliestie): The or Doctament (; appliestie): Signed:	Sudth ST Miche (Ludde St becker 179 203	<u> </u>
The following alls Developments not covered by Persycoph 5, in which I kaye any Hon, site, or interact, and which were providedly corrective of methods and neither published nor rited is pry Peternt Office: Description of Dectements (if applicable): The on Dectement The on Dectement The on Dectement The on Dectement None of Winese as Document None of Winese as Document Signed: Employee's Foll hame If the in your inferrent to establish that any of the above means made, concerved or writem before your employment by IBM. You aloued rigg decision the interact and the interact of document eldocarding from. If you with interact for suborder your with instruction of the interact of document eldocarding from. If you with interact for suborder the interact of document eldocarding from. If you with interact for suborder the interact of document eldocarding from. If you with interact of the interact of the interact of the interact of document eldocarding from the interact of the inte	The following are Developments not covered by Peregraph 5, in which I have any right, site, or interact, and which were providedly conceived or vertee either wholly or in pert by the bull mether published nor filed in any Petent Office: Description of Declarentic (if applicable):	· · · · · · · · · · · · · · · · · · ·	
Conceived or writen either whelly or in part by me, but neither published nor filed is phy Fetant CStee: Description of Dectanents (if applicable): The se Decement Determine of Witness on Document Signed: Employee's Full Name Determine of Witness for Document (if is in your interest to establish that any of the above wave made, compared to ascribing them, if you use to interest (BM in any of the above wave made, compared to ascribing them, if you use to interest (BM in any of the above wave made, compared to ascribing them, if you use to interest (BM in any of the above wave made, compared to ascribing them, if you use to interest (BM in any of them and by the title and of accument of Constrate Headquartors, which will provide you with instruct them for the interest (BM in any of them and by the title and of compared to ascribing them, if you use to interest (BM in any of them and by the title and of accument of Constrate Headquartors, which will provide you with instruct them for the interest of the instruct the interest (BM in any of them and the instruct the interest of the interest (BM in any of the interest (BM in any of them and the instruct them and the interest of the interest (BM in any of them and the interest of them interest to interest the interest of the	Currentived or writen either wholly or in part by ma, but neither published nor rited in priv Patant Citics: Description of Decements (if applicable): The on Decement Date on Decement Signed: Employee's Full Name Signed: Employee's Full Name Signed: Employee's Full Name Signed: Date: Date: Date		- 14
Description of Doctaments (if application): The op Doctament The op Doctament Signed: Employee's Foll Name R is in your inferent to establish that any of the above wars made. Conceived or written before your employment by IBM. You aloud nat disclose them in the dealer will have on the instance of the above mars made. Conceived or written before your employment by IBM. You aloud nat disclose them in the dealer will have on the instance of the above mars made. Conceived or written before your employment by IBM. You aloud nat disclose them in the dealer will have on the instance of the above mars made. Conceived or written before your employment by IBM. You aloud nat disclose them in the dealer will have on the instance of the above of them and place the documents obscribing from. If you wash to internet IBM in any of them for solutionity them to IBM.) ZMO4-3097-14 ZMO4-3097-14	Description of Declanents (if applicable): The on Declanent Data on Declanent Nerve of Witness on Document Signed: Employee's Full Name Signed: Emp	The recolumn are Developments not covered by Perspects, in which I have any fight, the, or interest, and Which were providedly conserved of written either wholly or in pert by the init perturbation blacked perturbation of Vertex.	
The or Document Name of Witness on Document Signed:	The period of Voltages on Document Interpretendent Signed: Employee's Full Name If is in your inferent to establish that any of the above wave made, conceived, or written before your employment by JBM. You about drag of them, in detail, but identify them only by the titles and releas of document of accurate Hosting from. If you with the internet (BM in any of them, you may content the internet if the int		
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not obscible them in detail, but iseneity them only by the itiles and nates of documents describing them. If you uses to interent (BM in any of them, your may some or the invitational Property and Licensing Department of Concerner Hoedaucutors, which will provide you with testing terms for submitting them to IBNA;	It is in your interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not discuss them in detail, but isometry them only by the titles and nates of documents classofting from. If you wish to internet (ISM in any of them, you may conserve the interlational Property and Electrising Dependent of Concrete Headouruters, which will provide you with that increte the solution to IBM.) ZMO4-3097-14		
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not obscible them in detail, but iseneity them only by the itiles and nates of documents describing them. If you uses to interent (BM in any of them, your may some or the invitational Property and Licensing Department of Concerner Hoedaucutors, which will provide you with testing terms for submitting them to IBNA;	It is in your interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not discuss them in detail, but isometry them only by the titles and nates of documents classofting from. If you wish to internet (ISM in any of them, you may conserve the interlational Property and Electrising Dependent of Concrete Headouruters, which will provide you with that increte the solution to IBM.) ZMO4-3097-14		
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not electore them in detail, but identify them only by the titles and nates of documents describing them. If you unsit to interent (BM in any of them, you may concern the thereing) Property and Licensing Department of Conscrate Hoedaucutors, which will provide you with testing term to IBM.	It is in your interest to establish that any of the above ware made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above ware made, conceived, or written before your employment by IBM. You should not also be interest in detail, but beinted and interesting dependent of concerster Headquarters, which will provide you with the interest the interest in a light in any of the state of concerster Headquarters, which will provide you with the interest to the interest in a light in any of the state o		· • • •
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not obscible them in detail, but iseneity them only by the itiles and nates of documents describing them. If you uses to interent (BM in any of them, your may some or the invitational Property and Licensing Department of Concerner Hoedaucutors, which will provide you with testing terms for submitting them to IBNA;	It is in your interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interested as of documents also be interested to use the interest of the above more made of documents also be interested to use the interest of the above more made of documents also be interested to use the interest of the above more and interesting Dependent all Concerses Head auto will provide you with the interested on a terrested more to IBM.) ZMO4-3097-14 REMINE IN IN THE INFORMATION IN THE INT	······································	· · ·
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not obscible them in detail, but iseneity them only by the itiles and nates of documents describing them. If you uses to interent (BM in any of them, your may some or the invitational Property and Licensing Department of Concerner Hoedaucators, which will provide you with testing terms for submitting them to IBNA;	It is in your interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not discuss that it detail, but isometry them only by the itiles and nates of documents discretibing fram. If you wish to internet (ISM in any of them, you may conteer the intelligence) Property and Licensing Dependent of Concrete Headourulers, which will provide you with that increte the second of the state of the second of the		
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not obscible them in detail, but iseneity them only by the itiles and nates of documents describing them. If you uses to interent (BM in any of them, your may some or the invitational Property and Licensing Department of Concerner Hoedaucators, which will provide you with testing terms for submitting them to IBNA;	It is in your interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interested as of documents also be interested to use the interest of the above more made of documents also be interested to use the interest of the above more made of documents also be interested to use the interest of the above more and interesting Dependent all Concerses Head auto will provide you with the interested on a terrested more to IBM.) ZMO4-3097-14 REMINE IN IN THE INFORMATION IN THE INT		
It is in your interest to establish that any of the above wave made, conceived, or written before your employment by JBM. You should not obscible them in detail, but iseneity them only by the itiles and nates of documents describing them. If you uses to interent (BM in any of them, your may some or the invitational Property and Licensing Department of Concerner Hoedaucators, which will provide you with testing terms for submitting them to IBNA;	It is in your interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interest to establish that any of the above more made, conceived, or written before your employment by IBM. You should not also be interested as of documents also be interested to use the interest of the above more made of documents also be interested to use the interest of the above more made of documents also be interested to use the interest of the above more and interesting Dependent all Concerses Head auto will provide you with the interested on a terrested more to IBM.) ZMO4-3097-14 REMINE IN IN THE INFORMATION IN THE INT	Signed:	
It is in your interest to establish that any of the above wave made, conceived, or writen before your employment by IBM. You should need allocize them in detail, but isement itil is any of them, you may concern the intervent only by the titles and detail of documents obscribing from. If you watch to intervent IGM in any of them, you may concern the intervent of them and you with estimate the concernet. Headlaw the provide you with estimate the formation of them to IBM.	(It is in your interest to establish that any of the above were made, conceived, or written before your employment by IBM. You about not discribe them in detail, but isensity them only by the itiles and rides of documents describing them. If you wish to interest (BM in any of them, you may conteer the interest of interest and itcensing Department of Concerner Headquarters, which will provide you with instructions for a dominant of BM).		-
Also be the first for detail, but kiewith them only by the interesting Dependence of documents of constrained interview interview fills in any of them, you may contain the interview and licensing Dependence at Conscrete Hose(quarters, which will provide you with instructions for sydemitting them to IBM) ZMO4-3097-14	discress them in detail, but identify them only by the idies and dates of documents describing from. If you wish to internet IBM in any of tham, you may consort its interlational Property and Licensing Department of Concerses HeadQuarters, which will provide you with thatme- tions for sylemitting them to IBM.j		
	- 開始 - 開始 - 開始 - 日本 - 日	disclose them in detail, but identify them only by the titles and detes of documents describing them. If you wish to intervent IGM in any of them, you may content the interlectual Property and Licensing Department of Commerciale Hospitality, which will previde you with test way of	
չ աննեւ առաջ է որոնք անդաման առաջ անդաման առաջ անդաման առաջ անդամ են նարագանություն է անդաման է ենց առաջ է լուն		縣 地名美国法格尔 医马克尔氏 医	, <i>.</i>
	s water water the state of the		

	Disclosure CAM8-2006-0398
	Prepared for and/or by an IBM Attomey - IBM Confidential
· · · · · · · · · · · · · · · · · · ·	Created By Steve Wang On 12/21/2006 08:54:22 AM MST
	Last Modified By Jane Edlin On 08/27/2007 07:32:56 PM EDT

Required fields are marked with the asterisk (*) and must be filled in to submit this document. For help with a specific field, place the cursor in it and press the "F1" key on your keyboard.

* Title of disclosure (in English)

Method and System for JCR (Java Content Repository) Binary Streaming for Data Centric Applications

	Status	Final Decision (File)
	Final deadline	03/30/2007
	Final deadline reason	
	Docket family	CAM9-2007-0166
*	Processing location	Cambridge
汝	Functional area	(01) Development and Technical Support (Rhodin)
	Attorney/Patent professional	Ayla A Lari/Cambridge/IBM@IBMUS
	Submitted date	12/22/2006 08:07:16 AM MST
*	Owning division	LOT

To add inventors to this disclosure, you may select names from a Name and Address book located on your workspace or type the full Lotus Notes name of each inventor.

Inventors (like assignees) MUST use the Lotus Notes Address of the country their working contract applies to.

Example: John Inventor/Germany/IBM

Inventors: Steve Wang/Raleigh/IBM

Inventor Name	Inventor Second		Inventor Phone	Manager Name
> WANG, STEVE	766917	8M/OIFA	441-3905	Saraceni, Thomas A.

≻ denotes primary contact

Main Idea for Disclosure CAM8-2006-0398

Prepared for and/or by an IBM Attorney - IBM Confidential

Archived On 05/18/2007 01:07:41 AM

Title of disclosure (in English)

Method and System for JCR (Java Content Repository) Binary Streaming for Data Centric Applications

Main Idea

1. Background: What is the problem solved by your invention? Describe known solutions to this problem (if any). What are the drawbacks of such known solutions, or why is an additional solution required? Cite any relevant technical documents or references.

The JCR (Java Content Repository, JSR 170: http://jcp.org/en/jsr/detail?id=170) is catching momentum in the Web based content management system (CMS). The applications based on JCR are easily customizable with JCR node types for modeling, and are encapsulated of diversified back-end database systems by the higher level JCR API. All data stored in JCR are represented with XML node schema and can be serialized to file system. The serialized node file contains the data properties and their path information. To process the serialized XML node files with higher performance is critical for enterprise data centric applications such as archive and restore and migration. The XML node files can be large because it can store actual binary content within the XML nodes. It is not uncommon to have ten's of Meg Bytes (MB) JCR XML node files for a typical repository. There is no efficient XML processor that can handle large XML files with both parsing and manipulating the states of XML elements such as DOM or SAX. One such processor might be good in parsing only (SAX) but not sufficient in maintaining states or vice versa with prohibit memory consumption (DOM). This invention intends to address the problem with JCR binary streaming technique that can greatly improve performance for such data centric applications.

2. Summary of Invention: Briefly describe the core idea of your invention (saving the details for questions #3 below). Describe the advantage(s) of using your invention instead of the known solutions described above.

The JCR binary streaming saves the node property path and other relevant retrieving information within the serialized XML node files so that the intended large binary data remains inside the content repository after the corresponding node being serialized. Any data centric application that requires processing of the serialized XML node file is now dealing with a much reduced sized XML file. This can improve the performance greatly in terms of memory usage and processing speed for XML processors such as DOM. During the consuming phase of the data centric applications, the binary data property is streamed from its source JCR repository into the target repository by looking up through its original property path and other retrieving information.

3. Description: Describe how your invention works, and how it could be implemented, using text, diagrams and flow charts as appropriate.

The JCR binary streaming involves two phases. The first phase is when the JCR nodes are serialized. The concerned binary property path is obtained and serialized into its property value along with a unique token to identify that this property is a streaming property. Other relevant retrieving information such as source server is also serialized. The data centric applications can process the serialized node file as usual with any XML processors such as DOM or SAX parser. The second phase happens during consuming or import. The data centric applications will identify the property being streamed by the unique property token. The path and other info saved in the streamed property allow the consuming applications to successfully retrieve the actual binary data by streaming through from the source JCR repository with the saved property path.

A system with JCR binary streaming for a data centric application called JCR Migration Framework (JMF) for a WebSphere Portal environment has been constructed. The migration between two JCR repository migrates the user data saved in the source application model to the user data of a target application model that is based on JCR. The migration exports to XML node files on a file system, transforms and imports to a target system. The following diagram illustrates the implementation:



Here is the description for each components above:

Source JCR/Portal: the source JCR repository in a WebSphere Portal environment

Target JCR/Portal: the target JCR repository in a WebSphere Portal environment

ExportServlet : servlet to handle exporting of nodes for a source JCR repository

ImportServlet: servlet to handle importing of nodes to a target JCR repository

ExportStreamingVisitor: a visitor that writes the binary property with unique identifier, property path and other relevant information such as source server.

ImportStreamingVisitor: a visitor that identifies the binary property and calls the StreamingServlet to stream the binary property from source JCR

StreamingServlet: servlet to handle streaming a binary property request and to stream out the actual binary property data to the requester

Source ESV: the exported system view of the source JCR repository with XML node files.

Target ESV: the transformed XML node files

JMF: JCR Migration Framework that transforms the source nodes to the target nodes according to certain transform rules

The binary streaming of the JCR properties allows migration to export less data, parse efficiently with much reduced sized XML node files during transform for those nodes that contain large binary data, and streaming from the source JCR repository for faster import.

Hoffman Warnick LLC

Intellectual Property Law www.hwdpatents.com

75 State Street – 14th Floor Albany, NY 12207 Phone: (518) 449-0044 Fax: (518) 449-0047

FACSIMILE TRANSMISSION

FOR: PTO

COMPANY:

FROM: John W. LaBatt

DATE: October 22, 2008

NUMBER OF PAGES: <u>10</u> (including cover page)

DESTINATION FACSIMILE NUMBER: (571) 273-0140

RE: CAM920070166US1 (IBMRA-0014) Assignment

If you do not receive any of the pages, please call (518) 449-0044.

NOTE: The information contained in or attached to this facsimile is attorney's PRIVILEGED AND CONFIDENTIAL information intended only for the person or entity named above. If you are <u>not</u> the intended recipient or someone responsible for delivering it to the intended recipient, please be aware that any copying or dissemination of this communication is STRICTLY PROHIBITED. If you receive this communication in error, please notify us at the telephone number listed above.

RECORDED: 10/15/2008

REEL: 021718 FRAME: 0312