PATENT ASSIGNMENT COVER SHEET

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NATURE OF CONVEYANCE:	NUNC PRO TUNC ASSIGNMENT			
EFFECTIVE DATE:	01/24/2018			

CONVEYING PARTY DATA

Name	Execution Date
IBM INTERNATIONAL GROUP B.V.	12/05/2018

RECEIVING PARTY DATA

Name:	IBM INTERNATIONAL C.V.		
Street Address:	JOHAN HUIZINGALAAN 765		
City:	AMSTERDAM		
State/Country:	NETHERLANDS		
Postal Code:	1066VH		

PROPERTY NUMBERS Total: 42

Property Type	Number
Patent Number:	9037533
Patent Number:	7089448
Patent Number:	8880551
Patent Number:	7146366
Patent Number:	7433863
Patent Number:	8171018
Patent Number:	7430549
Patent Number:	8805818
Patent Number:	9183256
Patent Number:	9589018
Patent Number:	9679011
Patent Number:	9195695
Patent Number:	8286237
Patent Number:	7673147
Patent Number:	8880893
Patent Number:	6125351
Patent Number:	6842746
Patent Number:	7272605
Patent Number:	7337351

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Property Type	Number
Patent Number:	7010521
Patent Number:	7464106
Patent Number:	7921130
Patent Number:	6831839
Patent Number:	7730077
Patent Number:	7698338
Patent Number:	7529752
Patent Number:	7577667
Patent Number:	7634477
Patent Number:	7305386
Patent Number:	7089253
Patent Number:	7139783
Patent Number:	7702610
Patent Number:	7415719
Patent Number:	7870598
Patent Number:	6480814
Patent Number:	7707091
Patent Number:	7752064
Patent Number:	6995702
Patent Number:	7835929
Application Number:	12755996
Application Number:	12755912
Application Number:	29156718

CORRESPONDENCE DATA

Fax Number: (301)762-4056

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: 301-424-3640 Email: je@usiplaw.com

Correspondent Name: EDELL, SHAPIRO & FINNAN, LLC Address Line 1: 9801 WASHINGTONIAN BOULEVARD

Address Line 2: **SUITE 750**

Address Line 4: GAITHERSBURG, MARYLAND 20878

NAME OF SUBMITTER:	STUART B. SHAPIRO
SIGNATURE:	/Stuart B. Shapiro/
DATE SIGNED:	12/17/2018

Total Attachments: 4

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PATENT REEL: 047794 FRAME: 0781

PATENT ASSIGNMENT

WHEREAS, IBM International Group B.V., a Dutch Private Limited Liability Company (referred to as "Company"), whose full post office address is Johan Huizingalaan 765, 1066 VH Amsterdam, the Netherlands, has ownership of the patent applications listed on Schedule A hereto, all patents which may issue therefrom, and all divisionals, reissues, substitutions, continuations, re-examinations and extensions thereof which may be pending in or granted by any patent office or forum throughout the world (referred to as the "Patents") and whereas Company owns all inventions disclosed and claimed in the Patents ("Inventions");

WHEREAS, IBM International C.V., a Dutch Limited Partnership (referred to as "IBM C.V."), whose full post office address is Johan Huizingalaan 765, 1066 VH Amsterdam, the Netherlands, desires to acquire the entire right, title and interest in and to the Inventions and Patents; and

NOW, THEREFORE, for good and valuable consideration, the receipt of which is hereby acknowledged, Company hereby transfers and assigns to IBM C.V. free and clear of all liens or other encumbrances, and hereby accepts the transfer and assignment of, the entire right, title, and interest of Company in and to the Patents and Inventions, and all rights of priority resulting from the filing of the Patents; and Company hereby authorizes and requests the Commissioner of Patents and any other relevant authority to issue all patents related to the Patents to IBM C.V. as assignee of Company's entire right, title and interest therein.

Company also hereby transfers and assigns to IBM C.V., and IBM C.V. hereby accepts the transfer and assignment of, any foreign rights to the Inventions and Patents, in all countries of the world, including the right to file applications, prosecute, and obtain patents under any treaty including the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, and of the European Patent Convention. Company agrees that this executed document is recordable evidence of such transfer and assignment and further agrees to perform at IBM C.V.'s expense, upon reasonable notice, such lawful acts and to execute any and all patent applications, assignments, affidavits, and any other papers in connection therewith necessary to perfect such foreign patent rights.

Upon the written request of IBM C.V., Company hereby further agrees that Company will sign all lawful papers, execute all divisional, continuation, reissue, re-examination, and substitute applications, make all lawful oaths, and provide reasonable assistance to aid IBM C.V., its successors, assigns and nominees to facilitate the prosecution and maintenance of the Patents in all countries of the world.

This transfer and assignment is effective as of January 24, 2018.

IN WITNESS WHEREOF, the parties hereto have executed this Patent Assignment by its respective duly authorized officer in their respective corporate names.

IBM International Group B.V.

IBM International C.V.

By: IBM Services B.V., its General Partner

By: Brendan Jon Turnbull

Title: Director

Date: December 5, 2018

By: Brendan Jon Turnbull

Title: Director

Date: December 5, 2018

SCHEDULE A

ISSUED PATENTS							
Patent No.	Grant Date	Application Number	Filed Date	App Title	Country	Current Owners	
9037533	2015-05-19	11/900222	2007-09-11	Network Interface for Distributed Intelligence Database System	USA	IBM International Group B.V.	
7089448	2006-08-08	10/667127	2003-09-18			IBM International Group B.V.	
8880551	2014-11-04	12/755052	2010-04-06	Field Oriented Pipeline Architecture for a Programmable Data Streaming Processor	USA	IBM International Group B.V.	
7146366	2006-12-05	10/653453	2003-09-02	Distributed Concurrency Control Using Serialization Ordering	USA	IBM International Group B.V.	
7433863	2008-10-07	10/887247	2004-07-07	Optimized Executable SQL Code Generator	USA	IBM International Group B.V.	
8171018	2012-05-01	12/287152	2008-10-06	SQL Code Generation for Heterogeneous Environment	USA	IBM International Group B.V.	
7430549	2008-09-30	10/886011	2004-07-07 Optimized Executable SQL Code Generator		USA	IBM International Group B.V.	
8805818	2014-08-12	12/763533	2010-04-20	Performing Sequence Analysis as a Multipart Plan Storing Intermediate Results as a Relation	USA	IBM International Group B.V.	
9183256	2015-11-10	10/944281	2004-09-17			IBM International Group B.V.	
9589018	2017-03-07	14/879140	2015-10-09	PERFORMING SEQUENCE ANALYSIS AS A RELATIONAL JOIN	USA	IBM International Group B.V.	
9679011	2017-06-13	15/158834	2016-05-19	PERFORMING SEQUENCE ANALYSIS AS A RELATIONAL JOIN	USA	IBM International Group B.V.	
9195695	2015-11-24	11/900931	2007-09-13			IBM International Group B.V.	
8286237	2012-10-09	10/780252	2004-02-17	Method and Apparatus to Detect Unauthorized Information Disclosure Via Content Anomaly Detection	USA	IBM International Group B.V.	
7673147	2010-03-02	10/950069	2004-09-24	Real-Time Mitigation of Data Access Insider Intrusions	USA	IBM International Group B.V.	
8880893	2014-11-04	10/950070	2004-09-24	Enterprise Information Asset Protection Through Insider Attack Specification Monitoring and Mitigation	USA	IBM International Group B.V.	

6125351	2000-09-26	09/080040	1998-05-15 System and Method for the Synthesis of an Economic Web and the Identification of		USA	IBM International Group B.V.
6842746	2005-01-11	09/507966	2000-02-22	New Market Niches 2000-02-22 Method and system for Use Enterprise Management Using Grammar Chips		IBM International Group B.V.
7272605	2007-09-18	10/145564	2002-05-13			IBM International Group B.V.
7337351	2008-02-26	10/885519	2004-07-06	Disk Mirror Architecture for Database Appliance	USA	IBM International Group B.V.
7010521	2006-03-07	10/145571	2002-05-13	Optimized Database Appliance	USA	IBM International Group B.V.
7464106	2008-12-09	11/332704	2006-01-13	Optimized Database Appliance	USA	IBM International Group B.V.
7921130	2011-04-05	12/288160	2008-10-15	Optimized Database Appliance	USA	IBM International Group B.V.
6831839	2004-12-14	10/090119	2002-02-28	2-02-28 Adjustable Sled Module for Mass Storage Devices		IBM International Group B.V.
7730077	2010-06-01	10/667203	2003-09-18	9-18 Intelligent Storage Device Controller		IBM International Group B.V.
7698338	2010-04-13	10/665726	2003-09-18	8 Intelligent Storage Device U Controller		IBM International Group B.V.
7529752	2009-05-05	10/666729	2003-09-18	9-18 Asymmetric Streaming Record Data Processor Method and Apparatus		IBM International Group B.V.
7577667	2009-08-18	10/668113	2003-09-18	Programmable Streaming Data Processor for Database Appliance having Multiple Processing Unit Groups	USA	IBM International Group B.V.
7634477	2009-12-15	10/667128	2003-09-18	Asymmetric Data Streaming Architecture having Autonomous and Asynchronous Job Processing Unit	USA	IBM International Group B.V.
7305386	2007-12-04	10/646522	2003-08-22	Controlling Visability in Multi- Version Database Systems	USA	IBM International Group B.V.
7089253	2006-08-08	10/653455	2003-09-02	Computer Method and System for Concurrency Control Using Serialization Ordering	USA	IBM International Group B.V.
7139783	2006-11-21	10/775766	2004-02-10	Materialized View Architecture	USA	IBM International Group B.V.
7702610	2010-04-20	10/944445	2004-09-17	Performing Sequence Analysis as a Multipart Plan	USA	IBM International Group B.V.

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				Storing Intermediate Results as a Relation		
7415719	2008-08-19	10/950073	2004-09-24	Policy Specification Framework for Insider Intrusions	USA	IBM International Group B.V.
7870598	2010-12-22	12/193136	2008-08-18	Policy Specification Framework for Insider Intrusions	USA	IBM International Group B.V.
6480814	2002-11-12	09/301615	1999-04-29	Method for Creating a Network Model of a Dynamic System of Interdependent Variables from System Observations	USA	IBM International Group B.V.
7707091	2010-04-27	09/868981	2002-06-25	System and Method for the Analysis and Prediction of Economic Markets	USA	IBM International Group B.V.
7752064	2010-07-06	11/087034	2005-03-22	System and Method for the Analysis and Prediction of Economic Markets	USA	IBM International Group B.V.
6995702	2006-02-07	09/822208	2001-04-02	Automatic Evolution of Mixed Analog and Digital Electronic Circuits	USA	IBM International Group B.V.
7835929	2010-11-16	10/220134	2003-05-05	Method and System for Managing a Portfelio	USA	IBM International Group B.V.

PATENT APPLICATIONS

Application Number	Filed Date	Patent No.	Grant Date	Cou	Current Owners	App Title
12/755996	2010-04-07		:	USA	IBM International Group B.V.	Appliance-based Parallelized Analytics of Data Auditing Events
12/755912	2010-04-07			USA	IBM International Group B.V.	Distributed Data Search, Audit and Analytics
09/345441	1999-07-01			USA	IBM International Group B.V.	Method and system for Enterprise Management Using Grammar Chips
29/156718	2002-02-28	D473197	2003- 04-15	USA	IBM International Group B.V.	Front Panel for a Circuit Sled Module

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