PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2859137

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
EXEGY INCORPORATED	05/09/2013

RECEIVING PARTY DATA

Name:	IP RESERVOIR, LLC
Street Address:	349 MARSHALL AVENUE, SUITE 100
City:	ST. LOUIS
State/Country:	MISSOURI
Postal Code:	63119

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14279856

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	57451-132388
NAME OF SUBMITTER:	BENJAMIN L. VOLK, JR.
SIGNATURE:	/Benjamin L. Volk, Jr./
DATE SIGNED:	05/16/2014

Total Attachments: 7
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ASSIGNMENT

WHEREAS, **Exegy Incorporated**, a corporation of the State of Delaware, having its principal place of business at 349 Marshall Ave., Suite 100, St. Louis, MO 63119 (hereinafter "Exegy"), owns the patents and patent applications identified on Schedule A attached hereto and the inventions disclosed therein (hereinafter, collectively, the "Patent Rights"); and

WHEREAS, **IP Reservoir, LLC**, a limited liability company of the State of Delaware, having its principal place of business at 349 Marshall Ave., Suite 100, St. Louis, MO 63119 (hereinafter "IPR"), is desirous of acquiring the entire right, title and interest in and to said Patent Rights.

NOW THEREFORE, in consideration of the sum of One Dollar ($1.00) to it in hand paid, and other good and valuable consideration, the receipt and adequacy of all of which are hereby acknowledged, Exegy has sold, assigned and transferred and does hereby sell, assign and transfer unto IPR, its successors or assigns, its entire right, title and interest in and to said Patent Rights and improvements as the same are disclosed in said Patent Rights, in and to any and all letters patent and applications filed therefor, including provisionals, non-provisionals, divisionals, continuations, reissues, reexaminations and extensions to be obtained therefor in the United States and all foreign countries, and the right to sue and collect damages for any past infringement of the Patent Rights; and it further agrees to cooperate with IPR in the obtaining and sustaining of any and all such letters patent of the Patent Rights as the assignee may desire to apply for.

The Commissioner of Patents or other proper official is hereby authorized and requested to issue said Patent Rights to IPR in accordance with this Assignment.

Exegy hereby authorizes and requests the attorneys of record in said Patent Rights to insert in this Assignment the serial number, filing date, and date of execution of any items of said Patent Rights for the purposes of recording this Assignment.

For said considerations, Exegy hereby agrees, upon the request of IPR, to execute any provisional, non-provisional, divisional, continuation, continuation-in-part or substitute application for said Patent Rights, and any oath or affidavit relating thereto, and any application for the reissue or extension of any letters patent that may be granted upon said Patent Rights, and, in the event of any application or letters patent of the Patent Rights becoming involved in an interference, to cooperate to the best of its ability in the matters of preparing and executing the preliminary statement and giving and producing evidence in support thereof. Exegy agrees to perform, upon request, any affirmative acts to obtain letters patent from the Patent Rights and vest in IPR all rights therein, whereby said Patent Rights will be held and enjoyed by IPR, to the full end of the term for which said Patent Rights may be granted as fully and entirely as the same would have been held and enjoyed by Exegy if this Assignment had not been made.

And for said consideration, Exegy hereby assigns to IPR the entire right, title and interest in said Patent Rights for all foreign countries, including all priority rights, and agrees to execute, at the request of IPR, all documents in connection with any application for foreign letters patent within the Patent Rights.

IN WITNESS WHEREOF, I have hereunto set my hand the _9th_ day of
May , 2013.

Exegy:

By: _____

Printed Name: _J. J. Skipp_

Title: _CEO_
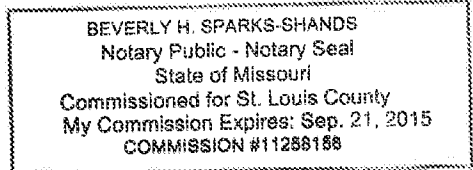
STATE OF _Missouri_ :

                              : SS

COUNTY OF _St. Louis_ :

     On this _9th_ day of _May_ 2013 before me, a Notary Public, within and
for the County of _St. Louis_ , State of _Missouri_ , personally
appeared the signer identified above, to me known to be the person described in and who
executed the foregoing assignment on behalf of Exegy and acknowledged that he executed same
as his free act and deed.

     IN TESTIMONY WHEREOF, I have hereunto set my hand and seal the date and year
last above written.

Beverly H Spark-Shands
Notary Public

My Commission Expires: _Sept 21 2015_

BEVERLY H. SPARKS-SHANDS
Notary Public - Notary Seal
State of Missouri
Commissioned for St. Louis County
My Commission Expires: Sep. 21, 2015
COMMISSION #11258188

WITNESS:

By: _Melanie Bath_

Printed Name: _Melanie Bath_

WITNESS:

By: _____

Printed Name: _Brandi McWhorter_

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<u>SCHEDULE A</u>

Jurisdiction	Patent No.	Application No.	Title	Status	TC Reference Number
USA	7,636,703	11/381,214	Method and Apparatus for Approximate Pattern Matching	Issued	44826-59522
PCT	N/A	PCT/US2007/067319	Method and Apparatus for Approximate Pattern Matching	Expired	44826-68356
CA	N/A	2650571	Method and Apparatus for Approximate Pattern Matching	Pending	44826-79499
EP	N/A	07761209.1	Method and Apparatus for Approximate Pattern Matching	Pending	44826-79501
EP	N/A	11176040.1	Method and Apparatus for Approximate Pattern Matching	Pending	44826-97853
JP	N/A	2009-509952	Method and Apparatus for Approximate Pattern Matching	Allowed	44826-79502
USA	7,702,629	11/293,619	Method and Device for High Performance Regular Expression Pattern Matching	Issued	44826-59189
USA	7,945,528	12/703,388	Method and Device for High Performance Regular Expression Pattern Matching	Issued	44826-88116
PCT	N/A	PCT/US2006/045653	Method and Device for High Performance Regular Expression Pattern Matching	Expired	44826-64930
AU	2006320643	2006320643	Method and Device for High Performance Regular Expression Pattern Matching	Issued	44826-75332
CA	N/A	2629618	Method and Device for High Performance Regular Expression Pattern Matching	Allowed	44826-75333
EP	N/A	06838554.1	Method and Device for High Performance Regular Expression Pattern Matching	Pending	44826-75334
JP	N/A	2008-543412	Method and Device for High Performance Regular Expression Pattern Matching	Allowed	44826-75335
USA	N/A	60/785,821	Method and System for High Throughput Blockwise Independent Encryption/Decryption	Expired	44826-66955
USA	7,739,341	11/690,034	Method and System for High Throughput Blockwise Independent Encryption/Decryption	Issued	44826-67649
USA	N/A	13/759,227	Method and System for High Throughput Blockwise Independent Encryption/Decryption	Pending	44826-11197%
PCT	N/A	PCT/US2007/064712	Method and System for High Throughput Blockwise Independent Encryption/Decryption	Expired	44826-67650
USA	N/A	60/814,796	High Speed Processing of Financial Information Using FPGA Devices	Expired	44826-62269
USA	7,921,046	11/765,306	High Speed Processing of Financial Information Using FPGA Devices	Issued	44826-69254
USA	8,407,122	13/076,906	High Speed Processing of Financial Information Using FPGA Devices	Issued	44826-95688
USA	N/A	13/076,929	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-95685
USA	N/A	13/076,951	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-95686
USA	N/A	13/076,968	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-94016

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USA	N/A	13/076,982	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-95685
USA	N/A	13/077,036	High Speed Processing of Financial Information Using FPGA Devices	Allowed	44826-94611
USA	N/A	13/077,221	High Speed Processing of Financial Information Using FPGA Devices	Allowed	44826-95687
USA	N/A	13/077,294	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-95684
PCT	N/A	PCT/US2008/066929	High Speed Processing of Financial Information Using FPGA Devices	Expired	44826-75662
CA	N/A	2691239	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-86882
EP	N/A	08771027.3	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-86885
JP	N/A	2010-513345	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-86884
USA	7,840,482	11/760,211	Method and System for High Speed Options Pricing	Issued	44826-64581
USA	N/A	12/912,354	Method and System for High Speed Options Pricing	Pending	44826-92188
PCT	N/A	PCT/US2008/065955	Method and System for High Speed Options Pricing	Expired	44826-78310
CA	N/A	2688502	Method and System for High Speed Options Pricing	Pending	44826-86247
EP	N/A	08756734.3	Method and System for High Speed Options Pricing	Pending	44826-86246
JP	N/A	2010-511333	Method and System for High Speed Options Pricing	Pending	44826-86248
USA	N/A	60/865,629	Method and System for High Performance Processing of Structured and Unstructured Enterprise Data Using FPGA Devices	Expired	44826-64582
USA	7,660,793	11/938,709	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Issued	44826-72530
USA	8,156,101	12/640,891	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Issued	44826-86209
USA	N/A	13/442,442	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Pending	44826-102539
PCT	N/A	PCT/US2007/084466	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Expired	44826-72534
EP	N/A	07845066.5	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Pending	44826-82943
JP	N/A	2009-536536	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Pending	44826-82942
USA	8,326,819	11/938,732	Method and System for High Performance Data Metatagging and Data Indexing Using Coprocessors	Issued	44826-65592
USA	N/A	13/686,338	Method and System for High Performance Pattern Indexing	Pending	44826-108515
PCT	N/A	PCT/US2007/084464	Method and System for High Performance Data Metatagging and Data Indexing Using Coprocessors	Expired	44826-72692

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EP	N/A	07845064.0	Method and System for High Performance Data Metatagging and Data Indexing Using Coprocessors	Pending	44826-82945
JP	N/A	2009-536935	Method and System for High Performance Data Metatagging and Data Indexing Using Coprocessors	Pending	44826-82944
USA	N/A	60/969,384	Method and Apparatus for Hardware-Accelerated Encryption with Integrated Key Management	Expired	44826-70268
USA	N/A	12/201,259	Method and Apparatus for Hardware-Accelerated Encryption/Decryption	Pending	44826-77928
PCT	N/A	PCT/US2008/074862	Method and Apparatus for Hardware-Accelerated Encryption/Decryption	Expired	44826-78092
EP	N/A	08798092.7	Method and Apparatus for Hardware-Accelerated Encryption/Decryption	Pending	44826-87861
USA	N/A	12/013,302	Method and System for Low Latency Basket Calculation	Pending	44826-72354
PCT	N/A	PCT/US2009/030623	Method and System for Low Latency Basket Calculation	Expired	44826-80628
CA	N/A	2707044	Method and System for Low Latency Basket Calculation	Pending	44826-90086
EP	N/A	09700515.9	Method and System for Low Latency Basket Calculation	Pending	44826-90087
JP	N/A	2010-542380	Method and System for Low Latency Basket Calculation	Pending	44826-90089
USA	8,374,986	12/121,473	Method and System for Accelerated Stream Processing	Issued	44826-72736
USA	N/A	13/759,430	Method and Apparatus for Accelerated Data Quality Checking	Pending	44826-110621
PCT	N/A	PCT/US2009/043759	Method and System for Accelerated Stream Processing	Expired	44826-82590
UK	N/A	1019313.4	Method and System for Accelerated Stream Processing	Allowed	44826-93508
USA	N/A	61/122,673	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Expired	44826-80492
PCT	N/A	PCT/US2009/067935	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Expired	44826-86878
USA	N/A	13/132,408	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-96839
USA	N/A	13/154,804	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-97231
USA	N/A	13/154,824	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-97232
CA	N/A	2744746	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-96836
EP	N/A	09836816.0	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-96835
JP	N/A	2011-540957	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-96837
USA	N/A	61/421,545	Method and Apparatus for Managing Orders in Financial Markets	Expired	44826-94012

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USA	N/A	13/316,332	Method and Apparatus for Managing Orders in Financial Markets	Pending	44826-100986
PCT	N/A	PCT/US2011/064629	Method and Apparatus for Managing Orders in Financial Markets	Pending	44826-100988
USA	N/A	61/570,670	Method and Apparatus for Low Latency Data Distribution	Expired	44826-93272
USA	N/A	13/440,118	Method and Apparatus for Low Latency Data Distribution	Pending	44826-93273
PCT	N/A	PCT/US2012/69142	Method and Apparatus for Low Latency Data Distribution	Pending	44826-103589
USA	N/A	61/616,181	Offload Processing of Data Packets Containing Financial Information	Expired	44826-102934
USA	N/A	13/833,098	Offload Processing of Data Packets Containing Financial Information	Pending	44826-112414
USA	N/A	61/790,254	Offload Processing of Data Packets	Pending	44826-112496
PCT	N/A	PCT/US2013/33889	Offload Processing of Data Packets	Pending	44826-112537
USA	N/A	10/550,326	Intelligent Data Storage and Processing Using FPGA Devices	Abandoned	53047-57265
USA	N/A	13/165,155	Intelligent Data Storage and Processing Using FPGA Devices	Allowed	53047-97426
PCT	N/A	PCT/US2004/016021	Intelligent Data Storage and Processing Using FPGA Devices	Expired	53047-48386
AU	N/A	2004272466	Intelligent Data Storage and Processing Using FPGA Devices	Abandoned	53047-57369
CA	N/A	2522862	Intelligent Data Storage and Processing Using FPGA Devices	Abandoned	53047-57368
CA	N/A	2759064	Intelligent Data Storage and Processing Using FPGA Devices	Pending	53047-100065
EP	N/A	04752943.3	Intelligent Data Storage and Processing Using FPGA Devices	Pending	53047-57367
EP	N/A	12165819.9	Intelligent Data Storage and Processing Using FPGA Devices	Pending	53047-103889
JP	N/A	2006-514319	Intelligent Data Storage and Processing Using FPGA Devices	Abandoned	53047-57366
USA	7,954,114	11/339,892	Firmware Socket Module for FPGA-Based Pipeline Processing	Issued	44826-59523
PCT	N/A	PCT/US2007/060835	Firmware Socket Module for FPGA-Based Pipeline Processing	Expired	44826-65332
AU	N/A	2007208128	Firmware Socket Module for FPGA-Based Pipeline Processing	Abandoned	44826-75663
CA	N/A	2640040	Firmware Socket Module for FPGA-Based Pipeline Processing	Pending	44826-75664
EP	1,994,474 B1	07762449.2	Firmware Socket Module for FPGA-Based Pipeline Processing †	Issued	44826-75665
JP	N/A	2008-552538	Firmware Socket Module for FPGA-Based Pipeline Processing	Pending	44826-75666

†Validated in DE, FR, GB

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