502526349 10/09/2013

PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT2571573

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 AVE., SUITE 100
City:	ST. LOUIS
State/Country:	MISSOURI
Postal Code:	63119

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14049591

CORRESPONDENCE DATA

Fax Number: (314)667-3633 Phone: 314-552-6000

IPDOCKET@THOMPSONCOBURN.COM Email: Correspondence will be sent via US Mail when the email attempt is unsuccessful.

Correspondent Name: THOMPSON COBURN LLP Address Line 1: ONE US BANK PLAZA

Address Line 2: **SUITE 3500**

Address Line 4: ST LOUIS, MISSOURI 63101

ATTORNEY DOCKET NUMBER:	44826-126700
NAME OF SUBMITTER:	BENJAMIN L. VOLK, JR.
Signature:	/Benjamin L. Volk, Jr./
Date:	10/09/2013

PATENT

REEL: 031373 FRAME: 0075

Total Attachments: 7 source=Assignment2#page1.tif source=Assignment2#page2.tif source=Assignment2#page3.tif source=Assignment2#page4.tif source=Assignment2#page5.tif source=Assignment2#page6.tif source=Assignment2#page7.tif

PATENT

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.

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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.

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IN WITNESS WHEREOF, I have	hereunto set my hand the 9th day of
	Exegy:
	Ву:
	Printed Name: J.J. 5 Kgg
	Title:
STATE OF MISSOURI	
COUNTY OF St. Lauis	: SS :
On this Hay of MAY for the County of St. Laus appeared the signer identified above, to me	2013 before me, a Notary Public, within and State of, personally known to be the person described in and who of Exegy and acknowledged that he executed same
IN TESTIMONY WHEREOF, I have last above written.	hereunto set my hand and seal the date and year
	Bevery H Spare-Shands Notary Public
My Commission Expires: Sept 2120	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:	WITNESS
By: <u>Marie Bath</u> Printed Name: Melanie Bath	Ву:
Printed Name: Melanie Bath	Printed Name: Brandi MWWooder

SCHEDULE A

Jurisdiction	Patent No.	Application No.	Tide	Status	TC Reference Number
USA	2,636,703	11/381,214	Method and Apptrains for Approximate Pattern Matching	Issued	44826-59522
PCT	N/A	PC1/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
MP.	S/A	07761209.1	Method and Apparatus for Approximate Pattern Maishing	Fending	44826-79501
EP	B/A	11176040.1	Method and Apparatus for Approximate Pattern Manking	Pending	44826-97853
JP	N/A	2009-509952	Method and Apparatus for Approximate Pattern Malohing	Allowed	44826-79502
USA	7,702,629	11/293,619	Method and Dance for High Performence Regular Expression Pettern Matching	İssued	44826-59149
USA	7,940,528	12/793,388	Method and Device for High Portomance Pogular Expression Pattern Matching	fesued	44826-88116
PCI	N/A	PC PAUSZ056/04/56/53	Method and Device for High Portomance Regular Expression Pattern Matching	Expired	44829-64930
AU	2006320643	2/063/0645	Medical and Device for High Performance Regular Expression Pattern Matching	Insued	44829-75332
ea -	N/A	2625618	Method and Device for High Performance Regular Expression Pattern Matching	Allowed	44826-75333
832	N/A	06838354.1	Medical and Device for High Performance Regular Expression Pattern Maiching	Pending	44826-75334
JP	N/A	2008-543412	Melted and Device for High Performance Regular Expression Pattern Matching	Allowed	44825-75335
USA	N/A	60/785,821	Medied and System for High Throughput Blockwise Independent Encryption/Decryption	Expired	44826-66955
USA	8,379,841	117690,034	Method and System for High Throughput Blockwise Independent Encryption/Decryption	Iszued	44826-67649
Web.	N/A	13/759,227	Method and System for High Throughpur Blockwise Independent Encryphon/Decryption	Pending	44826-111078
PCT	N/A	PC17U82607/064712	Method and System for High Throughput Blockwise Independent Encryptios/Decryption	Expired	44826-67650
OSA	N/A	60/814,796	High Speed Processing of Pinancial Information Using PPGA Devices	Ехриед	44826-62269
USA	7,921,046	11/765,306	High Speed Processing of Financial Information Using FPCiA Devices	lssued	44826-69254
USA	8,407,122	13/076,906	High Speed Processing of Financial Information Using FPCiA Devices	laşued	44826-95688
WSX	N/A	137076,929	High Speed Processing of Financial Information Using FPCIA Devices	Pending	44826-95689
USA	707A	13/076,951	High Speed Processing of Plasmont Information Using PPGA Devices	Pending	44826-95686
USA	N/A	13/676,968	High Speed Processing of Financial Information Using PPGA Devices	Pending	44826-94010

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USA	N/A	13/076,982	Righ Speed Processing of Financial Information Using FPGA Devices	Pending	44826-95685
USA	N/A	13/077,036	High Spead Processing of Financial Information Uning FPGA Devices	Allowed	44826-94011
USA	N/A	13/077,224	Righ Speed Processing of Financial Information Using PPGA Devices	Allowed	44826-95687
USA	N/A	13/077,294	High Speed Processing of Emancial Information Using FPOA Devices	Pending	44826-95684
PCT	N/A/	PC17/US2008/066929	Pigh Speed Processing of Financial Information Using FPGA Devices	Expired	44826-75662
CA	N/A	2691229	High Speed Processing of Financial Information Using FPGA Devices	Pending	44826-86882
	N/A	08771027:3	Righ Speed Processing of Financial Information Using FPGA Devices	Pending	44826-86885
jp	N/A	2010-513345	Bigh Speed Processing of Financial Information Using FPGA Devices	Pending	44825-86884
USA	7,840,482	11/760,211	Method and System for High Speed Options Pricing	fesued	44826-64381
USA	N/A	12/912,354	Method and System for High Speed Options Priving	Pending	44825-92188
PCY	N/A	PCT/U\$2008/065958	Method and System for High Speed Options Prising	Expired	44826-76310
CA	N/A	2688502	Method and System for High Speed Options Pricing	Pending	44826-86247
E1£1	N/A	08756794,3	Method and System for High Speed Options Pricing	Pending	44826-86246
19	t/A	2010-511331	Method and System for High Speed Options Pricing	Pending	44826-86248
USA	N/A	507865,629	Method and System for High Performance Processing of Structured and Unstructured Enterprise Data Using FPGA Devices	Expired	44826-64582
WEU	7,660,793	11/938,709	sibed and System for High Performance Ortegration, Processing and Searching of Structured and structured Data Using Coprocession		44826-72530
USA	8,156,101	T27640,E91	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Coprocessors	Issued	44826-86209
OSA	N7A	13/442,442	Method and System for High Performance Integration, Processing and Searching of Structured and Unstructured Data Using Cogmicionary	Pending	44826-102539
PCT	N/A	PCT/US2007/084466	Method and System for High Performance integration, Processing and Searching of Structured and Union Confederates	Expired	44826-72534
EP	N/A	07845066,5	Method and System for High Performance Integration, Processing and Seambing of Structured and Unsured Data Using Cognitionators		44826-82943
iiipiiiiii	N/A	2609-536536	Method and System for High Performence tabignation, Processing and Searching of Situationed and Uniterestrated Bala Using Copressessors		44826-82942
USA	8,326,819	11/938,732	Method and System for High Performance Data Metatagging and Data Indexing Using Coprocessors	fasued	44826-65592
USA	N/A	13/686,338	Method and System for High Porformance Pettern Indextog	Persing	44826-108515
8CT	:N/A	PC7/US2007/084464	Method and System for High Performance Data Metatogging and Data Indexing Using Coprocessors	Espired	44826-72692

8P	N/A	07845064,0	Method and System for High Performance Data Mataisaging and Data Indexing Using Coprocessors	Pending	44826-82945
IP.	N/A	2009-536535	Method and System for High Performance Data Metalagging and Data Inducing Using Coprocessors	Pending	44826-82944
	N/A	60/969,384	Method and Apperatus for Hardwers-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	PCY/US2608/074862	Method and Apparatus for Hardware-Accelerated Encryption/Decryption	Expired	44826-78092
3319	N/A	087989927	Method and Apparatus for Hardware-Accelerated Encryption/Decryption	Pending	44826-87861
OSA	N/A	(2/013,302	Metflod and System for Low Latency Basker Calculation	Pending	44826-72554
PC3	TM/A	PC17/US2/109/030623	Method and System for Low Latency Basker Calculation	Expired	44826-80628
ČA.	TIVA	2707044	Method and System for Low Latency Basket Calculation	Pending	44826-90086
EF	N/A	69700535.9	Method and System for Low Latency Basket Calculation	Pending	44826-90087
<u></u>	IVA	2010-542386	Method and System for Low Latency Basket Colouistion	Pending	44826-90089
USA	8,374,986	12/121,473	Method and System for Accelerated Streem Processing	Issued	44826-72736
USA	N/A	13/759,430	Method and Apparators for Accelerated Data Quality Checking	Pending	44826-110621
PCT	N/A	PC7/US2009/043759	Method and System for Accelerated Stream Processing	Expired	44826-82596
UK	N/A	1019313.4	Method and System for Accelerated Stream Processing	Affowed	44826-93508
USA	- N/A	207122,673	Method and Apparatus for High Speed Processing of Financial Merket Depth Data	Expired	44826-89492
PCT	TN/A	PCT/US2009/067935	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Expired	44826-86878
USA	T:N/A	13/132,408	Mothod and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-96839
USA	TN/A	13/154,804	Mothod and Apparetus for High Speed Processing of Financial Market Depth Data	Pending	44826-97251
USA	N/A	13/154,824	Method and Apparatus for Bigh Speed Processing of Financial Market Depth Data	Pending	44826-97232
ČÁ	N/A	2744746	Method and Apparatus for High Speed Processing of Financial Market Depth Dists	Pending	44826-96836
<u>E</u> B	N/X	09836816.0	Method and Apparatus for High Speed Processing of Financial Market Depth Data	Pending	44826-96835
	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 Managong Orders in Financial Mathets	Excited	44826-94012

UNA	N/A	13/316,332	Medical and Apparatus for Managing Orders in Financial Markets	Pending	44826-100986
PCT	N/A	PCT/US2011/064629	Method and Apperatos for Managing Orders in Financial Markets	Pending	44826-100988
USA		61/579,670	Method and Apperatos for Low Latency Data Distribution	Expired	44826-93272
USA	T WA	13/440,118	Method and Apparatus for Low Latency Data Distribution	Pending	44826-93223
FCT	NA.	PCV/082/112/69142	Method and Apparatos for Low Latency Data Distribution	Pending	44826-108589
USA		61/616,181	Official Processing of Dela Packets Constroing Financial Information	Expired	44826-102934
USA	N/A	13/833.098	Officed Processing of Data Packets Containing Financial Information	Pending	44826-112414
UŠĀ	TN/A	61/790,254	Official Processing of Data Packets	Pending	44826-112496
PÉT	N/A	PC1/U82013/33889	Official Processing of Deta Pachols	Pending	44626-112537
USA		10/550,326	Intelligent Data Statage and Processing Using FPOA Devices	Abandoned	33047-57363
USA	N/A	13/165,155	Intelligent Data Storage and Processing Using FPGA Devices	Allowed	33047-97426
PCT	N/A	PC1/U82004/016021	Intelligent Data Strage and Processing Using FPGA Devices	Expired	53647-48386
AU	N/A	2004273496	Intelligent Data Stronge and Processing Using NPGA 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	Seodiog	53647-100065
Eb	N/A	04752943,3	Intelligent Data Storage and Processing Using FPGA Devices	Panding	53047-57367
EP	N/A	12165819.9	Intelligent Data Storage and Processing Using FPGA Devices	Panding	53647-103889
JP	,N/A	2005-514919	Intelligent Data Storage and Processing Using PPCIA Devices	Abandoned	53047-57366
USA	7,954,114	11/339,892	Firmwere Booket Module for PPGA-Based Pipeline Processing	Yssued	44826-59523
PCT	N/A	PCT/052007/060835	Firmware Socket Module for PPGA-Based Pipeline Processing	Expired	44826-63332
At)	N/A	2007208128	Firmware Socket Medule for PPGA-Based Pipeline Processing	Abandoned	44826-75663
CA.	N/A	2540140	Firmwere Socket Module for FPGA-Based Pipeline Processing	Pending	44826-75664
EF	1994,474 81	07762449.2	Firmware Socket Models for FPGA-Based Pipeline Processing 🕈	Issued	44826-75665
	WA	2008-352538	Firmware Socket Module for FPGA-Based Pipeline Processing	Pending	44826-75666

†Validated in DE, FR, GB