508030805 07/26/2023

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT8077956

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

### **CONVEYING PARTY DATA**

Name	Execution Date
HEWLETT-PACKARD LIMITED	07/01/2021

## **RECEIVING PARTY DATA**

Name:	Hewlett Packard Enterprise Development LP			
Street Address:	1701 East Mossy Oaks Road			
City:	Spring			
State/Country:	TEXAS			
Postal Code:	77389			

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	18168430

## **CORRESPONDENCE DATA**

### Fax Number:

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: (970) 898-6588
Email: hpe.ip.mail@hpe.com

Correspondent Name: HEWLETT PACKARD ENTERPRISE
Address Line 1: 3404 E. HARMONY ROAD MS 79
Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER:	710226870US02CON
NAME OF SUBMITTER:	LAURA M. ZAVALA
SIGNATURE:	/Laura M. Zavala/
DATE SIGNED:	07/26/2023

## **Total Attachments: 149**

source=HPL\_HPED\_Assignment#page1.tif source=HPL\_HPED\_Assignment#page2.tif source=HPL\_HPED\_Assignment#page3.tif source=HPL\_HPED\_Assignment#page4.tif source=HPL\_HPED\_Assignment#page5.tif source=HPL\_HPED\_Assignment#page6.tif

> PATENT REEL: 064385 FRAME: 0367

508030805

source=HPL_HPED_Assignment#page7.tif	
source=HPL_HPED_Assignment#page8.tif	
source=HPL_HPED_Assignment#page9.tif	
source=HPL_HPED_Assignment#page10.tif	
source=HPL_HPED_Assignment#page11.tif	
source=HPL_HPED_Assignment#page12.tif	
source=HPL_HPED_Assignment#page13.tif	
source=HPL_HPED_Assignment#page14.tif	
source=HPL_HPED_Assignment#page15.tif	
source=HPL_HPED_Assignment#page16.tif	
source=HPL_HPED_Assignment#page17.tif	
source=HPL_HPED_Assignment#page18.tif	
source=HPL_HPED_Assignment#page19.tif	
source=HPL_HPED_Assignment#page20.tif	
source=HPL_HPED_Assignment#page21.tif	
source=HPL_HPED_Assignment#page22.tif	
source=HPL_HPED_Assignment#page23.tif	
source=HPL_HPED_Assignment#page24.tif	
source=HPL_HPED_Assignment#page25.tif	
source=HPL_HPED_Assignment#page26.tif	
source=HPL_HPED_Assignment#page27.tif	
source=HPL_HPED_Assignment#page28.tif	
source=HPL_HPED_Assignment#page29.tif	
source=HPL_HPED_Assignment#page30.tif	
source=HPL_HPED_Assignment#page31.tif	
source=HPL_HPED_Assignment#page32.tif	
source=HPL_HPED_Assignment#page33.tif	
source=HPL_HPED_Assignment#page34.tif	
source=HPL_HPED_Assignment#page35.tif	
source=HPL_HPED_Assignment#page36.tif	
source=HPL_HPED_Assignment#page37.tif	
source=HPL_HPED_Assignment#page38.tif	
source=HPL_HPED_Assignment#page39.tif	
source=HPL_HPED_Assignment#page40.tif	
source=HPL_HPED_Assignment#page41.tif	
source=HPL_HPED_Assignment#page42.tif	
source=HPL_HPED_Assignment#page43.tif	
source=HPL_HPED_Assignment#page44.tif	
source=HPL_HPED_Assignment#page45.tif	
source=HPL_HPED_Assignment#page46.tif	
source=HPL_HPED_Assignment#page47.tif	
source=HPL_HPED_Assignment#page48.tif	
source=HPL_HPED_Assignment#page49.tif	
source=HPL_HPED_Assignment#page50.tif	
source=HPL_HPED_Assignment#page51.tif source=HPL HPED Assignment#page52.tif	
source=HPL_HPED_Assignment#page52.tif	
source=HPL HPED Assignment#page53.tif	
σοσισο-τη ε_τη ευ_Λοσιβιπιστιπραθέστει	DATENT

source=HPL_HPED_Assignment#page55.tif	
source=HPL_HPED_Assignment#page56.tif	
source=HPL_HPED_Assignment#page57.tif	
source=HPL_HPED_Assignment#page58.tif	
source=HPL_HPED_Assignment#page59.tif	
source=HPL_HPED_Assignment#page60.tif	
source=HPL_HPED_Assignment#page61.tif	
source=HPL HPED Assignment#page62.tif	
source=HPL_HPED_Assignment#page63.tif	
source=HPL HPED Assignment#page64.tif	
source=HPL_HPED_Assignment#page65.tif	
source=HPL_HPED_Assignment#page66.tif	
source=HPL HPED Assignment#page67.tif	
source=HPL_HPED_Assignment#page68.tif	
source=HPL_HPED_Assignment#page69.tif	
source=HPL_HPED_Assignment#page70.tif	
source=HPL_HPED_Assignment#page71.tif	
source=HPL_HPED_Assignment#page72.tif	
source=HPL_HPED_Assignment#page73.tif	
source=HPL_HPED_Assignment#page74.tif	
source=HPL_HPED_Assignment#page75.tif	
source=HPL_HPED_Assignment#page76.tif	
source=HPL_HPED_Assignment#page77.tif	
source=HPL_HPED_Assignment#page78.tif	
source=HPL_HPED_Assignment#page79.tif	
source=HPL_HPED_Assignment#page80.tif	
source=HPL_HPED_Assignment#page81.tif	
source=HPL_HPED_Assignment#page82.tif	
source=HPL_HPED_Assignment#page83.tif	
source=HPL_HPED_Assignment#page84.tif	
source=HPL_HPED_Assignment#page85.tif	
source=HPL_HPED_Assignment#page86.tif	
source=HPL_HPED_Assignment#page87.tif	
source=HPL_HPED_Assignment#page88.tif	
source=HPL_HPED_Assignment#page89.tif	
source=HPL_HPED_Assignment#page90.tif	
source=HPL_HPED_Assignment#page91.tif	
source=HPL_HPED_Assignment#page92.tif	
source=HPL_HPED_Assignment#page93.tif	
source=HPL_HPED_Assignment#page94.tif	
source=HPL_HPED_Assignment#page95.tif	
source=HPL_HPED_Assignment#page96.tif	
source=HPL_HPED_Assignment#page97.tif	
source=HPL_HPED_Assignment#page98.tif	
source=HPL_HPED_Assignment#page99.tif	
source=HPL_HPED_Assignment#page100.tif	
source=HPL_HPED_Assignment#page101.tif	
source=HPL_HPED_Assignment#page102.tif	
	DATENT

source=HPL HPED Assignment#page103.tif
source=HPL_HPED_Assignment#page104.tif
source=HPL HPED Assignment#page105.tif
source=HPL HPED Assignment#page106.tif
source=HPL_HPED_Assignment#page107.tif
source=HPL_HPED_Assignment#page108.tif
source=HPL HPED Assignment#page109.tif
source=HPL HPED Assignment#page110.tif
source=HPL_HPED_Assignment#page111.tif
source=HPL_HPED_Assignment#page112.tif
source=HPL_HPED_Assignment#page113.tif
source=HPL_HPED_Assignment#page114.tif
source=HPL_HPED_Assignment#page115.tif
source=HPL HPED Assignment#page116.tif
source=HPL HPED Assignment#page117.tif
source=HPL_HPED_Assignment#page118.tif
source=HPL_HPED_Assignment#page119.tif
source=HPL_HPED_Assignment#page120.tif
source=HPL_HPED_Assignment#page121.tif
source=HPL_HPED_Assignment#page122.tif
source=HPL_HPED_Assignment#page123.tif
source=HPL_HPED_Assignment#page124.tif
source=HPL_HPED_Assignment#page125.tif
source=HPL_HPED_Assignment#page126.tif
source=HPL_HPED_Assignment#page127.tif
source=HPL_HPED_Assignment#page128.tif
source=HPL_HPED_Assignment#page129.tif
source=HPL_HPED_Assignment#page130.tif
source=HPL_HPED_Assignment#page131.tif
source=HPL_HPED_Assignment#page132.tif
source=HPL_HPED_Assignment#page133.tif
source=HPL_HPED_Assignment#page134.tif
source=HPL_HPED_Assignment#page135.tif
source=HPL_HPED_Assignment#page136.tif
source=HPL_HPED_Assignment#page137.tif
source=HPL_HPED_Assignment#page138.tif
source=HPL_HPED_Assignment#page139.tif
source=HPL_HPED_Assignment#page140.tif
source=HPL_HPED_Assignment#page141.tif
source=HPL_HPED_Assignment#page142.tif
source=HPL_HPED_Assignment#page143.tif
source=HPL_HPED_Assignment#page144.tif
source=HPL_HPED_Assignment#page145.tif
source=HPL_HPED_Assignment#page146.tif
source=HPL_HPED_Assignment#page147.tif
source=HPL_HPED_Assignment#page148.tif
source=HPL_HPED_Assignment#page149.tif

#### AMENDED AND RESTATED PATENT ASSIGNMENT

This AMENDED AND RESTATED PATENT ASSIGNMENT (this "Assignment"), dated as of the 1st of June, 2021, is entered into by and between Hewlett-Packard Limited, a private company limited by shares and organized under the laws of England and Wales ("Assignor"), and Hewlett Packard Enterprise Development LP, a limited partnership organized under the laws of the State of Texas, United States of America, with a place of business at 11445 Compaq Center Drive West, Houston, TX 77707 ("Assignee"). Assignor and Assignee are referred to herein individually as a "Party" and collectively as the "Parties".

#### RECITALS

WHEREAS, Assignor and Assignee are parties to that certain *Patent Assignment*, effective the 1st of April, 2020 (the "Original Agreement"), pursuant to which Assignee is assigned and acquires from time to time all legal title in and to patents and patent applications developed or created by Assignor, including but not limited to the patents and patent applications set forth on Exhibit A attached thereto (as may be amended, supplemented or otherwise modified from time to time).

WHEREAS, the Parties desire to amend and restate the Original Agreement to insert a revised list of patents and patent applications (collectively the "Patents") on an updated Exhibit A by entering into this Agreement on the terms and conditions set forth herein.

WHEREAS, the Parties hereto wish to record such Patents.

WHEREAS, the Parties hereto intend and agree that the terms of this Assignment are consistent with the past practices of the Parties with respect to the transactions contemplated hereunder for the period beginning as of the date first written above and that the terms of this Assignment apply as of such date.

NOW, THEREFORE, for good and valuable consideration, the adequacy and receipt of which are hereby acknowledged, the Parties agree as follows:

- 1. Assignor hereby assigns to Assignee all right, title, and interest, throughout the world, in and to the Patents set forth on Exhibit A, including, without limitation, the right to sue for injunctive relief and damages (including based on provisional rights related to published patent applications among the Patents) for infringement of any of the Patents accruing at any time prior to, and the right (where applicable) to file applications under the Paris Convention corresponding to or based on any of the applications for the Patents and to claim priority from such applications and to file national phase, regional phase, continuation, continuation-in-part and divisional applications based on the Patents.
- 2. Assignor hereby authorizes and requests the competent authorities to record this Assignment and to grant and issue any and all registrations of the Patents set forth on <u>Exhibit A</u> throughout the world to Assignee, its successors, or assigns, whose rights, title, and interests in such registrations are the same as would have been held and enjoyed by Assignor had this Assignment not been made.
- 3. Assignor will, and will ensure that any other necessary party will, execute all such documents and do all such acts and things as may be required by Assignee for securing and perfecting the assignment of the Patents set forth on Exhibit A in accordance with this Assignment.
- This Assignment will be binding upon the Parties and their successors and assigns.

IC16929 I Confidential

A&R Patent Assignment (R&D Agmt)) (Short Form) (dated 1 June 2021)
Between Hewlett-Packard Limited (GB00 / GB40), as Assignor, and HPED, as Assignee

- 5. The Parties agree that <u>Exhibit A</u> may be updated from time to time by the Parties without written consent to reflect any changes to the list of Patents on <u>Exhibit A</u>. A copy of the updated Exhibit A may be found on the HPE SharePoint website.
- 6. This Assignment may be executed simultaneously in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. This Assignment may be executed by facsimile or .pdf signature, and a facsimile or .pdf signature will constitute an original for all purposes.
- 7. This Agreement will be governed in all respects by the laws of the State of Delaware, United States of America, without reference to any choice of law provisions. Any dispute between the parties shall be subject to the exclusive jurisdiction of the Federal Court of the District of Delaware. The parties agree that United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement.

IN WITNESS WHEREOF the Parties have executed this Assignment by their duly authorized representatives as of the date first written above:

	viett Packard Enterprise Development LP Enterprise DC Holdings LLC, its General ner	Hewlett-Packard Limited	
Ву:	<u>Aarnir Hag</u> Ammo Hag (2011, 2011, 15:52 (COT)	By: P. A. Oram	
·	(Signature)	(Signature)	***************************************
	Asmir Haq	Philippa Anne Oram	
	(Name)	(Name)	
	Manager	Director	
	(Title)	(Title)	
	07/01/2021	07/01/2021	
	(Execution Date)	(Execution Date)	~~~~~

IC16929 2 Confidential

# **EXHIBIT A**

Patent Id	Status	Patent Number	Filing Date	Grant Date	Application Number	Terr Code	Title
200703983-3	Abandoned		3/10/2008		PI0821182-5	BR	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
							Two-phase Optical Communication Methods And Optical Bus Systems For
200703983-5	Filed		3/10/2008		6260/DELNP/2010	IN	Implementing The Same METHOD AND APPARATUS FOR INCREASING THE SPEED OF SUCCESSFUL ENTANGLEMENT CREATION AND QUANTUM REPEATER
200903065IN01	Filed		10/26/2009		9070/CHENP/2011	IN	USING THE SAME
200903705EP01	Closed	2517058	12/21/2009	7/15/2020	09852671.8	EP	CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC
700217925IN01	Abandoned		10/29/2014		5401/CHE/2014	IN	DATA RESTORATION USING ALLOCATION MAPS
							SNAPSHOT STORAGE
700221119IN01	Abandoned		7/31/2015		3949/CHE/2015	IN	MANAGEMENT
71022358201	Issued	10,776,210	9/30/2016	9/15/2020	15/281,910	US	RESTORATION OF CONTENT OF A VOLUME
		10770 1170	0.0724		201200070222		
700212379CN01	Issued	105594170	8/9/2013	6/16/2020	201380079989.3	CN	SWITCH ASSEMBLY
710224772US01	Issued	10,783,246	1/31/2017	9/22/2020	15/420,404	US	COMPARING STRUCTURAL INFORMATION OF A SNAPSHOT OF SYSTEM MEMORY

IC16929 3

		T			T		
700218604US01	Issued	10,699,031	10/30/2014	6/30/2020	15/328,408	US	SECURE TRANSACTIONS IN A MEMORY FABRIC
700218502US01	Issued	10,721,062	9/24/2014	7/21/2020	15/329,997	US	UTILIZING ERROR CORRECTION (ECC) FOR SECURE SECRET SHARING
700218916US01	Issued	10,742,400	3/20/2015	8/11/2020	15/505,671	US	DATASTREAM BLOCK ENCRYPTION
700218682US01	Issued	10,715,332	10/30/2014	7/14/2020	15/515,707	US	ENCRYPTION FOR TRANSACTIONS IN A MEMORY FABRIC
700222998US01	Issued	10,929,431	8/28/2015	2/23/2021	15/547,710	US	COLLISION HANDLING DURING AN ASYNCHRONOUS REPLICATION
710225781US01	Issued	10,726,132	3/8/2018	7/28/2020	15/915,381	US	ENCLAVE LAUNCH AND AUTHENTICATION
710225716US01	Issued	10,740,125	1/30/2018	8/11/2020	15/884,030	US	MEMRISTIVE DOT PRODUCT ENGINE VIRTUALIZATION
700221453EP01	Closed	3262514	9/14/2015	7/29/2020	15904219.1	EP	SECURE MEMORY SYSTEMS
700221312US01	Issued	10,701,152	9/24/2015	6/30/2020	15/573,863	US	MEMORY SYSTEM MANAGEMENT

IC16929

	ı	1			1	1	
700218916CN01	Issued	107534549	3/20/2015	6/30/2020	201580078971.0	CN	READABLE STORAGE MEDIUM, METHOD AND SYSTEM FOR DATASTREAM BLOCK ENCRYPTION
700221310CN01	Issued	107636629	7/31/2015	7/10/2020	201580078970.6	CN	MEMORY SYSTEM, AND METHOD FOR CREATING AND UPDATING LOGICAL TREES OF MEMORY SYSTEM
700220510US01	Issued	10.769.102	6/12/2015	9/8/2020	15/579,838	US	DISK STORAGE ALLOCATION
							DATA PROCESSING APPARATUSES AND METHODS TO SUPPORT TRANSFERRING CONTROL BETWEEN A PRIMARY DATA PROCESSING SYSTEM AND A SECONDARY DATA PROCESSING SYSTEM IN RESPONSE TO
710226052US01	Issued	10,795,782	4/2/2018	10/6/2020	15/942,925	US	AN EVENT
710223598US01	Issued	10,719,379	2/26/2016	7/21/2020	15/770,840	US	FAULT ISOLATION IN TRANSACTION LOGS
710223856US01	Issued	10,783,021	3/31/2016	9/22/2020	15/770,845	US	TRANSACTION MANAGEMENT FOR MULTI-NODE CLUSTERS
710224926CN01	Abandoned		1/22/2018		201810060096.9	CN	CHANGING THE DEPLOYMENT STATUS OF A PRE-PROCESSOR OR ANALYTIC
710225032CN01	Issued	201810058458.0	1/22/2018	6/10/2022	201810058458.0	CN	SYSTEM CALL POLICIES FOR CONTAINERS
710223137US01	Issued	11,050,562	1/29/2016	6/29/2021	15/756,978	US	DEVICE ATTESTATION
.102231370301	200000	11,000,000	1.27.2010	3/23/2021	25/150,510	1 00	ZZ, ICZIII IZOIIIIOI

		T		1	1		1
710223371US01	Issued	10,764,393	4/21/2016	9/1/2020	16/061,998	US	DETERMINING A PERSISTENT NETWORK IDENTITY OF A NETWORKED DEVICE
700222878US01	Issued	10,749,895	11/17/2015	8/18/2020	15/777,185	US	HANDLING NETWORK THREATS
710223606US01	Issued	11,610,075	4/29/2016	3/21/2023	16/085,187	US	HIERARCHICAL RULE CLUSTERING
710226917US01	Issued	10,771.264	10/10/2018	9/8/2020	16/155,983	US	Securing Firmware
. 33-23/2/10001	20072	20,,201	25.20.2010	3.0.2020			
710226623US01	Published		4/2/2019		16/372,675	US	CONTAINER INDEX PERSISTENT ITEM TAGS
710226989US01	Issued	11,556,471	4/30/2019	1/17/2023	16/399,230	US	CACHE COHERENCY MANAGEMENT FOR MULTI-CATEGORY MEMORIES
1102703930201	Issued	11,550,4/1	4/30/2019	1/1//2023	10/399,230	08	MEMORIES
710227074WO01	Closed		1/8/2019		PCT/US2019/012610	WO	SECURING NODE GROUPS
.1022.01411.001	Crosou		170/2019		. 01/03201//012010	1,0	SECRETO NODE GROOTS
710226870US01	Issued	11,017,090	12/17/2018	5/25/2021	16/222,293	US	VERIFICATION OF A PROVISIONED STATE OF A PLATFORM
					1600170	***	
710226578US01	Abandoned	1	3/4/2019	<u> </u>	16/291,738	US	CACHE MANAGER

					1		
710226935US01	Issued	10,776,493	10/12/2018	9/15/2020	16/159,365	US	SECURE MANAGEMENT AND EXECUTION OF COMPUTING CODE INCLUDING FIRMWARE
							INTEGRITY MANIFEST
710226817US01	Issued	11,360,784	9/10/2019	6/14/2022	16/565,915	US	CERTIFICATE
710226981US01	Issued	10,732,881	1/30/2019	8/4/2020	16/262,578	US	REGION CLONING FOR DEDUPLICATION
710227178US01	Issued	11,695,654	2/27/2019	7/4/2023	16/287,518	US	HIGH PERFORMANCE COMPUTE INFRASTRUCTURE AS A SERVICE
710227534US01	Issued	11,372,970	3/12/2019	6/28/2022	16/299,258	US	Multi-Dimensional Attestation
700218553US02	Issued	10,764,065	1/22/2019	9/1/2020	16/253,853	US	ADMISSIONS CONTROL OF A DEVICE
710227826US01	Issued	11,100,235	4/29/2019	8/24/2021	16/397.661	US	BACKUPS OF FILE SYSTEM INSTANCES WITH ROOT OBJECT ENCRYPTED BY METADATA ENCRYPTION KEY
710227824US01	Issued	11,226,867	4/29/2019	1/18/2022	16/398,069	US	BACKUPS OF FILE SYSTEM INSTANCES OF ENCRYPTED DATA OBJECTS
, AUDE TODATONO	1354041	11,000,007	712/12019	111012022	101370,003	00	
710227941US01	Issued	11,405,409	4/29/2019	8/2/2022	16/397,967	US	THREAT-AWARE COPY DATA MANAGEMENT

							1
710228344IN01	Published		5/31/2019		201941021738	IN	Unified KaaS (Kubernetes as a Service) Controller through HPE self-service Portal using dynamic discovery of plugin based on event-driven architecture
710227596US01	Issued	11,290,471	8/27/2019	3/29/2022	16/552,357	US	CROSS-ATTESTATION OF ELECTRONIC DEVICES
					,		
710228151US01	Published		7/26/2019		16/523,085	US	MONITORING OPERATING SYSTEM INVARIANT INFORMATION
710228465US01	Issued	10,873,504	7/17/2019	12/22/2020	16/514,556	US	MANAGING CONCURRENTLY RECEIVED CONFIGURATION REQUESTS IN A COMPUTING NETWORK
					,		
710228466US01	Abandoned		7/17/2019		16/514,654	US	MANAGING A CONFIGURATION REQUEST IN A COMPUTING NETWORK
710228519US01	Issued	10,877,931	9/12/2019	12/29/2020	16/568,451	US	BACKUPS OF FILE SYSTEM INSTANCES HAVING SUBTREES
			·				
710228344US01	Issued	11,561,835	5/29/2020	1/24/2023	16/887,001	US	UNIFIED CONTAINER ORCHESTRATION CONTROLLER
710228674US01	Issued	11,029,476	9/25/2019	6/8/2021	16/582,907	US	INJECTION LOCKED MULTI-WAVELENGTH OPTICAL SOURCE
710228862US01	Issued	11,281,476	1/30/2020	3/22/2022	16/777,779	US	A PLUGIN FRAMEWORK TO SUPPORT ZERO TOUCH MANAGEMENT OF HETEROGENEOUS INFRASTRUCTURE ELEMENTS ACROSS DISTRIBUTED DATA CENTERS
/10220002U3U1	185000	11,201,470	1/30/2020	312212022	10////,//9	US	CENTERS

		T		·	T		
710228701US01	Issued	11,153,279	1/30/2020	10/19/2021	16/776,735	US	LOCALLY REPRESENTING A REMOTE APPLICATION PROGRAMMING INTERFACE (API) ENDPOINT WITHIN AN APPLICATION PLATFORM
CRAY0006US01	Issued	10,757,022	11/20/2018	8/25/2020	16/197,159	US	INCREASINGLY MINIMAL BIAS ROUTING
710229042US01	Issued	11,645,161	3/26/2020	5/9/2023	16/830,421	US	CATALOG OF FILES ASSOCIATED WITH SNAPSHOTS
710228596US01	Issued	11,334,501	1/28/2020	5/17/2022	16/774,638	US	ACCESS PERMISSIONS FOR MEMORY REGIONS
		, ,,			, -		
710229088US01	Issued	11,106,580	1/27/2020	8/31/2021	16/773,710	US	DEDUPLICATION SYSTEM THRESHOLD BASED ON AN AMOUNT OF WEAR OF A STORAGE DEVICE
710228901US01	Issued	11,436,092	4/20/2020	9/6/2022	16/852,711	US	BACKUP OBJECTS FOR FULLY PROVISIONED VOLUMES WITH THIN LISTS OF CHUNK SIGNATURES
7102209010301	133000	11,430,072	472072020	71012022	10/052,711	0.5	SIGINITORES
710229162US01	Issued	11,334,670	1/28/2020	5/17/2022	16/774,467	US	INTEGRITY VERIFICATION FOR A SOFTWARE STACK OR PART OF A SOFTWARE STACK
710227178CN01	Published		2/26/2020		202010121093.9	CN	HIGH PERFORMANCE COMPUTE INFRASTRUCTURE AS A SERVICE
710227824CN01	Published		3/31/2020		202010248020.6	CN	BACKUPS OF FILE SYSTEM INSTANCES OF ENCRYPTED DATA OBJECTS

	T	1	1		1		
710226989CN01	Published		4/1/2020		202010247862.X	CN	CACHE COHERENCY MANAGEMENT FOR MULTI-CATEGORY MEMORIES
710227178DE01	Published		2/25/2020		102020104871.8	DE	High Performance Compute Infrastructure as a Service
710227824DE01	Issued	102020111199	4/24/2020	5/11/2023	102020111199.1	DE	BACKUPS OF FILE SYSTEM INSTANCES OF ENCRYPTED DATA OBJECTS
710226989DE01	Published		3/30/2020		102020108666.0	DE	CACHE COHERENCY MANAGEMENT FOR MULTI-CATEGORY MEMORIES
710228676US01	Issued	11,586,541	7/31/2020	2/21/2023	16/944,905	US	SYSTEM AND METHOD FOR SCALABLE HARDWARE-COHERENT MEMORY NODES
710228677US01	Issued	11.573.898	8/17/2020	2/7/2023	16/995,411	US	SYSTEM AND METHOD FOR FACILITATING HYBRID HARDWARE- MANAGED AND SOFTWARE-MANAGED CACHE COHERENCY FOR DISTRIBUTED COMPUTING
CRAY0230WO01	Closed	770.0000	3/23/2020		PCT/US2020/024303	WO	SYSTEMS AND METHODS FOR ADAPTIVE ROUTING IN THE PRESENCE OF PERSISTENT FLOWS
CRAY0230WO02	Closed		3/23/2020		PCT/US2020/024340	wo	SYSTEMS AND METHODS FOR PER TRAFFIC CLASS ROUTING
CRAY0230WO03	Closed		3/23/2020		PCT/US2020/024125	WO	METHODS FOR DISTRIBUTING SOFTWARE-DETERMINED GLOBAL LOAD INFORMATION

	Г			T T	
CRAY0230WO04	Closed	3/23/202	D PCT/US2020/0241	29 WO	ALGORITHMS FOR USE OF LOAD INFORMATION FROM NEIGHBORING NODES IN ADAPTIVE ROUTING
CRAY0230WO05	Closed	3/23/202	D PCT/US2020/0243	842 WO	SYSTEMS AND METHODS FOR ON THE FLY ROUTING IN THE PRESENCE OF ERRORS
CRAY0230WO07	Closed	3/23/202	D PCT/US2020/0241	70 WO	OPTIMIZED ADAPTIVE ROUTING TO REDUCE NUMBER OF HOPS
CRAY0230WO09	Closed	3/23/202	) PCT/US2020/0242	221 WO	WEIGHTING ROUTING
CRAY0230WO10	Closed	3/23/202	) PCT/US2020/0242	276 WO	DEADLOCK-FREE MULTICAST ROUTING ON A DRAGONFLY NETWORK
CRAY0230WO11	Closed	3/23/202	D PCT/US2020/0242	259 WO	SYSTEM AND METHOD FOR FACILITATING DATA-DRIVEN INTELLIGENT NETWORK
CRAY0230WO13	Closed	3/23/202	) PCT/US2020/0242	251 WO	SYSTEM AND METHOD FOR FACILITATING DATA-DRIVEN INTELLIGENT NETWORK WITH ENDPOINT CONGESTION DETECTION AND CONTROL
CRAY0230WO14	Closed	3/23/202			SYSTEM AND METHOD FOR FACILITATING DATA-DRIVEN INTELLIGENT NETWORK WITH PER-FLOW CREDIT- BASED FLOW CONTROL
CRAY0230WO15	Closed	3/23/202			SYSTEM AND METHOD FOR FACILITATING DATA-DRIVEN INTELLIGENT NETWORK WITH FLOW CONTROL OF INDIVIDUAL APPLICATIONS AND TRAFFIC FLOWS

	1			1	Γ
CRAY0230WO16	Closed	3/23/2020	PCT/US2020/024327	WO	SYSTEM AND METHOD FOR FACILITATING DATA-DRIVEN INTELLIGENT NETWORK WITH INGRESS PORT INJECTION LIMITS
CRAY0230WO17	Closed	3/23/2020	PCT/US2020/024239	wo	DYNAMIC BUFFER MANAGEMENT IN DATA- DRIVEN INTELLIGENT NETWORK
CRAY0230WO18	Closed	3/23/2020	PCT/US2020/024266	WO	SYSTEM AND METHOD FOR FACILITATING GLOBAL FAIRNESS IN A NETWORK
CRAY0230WO20	Closed	3/23/2020	PCT/US2020/024237	WO	METHOD AND SYSTEM FOR PROVIDING NETWORK EGRESS FAIRNESS BETWEEN APPLICATIONS
CRAY0230WO22	Closed	3/23/2020	PCT/US2020/024260	WO	SYSTEM AND METHOD FOR DYNAMIC ALLOCATION OF REDUCTION ENGINES
CRAY0230WO23	Closed	3/23/2020	PCT/US2020/024243	WO	SYSTEM AND METHOD FOR FACILITATING SELF- MANAGING REDUCTION ENGINES
CRAY0230WO24	Closed	3/23/2020	PCT/US2020/024253	WO	SYSTEM AND METHOD FOR FACILITATING TRACER PACKETS IN A DATA-DRIVEN INTELLIGENT NETWORK
CRAY0230WO25	Closed	3/23/2020	PCT/US2020/024324	WO	METHOD AND SYSTEM FOR FACILITATING LOSSY DROPPING AND ECN MARKING
CRAY0230WO27	Closed	3/23/2020	PCT/US2020/024332	WO	METHOD AND SYSTEM FOR FACILITATING WIDE LAG AND ECMP CONTROL

		_	ı	I	1		ı
CRAY0228WO01	Closed		3/23/2020		PCT/US2020/024254	WO	SYSTEM AND METHOD FOR FACILITATING DATA REQUEST MANAGEMENT IN A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO03	Closed		3/23/2020		PCT/US2020/024245	wo	SYSTEM AND METHOD FOR FACILITATING FINE- GRAIN FLOW CONTROL IN A NETWORK INTERFACE CONTROLLER (NIC)
			2 72 72 72			Wo	SYSTEM AND METHOD FOR FACILITATING EFFICIENT MESSAGE MATCHING IN A NETWORK INTERFACE
CRAY0228WO04	Closed		3/23/2020		PCT/US2020/024311	WO	CONTROLLER (NIC) SYSTEM AND METHOD FOR FACILITATING EFFICIENT PACKET FORWARDING USING A MESSAGE STATE TABLE IN A NETWORK INTERFACE CONTROLLER
CRAY0228WO05	Closed		3/23/2020 3/23/2020		PCT/US2020/024241  PCT/US2020/024246	WO	(NIC)  SYSTEM AND METHOD FOR FACILITATING HYBRID MESSAGE MATCHING IN A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO07	Closed		3/23/2020		PCT/US2020/024272	WO	SYSTEM AND METHOD FOR FACILITATING EFFICIENT LOAD BALANCING IN A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO08	Closed		3/23/2020		PCT/US2020/024304	WO	SYSTEM AND METHOD FOR FACILITATING EFFICIENT MANAGEMENT OF NON- IDEMPOTENT OPERATIONS IN A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO09	Closed		3/23/2020		PCT/US2020/024250	WO	SYSTEM AND METHOD FOR FACILITATING DYNAMIC COMMAND MANAGEMENT IN A NETWORK INTERFACE CONTROLLER (NIC)
710229412US01	Issued	11,650,936	7/10/2020	5/16/2023	16/926,628	US	FIELD-REPLACEABLE UNIT (FRU) SECURE COMPONENT BINDING

	1	1			T		1
							ALLOCATING COMPUTING RESOURCES
710229427US01	Published		9/3/2020		17/011,327	US	TO DATA TRANSFER JOBS
10013048-1	Issued	7,111,282	6/12/2001	9/19/2006	09/880,327	US	INSTRUMENTING A SOFTWARE PROGRAM AND COLLECTING DATA FROM THE INSTRUMENTED SOFTWARE PROGRAM BY TYPE
30001673-3	Expired	6,886,032	6/8/2001	4/26/2005	09/876,161	US	Utilization Of Unused Disk Space On Networked Computer
30001673-4	Issued	6,865,598	6/8/2001	3/8/2005	09/875,950	US	Utilization Of Unused Disk Space On Networked Computers
30002482-2	Issued	7,562,248	2/18/2005	7/14/2009	11/061,022	US	DATA STORAGE SYSTEM
							Gathering Information From
30003028-3	Issued	6,925,288	3/29/2001	8/2/2005	09/821,146	US	Short-range Wireless Portals
30003063-2	Issued	6,941,476	5/10/2001	9/6/2005	09/852,262	US	Information Storage
30003760-2	Expired	6,934,881	4/27/2001	8/23/2005	09/843,148	US	MEMORY INCLUDING PORTION STORING A COPY OF PRIMARY OPERATING SYSTEM AND METHOD OF OPERATING COMPUTER INCLUDING THE MEMORY
30003893-3	Issued	8,024,270	5/8/2001	9/20/2011	10/275,871	US	Operating A Communications Infrastructure On A Pre- payment Basis

	T		I	1	T	1	T
							Operating A Communications
30003893-5	Expired	60121569.9	5/8/2001	7/19/2006	01925734.4	DE	Infrastructure On A Pre- payment Basis
30003873-3	Ехриси	00121309.9	3/0/2001	111312000	01923734.4	DE	payment basis
							The state of the s
30003893-6	Expired	1281270	5/8/2001	7/19/2006	01925734.4	GB	Distributed pre-paid communications infrastructure
							Distributed pre-paid
30003893-7	Expired	1281270	5/8/2001	7/19/2006	01925734.4	IT	communications infrastructure
30003957-5	Expired	60037972.8	10/10/2000	2/6/2008	00308910.9	DE	E-appliances
30003957-6	Expired	1197858	10/10/2000	2/6/2008	00308910.9	GB	E-appliances
							Performance Of A Service On
30004521-2	Issued	7,877,799	8/1/2001	1/25/2011	09/920,554	US	A Computing Platform
							Performance Of A Service On
30004521-4	Issued	4818542	8/9/2001	9/9/2011	2001-241933	JP	A Computing Platform
30004631-1	Expired	2368227	10/17/2000	12/10/2003	0025461.5	GB	Contact Center
30004031-1	Бариси	2306221	10/11/12000	12/10/2003	0023401.3	GB	CONTACT CENTER
							SYSTEM AND METHOD FOR SPECIFYING
							DIFFERENT SERVICE
							SPECIFIC BEHAVIOURS AND OFFERING RANGE
30004631-3	Issued	6,988,126	10/16/2001	1/17/2006	09/977,494	US	OF CORRESPONDING
30004031-3	Issueu	0,900,120	10/10/2001	1/1//2006	U7/7 / /,474	103	CUSTOMER SERVICES

					T		
							Content Provider Entity For
30004635-1	Expired	2368224	10/17/2000	8/25/2004	0025454.0	GB	Communication Session
30004635-2	Issued	7,334,017	10/16/2001	2/19/2008	09/977,501	US	Content Provider Entity For Communication Session
30004033-2	Issueu	7,334,017	10/10/2001	2/19/2008	09/977,301	03	Communication Session
							Establishment Of A Deferred
30004637-1	Expired	2368930	10/17/2000	4/6/2005	0025452.4	GB	Network Communication Session
							Establishment Of A Deferred Network Communication
30004637-2	Issued	7,000,019	10/16/2001	2/14/2006	09/977,495	US	Session
							Inviting Assistant Entity Into A Network Communication
30004640-1	Issued	2368225	10/17/2000	12/10/2003	0025458.1	GB	Session
							Inviting Assistant Entity Into
30004640-2	Issued	8,166,173	10/16/2001	4/24/2012	09/977,497	US	A Network Communication Session
		-,,					
30004647-1	Issued	2368246	10/17/2000	9/1/2004	0025462.3	GB	Overview Subsystem For Information Page Server
							OVERVIEW SUBSYSTEM FOR INFORMATION PAGE
30004647-2	Issued	6,996,605	10/16/2001	2/7/2006	09/977,496	US	SERVER
30004693-2	Issued	7,113,911	11/21/2001	9/26/2006	09/990,768	US	Voice Communication Concerning A Local Entity
3000 <del>1</del> 073-2	155000	1,113,711	11/21/2001	1 212012000	021220,100	103	Concerning A Local Entity

			1	T	ı	_	T
							Cooperative Networking
30004771-1	Expired	7,065,575	11/20/2000	6/20/2006	09/715,045	US	Method And System
30006602-1	Expired	2372594	2/23/2001	10/6/2004	0104670.5	GB	Trusted Computing Environment
							Trusted Computing
30006602-2	Issued	7,353,531	2/22/2002	4/1/2008	10/080,477	US	Environment
							Performing Secure And Insecure Computing Operations In A
30006603-2	Issued	7,159,210	6/18/2002	1/2/2007	10/175,553	US	Compartmented Operating System
30000003-2	Issueu	7,139,210	0/18/2002	17272007	10/175,555	03	System
							W
30006604-1	Expired	2376764	6/19/2001	12/29/2004	0114891.5	GB	Multiple Trusted Computing Environments
							MULTIPLE TRUSTED COMPUTING
30006604-2	Issued	7,865,876	6/18/2002	1/4/2011	10/175,542	US	ENVIRONMENTS
							Method Of And Apparatus For
30006606-2	Issued	8,219,496	2/22/2002	7/10/2012	10/080,479	US	Ascertaining The Status Of A Data Processing Environment
							Method Of And Apparatus For Ascertaining The Status Of A
30006606-3	Abandoned	2375199	2/20/2002	2/2/2005	0203939.4	GB	Data Processing Environment
30006636-3	Issued	7,437,568	8/16/2001	10/14/2008	09/931,526	US	Apparatus And Method For Establishing Trust
		.,,					

				ı	T		T
							COMPUTER SYSTEM
30006640-3	Issued	6,986,042	8/17/2001	1/10/2006	10/110,950	US	OPERABLE TO REVERT TO A TRUSTED STATE
					,		
30006640-5	Expired	60123969.5	8/17/2001	10/18/2006	01958228.7	DE	A Computer System Operable To Revert To A Trusted State
30006640-6	Expired	1309916	8/17/2001	10/18/2006	01958228.7	GB	A Computer System Operable To Revert To A Trusted State
30007696-1	Expired	2373348	3/7/2001	1/12/2005	0105691.0	GB	Computer System
30007696-3	Issued	8,769,478	4/22/2005	7/1/2014	11/111,866	US	Aggregation Of Multiple Headless Computer Entities Into A Single Computer Entity Group
							Method Of Utilisation Of A Data Storage Array, And
30008194-1	Expired	2377048	6/30/2001	5/4/2005	0116063.9	GB	Array Controller Therefor
30008194-2	Issued	6,851,037	7/1/2002	2/1/2005	10/185,725	US	METHOD OF UTILISATION OF A DATA STORAGE ARRAY, AND ARRAY CONTROLLER THEREFOR
30010410-2	Issued	7,634,656	9/12/2002	12/15/2009	10/241,894	US	Method And Apparatus For Identifying A Voice Caller
30010410-4	Issued	60207500.9	9/10/2002	11/23/2005	02256245.8	DE	Method And Apparatus For Identifying A Voice Caller

					T		T
							Method And Apparatus For
30010410-6	Issued	1294157	9/10/2002	11/23/2005	02256245.8	GB	Identifying A Voice Caller
30011229-2	Issued	7,444,666	7/25/2002	10/28/2008	10/202,816	US	Multi-domain Authorization And Authentication
30011229-2	Issued	7,444,000	112312002	10/28/2008	10/202,810	03	And Admendeation
30011229-4	Abandoned	60214632.1	7/26/2002	9/13/2006	02255218.6	DE	Multi-domain Authorisation And Authentication
							Multi-domain Authorisation
30011229-6	Abandoned	1280317	7/26/2002	9/13/2006	02255218.6	GB	And Authentication
20011200 2		7 700 760	7/24/2002	1000010	40.007.000	***	Remote Monitoring Of
30011380-2	Issued	7,702,763	7/31/2002	4/20/2010	10/207,802	US	Computer Devices
30012087-2	Issued	6,873,270	10/30/2002	3/29/2005	10/283,503	US	Data Storage And Analysis
							Trusted Identities On A
30012776-2	Issued	8,370,631	7/29/2002	2/5/2013	10/208,716	US	Trusted Identities On A Trusted Computing Platform
							METHOD OF AND
							APPARATUS FOR MANAGING PREDICTED
							FUTURE USER ACCOUNTS ASSIGNED TO A
30015421-2	Expired	7,058,708	6/12/2001	6/6/2006	09/878,185	US	COMPUTER
							METHOD OF SATISFYING A DEMAND ON A
30015986-2	Abandoned	7,822,862	6/9/2003	10/26/2010	10/457,021	US	NETWORK FOR A NETWORK RESOURCE
						•	

	1	1	1	1		1	1
30015987-1	Abandoned	2386738	3/18/2002	9/21/2005	0206404.6	GB	Lower Cost Streaming Media Playback Infrastructure
30013787-1	Abandoned	2380738	3/18/2002	7/21/2003	0200404.0	GD	1 layback infrastructure
30015987-2	Abandoned	7,770,199	3/18/2003	8/3/2010	10/390,161	US	Media Playing
30015988-2	Issued	7,590,746	6/9/2003	9/15/2009	10/457,003	US	SYSTEMS AND METHODS OF MAINTAINING AVAILABILITY OF REQUESTED NETWORK RESOURCES
30015988-3	Abandoned	2389481	6/4/2003	12/28/2005	0312767.7	GB	Method Of Maintaining Availability Of Requested Network Resources
30016274-1	Issued	7,779,267	9/4/2001	8/17/2010	09/946,323	US	Method And Apparatus For Using A Secret In A Distributed Computing System
30016994-2	Issued	7096409	7/30/2003	8/22/2006	10/632,125	US	Reed-solomon Decoder And Decoding Method For Errors And Erasures Decoding
J0010774-2	155000	7 U2 U4 U2	113012003	012212000	10/032,123	03	And Erasures Decouning
30017533-1	Expired	2376765	6/19/2001	12/29/2004	0114895.6	GB	Multiple Trusted Computing Environments With Verifiable Environment Identities
30017533-2	Issued	7,076,655	6/18/2002	7/11/2006	10/175,183	US	Multiple Trusted Computing Environments With Verifiable Environment Identities
30017568-2	Issued	7,086,052	1/3/2003	8/1/2006	10/336,590	US	Software Installation And Operation With Random Selection

			1		T	-	Γ
30019296-2	Closed	2381173	10/4/2002	6/30/2004	0222978.9	GB	Method And Apparatus For Encrypting Data
30017270-2	Closed	2301173	10/4/2002	0/30/2004	0222716.7	GD.	Enerypting Data
							Method And Apparatus For
30019296-3	Closed	10248006	10/15/2002	1/17/2008	10248006.0	DE	Encrypting Data
30019296-4	Issued	7,219,226	10/11/2002	5/15/2007	10/270,039	US	Method And Apparatus For Encrypting Data
30017270-4	Issued	1,217,220	10/11/2002	3/13/2007	10/270,037	03	Enerypting Data
							Metering In A Data
30990075-4	Issued	8,407,092	10/30/2001	3/26/2013	10/415,449	US	Processing System
30990084-4	Erminad	6,728,860	2/10/2001	4/27/2004	09/959,590	US	Address Mapping In Solid State Storage Device
30990084-4	Expired	0,728,800	2/19/2001	4/2//2004	09/939,390	03	State Storage Device
							Address Mapping In Solid
30990084-5	Expired	6,931,509	12/15/2003	8/16/2005	10/734,624	US	State Storage Device
30990155-3	Issued	700/204	10/6/2000	0/22/2004	10/110 200	TIC	
30990155-3	Issued	7096204	10/6/2000	8/22/2006	10/110,280	US	Electronic Commerce System
							Managament Of Sagurity Var
200205658-2	Abandoned	7,415,113	7/30/2003	8/19/2008	10/629,599	US	Management Of Security Key Distribution
200205650.2		7.512.212	10/20/2002	2/21/2000	10/04/02/	7.10	Management Of Security Key
200205659-2	Issued	7,512,240	10/29/2003	3/31/2009	10/694,824	US	Distribution

	_	,			Τ	1	
							METHOD OF
200205709-2	Issued	7,917,752	8/18/2003	3/29/2011	10/643,306	US	CONTROLLING THE PROCESSING OF DATA
200203709-2	issucu	1,911,132	8/18/2003	3/29/2011	10/043,300	US	PROCESSING OF DATA
200206116-4	Abandoned	2398712	1/20/2004	6/28/2006	0401123.5	GB	Privacy Management Of Personal Data
200206116-5	Abandoned	7,398,393	1/28/2004	7/8/2008	10/767,868	US	Privacy Management Of Personal Data
200206289-1	Issued	7,983,422	7/25/2003	7/19/2011	10/627,158	US	QUANTUM CRYPTOGRAPHY
200206289-4	Issued	4829788	7/22/2004	9/22/2011	2006-520891	JP	Quantum Cryptography With Quantum Channel Check
							Quantum Cryptography With
200206289-5	Issued	602004010270.9	7/22/2004	11/21/2007	04743493.1	DE	Quantum Channel Check  Quantum Cryptography With
200206289-7	Issued	1652334	7/22/2004	11/21/2007	04743493.1	GB	Quantum Channel Check  Quantum Information Processing Using
200207050-1	Issued	7,560,726	2/11/2003	7/14/2009	10/364,987	US	Electromagnetically Induced Transparency
200207050-4	Abandoned	4870549	2/11/2004	11/25/2011	2006-503439	JP	Quantum Information Processing Using Electromagnetically Induced Transparency

	T	Т			T		
200207371-1	Issued	8.230,497	11/4/2002	7/24/2012	10/287,125	US	Method Of Identifying Software Vulnerabilities On A Computer System
200207373-1	Issued	7,353,539	1/16/2003	4/1/2008	10/345,701	US	SIGNAL LEVEL PROPAGATION MECHANISM FOR DISTRIBUTION OF A PAYLOAD TO VULNERABLE SYSTEMS
200207542-2	Issued	8,069,450	1/26/2004	11/29/2011	10/765,827	US	Computer Operating System Data Management
200207542-3	Issued	2398656	1/21/2004	6/14/2006	0401194.6	GB	Improvements In And Relating To Computer Operating System Data Management
200208124-2	Issued	8,806,222	1/20/2006	8/12/2014	11/335,824	US	Method And System For Contained Cryptographic Separation
200208361-2	Issued	9,398,140	7/20/2006	7/19/2016	11/489,433	US	CONTEXT-BASED EVENT PROCESSING
							Context-based Event
200208361-3	Issued	602005014979.1	9/12/2005	6/17/2009	05300740.7	DE	Processing  Context-based Event
200208361-4	Issued	1763260	9/12/2005	6/17/2009	05300740.7	GB	Processing
200208659-1	Issued	7,483,142	5/3/2006	1/27/2009	11/417,614	US	Security Systems And Monitoring Methods Using Quantum States

	T	1			T	ı	
200209133-2	Issued	8,392,995	1/11/2005	3/5/2013	11/033,182	US	Network Management
200209134-1	Issued	2411313	2/21/2004	7/26/2006	0403931.9	GB	NETWORK CONNECTION CONTROL
200209134-2	Issued	7,558,216	2/1/2005	7/7/2009	11/048,126	US	Network Connection Control
200209134-2	Issucu	1,00,210	2/1/2003	11112009	11/040,120	US	INCIWOIK CONNECTION CONTROL
200300132-2	Issued	7,600,261	3/26/2004	10/6/2009	10/810,308	US	Security Attributes In Trusted Computing Systems
200300133-2	Issued	7,552,328	3/26/2004	6/23/2009	10/810,348	US	SECURITY ATTRIBUTES OF NODES IN TRUSTED COMPUTING SYSTEMS
CRAY0230US01	Expired		5/23/2019		62/852,273	US	1177 - NETWORK SWITCH (ROSETTA SHORT )
CRAY0228WO10	Closed		3/23/2020		PCT/US2020/024248	wo	SYSTEM AND METHOD FOR FACILITATING EFFICIENT EVENT NOTIFICATION MANAGEMENT FOR A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO11	Closed		3/23/2020		PCT/US2020/024242	WO	SYSTEM AND METHOD FOR FACILITATING EFFICIENT UTILIZATION OF AN OUTPUT BUFFER IN A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO12	Closed		3/23/2020		PCT/US2020/024257	WO	SYSTEM AND METHOD FOR FACILITATING OPERATION MANAGEMENT IN A NETWORK INTERFACE CONTROLLER (NIC) FOR ACCELERATORS

					T	1	T
CRAY0228WO13	Closed		3/23/2020		PCT/US2020/024262	WO	SYSTEM AND METHOD FOR FACILITATING EFFICIENT PACKET FORWARDING IN A NETWORK INTERFACE CONTROLLER (NIC)
CRAY0228WO14	Closed		3/23/2020		PCT/US2020/024321	WO	SYSTEM AND METHOD FOR FACILITATING EFFICIENT PACKET INJECTION INTO AN OUTPUT BUFFER IN A NETWORK INTERFACE CONTROLLER (NIC)
200300254-3	Issued	7,574,596	4/22/2004	8/11/2009	10/831,549	US	Cryptographic Method And Apparatus
200300254-3	Issued	7,574,596	4/22/2004	8/11/2009	10/831,549	US	Cryptographic Method And Apparatus
200300254-5	Issued	602004001273.4	4/21/2004	6/21/2006	04252330.8	DE	Identifier-Based Encryption Method and Apparatus
							Identifier-Based Encryption
200300254-6	Issued	1471680	4/21/2004	6/21/2006	04252330.8	FR	Method and Apparatus  Identifier-Based Encryption
200300254-7	Issued	1471680	4/21/2004	6/21/2006	04252330.8	GB	Method and Apparatus  PROCESSING AND DISPLAY OF A REAL
200300255-2	Abandoned	8,670,959	7/26/2006	3/11/2014	11/494,292	US	WORLD MODEL
200309140-1	Issued	6,989,523	4/11/2003	1/24/2006	10/412,019	US	Photon Number Resolving Systems And Methods

					T	1	
							Mathed And Assesses For
							Method And Apparatus For Managing A Hierarchy Of
200309650-3	Issued	8,261,063	10/16/2003	9/4/2012	10/688,397	US	Nodes
							Quantum Information Conversion Between Matter
200309939-1	Issued	8,023,828	10/17/2005	9/20/2011	11/252,964	US	And Light Representations
200309939-4	Issued	5437634	7/21/2006	12/20/2013	2008-535519	JР	Quantum Information Conversion Between Matter And Light Representations
200309939-5	Issued	200680038674.4	7/21/2006	1/16/2013	200680038674.4	CN	Quantum Information Conversion Between Matter And Light Representations
200311104-1	Issued	7,449,672	4/30/2004	11/11/2008	10/837,129	US	CONVERSION OF QUANTUM INFORMATION FROM ONE PHOTONIC REPRESENTATION TO ANOTHER PHOTONIC REPRESENTATION
200311104-6	Abandoned	200580013632.0	4/28/2005	9/8/2010	200580013632.0	CN	Quantum Optical State Converter
200311104-0	Avanuoneu	200300013032.0	4/20/2003	910/2010	200300013032.0	CIN	Convener
200311104-7	Abandoned	255977	4/28/2005	4/11/2013	4026/CHENP/2006	IN	QUANTUM OPTICAL STATE CONVERTER
							Games Using Pair-wise
200311116-1	Issued	7,310,623	12/12/2003	12/18/2007	10/734,713	US	Entanglements
200311663-1	Issued	7,343,059	10/11/2003	3/11/2008	10/684,278	US	Photonic Interconnect System

	1	T	<u> </u>		T	1	1
200311663-3	Issued	8,447,146	1/11/2008	5/21/2013	12/008,605	US	Photonic Interconnect System
200311003-3	Issued	3,447,140	1/11/2008	3/21/2013	12/008,003	03	1 notonic interconnect System
200311663-5	Issued	7,546,004	1/11/2008	6/9/2009	12/008,554	US	Photonic Interconnect System
200311663-6	Issued	7,657,137	1/11/2008	2/2/2010	12/008,618	US	Photonic Interconnect System
200311003-0	Issueu	7,037,137	1/11/2006	2/2/2010	12/008,018	US	Fliotonic interconnect System
200311663-8	Abandoned	2422022	10/6/2004	8/22/2007	0607194.8	GB	Photonic Interconnect System
200211662.0	A1 1 1	1447606	10/6/2004	1/20/2010	2006 524242	ID.	Dia Tanana
200311663-9	Abandoned	4447606	10/6/2004	1/29/2010	2006-534342	JP	Photonic Interconnect System
200311663-10	Abandoned	2436242	10/6/2004	12/5/2007	0710983.8	GB	Photonic Interconnect System
200212102		462.5000		11/06/0010	2006 520522		Use Of Certified Secrets In
200312183-4	Issued	4635009	5/21/2004	11/26/2010	2006-530523	JP	Communication
							H- Of C-diff-15
200312183-5	Issued	8,689,000	5/21/2004	4/1/2014	10/557,953	US	Use Of Certified Secrets In Communication
							Cryptographic Method And
200312446-3	Issued	2401012	4/22/2004	7/6/2005	0408892.8	GB	Apparatus

		T	I		Т		1
200212446 5	Toward	2401014	4/22/2004	9/14/2005	0409002 2	CP	Cryptographic Method And
200312446-5	Issued	2401014	4/22/2004	9/14/2005	0408903.3	GB	Apparatus
							Cryptographic Method And
200312446-6	Issued	7,380,138	4/22/2004	5/27/2008	10/831,350	US	Apparatus
200313970-1	Issued	7,002,133	10/3/2003	2/21/2006	10/678,437	US	DETECTING ONE OR MORE PHOTONS FROM THEIR INTERACTIONS WITH PROBE PHOTONS IN A MATTER SYSTEM
200314217-1	Issued	7,133,173	7/26/2004	11/7/2006	10/899,332	US	Nonlinear Electromagnetic Quantum Information Processing
200314217-4	Issued	4684294	6/28/2005	2/18/2011	2007-523571	JP	Nonlinear Electromagnetic Quantum Information Processing
200314217-5	Issued	200580024861.2	6/28/2005	1/18/2012	200580024861.2	CN	Nonlinear Electromagnetic Quantum Information Processing
200316711-1	Abandoned	7,703,124	3/31/2005	4/20/2010	11/094,989	US	System And Method For Implementing A Private Virtual Backbone On A Common Network Infrastructure
200400502-1	Issued	7,702,725	7/2/2004	4/20/2010	10/884,092	US	Digital Object Repositories, Models, Protocol, Apparatus, Methods And Software And Data Structures, Relating Thereto
200400664-1	Issued	7,038,188	4/29/2004	5/2/2006	10/836,012	US	Non-demolition Photon Detector That Preserves Input State Characteristics

		Γ	I	<u> </u>	T		
							Non-demolition Photon
2004006644		4620406	4/20/2005	12/2/2010	2007 510072		Detector That Preserves Input
200400664-4	Abandoned	4638486	4/28/2005	12/3/2010	2007-510972	JP	State Characteristics
200400664-6	Abandoned	200580013328.6	4/28/2005	9/14/2011	200580013328.6	CN	NON-DEMOLITION PHOTON DETECTOR THAT PRESERVES INPUT STATE CHARACTERISTICS
200400004-0	Abandoned	200380013328.0	4/20/2003	9/14/2011	200360013326.0	CN	CHARACTERISTICS
200400664-7	Abandoned	258709	4/28/2005	1/31/2014	4028/CHENP/2006	IN	Non-demolition Photon Detector That Preserves Input State Characteristics
200 100001	Troundation	250.00	112012000	1,01,2011	1020/01111(1/2000		State Grantaveristies
							Access To A Computing Environment By Computing
200400717-2	Issued	8,984,291	3/23/2006	3/17/2015	11/389,336	US	Devices
							Self-authenticating Quantum
200400852-1	Issued	7,428,562	11/26/2004	9/23/2008	10/998,208	US	Random Number Generator METHOD AND AN
200400855-1	Issued	7,840,902	10/26/2005	11/23/2010	11/260,511	US	APPARATUS FOR AUTOMATIC CREATION OF SECURE CONNECTIONS BETWEEN SEGMENTED RESOURCE FARMS IN A UTILITY COMPUTING ENVIRONMENT
200401050-1	Issued	7,876,694	7/2/2004	1/25/2011	10/884,468	US	IDENTIFYING VPN FAULTS BASED ON VIRTUAL ROUTING ADDRESS AND EDGE INTERFACE RELATIONSHIP INFORMATION
200401266-1	Issued	7,643,434	9/30/2004	1/5/2010	10/953,281	US	Method And System For Managing Network Nodes Which Communicate Via Connectivity Services Of A Service Provider
200401763-2	Issued	7,743,321	10/28/2005	6/22/2010	11/260,569	US	METHOD AND APPARATUS FOR PROCESSING DATA

	1	1			Τ	1	1
200402146-2	Issued	8,589,679	7/14/2005	11/19/2013	11/182,527	US	Identifier-based Signcryption With Two Trusted Authorities
2001.027.10.2		0,000,010		11.17,2010	2010		
200402333-1	Issued	2412754	3/30/2004	7/11/2007	0407117.1	GB	Provision Of Resource Allocation Information
	155400						Provision Of Resource
200402333-2	Issued	7,949,753	3/16/2005	5/24/2011	11/081,248	US	Allocation Information
200402517-2	Issued	7,633,928	3/27/2006	12/15/2009	11/389,307	US	COMMUNICATION DATA METHOD AND SYSTEM FOR VOICE APPLICATIONS EXCECUTABLE BY USER EQUIPMENT.
200.02517.2	255454	,,055,720	5.2112000	12,10,2007	21.55,551	- 55	
200403197-1	Issued	2415579	6/23/2004	12/20/2006	0414062.0	GB	Cryptographic Method And Apparatus
200403197-2	Issued	7,986,778	6/23/2005	7/26/2011	11/166,921	US	Cryptographic Method And Apparatus
200403914-2	Issued	9,137,113	1/20/2006	9/15/2015	11/335,877	US	System And Method For Dynamically Allocating Resources
200404976-2	Issued	7,801,302	6/10/2005	9/21/2010	11/150,623	US	Cryptographic Method And Apparatus
200404976-4	Issued	602005003984.8	6/6/2005	12/26/2007	05104894.0	DE	Cryptographic Method And Apparatus

			1	ı	T		
200404976-5	Issued	1605626	6/6/2005	12/26/2007	05104894.0	FR	Cryptographic Method And Apparatus
200404976-6	Issued	1605626	6/6/2005	12/26/2007	05104894.0	GB	Cryptographic Method And Apparatus
200404970-0	Issueu	1603020	0/0/2003	12/20/2007	03104894.0	ОБ	Apparatus
							ENTANGLEMENT
200405115-4	Issued	7,554,080	7/13/2005	6/30/2009	11/632,596	US	PROCESSES AND SYSTEM
							Method And Apparatus For
200405859-2	Issued	7,962,789	6/28/2006	6/14/2011	11/476,259	US	Automated Testing Of A Utility Computing System
							Method For Indexing Data,
200406045-1	Issued	2419700	10/29/2004	3/31/2010	0424137.8	GB	Systems, Softward And Apparatus Relating Thereto
200400043-1	Issued	2419700	10/2//2004	3/31/2010	0424137.6	GB	Apparatus Relating Thereto
							INDEXING FOR DATA
							HAVING INDEXABLE AND NON-INDEXABLE PARENT
200406045-2	Issued	8,892,564	10/28/2005	11/18/2014	11/261,752	US	NODES
							Provision of services over a
							common delivery platform
200406808-1	Issued	2422218	1/14/2005	12/23/2009	0500716.6	GB	such as a mobile telephony network
							PROVISION OF SERVICES
							OVER A COMMON DELIVERY PLATFORM
200406808-2	Issued	8,291,077	1/13/2006	10/16/2012	11/331,858	US	SUCH AS A MOBILE TELEPHONY NETWORK
	200000		1.15/2000	20.20.20	_ 2. 2 2 2 3 2 2		
					0.420.554		
200407104-1	Issued	2418326	9/17/2004	4/11/2007	0420664.5	GB	Network Virtualization

	1					1	
200407104-3	Abandoned	8,223,770	8/3/2005	7/17/2012	11/575,382	US	Network Virtualization
200407104-3	Abandoned	6,223,770	8/3/2003	7/11/2012	11/3/3,362	US	Network virtualization
200407421-2	Abandoned	8,213,429	8/3/2005	7/3/2012	11/575,395	US	Virtual Network Interface
200407497-1	Issued	2422217	1/14/2005	12/23/2009	0500715.8	GB	Provision of services over a common delivery platform such as a mobile telephony network
200407497-2	Issued	8,904,000	1/13/2006	12/2/2014	11/331,946	US	Provision Of Services Over A Common Delivery Platform Such As A Mobile Telephony Network
					,		
200407528-2	Abandoned	8,274,912	8/3/2005	9/25/2012	11/575,397	US	Mapping Discovery For Virtual Network
200407612-4	Issued	8,544,002	10/28/2005	9/24/2013	11/718,196	US	Managing Virtual Overlay Infrastructures
							B . B1. 1
200407659-3	Abandoned	7,685,125	10/6/2005	3/23/2010	11/664,466	US	Proving Relationships Between Data
200500366-3	Issued	9,083,748	12/14/2005	7/14/2015	11/302,637	US	Modelling Network To Assess Security Properties
	255454	2,000,710	121112000		22002001		Security Aropoidos
200500429-1	Issued	9,311,367	3/30/2005	4/12/2016	11/096,577	US	Database Extension Structure

1				I	1	1
						Client And Method For
Issued	8,832,072	5/25/2006	9/9/2014	11/440,118	US	Database
Issued	8,161,558	4/25/2006	4/17/2012	11/411,685	US	Network Management And Administration
Issued	602006001680.8	4/27/2006	7/9/2008	06113237.9	DE	Network Management And Administration
Issued	1720315	4/27/2006	7/9/2008	06113237.9	GB	Network Management And Administration
Issued	2426841	6/4/2005	7/14/2010	0511438.4	GB	Memory Controller
Issued	7,461,216	2/23/2006	12/2/2008	11/359,501	US	Memory Controller
Abandoned	2428533	6/24/2005	8/22/2007	0512832.7	GB	Determining Data Flows In A Network
Issued	2431741	10/27/2005	11/3/2010	0521898.7	GB	A METHOD OF DIGITALLY SIGNING DATA AND A DATA REPOSITORY STORING DIGITALLY SIGNED DATA
Issued	8 028 163	7/26/2006	9/27/2011	11/493 005	II6	A METHOD OF DIGITALLY SIGNING DATA AND A DATA REPOSITORY STORING DIGITALLY SIGNED DATA
	Issued  Issued  Issued  Abandoned	Issued 8,161,558  Issued 602006001680.8  Issued 1720315  Issued 2426841  Abandoned 2428533  Issued 2431741	Issued 8,161,558 4/25/2006  Issued 602006001680.8 4/27/2006  Issued 1720315 4/27/2006  Issued 2426841 6/4/2005  Issued 7,461,216 2/23/2006  Abandoned 2428533 6/24/2005	Issued 8,161,558 4/25/2006 4/17/2012  Issued 602006001680.8 4/27/2006 7/9/2008  Issued 1720315 4/27/2006 7/9/2008  Issued 2426841 6/4/2005 7/14/2010  Issued 7,461,216 2/23/2006 12/2/2008  Abandoned 2428533 6/24/2005 8/22/2007  Issued 2431741 10/27/2005 11/3/2010	Issued     8,161,558     4/25/2006     4/17/2012     11/411,685       Issued     602006001680.8     4/27/2006     7/9/2008     06113237.9       Issued     1720315     4/27/2006     7/9/2008     06113237.9       Issued     2426841     6/4/2005     7/14/2010     0511438.4       Issued     7,461,216     2/23/2006     12/2/2008     11/359,501       Abandoned     2428533     6/24/2005     8/22/2007     0512832.7       Issued     2431741     10/27/2005     11/3/2010     0521898.7	Issued         8,161,558         4/25/2006         4/17/2012         11/411,685         US           Issued         602006001680.8         4/27/2006         7/9/2008         06113237.9         DE           Issued         1720315         4/27/2006         7/9/2008         06113237.9         GB           Issued         2426841         6/4/2005         7/14/2010         0511438.4         GB           Issued         7,461,216         2/23/2006         12/2/2008         11/359,501         US           Abandoned         2428533         6/24/2005         8/22/2007         0512832.7         GB           Issued         2431741         10/27/2005         11/3/2010         0521898.7         GB

	1	T	1	1	ı		
							ESTABLISHING A TRUST
							RELATIONSHIP BETWEEN
200505607-2	Issued	8,261,332	7/8/2008	9/4/2012	12/169,113	US	COMPUTING ENTITIES
200505650-1	Issued	2431770	10/31/2005	9/21/2011	0522227.8	GB	Emulated Tape-based Storage Media
							Emulated Tape-based Storage
200505650-2	Issued	7,519,767	5/30/2006	4/14/2009	11/442,128	US	Media
200505874-1	Issued	2434888	2/2/2006	7/13/2011	0602020.0	GB	Restoring A Client Device
200505874-2	Issued	7,694,169	1/31/2007	4/6/2010	11/700,126	US	Restoring A Client Device
200303874-2	issued	7,024,107	1731/2007	4/0/2010	117700,120	03	METHOD AND AN APPARATUS FOR CREATING VISUAL REPRESENTATIONS OF FARMS THAT ENABLES CONNECTING FARMS
200505999-1	Issued	8,396,966	10/26/2005	3/12/2013	11/260,514	US	SECURELY
200506050-3	Issued	8,135,276	8/11/2006	3/13/2012	11/990,421	US	QUANTUM REPEATER
							Methods For Preparing
200506117-1	Issued	7,836,007	1/30/2006	11/16/2010	11/343,639	US	Entangled Quantum States
200507238-2	Issued	8,842,839	7/21/2006	9/23/2014	11/490,853	US	Device With Multiple One- time Pads And Method Of Managing Such A Device
	,	-,,,		,,,			

	_				Т		
200507239-2	Abandoned	8,250,363	7/21/2006	8/21/2012	11/490,852	US	Method Of Provisioning Devices With One-time Pad Data, Device For Use In Such Method, And Service Usage Tracking Based On One-time Pad Data
200602101-1	Abandoned	7,769,173	10/30/2006	8/3/2010	11/590,493	US	Methods And Systems For Executing Bit-commitment Protocols That Are Based On Entangled Quantum States And A Third Party
200602324 1	Issued	8,095,630	3/20/2007	1/10/2012	11/725 715	US	Natural Regins
200602334-1	Issued	8,095,630	3/20/2007	1/10/2012	11/725,715	US	Network Booting
200603381-1	Issued	2446172	1/30/2007	1/21/2009	0701685.0	GB	Control Of Data Transfer
200003381-1	Issued	2440172	1/30/2007	112112009	0701083.0	GB	Condoi of Data Transier
200603381-2	Issued	8,650,339	11/27/2007	2/11/2014	11/945,458	US	Control Of Data Transfer
200003301-2	133404	0,030,337	11/21/2001	2/11/2014	11/745,450	0.5	Condoi of Bata Transier
200603884-4	Issued	8,369,247	1/29/2008	2/5/2013	12/449,241	US	Method And System For Facilitating Multi-point Communications
200603884-5	Issued	200880003529.1	1/29/2008	3/5/2014	200880003529.1	CN	Method And System For Facilitating Multi-point Communications
200603986-4	Issued	8,504,018	1/29/2008	8/6/2013	12/449,244	US	Service Routing For Communication Systems
200603987-4	Issued	8,554,244	1/29/2008	10/8/2013	12/449,246	US	CONFIGURATION OF MOBILE COMMUNICATION DEVICES

		_	1	1	T		1
200603987-5	Abandoned	200880003636.4	1/29/2008	2/15/2017	200880003636.4	CN	CONFIGURATION OF MOBILE COMMUNICATION DEVICES
200700240-2	Issued	101855636	10/25/2007	3/16/2016	200780101502.1	CN	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
200700240-3	Issued	112007003645	10/25/2007	6/16/2011	112007003645.1	DE	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
200700240-5	Issued	9,372,941	10/25/2007	6/21/2016	12/671,322	US	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
200700350-1	Issued	7,835,900	4/27/2007	11/16/2010	11/741,086	US	Emulated Tape-based Storage Media
200700455-1	Issued	8,904,341	4/30/2007	12/2/2014		US	DERIVING GROUNDED MODEL OF BUSINESS PROCESS SUITABLE FOR AUTOMATIC DEPLOYMENT
					11//41,8/8		TRUSTED COMPUTING
200700652-5	Issued	8,689,318	1/21/2008	4/1/2014	12/524,563	US	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING
200701071-2	Issued	8,150,851	10/27/2008	4/3/2012	12/258,638	US	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING
200701133-2	Issued	101855620	10/25/2007	6/12/2013	200780101503.6	CN	DATA

						T
Issued	2466581	10/25/2007	1/9/2013	1000248.3	GB	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
Issued	112007003678	10/25/2007	2/25/2016	112007003678.8	DE	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
Issued	8,332,404	10/24/2008	12/11/2012	12/257,659	US	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
Issued	200780101501.7	10/25/2007	4/26/2017	200780101501.7	CN	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
Issued	2466580	10/25/2007	1/2/2013	1000247.5	GB	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
Issued	112007003693	10/25/2007	5/15/2014	112007003693.1	DE	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
						DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
						DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
						DATA TRANSFER
	Issued  Issued	Issued 112007003678  Issued 8,332,404  Issued 200780101501.7  Issued 112007003693  Issued 8,838,541  Issued 8,099,573	Issued 112007003678 10/25/2007  Issued 8,332,404 10/24/2008  Issued 200780101501.7 10/25/2007  Issued 112007003693 10/25/2007  Issued 8,838,541 10/25/2007  Issued 8,838,541 10/25/2007	Issued 112007003678 10/25/2007 2/25/2016  Issued 8,332,404 10/24/2008 12/11/2012  Issued 200780101501.7 10/25/2007 4/26/2017  Issued 2466580 10/25/2007 1/2/2013  Issued 112007003693 10/25/2007 5/15/2014  Issued 8,838,541 10/25/2007 9/16/2014  Issued 8,099,573 10/22/2008 1/17/2012	Issued 112007003678 10/25/2007 2/25/2016 112007003678.8  Issued 8.332,404 10/24/2008 12/11/2012 12/257,659  Issued 200780101501.7 10/25/2007 4/26/2017 200780101501.7  Issued 2466580 10/25/2007 1/2/2013 1000247.5  Issued 112007003693 10/25/2007 5/15/2014 112007003693.1  Issued 8.838,541 10/25/2007 9/16/2014 12/671,334	Issued         112007003678         10/25/2007         2/25/2016         112007003678.8         DE           Issued         8,332,404         10/24/2008         12/11/2012         12/257,659         US           Issued         200780101501.7         10/25/2007         4/26/2017         200780101501.7         CN           Issued         2466580         10/25/2007         1/2/2013         1000247.5         GB           Issued         112007003693         10/25/2007         5/15/2014         112007003693.1         DE           Issued         8.838.541         10/25/2007         9/16/2014         12/671.334         US           Issued         8.099.573         10/22/2008         1/17/2012         12/256.329         US

				1	T	_	T
200701320-1	Issued	7,984,236	9/13/2007	7/19/2011	11/854,731	US	DATA TRANSFER
		1,2 = 1,===			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
							Synchronous Optical Bus
							Providing Communication Between Computer System
200701587-1	Issued	8,032,033	10/23/2007	10/4/2011	11/977,369	US	Components
200702339-4	Issued	8,161,154	9/30/2008	4/17/2012	12/241,435	US	Establishing A Thin Client Terminal Services Session
		10.550.100	1044		40/040.000	***	Server-embedded Distributed
200702547-2	Issued	10,572,188	10/1/2008	2/25/2020	12/243,022	US	Storage System
							SYSTEMS AND METHODS
							FOR DEPLOYMENT OF BOOT IMAGES IN
200702599-2	Issued	8,522,002	1/28/2008	8/27/2013	12/811,198	US	DISKLESS SERVERS
							DEPLOYMENT OF BOOT
200702599-3	Issued	101925876	1/28/2008	6/12/2013	200880125785.8	CN	IMAGES IN DISKLESS SERVERS
200702377-3	133000	101725070	1720/2000	0/12/2013	200000123703.0	CIV	SERVERS
							DEPLOYMENT OF BOOT IMAGES IN DISKLESS
200702599-5	Issued	2467721	1/28/2008	6/12/2013	1010537.7	GB	SERVERS
200703074-1	Issued	8,059,443	10/23/2007	11/15/2011	11/975,963	US	Three-dimensional Memory Module Architectures
		1010252-	10/02/2005	10/11/2011	*******		Three-dimensional Memory
200703074-3	Abandoned	101836257	10/23/2008	12/11/2013	200880112836.3	CN	Module Architectures

	1		ı	1	T		1
							Three-dimensional Memory
200703074-5	Abandoned	5280455	10/23/2008	5/31/2013	2010-531048	JP	Module Architectures
200703074-6	Abandoned	101574358	10/23/2008	11/27/2015	2010-7009034	KR	Three-dimensional Memory Module Architectures
200703495-3	Issued	8,817,787	1/28/2009	8/26/2014	12/361,204	US	Data Processing Method And System
							QKD Transmitter And
200703934-1	Issued	8,170,214	10/1/2008	5/1/2012	12/286,854	US	Transmission Method
200703966-3	Abandoned	200880113950.8	10/14/2008	9/25/2013	200880113950.8	CN	QUANTUM KEY DISTRIBUTION SYSTEM USING LDPC CODES WITH A GRAPH HAVING A TOROID STRUCTURE
							Quantum Key Distribution System Using LDPC Codes With A Graph Having A
200703966-6	Abandoned	8,332,730	10/14/2008	12/11/2012	12/740,341	US	Toroid Structure
200703983-4	Issued	102027697	3/10/2008	12/3/2014	200880129118.7	CN	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
200703983-6	Abandoned	5160654	3/10/2008	12/21/2012	2010-550641	JP	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
200703983-7	Abandoned	10-1388801	3/10/2008	4/17/2014	2010-7022611	KR	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same

	1	1		1	T	_	1
200703983-8	Issued	8,472,802	3/10/2008	6/25/2013	12/921,763	US	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
200703994-3	Abandoned	0821180-9	3/11/2008	1/22/2019	PI0821180-9	BR	Optoelectronic Switches Using On-chip Optical Waveguides
							Optoelectronic Switches
200703994-4	Abandoned	102027399	3/11/2008	3/27/2013	200880129150.5	CN	Using On-chip Optical Waveguides
200703994-5	Issued	327540	3/11/2008	12/17/2019	6412/DELNP/2010	IN	Optoelectronic Switches Using On-chip Optical Waveguides
200703994-7	Abandoned	101465293	3/11/2008	11/19/2014	2010-7022707	KR	Optoelectronic Switches Using On-chip Optical Waveguides
200703994-8	Issued	8,938,139	3/11/2008	1/20/2015	12/921,768	US	Optoelectronic Switches Using On-chip Optical Waveguides
200103994-0	Issued	0,730,137	3/11/2008	112012013	121921,100	US	11 aveguides
200704016-1	Issued	2458154	3/7/2008	6/27/2012	0804253.3	GB	Routing Across A Virtual Network
200704016-2	Issued	8,370,834	3/9/2009	2/5/2013	12/400,491	US	Routing Across A Virtual Network
200704017-1	Issued	2458157	3/7/2008	4/25/2012	0804259.0	GB	Virtual Machine Liveness Check

	1	Т		<b>I</b>	T		T
200704017-2	Issued	8,627,313	3/9/2009	1/7/2014	12/400,510	US	Virtual Machine Liveness Check
200704017-2	Issued	0,027,313	31712007	1/1/2014	12/400,510	03	Check
200704228-1	Issued	2459433	3/7/2008	6/6/2012	0804263.2	GB	Distributed Network Connection Policy Management
200704228-2	Issued	9,178,850	3/9/2009	11/3/2015	12/400,526	US	Distributed Network Connection Policy Management
200704591-1	Issued	2455496	10/31/2007	5/30/2012	0721310.1	GB	Error Detection Method And Apparatus
200704591-2	Issued	8,205,134	9/30/2008	6/19/2012	12/286,492	US	Error Detection Method And Apparatus
							SELECTING EXECUTING
200800252-1	Issued	8,677,375	1/29/2009	3/18/2014	12/362,202	US	REQUESTS TO PREEMPT
200800266-2	Issued	8,156,063	9/29/2008	4/10/2012	12/240,593	US	DECISION MAKING BASED ON CHANGES INPUT TO A DATABASE
200800277-2	Issued	8,918,670	10/29/2008	12/23/2014	12/260,609	US	Active Link Verification For Failover Operations In A Storage Network
200800998-1	Abandoned	9,015,204	7/15/2009	4/21/2015	12/503,794	US	ONBOARDING RESOURCES TO AN IDENTITY MANAGEMENT SYSTEM

<u> </u>				I		1
Y	0.117.242	10/29/2009	2/14/2012	12/260 024	TIC	Landmark Chunking Of Landmarkless Regions
Issueu	6,117,343	10/28/2008	2/14/2012	12/200,024	03	Landmarkiess Regions
Issued	8,316,289	1/29/2009	11/20/2012	12/361,669	US	Updating Sequential Data
						Remote Configuration Of
Issued	8,127,124	3/19/2009	2/28/2012	12/407,642	US	Computing Platforms
Issued	2464966	10/31/2008	8/29/2012	0819995.2	GB	Policy Enforcement In Trusted Platforms
						Sizing An Infrastructure Configuraton Optimized For
Issued	8,448,181	1/30/2009	5/21/2013	12/363,581	US	A Workload Mix
						Sizing An Infrastructure
Issued	9.055.402	1/20/2000	11/9/2011	12/262 507	TIC	Configuration Optimized For A Workload Mix Using A Predictive Model
Issueti	6,033,493	1/30/2009	11/8/2011	12/303,397	03	Fredictive Model
						AUTOMATED LIFECYCLE MANAGEMENT OF A
Issued	8,312,419	10/30/2008	11/13/2012	12/261,324	US	COMPUTER IMPLEMENTED SERVICE
						AUTOMATED TEST
						EXECUTION IN A SHARED VIRTUALIZED RESOURCE
Issued	9,294,296	1/30/2009	3/22/2016	12/363,558	US	POOL
Issued	9,323,473	1/9/2009	4/26/2016	12/351,164	US	Virtual Tape Library
	Issued  Issued  Issued  Issued	Issued 8,316,289  Issued 8,127,124  Issued 2464966  Issued 8,448,181  Issued 8,055,493  Issued 9,294,296	Issued 8,316,289 1/29/2009  Issued 8,127,124 3/19/2009  Issued 2464966 10/31/2008  Issued 8,448,181 1/30/2009  Issued 8,055,493 1/30/2009  Issued 9,294,296 1/30/2009	Issued       8,316,289       1/29/2009       11/20/2012         Issued       8,127,124       3/19/2009       2/28/2012         Issued       2464966       10/31/2008       8/29/2012         Issued       8,448,181       1/30/2009       5/21/2013         Issued       8,055,493       1/30/2009       11/8/2011         Issued       8,312,419       10/30/2008       11/13/2012         Issued       9,294,296       1/30/2009       3/22/2016	Issued 8,316,289 1/29/2009 11/20/2012 12/361,669  Issued 8,127,124 3/19/2009 2/28/2012 12/407,642  Issued 2464966 10/31/2008 8/29/2012 0819995.2  Issued 8,448,181 1/30/2009 5/21/2013 12/363,581  Issued 8,055,493 1/30/2009 11/8/2011 12/363,597  Issued 8,312,419 10/30/2008 11/13/2012 12/261,324	Issued     8,316,289     1/29/2009     11/20/2012     12/361,669     US       Issued     8,127,124     3/19/2009     2/28/2012     12/407,642     US       Issued     2464966     10/31/2008     8/29/2012     0819995.2     GB       Issued     8,448,181     1/30/2009     5/21/2013     12/363,581     US       Issued     8,055,493     1/30/2009     11/8/2011     12/363,597     US       Issued     8,312,419     10/30/2008     11/13/2012     12/261,324     US       Issued     9,294,296     1/30/2009     3/22/2016     12/363,558     US

	1	1	1	1		1	1
							Associating A Signing Key
200802665-1	T	2466071	12/15/2009	11/13/2013	0822726.6	GB	With A Software Component Of A Computing Platform
200802003-1	Issued	2400071	12/15/2008	11/13/2013	0822726.6	GB	Of A Computing Platform
							Associating A Signing Key With A Software Component
200802665-2	Issued	9,361,462	12/15/2009	6/7/2016	12/638,726	US	Of A Computing Platform
200802879-1	Issued	7,977,622	2/9/2009	7/12/2011	12/322,896	US	TUNING AN OPTICAL RESONATOR USING A FEEDBACK SIGNAL REPRESENTING AN AVERAGE DC BALANCED CODING
							QUESTIONNAIRE
200803093-1	Issued	8,655,827	10/29/2009	2/18/2014	12/608,878	US	GENERATION
200803195-1	Issued	9,559,842	9/30/2008	1/31/2017	12/242,104	US	Trusted Key Management For Virtualized Platforms
200803229-1	Issued	2466178	12/5/2008	10/10/2012	0822213.5	GB	Data Centre And Apparatus And Method For Data Centre Cooling
200803229-1	Issued	2400178	12/3/2006	10/10/2012	0822213.3	GB	Cooling
200803499-2	Issued	2470081	6/30/2009	7/29/2015	0911271.5	GB	Quantum Repeater And System And Method For Creating Extended Entanglements
200803630-1	Issued	7,979,491	3/27/2009	7/12/2011	12/412,821	US	Producing Chunks From Input Data Using A Plurality Of Processing Elements
200900314-2	Issued	8,566,519	7/9/2010	10/22/2013	12/833,594	US	Providing Preferred Seed Data For Seeding A Data Deduplicating Storage System

				1	1		1
200900462-1	Issued	9,026,803	11/30/2009	5/5/2015	12/627,500	US	Computing Entities, Platforms And Methods Operable To Perform Operations Selectively Using Different Cryptographic Algorithms
200901410-1	Abandoned	8,285,578	1/21/2004	10/9/2012	10/763,072	US	Managing Information Technology (IT) Infrastructure Of An Enterprise Using A Centralized Logistics And Management (CLAM) Tool
200901883-1	Issued	8,255,904	12/8/2006	8/28/2012	11/635,906	US	SYSTEM AND METHOD FOR GENERATING A DISTRIBUTABLE SOFTWARE PACKAGE
200902399-1	Issued	8,427,980	7/21/2010	4/23/2013	12/841,039	US	Methods And Apparatus To Determine And Implement Multidimensional Network Topologies
200902408-1	Issued	8,130,754	7/10/2009	3/6/2012	12/501,000	US	ON-CHIP AND CHIP-TO- CHIP ROUTING USING A PROCESSOR ELEMENT/ROUTER COMBINATION
200902415-1	Issued	8,537,677	10/13/2009	9/17/2013	12/577,972	US	Incremental Adaptive Packet Routing In A Multi- dimensional Network
200903516-1	Issued	9,740,704	1/28/2010	8/22/2017	12/695,261	US	Method And Apparatus For Random Access Of Data Stored In A Sequential Manner
200903527-1	Issued	8,660,994	1/28/2010	2/25/2014	12/695,285	US	MODELING A CLOUD
200903536-1	133000	8,589,475	1/28/2010	11/19/2013	12/695,622	103	COMPUTING SYSTEM

					1		T
							Capping A Number Of Locations Referred To By
200904480-1	Issued	8,499,131	4/13/2010	7/30/2013	12/759,174	US	Chunk References
200904482-1	Issued	8,782,368	5/11/2010	7/15/2014	12/777,478	US	Storing Chunks In Containers
200904629-1	Issued	2481807	7/6/2010	3/25/2015	1011319.9	GB	Protecting File Entities In A Networked System
							Managing A Memory
201000023-1	Issued	8,812,400	7/9/2010	8/19/2014	12/833,438	US	Segment Using A Memory Virtual Appliance
							ENERGY-EFFICIENT AND FAULT-TOLERANT
							RESONATOR-BASED MODULATION AND
201000081-1	Issued	8,705,972	5/11/2010	4/22/2014	12/777,500	us	WAVELENGTH DIVISION MULTIPLEXING SYSTEMS
							Flow-control Methods And
201000102-1	Issued	8,391,717	5/24/2010	3/5/2013	12/785,962	US	Systems For Multibus Systems
2010001021	10000	5,671,111	0.2020	0,0,2010	12/100,502		Systems
201000778-1	Issued	8,850,593	5/12/2011	9/30/2014	13/106,719	US	DATA MANAGEMENT
201000778-1	Issued	8,850,575	3/12/2011	7/30/2014	13/100,719	0.5	DATA WAR WOLVILLY
							SYSTEM AND METHOD
201000788-1	Issued	9,558,103	9/25/2011	1/31/2017	12/217 802	US	TO INDICATE CODE BLOCK EXECUTION
201000700-1	155000	2,330,103	8/25/2011	1/31/2017	13/217,892	US	DEOCK EAECUTION
201001445 1	T3	0.000.704	0/04/0010	4/14/0015	10/000 707	110	Load Balancing Data Access
201001445-1	Issued	9,009,724	9/24/2010	4/14/2015	12/889,727	US	In Virtualized Storage Nodes

	1		1	Т	T		1
							Retention Management in a
201001960-1	Issued	9,639,540	2/25/2011	5/2/2017	13/034,900	US	WORM Storage System
201004652-2	Issued	7,818,564	5/3/2005	10/19/2010	11/121,231	US	DECIPHERING OF FRAGMENTED ENCIPHERED DATA PACKETS
201004654-2	Issued	8,331,404	10/25/2007	12/11/2012	11/923,869	US	Signature Checking Using Deterministic Finite State Machines
201004979-1	Issued	8,519,803	10/29/2010	8/27/2013	12/915,598	US	RESONATOR SYSTEMS AND METHODS FOR TUNING RESONATOR SYSTEMS
201005199-1	Issued	8,397,302	10/29/2010	3/12/2013	12/916,265	US	SYSTEM AND METHOD FOR ANALYZING A PROCESS
201005200-1	Issued	9,607,155	10/29/2010	3/28/2017	12/916,277	US	METHOD AND SYSTEM FOR ANALYZING AN ENVIRONMENT
300110618-3	Abandoned	2399906	2/26/2004	10/4/2006	0404218.0	GB	Method And System For Delegating Authority And Access Control Methods Based On Delegated Authority
300110618-4	Issued	7,516,321	3/8/2004	4/7/2009	10/797,715	US	Method, System And Device For Enabling Delegation Of Authority And Access Control Methods Based On Delegated Authority
300111166-4	Abandoned	7,650,498	4/14/2004	1/19/2010	10/825,596	US	SECURE DATA PROVISION METHOD AND APPARATUS AND DATA RECOVERY METHOD AND SYSTEM

	T	T		T	Γ		T
300200017-2	Issued	7,835,724	9/9/2003	11/16/2010	10/657,237	US	METHOD AND APPARATUS FOR AUTHENTICATING SERVICE TO A WIRELESS COMMUNICATIONS DEVICE
300201524-1	Abandoned	2389479	6/7/2002	12/28/2005	0213072.2	GB	METHOD OF SERVING OUT VIDEO OVER A NETWORK OF VIDEO SERVERS
300201524-2	Issued	7,441,261	6/6/2003	10/21/2008	10/455,405	US	VIDEO SYSTEM VARYING OVERALL CAPACITY OF NETWORK OF VIDEO SERVERS FOR SERVING SPECIFIC VIDEO
200202276.2		5.140.016	4/0/2003	11/00/0000	10/400 220		
300202276-2	Issued	7,143,316	4/8/2003	11/28/2006	10/409,239	US	Fault Diagnosis In A Network
300202355-4	Abandoned	60316861.2	3/28/2003	10/17/2007	03251967.0	DE	Method And Apparatus For Encrypting/decrypting Data
200200255 (	Abadaad	1255445	2/08/0002	10/17/2007	02251077.0	CP.	Method And Apparatus For
300202355-6	Abandoned	1355445	3/28/2003	10/17/2007	03251967.0	GB	Encrypting/decrypting Data
300202699-3	Issued	7,650,494	7/2/2003	1/19/2010	10/613,522	US	Method And Apparatus For Use In Relation To Verifying An Association Between Two Parties
300202699-6	Issued	2401763	7/4/2003	8/10/2005	0417136.9	GB	Trusted Authority For Identifier-Based Cryptography
300202699-7	Issued	60326027.6	7/1/2003	1/28/2009	03254190.6	DE	Authentication Method And Apparatus Using Pairing Functions For The Elliptic Curves Based Cryptosystems

	1	T		г	T	1	1
300202699-8	Issued	1378821	7/1/2003	1/28/2009	03254190.6	FR	Authentication Method And Apparatus Using Pairing Functions For The Elliptic Curves Based Cryptosystems
300203841-1	Abandoned	2401959	5/23/2003	2/22/2006	0311874.2	GB	Data Log For Peer-to-peer Network
200703285DE01	Issued	112008003858	5/9/2008	11/21/2019	112008003858.9-51	DE	Proximity Free Space Optical Interconnect
200703285JP01	Abandoned	5118771	5/9/2008	10/26/2012	2011-508457	JP	Proximity Free Space Optical Interconnect
200703285KR01	Issued	101394844	5/9/2008	5/7/2014	2010-7027654	KR	Proximity Free Space Optical Interconnect
200703285US01	Issued	8,571,366	5/9/2008	10/29/2013	12/991,644	US	PROXIMITY FREE SPACE OPTICAL INTERCONNECT
							Method And Systems For Implementing High-radix Switch Topologies On Relatively Lower-radix Switch
200704234US01	Issued	8,774,625	8/8/2008	7/8/2014	13/058,024	US	Physical Networks
20040222247		0.166.171	2455	40.45	10/045 215	7.0	Provision Of Resource
200402333US03	Issued	8,166,171	3/16/2005	4/24/2012	13/045,216	US	Allocation Information
201000074TW01	Abandoned	I451143	5/18/2011	9/1/2014	100117350	TW	Optical Interconnect Fabrics And Optical Switches
2010000171 WUI	1 Tourabilea	1 1701170	2/10/2011	7/1/2014	100111000	1 1 11	Tha Option Switches

					T		T
700205948US01	Issued	8,667,236	9/29/2010	3/4/2014	12/893,335	US	HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION
201000912GB01	Issued	2490483	4/26/2011	5/29/2019	1106932.5	GB	Digital Signature Method And System
200803229AU01	Issued	2009321637	11/13/2009	11/7/2013	2009321637	AU	Data Centre And Apparatus And Method For Data Centre Cooling
200803229BR01	Issued	0916505-3	11/13/2009	1/22/2019	PI0916505-3	BR	Data Centre And Apparatus And Method For Data Centre Cooling
200803229CN01	Issued	102282428	11/13/2009	1/22/2014	200980148656.5	CN	Data Centre And Apparatus And Method For Data Centre Cooling
200803229IN01	Issued	326786	11/13/2009	12/4/2019	2293/CHENP/2011	IN	Data Centre And Apparatus And Method For Data Centre Cooling
200803229KR01	Issued	101564480	11/13/2009	10/23/2015	2011-7012823	KR	Data Centre And Apparatus And Method For Data Centre Cooling
200803229US01	Issued	8,634,963	11/13/2009	1/21/2014	13/132,866	US	Data Centre And Apparatus And Method For Data Centre Cooling
700205424US01	Issued	8,589,648	7/7/2011	11/19/2013	13/177,693	US	PERFORMING A COPY OPERATION ON A REPLICATED VIRTUAL CARTRIDGE

	1	1	1	T	Г	1	T
200802144CN01	Issued	102203692	10/31/2008	7/15/2015	200880131782.5	CN	Prioritized Optical Arbritration Systems And Methods
20000214761101	Issued	102203072	10/31/2000	1713/2015	200000131702.3	CIT	Nethods
200802144JP01	Abandoned	5324660	10/31/2008	7/26/2013	2011-534463	JP	Prioritized Optical Arbritration Systems And Methods
200802144KR01	Abandoned	101444514	10/31/2008	9/18/2014	2011-7009758	KR	Prioritized Optical Arbritration Systems And Methods
200802144US01	Issued	8,938,169	10/31/2008	1/20/2015	13/126,747	US	Prioritized Optical Arbritration Systems And Methods
200703966DE01	Issued	602008005935.9	10/14/2008	3/30/2011	08806753.3	DE	Data Processing Arrangements For Use In Data Communication Apparatus In Connection With Error Correction
200702066CD02	Abandanad	2227942	10/14/2009	2/20/2011	09906752 2	CP	Data Processing Arrangements For Use In Data Communication Apparatus In Connection With Error Correction
200703966GB02	Abandoned	2227862	10/14/2008	3/30/2011	08806753.3	GB	Correction
200904629US01	Issued	8,769,609	7/5/2011	7/1/2014	13/176,581	US	Protecting File Entities
201005787US01	Issued	8,589,200	6/28/2011	11/19/2013	13/171,145	US	MANAGING AN INFORMATION TECHNOLOGY SYSTEM
200802881US01	Issued	8,660,390	1/27/2009	2/25/2014	13/146,473	US	REDUNDANT RING RESONATORS OF VARYING DIMENSIONS TO REDUCE RING RESONATOR TUNING REQUIREMENTS

				ı	T		
							ELLIPTIC CURVE
70020 (00171001	,	0.000.010	2/0/2012	10/21/2014	12/250 100	710	CRYPTOGRAPHIC
700206991US01	Issued	8,868,910	2/9/2012	10/21/2014	13/370,190	US	SIGNATURE
2000038041/501	Isovad	8,705,911	5/6/2000	4/22/2014	12/050 405	Tie	BUS-BASED SCALABLE OPTICAL FABRICS
200902804US01	Issued	8,705,911	5/6/2009	4/22/2014	13/258,425	US	OPTICAL FABRICS
200902589US01	Issued	8,485,738	7/31/2009	7/16/2013	13/258,599	US	Optical Fiber Connector
2009023890301	Issued	8,483,738	7/31/2009	7/10/2013	13/238,399	US	Optical Fiber Connector
							HETEROGENEOUS DATA
200903275US01	Issued	9,165,034	10/15/2009	10/20/2015	13/259,498	US	SOURCE MANAGEMENT
200903366US01	Issued	9,264,226	10/26/2009	2/16/2016	13/387,111	US	Method And Apparatus For Selectively Routing Entanglement Building
200803285US01	Issued	8,774,638	7/31/2009	7/8/2014	13/260,095	US	PHOTONIC QUANTUM SYSTEM ALIGNMENT USING MULTIPLE BEAMS
2008032830301	Issueu	8,774,038	7/31/2009	7/0/2014	13/200,093	03	USING MULTIFLE BEAMS
200904501TW01	Issued	1467258	10/7/2011	1/1/2015	100136479	TW	ELECTRONIC SYSTEM AND METHOD FOR IMPLEMENTING THE SAME
700206164US01	Issued	9,053,577	10/27/2011	6/9/2015	13/282,564	US	REFLECTING VALUES FOR A METRIC IN A DISPLAY
700208756US01	Issued	9,098,325	2/28/2012	8/4/2015	13/407,050	US	PERSISTENT VOLUME AT AN OFFSET OF A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER

		_			Τ		
700208755US01	Issued	9,158,568	1/30/2012	10/13/2015	13/360,956	US	INPUT/OUTPUT OPERATIONS AT A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER
201005054TW01	Issued	1467254	1/11/2012	1/1/2015	101101088	TW	COMPOSITE PROCESSORS
200803285CN01	Issued	200980160706.1	7/31/2009	6/3/2015	200980160706.1	CN	PHOTONIC QUANTUM SYSTEM ALIGNMENT USING MULTIPLE BEAMS
200903705CN01	Issued	102576130	12/21/2009	4/9/2014	200980161291.X	CN	CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC
200903705US01	Issued	8,885,991	12/21/2009	11/11/2014	13/384,878	US	CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC
200801450US02	Issued	8,370,610	2/24/2012	2/5/2013	13/405,098	US	Remote Configuration Of Computing Platforms
2003014300302	155400	6,570,010	212712012	21312013	137403,070	03	
201000525US01	Abandoned	8,654,980	1/28/2011	2/18/2014	13/387,361	US	QUANTUM KEY DISTRIBUTION METHOD AND APPARATUS
200701318US03	Expired	9,665,434	2/7/2012	5/30/2017	13/367,567	US	COMMUNICATING CHUNKS BETWEEN DEVICES
30006603DE01	Expired	60243457.2	6/12/2002	8/8/2012	02254078.5	DE	Performing Secure And Insecure Computing Operations In A Compartmented Operating System

		1	_		T	-	T
							Digital Signature Method And
201000912US01	Issued	8,930,704	4/10/2012	1/6/2015	13/443,285	US	System
201000075CN01	Issued	102907057	5/20/2010	12/2/2015	201080066907.8	CN	SWITCHING IN A NETWORK DEVICE
201000075US01	Abandoned	8,942,559	5/20/2010	1/27/2015	13/696,631	US	SWITCHING IN A NETWORK DEVICE
700209596US01	Issued	8,725,749	7/24/2012	5/13/2014	13/556,684	US	MATCHING REGULAR EXPRESSIONS INCLUDING WORD BOUNDARY SYMBOLS
700209961US01	Issued	9,015,433	7/31/2012	4/21/2015	13/563,223	US	RESILIENCY WITH A DESTINATION VOLUME IN A REPLICATION ENVIRONMENT
2000040021/001		0.000.000	(22/2010	2/24/2015	12/0051/0	IV0	
200904882US01	Issued	8,990,900	6/23/2010	3/24/2015	13/805,160	US	Authorization Control
700211598US01	Issued	9,792,182	1/31/2013	10/17/2017	13/755,664	US	CHECKPOINT GENERATION
700211620US01	Issued	9,575,542	1/31/2013	2/21/2017	13/755,527	US	Computer Power Management
201000205CN01	Issued	102934097	10/8/2010	4/20/2016	201080067520.4	CN	DATA DEDUPLICATION

		T	1		Τ		T
201000205US02	Issued	8,799,238	10/8/2010	8/5/2014	13/634,757	US	DATA DEDUPLICATION
		, , , ,					Signature checking using deterministic finite state
201004654US03	Issued	8,665,911	11/2/2012	3/4/2014	13/668,001	US	machines
700205948CN01	Issued	103124961	9/28/2011	6/29/2016	201180047258.1	CN	HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION
201000074US01	Issued	9,354,412	5/19/2010	5/31/2016	13/697,760	US	OPTICAL INTERCONNECT FABRICS AND OPTICAL SWITCHES
700212582US01	Issued	8,943,353	1/31/2013	1/27/2015	13/756,155	US	ASSIGNING NODES TO JOBS BASED ON RELIABILITY FACTORS
200803229FR01	Issued	2352953	11/13/2009	1/2/2013	09775127.5	FR	Data Centre And Apparatus And Method For Data Centre Cooling
200003227FKU1	155000	4334333	11/13/2009	11212013	07113121.3	1.1	Coomig
200803229DE01	Issued	602009012528.1	11/13/2009	1/2/2013	09775127.5	DE	Data Centre And Apparatus And Method For Data Centre Cooling
200803229GB02	Issued	2352953	11/13/2009	1/2/2013	09775127.5	GB	Data Centre And Apparatus And Method For Data Centre Cooling
700207697TW01	Issued	1559041	1/28/2013	11/21/2016	102103081	TW	HYBRID ELECTRO- OPTICAL PACKAGE FOR AN OPTO-ELECTRONIC ENGINE

1	1				1	1
Issued	9,166,893	9/23/2010	10/20/2015	13/818,850	US	METHODS, APPARATUS AND SYSTEMS FOR MONITORING LOCATIONS OF DATA WITHIN A NETWORK SERVICE
Issued	9,514,150	4/19/2013	12/6/2016	13/866,732	US	AUTOMATIC WORM- RETENTION STATE TRANSITIONS
Issued	602008023941.1	10/23/2008	4/17/2013	08842157.3	DE	Three-dimensional Memory Module Architectures
Issued	2212887	10/23/2008	4/17/2013	08842157.3	GB	Three-dimensional Memory Module Architectures
Issued	103221861	10/8/2010	3/11/2015	201080070325.7	CN	ELECTRONIC SYSTEM HAVING FANOUT OPTICAL BUSES
Aboutond	0.014.567	10/9/2010	4/01/2015	12/077 (41	TIC.	ELECTRONIC SYSTEM HAVING FANOUT
Abandoned	9,014,367	10/8/2010	4/21/2015	13/8//,041	US	OPTICAL BUSES
Abandoned	5690411	10/27/2010	2/6/2015	2013-536572	JP	RECEIVERS AND TRANSCEIVERS FOR OPTICAL MULTIBUS SYSTEMS
Issued	9,178,642	10/27/2010	11/3/2015	13/881,004	US	RECEIVERS AND TRANSCEIVERS FOR OPTICAL MULTIBUS SYSTEMS
Issued	9,064,129	4/7/2011	6/23/2015	13/882,692	US	Managing Data
	Issued  Issued  Abandoned  Abandoned	Issued 9,514,150  Issued 602008023941.1  Issued 2212887  Issued 103221861  Abandoned 9,014,567  Abandoned 5690411  Issued 9,178,642	Issued 9,514,150 4/19/2013  Issued 602008023941.1 10/23/2008  Issued 2212887 10/23/2008  Issued 103221861 10/8/2010  Abandoned 9,014,567 10/8/2010  Abandoned 5690411 10/27/2010	Issued 9,514,150 4/19/2013 12/6/2016  Issued 602008023941.1 10/23/2008 4/17/2013  Issued 2212887 10/23/2008 4/17/2013  Issued 103221861 10/8/2010 3/11/2015  Abandoned 9,014,567 10/8/2010 4/21/2015  Abandoned 5690411 10/27/2010 2/6/2015  Issued 9,178,642 10/27/2010 11/3/2015	Issued     9,514,150     4/19/2013     12/6/2016     13/866,732       Issued     602008023941.1     10/23/2008     4/17/2013     08842157.3       Issued     2212887     10/23/2008     4/17/2013     08842157.3       Issued     103221861     10/8/2010     3/11/2015     201080070325.7       Abandoned     9,014,567     10/8/2010     4/21/2015     13/877,641       Abandoned     5690411     10/27/2010     2/6/2015     2013-536572       Issued     9,178,642     10/27/2010     11/3/2015     13/881,004	Issued         9,514,150         4/19/2013         12/6/2016         13/866,732         US           Issued         602008023941.1         10/23/2008         4/17/2013         08842157.3         DE           Issued         2212887         10/23/2008         4/17/2013         08842157.3         GB           Issued         103221861         10/8/2010         3/11/2015         201080070325.7         CN           Abandoned         9,014,567         10/8/2010         4/21/2015         13/877,641         US           Abandoned         5690411         10/27/2010         2/6/2015         2013-536572         JP           Issued         9,178,642         10/27/2010         11/3/2015         13/881,004         US

			1		T		T
200703983US09	Issued	8,805,189	5/20/2013	8/12/2014	13/898,111	US	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
201005054CN01	Issued	103299290	1/20/2011	11/25/2015	201180064918.7	CN	COMPOSITE PROCESSORS
201005054US01	Issued	8,929,694	1/20/2011	1/6/2015	13/978,039	US	COMPOSITE PROCESSORS
200703285US02	Issued	8,755,656	8/7/2013	6/17/2014	13/961,171	US	PROXIMITY FREE SPACE OPTICAL INTERCONNECT
700206063CN01	Issued	103563329	6/7/2011	4/12/2017	201180071448.7	CN	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
70020606211501	Inqued	0 204 709	6/7/2011	4/5/2016	14/122 164	Tie.	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED
700206063US01	Issued	9,304,798	6/7/2011	4/5/2016	14/122,164	US	DATACENTERS
201001768JP01	Issued	5990264	6/16/2011	8/19/2016	2014-514445	JP	System and Method for Policy Generation
201001768US01	Issued	10,536,483	6/16/2011	1/14/2020	14/118,847	US	System and Method for Policy Generation
700205826US01	Issued	9,203,621	7/11/2011	12/1/2015	14/125,685	US	POLICY-BASED DATA MANAGEMENT

	1	T	1		I		Ī
700206167JP01	Issued	5710075	7/29/2011	3/13/2015	2014-522804	JP	CREDENTIAL VALIDATION
							CREDENTIAL
700206167US01	Issued	9,268,968	7/29/2011	2/23/2016	14/234,334	US	VALIDATION
200700652FR01	Abandoned	2126770	1/21/2008	3/19/2014	08702121.8	FR	TRUSTED COMPUTING ENTITIES
200700652DE01	Issued	602008030950.9	1/21/2008	3/19/2014	08702121.8	DE	TRUSTED COMPUTING ENTITIES
200700652GB03	Issued	2126770	1/21/2008	3/19/2014	08702121.8	GB	TRUSTED COMPUTING ENTITIES
70000740711501	Inqued	0.225.500	1/21/2012	5/10/2016	14/265 204	TIC.	HYBRID ELECTRO- OPTICAL PACKAGE FOR AN OPTO-ELECTRONIC
700207697US01	Issued	9,335,500	1/31/2012	5/10/2016	14/365,294	US	ENGINE
700208369US01	Irrued	9,514,290	3/30/2012	12/6/2016	14/371,665	US	AUTHODIZATION CACUE
700208309U301	Issued	7,514,270	3/30/2012	12/6/2016	14/3/1,003	0.5	AUTHORIZATION CACHE
700206575CN01	Issued	104067239	2/2/2012	5/10/2017	201280068663.6	CN	SYSTEMS AND METHODS FOR DATA CHUNK DEDUPLICATION
700206575US01	Issued	9,672,218	2/2/2012	6/6/2017	14/364,440	US	SYSTEMS AND METHODS FOR DATA CHUNK DEDUPLICATION

			ı	1	T		T
							REGULATING A REPLICATION
700209845US01	Issued	9,824,131	3/15/2012	11/21/2017	14/373,848	US	OPERATION
700209846CN01	Abandoned	201280068688.6	4/24/2012	8/2/2019	201280068688.6	CN	Determining A Schedule For A Job To Replicate An Object Stored On A Storage Appliance
700208013CN01	Issued	201280068732.3	4/12/2012	10/20/2017	201280068732.3	CN	RECONFIGURATION OF AN OPTICAL CONNECTION INFRASTRUCTURE
700207695US01	Issued	9,614,728	4/24/2012	4/4/2017	14/374,804	US	IDENTIFYING NETWORK COMMUNICATION PATTERNS
700207959US01	Issued	9,336,194	3/13/2012	5/10/2016	14/374,797	US	Submatch Extraction
							DATA CENTER SERVICE
700209343US01	Issued	10,020,998	4/27/2012	7/10/2018	14/387,985	US	ORIENTED NETWORKING
700207731US01	Issued	9,430,157	2/29/2012	8/30/2016	14/381,291	US	Continuous Recording Multichannel Disk-based Data Logging
200407497US03	Issued	9,294,867	10/31/2014	3/22/2016	14/530,331	US	PROVISION OF SERVICES OVER A COMMON DELIVERY PLATFORM SUCH AS A MOBILE TELEPHONY NETWORK
700211386US01	Issued	9,596,302	7/20/2012	3/14/2017	14/394,544	US	MIGRATING APPLICATIONS BETWEEN NETWORKS

	_		1	1		_	T
							PRIORITIZED OPTICAL ARBITRATION SYSTEMS
200802144US02	Issued	9,794,019	12/11/2014	10/17/2017	14/567,513	US	AND METHODS
							FAILOVER IN RESPONSE
700212686CN01	Issued	104798349	1/30/2013	8/7/2018	201380062446.0	CN	TO FAILURE OF A PORT
		0.000.000	1,00,0010			, va	FAILOVER IN RESPONSE
700212686US01	Issued	9,830,239	1/30/2013	11/28/2017	14/438,624	US	TO FAILURE OF A PORT
700211025US01	Issued	10,204,008	12/21/2012	2/12/2019	14/433,675	US	MEMORY MODULE HAVING ERROR CORRECTION LOGIC
200900462US02	Issued	9,710,658	3/6/2015	7/18/2017	14/640,730	US	Computing Entities, Platforms And Methods Operable To Perform Operations Selectively Using Different Cryptographic Algorithms
700220555EM01	Issued	28789910001	11/27/2015	1/14/2016	002878991	EM	RDX MicroServer Module
							MANAGEMENT OF
700218700CN01	Issued	105577383	6/30/2015	12/3/2019	201510384886.9	CN	CRYPTOGRAPHIC KEYS
							MANAGEMENT OF
700218700GB01	Issued	2531848	6/11/2015	12/13/2017	1510175.1	GB	CRYPTOGRAPHIC KEYS
700218700US01	Issued	10,027,481	6/30/2015	7/17/2018	14/755,125	US	MANAGEMENT OF CRYPTOGRAPHIC KEYS

		1		Г	T	<u> </u>	T
							Method And System For Facilitating Multi-point
200603884FR01	Issued	2143259	1/29/2008	5/27/2015	08708351.5	FR	Communications
200603884DE01	Issued	602008038318.0	1/29/2008	5/27/2015	08708351.5	DE	Method And System For Facilitating Multi-point Communications
200603884GB02	Issued	2143259	1/29/2008	5/27/2015	08708351.5	GB	Method And System For Facilitating Multi-point Communications
700208755US02	Issued	9,223,609	6/3/2015	12/29/2015	14/729,453	US	INPUT/OUTPUT OPERATIONS AT A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER
					,		
700210840US01	Issued	9,832,550	1/31/2013	11/28/2017	14/764,960	US	RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH
700221895US01	Issued	10,686,817	9/21/2015	6/16/2020	15/754,282	US	IDENTIFICATION OF A DNS PACKET AS MALICIOUS BASED ON A VALUE
7002210730301	135000	10,000,017	7/21/2013	0/10/2020	1377,202	03	VALUE
200704228US02	Issued	10,165,009	9/11/2015	12/25/2018	14/852,052	US	Distributed Network Connection Policy Management
700212144US01	Issued	10,452,567	4/29/2013	10/22/2019	14/785,749	US	NON-VOLATILE MEMORY TO STORE RESETTABLE DATA
700218553TW01	Issued	I616081	10/7/2015	2/21/2018	104133049	TW	ADMISSIONS CONTROL OF A DEVICE

	Т	1	ı	·	T		
700205826US02	Issued	9,628,516	10/21/2015	4/18/2017	14/919,258	US	POLICY-BASED DATA MANAGEMENT
7002030200302	Issued	7,020,510	10/21/2015	4/10/2017	14/717,230	0.5	MANAGEMENT
							SELECTING A STORE FOR
700213474CN01	Abandoned	105339929	5/16/2013	12/3/2019	201380076635.3	CN	DEDUPLICATED DATA
700213474US01	Issued	10,592,347	5/16/2013	3/17/2020	14/787,086	US	SELECTING A STORE FOR DEDUPLICATED DATA
		, ,			,		
							SELECTING A STORE FOR
700213475CN01	Abandoned	201380076634.9	5/16/2013	11/8/2019	201380076634.9	CN	DEDUPLICATED DATA
							SELECTING A STORE FOR
700213475US01	Issued	10,496,490	5/16/2013	12/3/2019	14/787,763	US	SELECTING A STORE FOR DEDUPLICATED DATA
							REPORTING DEGRADED STATE OF DATA
700213478CN01	Abandoned	201380076636.8	5/16/2013	1/8/2019	201380076636.8	CN	RETRIEVED FOR DISTRIBUTED OBJECT
700213478CN01	Abandoned	201380076030.8	3/10/2013	1/8/2019	201380076636.8	CN	DISTRIBUTED OBJECT
							REPORTING DEGRADED
							STATE OF DATA RETRIEVED FOR
700213478US01	Issued	10,296,490	5/16/2013	5/21/2019	14/888,089	US	DISTRIBUTED OBJECT
700214102US01	Abandoned	9,798,888	7/30/2013	10/24/2017	14/787,835	US	DATA MANAGEMENT
							CREDENTIAL
700206167US02	Issued	9,853,816	1/14/2016	12/26/2017	14/995,917	US	VALIDATION

1				T	1	
						DATA VIEW BASED ON
Issued	105408884	7/26/2013	3/29/2019	201380078505.3	CN	CONTEXT
						DATA VIEW BASED ON
Issued	10,027,632	7/26/2013	7/17/2018	14/905,422	US	CONTEXT
Issued	9,507,012	7/31/2013	11/29/2016	14/908,704	US	DETERMINING THE POSITION OF A MOBILE DEVICE WITHIN A STRUCTURE
Issued	9,871,749	8/9/2013	1/16/2018	14/911,081	US	SWITCH ASSEMBLY
Issued	6235140	8/9/2013	11/2/2017	2016-533283	JР	SWITCH ASSEMBLY
Issued	10,142,109	8/16/2016	11/27/2018	15/238,562	US	Instantiating Containers
						STORAGE SYSTEMS FOR
Issued	10,489,354	7/29/2016	11/26/2019	15/224,236	US	CONTAINERS
Issued	105683985	10/29/2013	12/21/2018	201380080310.2	CN	VIRTUAL MACHINE INTROSPECTION
Issued	10,089,474	10/29/2013	10/2/2018	15/021,032	US	VIRTUAL MACHINE INTROSPECTION
	Issued  Issued  Issued  Issued	Issued 10,027,632  Issued 9,507,012  Issued 9,871,749  Issued 6235140  Issued 10,142,109  Issued 10,489,354	Issued 10,027,632 7/26/2013  Issued 9,507,012 7/31/2013  Issued 9,871,749 8/9/2013  Issued 6235140 8/9/2013  Issued 10,142,109 8/16/2016  Issued 10,489,354 7/29/2016	Issued 10,027,632 7/26/2013 7/17/2018  Issued 9,507,012 7/31/2013 11/29/2016  Issued 9,871,749 8/9/2013 1/16/2018  Issued 6235140 8/9/2013 11/2/2017  Issued 10,142,109 8/16/2016 11/27/2018  Issued 10,489,354 7/29/2016 11/26/2019  Issued 105683985 10/29/2013 12/21/2018	Issued 10,027,632 7/26/2013 7/17/2018 14/905,422  Issued 9,507,012 7/31/2013 11/29/2016 14/908,704  Issued 9,871,749 8/9/2013 11/6/2018 14/911,081  Issued 6235140 8/9/2013 11/2/2017 2016-533283  Issued 10,142,109 8/16/2016 11/27/2018 15/238,562  Issued 10,489,354 7/29/2016 11/26/2019 15/224,236  Issued 105683985 10/29/2013 12/21/2018 201380080310.2	Issued         10,027,632         7/26/2013         7/17/2018         14/905,422         US           Issued         9,507,012         7/31/2013         11/29/2016         14/908,704         US           Issued         9,871,749         8/9/2013         1/16/2018         14/911,081         US           Issued         6235140         8/9/2013         11/2/2017         2016-533283         JP           Issued         10,142,109         8/16/2016         11/27/2018         15/238,562         US           Issued         10,489,354         7/29/2016         11/26/2019         15/224,236         US           Issued         105683985         10/29/2013         12/21/2018         201380080310.2         CN

	Т	1	T	<u> </u>	T		
700214981CN01	Issued	105637486	10/31/2013	11/13/2018	201380080188.9	CN	MEMORY INTEGRITY CHECKING
700214981US01	Issued	10,089,498	10/31/2013	10/2/2018	15/021,022	US	MEMORY INTEGRITY CHECKING
	200000	20,000,100	10/01/2010	20.2020	20.022,022		· · · · · · · · · · · · · · · · · · ·
700214729US01	Issued	10,242,042	10/31/2013	3/26/2019	15/021,040	US	COPY-ON-WRITE UPDATE-TRIGGERED CONSISTENCY
					,		
200802552US02	Issued	9,690,506	3/18/2016	6/27/2017	15/074,087	US	Virtual Tape Library
700214208US01	Issued	10,367,702	10/31/2013	7/30/2019	15/032,727	us	NETWORK DATABASE HOSTING
							DETERMINING WHETHER
710223943US01	Issued	10,372,909	8/19/2016	8/6/2019	15/241,502	US	DETERMINING WHETHER PROCESS IS INFECTED WITH MALWARE
710223965US01	Issued	10,389,693	8/23/2016	8/20/2019	15/244,774	US	KEYS FOR ENCRYPTED DISK PARTITIONS
							INTEGRITY VALUES FOR
710224296US01	Issued	10,242,195	7/22/2016	3/26/2019	15/217,583	US	BEGINNING BOOTING INSTRUCTIONS
							GLOBAL CAPABILITIES TRANSFERRABLE
710224076US01	Issued	10,324,722	6/24/2016	6/18/2019	15/192,742	US	ACROSS NODE BOUNDARIES

		1		г	T		1
710224025US01	Issued	10,261,919	7/8/2016	4/16/2019	15/205,326	US	SELECTIVE MEMORY ENCRYPTION
710224088US01	Issued	10,310,990	6/24/2016	6/4/2019	15/192,493	US	DIRECT MEMORY ACCESS ENCRYPTION WITH APPLICATION PROVIDED KEYS
710224071US01	Issued	10,671,668	7/11/2016	6/2/2020	15/206,637	US	INFERRING GRAPH TOPOLOGIES
710224191US01	Issued	10,365,974	9/16/2016	7/30/2019	15/267,899	US	ACQUISITION OF OBJECT NAMES FOR PORTION INDEX OBJECTS
710224568US01	Issued	10,461,926	8/31/2016	10/29/2019	15/252,392	US	CRYPTOGRAPHIC EVIDENCE OF PERSISTED CAPABILITIES
710224562US01	Issued	10,228,995	7/28/2016	3/12/2019	15/221,728	US	LAST WRITERS OF DATASETS IN STORAGE ARRAY ERRORS
700215841US01	Issued	10,680,848	1/29/2014	6/9/2020	15/113,892	US	MANAGING A NUMBER OF ETHERNET LINKS
700217317US01	Issued	10,567,221	5/15/2014	2/18/2020	15/116,674	US	NETWORK SCHEDULING
700216014US01	Issued	10,291,416	5/15/2014	5/14/2019	15/117,226	US	NETWORK TRAFFIC TUNING

	Т	1	1	T	T		
700217207US01	Issued	10,140,194	3/20/2014	11/27/2018	15/114,900	us	STORAGE SYSTEM TRANSACTIONS
700215509US01	Issued	10,374,807	4/4/2014	8/6/2019	15/114,921	US	STORING AND RETRIEVING CIPHERTEXT IN DATA STORAGE
700215885US01	Issued	10,193,892	3/14/2014	1/29/2019	15/116,851	US	RESOURCE RESTRICTION
200903366FR01	Abandoned	2909955	10/26/2009	7/13/2016	09748459.6	FR	Method And Apparatus For Selectively Routing Entanglement Building
200903366DE01	Issued	602009039713.3	10/26/2009	7/13/2016	09748459.6	DE	Method And Apparatus For Selectively Routing Entanglement Building
200903366GB01	Abandoned	2909955	10/26/2009	7/13/2016	09748459.6	GB	Method And Apparatus For Selectively Routing Entanglement Building
700215735US01	Issued	10,270,883	3/27/2014	4/23/2019	15/119,508	US	SCHEDULING DOWNLOADS
700217207CN01	Issued	106104502	3/20/2014	3/22/2019	201480077273.4	CN	Storage System Transactions
710224650US01	Issued	10,209,892	11/28/2016	2/19/2019	15/361,939	US	STORAGE OF FORMAT- AWARE FILTER FORMAT TRACKING STATES

	1		1		T		T
700214965US01	Issued	10,192,066	3/14/2014	1/29/2019	15/125,675	US	SEMANTIC RESTRICTION
							ENCRYPTED
710224250US01	Issued	10,372,897	10/20/2016	8/6/2019	15/298,494	US	CAPABILITIES STORED IN GLOBAL MEMORY
							FIRMWARE
710224524US01	Issued	10,303,883	10/25/2016	5/28/2019	15/333,779	US	VERIFICATION THROUGH DATA PORTS
							NETWORK
700216352US01	Issued	10,397,352	8/4/2014	8/27/2019	15/304,968	US	INFRASTRUCTURE MANAGEMENT
700216162US01	Issued	10,439,961	4/30/2014	10/8/2019	15/307,662	US	Network Fabric Control
							RECOVERY SERVICES
710225035US01	Issued	10,331,528	3/2/2017	6/25/2019	15/447,417	US	FOR COMPUTING SYSTEMS
710225036US01	Issued	10,409,988	1/20/2017	9/10/2019	15/410,934	US	ESCALATED REMEDIATION
710225032US01	Issued	10,650,138	1/27/2017	5/12/2020	15/417,955	US	SYSTEM CALL POLICIES FOR CONTAINERS
700218553US01	Issued	10,230,531	10/23/2014	3/12/2019	15/323,705	US	ADMISSIONS CONTROL OF A DEVICE

				1	ı	1	
							VERIFYING PACKET TAGS
710224966US01	Issued	10,491,513	1/20/2017	11/26/2019	15/410,975	US	IN SOFTWARE DEFINED NETWORKS
710224994US01	Issued	10,248,814	1/25/2017	4/2/2019	15/415,450	US	MEMORY INTEGRITY MONITORING
700216796US01	Issued	10,503,636	6/30/2014	12/10/2019	15/320,402	US	CONCURRENT DEAD ACTOR COLLECTION
					,		
700217728US01	Issued	10,528,752	8/13/2014	1/7/2020	15/502,661	US	NON-VOLATILE STORAGE OF MANAGEMENT DATA
7002177280301	Issueu	10,528,732	8/13/2014	17772020	13/302,001	CS	OF MANAGEMENT DATA
							IDENTIFICATION OF
							IDENTIFICATION OF CONTENT-DEFINED
700217986US01	Issued	10,496,313	9/22/2014	12/3/2019	15/500,077	US	CHUNK BOUNDARIES
							DATA RESTORATION USING ALLOCATION
700217925US01	Issued	10,496,496	12/15/2014	12/3/2019	15/330,000	US	MAPS
							REMEDIATING A SECURITY THREAT TO A
700217847US01	Issued	10,250,627	7/31/2014	4/2/2019	15/500,863	US	NETWORK NETWORK
							RELATIONSHIP BASED
							CACHE RESOURCE
700218297US01	Issued	10,515,012	9/3/2014	12/24/2019	15/500,883	US	NAMING AND EVALUATION
							PREVENTION OF A
700218223US01	Issued	10,366,242	12/23/2014	7/30/2019	15/500,922	US	PREDETERMINED ACTION REGARDING DATA
	•					•	

		T				1	
700219734US01	Issued	10,425,282	11/28/2014	9/24/2019	15/500,919	US	VERIFYING A NETWORK CONFIGURATION
700217874US01	Issued	10,325,092	3/11/2015	6/18/2019	15/500,909	US	DYNAMICALLY ADJUSTING A MODEL FOR A SECURITY OPERATIONS CENTER
700219958US01	Issued	10,686,814	4/10/2015	6/16/2020	15/505,820	US	NETWORK ANOMALY DETECTION
700218699US01	Issued	10,534,739	10/31/2014	1/14/2020	15/515,743	US	INDICATING A PRIVILEGE LEVEL
700218677US01	Issued	10,268,695	12/15/2014	4/23/2019	15/521,336	US	SNAPSHOT CREATION
700220555EM02	Issued	28789910002	11/27/2015	1/14/2016	002878991	EM	SERVER MODULE
710225486US01	Issued	10,592,437	7/31/2017	3/17/2020	15/664,101	US	MEMORY MATCHING KEY CAPABILITY
SGI00411US02	Issued	10,404,800	7/14/2017	9/3/2019	15/650,296	US	Caching Network Fabric for Hight Performance Computing
SGI00412US02	Issued	10,521,260	7/14/2017	12/31/2019	15/650,357	US	Workload Management System and Process

		1			Τ		
201005054DE01	Issued	602011042797.0	1/20/2011	10/25/2017	11855929.3	DE	COMPOSITE PROCESSORS
201005054GP01		2666007	1/20/2011	10/25/2015	11055020.0	G.P.	GOM POCUTE PROCEEDING
201005054GB01	Issued	2666097	1/20/2011	10/25/2017	11855929.3	GB	COMPOSITE PROCESSORS
							Prioritized Optical Arbritration Systems And
200802144DE01	Issued	602008052141.9	10/31/2008	9/13/2017	08877842.8	DE	Methods
							Prioritized Optical Arbritration Systems And
200802144GB01	Abandoned	2350772	10/31/2008	9/13/2017	08877842.8	GB	Methods
700221453US01	Issued	10,650,169	9/14/2015	5/12/2020	15/573,081	US	SECURE MEMORY SYSTEMS
700221468US01	Issued	10,310,877	7/31/2015	6/4/2019	15/573,112	US	CATEGORY BASED EXECUTION SCHEDULING
191119-3	Closed	0501610	1/28/1992	3/17/1999	92300711.6	EP	Object Oriented Distributed Computing System
191119-3	Closed	0501010	1/20/1992	3/11/1999	92300711.0	LF	Computing System
							Distributed Object Based
388001-1	Closed	0408812	7/21/1989	3/1/2000	89307458.3	EP	Systems
							Method And Apparatus For Information Management In A
389039-2	Closed		2/8/1991		PCT/GB1991/000198	WO	Computer Database

<b></b>			1	1	T		1
389042-2	Closed		2/8/1991		PCT/GB1991/000199	WO	Method And Apparatus For Processing Tabular Responses To Computer Database Queries
389043-1	Closed	0497022	1/31/1991	4/7/1999	91300772.0	EP	Conference System
390051-1	Closed	0489989	12/7/1990	1/24/1996	90313319.7	EP	LAN Measurement Apparatus For Determining Voltage Between Packets
390051-2	Closed		11/6/1991		PCT/EP1991/001951	WO	LAN Measurement Apparatus For Determining Voltage Between Packets
30003063-1	Issued	2362970	5/31/2000	12/29/2004	0013041.9	GB	Improvements Relating To Information Storage
30990018-3	Expired	6,978,379	5/26/2000	12/20/2005	09/578,503	US	Configuring Computer Systems
30770010-3				122012003	071310,003	03	бузина
30990087-3	Expired	4519261	4/27/2000	5/28/2010	2000-126830	JP	Loop Prevention In Networks
30990087-6	Expired	1054530	4/19/2000	1/11/2006	00303325.5	FR	Loop Prevention In Networks
30990087-7	Expired	1054530	4/19/2000	1/11/2006	00303325.5	GB	Loop Prevention In Networks

	1	T			Γ		1
300202355-2	Abandoned	7,321,660	3/3/2003	1/22/2008	10/379,455	US	METHOD AND APPARATUS FOR ENCRYPTING/DECRYPTIN G DATA USING TIMED- RELEASE KEYS
700221911US01	Issued	10,572,672	8/14/2015	2/25/2020	15/573,101	US	MODIFICATION OF DATA ELEMENTS USING A SEMANTIC RELATIONSHIP
700221913US01	Issued	10,686,612	7/30/2015	6/16/2020	15/573,688	US	CRYPTOGRAPHIC DATA
700222876US01	Issued	10,666,672	8/31/2015	5/26/2020	15/577,865	US	COLLECTING DOMAIN NAME SYSTEM TRAFFIC
200400664DE01	Abandoned	602005053348.6	4/28/2005	1/10/2018	05741090.4	DE	Non-demolition Photon Detector That Preserves Input State Characteristics
							Non-demolition Photon Detector That Preserves Input
200400664GB01	Closed	1761887	4/28/2005	1/10/2018	05741090.4	GB	State Characteristics  SCHEDULING HETEROGENOUS
700221910US01	Issued	10,558,500	7/27/2015	2/11/2020	15/748,478	US	PROCESSORS  CONTAINERIZED VIRTUAL NETWORK
700219989US01	Issued	10,644,945	8/20/2015	5/5/2020	15/747,795	US	FUNCTION  COMBINING HASHES OF
710223177US01	Issued	10,686,589	12/4/2015	6/16/2020	15/756,055	US	DATA BLOCKS

	1	1			T		1
700222741501		10 300 025	1/10/2017	0.01.2.02010	15/75/ 05/	Tie.	ACCESSING OBJECTS VIA
700222274US01	Issued	10,380,025	1/19/2016	8/13/2019	15/756,056	US	OBJECT REFERENCES
710226138US01	Issued	10,540,286	4/30/2018	1/21/2020	15/967,596	US	SYSTEMS AND METHODS FOR DYNAMICALLY MODIFYING COHERENCE DOMAINS
700206063FR01	Issued	2719124	6/7/2011	4/11/2018	11867520.6	FR	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
700206063DE01	Issued	602011047496.0	6/7/2011	4/11/2018	11867520.6	DE	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
700206063CH01	Issued	2719124	6/7/2011	4/11/2018	11867520.6	СН	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
700206063GB01	Issued	2719124	6/7/2011	4/11/2018	11867520.6	GB	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
			-	-			
700221391US01	Issued	10,572,249	10/30/2015	2/25/2020	15/770,370	US	SOFTWARE KIT RELEASE MANAGEMENT
200703994DE01	Issued	602008055348.5	3/11/2008	5/23/2018	08726728.2	DE	Optoelectronic Switches Using On-chip Optical Waveguides
200703994GB01	Abandoned	2252906	3/11/2008	5/23/2018	08726728.2	GB	Optoelectronic Switches Using On-chip Optical Waveguides

	T	1		1	Τ	1	T
							COMBINED BLOCKS OF PARTS OF ERASURE
710226416US01	Issued	10,673,463	10/25/2018	6/2/2020	16/170,909	US	CODED DATA PORTIONS
700206167FR01	Abandoned	2737656	7/29/2011	9/5/2018	11870379.2	FR	CREDENTIAL VALIDATION
700206167DE01	Issued	602011051896.8	<b>7/29/20</b> 11	9/5/2018	11870379.2	DE	CREDENTIAL VALIDATION
700206167GB01	Issued	2737656	7/29/2011	9/5/2018	11870379.2	GB	CREDENTIAL VALIDATION
201000525DE01	Abandoned	602011051975.1	1/28/2011	9/12/2018	11737715.0	DE	QUANTUM KEY DISTRIBUTION METHOD AND APPARATUS
700213881FR01	Abandoned	3025247	7/26/2013	10/24/2018	13889831.7	FR	DATA VIEW BASED ON CONTEXT
700213881DE01	Abandoned	602013045773.5	7/26/2013	10/24/2018	13889831.7	DE	DATA VIEW BASED ON CONTEXT
							DATA VIEW BASED ON
700213881GB01 200603987FR01	Abandoned  Abandoned	3025247 2127462	7/26/2013 1/29/2008	10/24/2018 10/24/2018	13889831.7 08708350.7	GB FR	CONTEXT  CONFIGURATION OF MOBILE COMMUNICATION DEVICES

	1	1	1	T	T	1	T
200603987GB01	Abandoned	2127462	1/29/2008	10/24/2018	08708350.7	GB	CONFIGURATION OF MOBILE COMMUNICATION DEVICES
700211025FR01	Issued	2936496	12/21/2012	11/28/2018	12890251.7	FR	MEMORY MODULE HAVING ERROR CORRECTION LOGIC
700211025DE01	Issued	602012054214.4	12/21/2012	11/28/2018	12890251.7	DE	MEMORY MODULE HAVING ERROR CORRECTION LOGIC
700211025GB01	Issued	2936496	12/21/2012	11/28/2018	12890251.7	GB	MEMORY MODULE HAVING ERROR CORRECTION LOGIC
.002110230301	155000	2,501,70	12/21/2012	11/20/2010	12070251.1	35	COMBOTION BOOK
30990084FR01	Abandoned	1183606	2/19/2001	10/31/2018	01904210.0	FR	Address Mapping In Solid State Storage Device
30990084DE01	Expired	60150987.0	2/19/2001	10/31/2018	01904210.0	DE	Address Mapping In Solid State Storage Device
30990084GB01	Abandoned	1183606	2/19/2001	10/31/2018	01904210.0	GB	Address Mapping In Solid State Storage Device
700209343FR01	Abandoned	2842045	4/27/2012	12/5/2018	12875325.8	FR	DATA CENTER SERVICE ORIENTED NETWORKING
700209343DE01	Issued	602012054508.9	4/27/2012	12/5/2018	12875325.8	DE	DATA CENTER SERVICE ORIENTED NETWORKING

I	ı				1	
Issued	2260594	3/10/2008	12/26/2018	08726645.8	FR	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
Issued	602008058460.7	3/10/2008	12/26/2018	08726645.8	DE	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
Issued	2260594	3/10/2008	12/26/2018	08726645.8	GB	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
Issued	602012056986.7	7/20/2012	2/20/2019	12881312.8	DE	MIGRATING APPLICATIONS BETWEEN NETWORKS
Issued	2875439	7/20/2012	2/20/2019	12881312.8	GB	MIGRATING APPLICATIONS BETWEEN NETWORKS
Issued	3311280	8/14/2015	3/27/2019	15751003.3	DE	DATA REPLICATION IN MEMORY SYSTEMS
						DATA REPLICATION IN MEMORY SYSTEMS
						Automated entity-resolution
						methods and systems  Automated entity-resolution methods and systems
	Issued  Issued  Issued	Issued 602008058460.7  Issued 2260594  Issued 602012056986.7  Issued 3311280  Issued 3311280  Abandoned 602015028451.8	Issued 602008058460.7 3/10/2008  Issued 2260594 3/10/2008  Issued 602012056986.7 7/20/2012  Issued 2875439 7/20/2012  Issued 3311280 8/14/2015  Abandoned 602015028451.8 5/18/2015	Issued 602012056986.7 7/20/2012 2/20/2019  Issued 2260594 3/10/2008 12/26/2018  Issued 602012056986.7 7/20/2012 2/20/2019  Issued 2875439 7/20/2012 2/20/2019  Issued 3311280 8/14/2015 3/27/2019  Issued 3311280 8/14/2015 3/27/2019  Abandoned 602015028451.8 5/18/2015 4/17/2019	Issued 602008058460.7 3/10/2008 12/26/2018 08726645.8  Issued 2260594 3/10/2008 12/26/2018 08726645.8  Issued 602012056986.7 7/20/2012 2/20/2019 12881312.8  Issued 2875439 7/20/2012 2/20/2019 12881312.8  Issued 3311280 8/14/2015 3/27/2019 15751003.3  Issued 3311280 8/14/2015 3/27/2019 15751003.3	Issued         602008058460.7         3/10/2008         12/26/2018         08726645.8         DE           Issued         2260594         3/10/2008         12/26/2018         08726645.8         GB           Issued         602012056986.7         7/20/2012         2/20/2019         12881312.8         DE           Issued         2875439         7/20/2012         2/20/2019         12881312.8         GB           Issued         3311280         8/14/2015         3/27/2019         15751003.3         DE           Issued         3311280         8/14/2015         3/27/2019         15751003.3         GB           Abandoned         602015028451.8         5/18/2015         4/17/2019         15724591.1         DE

		1	<u> </u>		T	1	
201000075FR01	Abandoned	2572475	5/20/2010	5/15/2019	10851886.1	FR	SWITCHING IN A NETWORK DEVICE
2010000121101	110411401164	20.21.2	5,20,2010	5,15,2017	1002100011		T.D.T. GLAPE J. T.D.
201000075DE01	Issued	602010058972.2	5/20/2010	5/15/2019	10851886.1	DE	SWITCHING IN A NETWORK DEVICE
							SWITCHING IN A
201000075NL01	Abandoned	2572475	5/20/2010	5/15/2019	10851886.1	NL	NETWORK DEVICE
							SWITCHING IN A
201000075GB01	Issued	2572475	5/20/2010	5/15/2019	10851886.1	GB	NETWORK DEVICE
700218916DE01	Issued	602015029588.9	3/20/2015	5/1/2019	15886621.0	DE	DATASTREAM BLOCK ENCRYPTION
700218916GB01	T	3272060	3/20/2015	5/1/2019	15886621.0	GB	DATASTREAM BLOCK ENCRYPTION
700218910GB01	Issued	3212000	3/20/2013	3/1/2019	13880021.0	GB	ENCRIPTION
							FAILOVER IN RESPONSE
700212686FR01	Issued	2951963	1/30/2013	4/24/2019	13873588.1	FR	TO FAILURE OF A PORT
							FAILOVER IN RESPONSE
700212686DE01	Issued	2951963	1/30/2013	4/24/2019	13873588.1	DE	TO FAILURE OF A PORT
							FAILOVER IN RESPONSE
700212686GB01	Issued	2951963	1/30/2013	4/24/2019	13873588.1	GB	TO FAILURE OF A PORT

	1	Т					1
							SYSTEMS AND METHODS FOR DATA CHUNK
700206575FR01	Abandoned	2810171	2/2/2012	7/3/2019	12867467.8	FR	DEDUPLICATION
							SYSTEMS AND METHODS FOR DATA CHUNK
700206575DE01	Issued	2810171	2/2/2012	7/3/2019	12867467.8	DE	DEDUPLICATION
700206575GB01	Issued	2810171	2/2/2012	7/3/2019	12867467.8	GB	SYSTEMS AND METHODS FOR DATA CHUNK DEDUPLICATION
700215556DE01	Issued	3063692	10/29/2013	7/24/2019	13896266.7	DE	VIRTUAL MACHINE INTROSPECTION
700215556GB01	Issued	3063692	10/29/2013	7/24/2019	13896266.7	GB	VIRTUAL MACHINE INTROSPECTION
710223554DE01	Issued	3274896	4/22/2016	8/21/2019	16894801.6	DE	CONFIGURATION OF A MEMORY CONTROLLER FOR COPY-ON-WRITE WITH A RESOURCE CONTROLLER
710223554GB01	Closed	3274896	4/22/2016	8/21/2019	16894801.6	GB	CONFIGURATION OF A MEMORY CONTROLLER FOR COPY-ON-WRITE WITH A RESOURCE CONTROLLER
700221312DE01	Issued	3278519	9/24/2015	8/21/2019	15770511.2	DE	MEMORY SYSTEM MANAGEMENT
700221312GB01	Issued	3278519	9/24/2015	8/21/2019	15770511.2	GB	MEMORY SYSTEM MANAGEMENT

		1	1		T		
<b>5</b> 00010010 <b>5</b> 001		2054040	T (2.1.12.0.1.5	0.001.001.0	10070160.0		RADIX ENHANCEMENT FOR PHOTONIC PACKET
700210840FR01	Issued	2951940	7/31/2015	8/21/2019	13873163.3	FR	SWITCH
700210840DE01	Issued	602013059590.9	7/31/2015	8/21/2019	13873163.3	DE	RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH
700210840NL01	Issued	2951940	7/31/2015	8/21/2019	13873163.3	NL	RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH
700210840GB01	Issued	2951940	7/31/2015	8/21/2019	13873163.3	GB	RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH
710224250DE01	Issued	602017006321.5	10/19/2017	8/21/2019	17197398.5	DE	ENCRYPTED CAPABILITIES STORED IN GLOBAL MEMORY
710224250GB01	Issued	3312758	10/19/2017	8/21/2019	17197398.5	GB	ENCRYPTED CAPABILITIES STORED IN GLOBAL MEMORY
710224230GB01	135000	3312730	10/19/2017	0/21/2019	17177376.5	GD	GEODAE MEMORI
700215841FR01	Issued	3100416	1/29/2014	10/16/2019	14880912.2	FR	MANAGING A NUMBER OF ETHERNET LINKS
700215841DE01	Issued	602014055416.4	1/29/2014	10/16/2019	14880912.2	DE	MANAGING A NUMBER OF ETHERNET LINKS
700215841GB01	Issued	3100416	1/29/2014	10/16/2019	14880912.2	GB	MANAGING A NUMBER OF ETHERNET LINKS

		1	ı	Т	T	1	
700212379FR01	Issued	3031187	8/9/2013	11/6/2019	13890993.2	FR	SWITCH ASSEMBLY
700212379DE01	Issued	602013062742.8	8/9/2013	11/6/2019	13890993.2	DE	SWITCH ASSEMBLY
700212379GB01	Issued	3031187	8/9/2013	11/6/2019	13890993.2	GB	SWITCH ASSEMBLY
700212379GB01	Issueu	3031187	8/9/2013	11/0/2019	13890993.2	GB	SWITCH ASSEMBLI
							Cryptographic Identities of
700221913DE01	Issued	3292495	7/30/2015	10/30/2019	15744571.9	DE	Nodes in TheMachine
							Cryptographic Identities of
700221913GB01	Issued	3292495	7/30/2015	10/30/2019	15744571.9	GB	Nodes in TheMachine
							RECOVERY SERVICES FOR COMPUTING
710225035DE01	Issued	3370151	2/28/2018	11/13/2019	18159058.9	DE	SYSTEMS
							RECOVERY SERVICES
710225035GB01	Issued	3370151	2/28/2018	11/13/2019	18159058.9	GB	FOR COMPUTING SYSTEMS
							METHODS TO CREATE
700221310DE01	Issued	602015041648.1	7/31/2015	11/13/2019	15745472.9	DE	LOGICAL TREES OF MEMORY SYSTEMS
75022151001501	133000	502015041040.1	115112015	1111312019	13143412.9	DE	HEMORI SISTEMS
							METHODS TO CREATE
<b>7</b> 00001016 77 71			# (0.1 mm.)		1.55.45.450.0	O.F.	LOGICAL TREES OF
700221310GB01	Issued	3298501	7/31/2015	11/13/2019	15745472.9	GB	MEMORY SYSTEMS

		1	ı	I	Τ	I	T
700222692DE01	Issued	602015045263.1	11/27/2015	1/8/2020	15801180.9	DE	Distribution of Gen-Z Transaction Integrity Keys
							MEMORY INTEGRITY
700214981DE01	Issued	3063627	10/31/2013	2/26/2020	13896796.3	DE	CHECKING
700214981GB01	Issued	3063627	10/31/2013	2/26/2020	13896796.3	GB	MEMORY INTEGRITY CHECKING
							MEMORY MODULE
700211025DE02	Issued	3425507	7/20/2018	4/8/2020	18184850.8	DE	HAVING ERROR CORRECTION LOGIC
							MEMORY MODULE HAVING ERROR
700211025GB02	Issued	3425507	7/20/2018	4/8/2020	18184850.8	GB	CORRECTION LOGIC
							COLLECTING DOMAIN
700222876DE01	Issued	602015051942.6	8/31/2015	4/29/2020	15903192.1	DE	NAME SYSTEM TRAFFIC
700222876GB01	Issued	3275151	8/31/2015	4/29/2020	15903192.1	GB	COLLECTING DOMAIN NAME SYSTEM TRAFFIC
3093005-1	Closed		7/28/1994		PCT/GB1994/001627	wo	Page Manipulation Facility
5075005-1	Cioscu		112011774		1 01/00/1/24/00/102/	,,,0	rage manipulation racinty
3093005-4	Closed	0784813	7/28/1994	11/4/1998	94921745.9	EP	Page Manipulation Facility

					T	1	T
				0.0000			
3093061-1	Closed	0680173	4/28/1994	9/3/2003	94303117.9	EP	Multicasting Apparatus
20020 <del>7</del> 0 1	Closed	0690170	4/28/1994	0/5/2001	04202120.2	ED	Multiport Quana
3093070-1	Closed	0680179	4/28/1994	9/5/2001	94303120.3	EP	Multicast Queue
3093088-4	Closed	0669771	2/8/1995	5/2/2003	95300789.5	EP	Communications Signalling Network Apparatus
3093086-4	Closed	0009771	2/8/1993	31212003	93300789.3	EF	Network Apparatus
3094048-1	Closed	0687089	6/10/1994	5/28/2003	94304210.1	EP	Eventflow
3071010 1	Closed	0007009	0/10/1994	3/20/2003	71301210.1		Evention
							Method And Apparatus For Regulating Virtual Channel
5094010-1	Closed	0700186	8/31/1994	4/13/2005	94306389.1	EP	Regulating Virtual Channel   Cell Transmission
							Data Storage System With
							Error Correction Code And Replaceable Defective
10014281-3	Closed		11/29/2004		PCT/US2004/039967	WO	Memory
							Utilization Of Unused Disk Space On Networked
30001673-1	Closed	1162537	6/9/2000	9/26/2007	00304891.5	EP	Computers
							Transfer Of Audio Messages
30001737-3	Closed	1139677	3/2/2001	1/26/2005	01301935.1	EP	To A Mobile Entity
							Generating And Logging
30001739-2	Closed	1133206	2/14/2001	5/3/2006	01301269.5	EP	Reminders Whilst Mobile

30002458-2 Closed		4/30/2001		PCT/GB2001/001876	WO	Improvements Relating To Networking
50002436-2 Closed		4/30/2001		PC1/GB2001/0018/0	WO	Networking
						T B
30003034-3 Closed		5/23/2001		PCT/GB2001/002291	wo	Location-Based Data Acess Control
						Location-Based Equipment
30003034-4 Closed	1172270	5/23/2001	8/13/2003	01304520.8	EP	Control
20000000000	1140545	4/5/2001	1 /20 /2004	010000115	ED	Shopping Assistance Method
30003036-2 Closed	1148745	4/5/2001	1/28/2004	01303211.5	EP	And Service System
30003578-4 Closed	1139688	2/12/2001	1/2/2003	01301228.1	EP	Providing Location Data About A Mobile Entity
						·
						Distributed Pre-Paid
30003893-2 Closed		5/8/2001		PCT/GB2001/001989	WO	Communcations Infrastructure
						Operating A Ommunications
						Infrastructure On A Pre-
30003893-4 Closed	1281270	5/8/2001	7/19/2006	01925734.4	EP	payment Basis
						Charging For VAS Resource
30003894-2 Closed		5/8/2001		PCT/GB2001/001968	WO	Usage In A Communications Infrastructure
						Charging For VAS Resource Usage In A Communications
30003894-4 Closed	1281269	5/8/2001	5/4/2005	01925726.0	EP	Infrastructure

					T	1	
20002057.1	Classi	1107050	10/10/2000	2/6/2008	00308910.9	EP	E
30003957-1	Closed	1197858	10/10/2000	2/0/2008	00308910.9	EP	E-appliances
							Use Of Local Equipment By
30004654-3	Closed	1170950	7/3/2001	5/3/2006	01305749.2	EP	Mobile Entity
							Idiom Handling In Voice
30004691-3	Closed	1215656	11/30/2001	6/15/2005	01310044.1	EP	Service Systems
30004708-3	Closed	1213692	11/26/2001	2/23/2005	01309916.3	EP	Device Inventory By Sound
							Improvements Relating To
30005829-2	Closed		3/28/2002		PCT/GB2002/001471	WO	Developing Documents
							Performing Secure And
							Insecure Computing Operations In A
20006602.2	CI 1	1071212	6/12/2002	0/0/2012	0225 4070 5	ED	Compartmented Operating
30006603-3	Closed	1271313	6/12/2002	8/8/2012	02254078.5	EP	System
30006634-2	Closed		8/16/2001		PCT/GB2001/003667	WO	Trusted Device
							A Computer System Operable
							To Revert To A TruPCT/GB2001/003712 ted
30006640-2	Closed		8/17/2001		PCT/GB2001/003712	WO	State
30006640-4	Closed	1309916	8/17/2001	10/18/2006	01958228.7	EP	A Computer System Operable To Revert To A Trusted State
30000040-4	Ciosea	1303910	0/1//2001	10/16/2000	U19J0440.1	Eľ	10 Reveit 10 A Trusted State

				Г		1	1
							Accessing A Remotely-stored Data Set And Associating
30007323-2	Closed		1/9/2003		PCT/GB2003/000101	WO	Notes With That Data Set
							Method And Apparatus For
30010410-3	Issued	1294157	9/10/2002	11/23/2005	02256245.8	EP	Identifying A Voice Caller
30010957-3	Closed	1217608	11/30/2001	1/26/2005	01310046.6	EP	Activation Of Voice- Controlled Apparatus
30011222-2	Closed		1/29/2002		PCT/GB2002/000385	WO	Trusted Gateway System
30011229-3	Closed	1280317	7/26/2002	9/13/2006	02255218.6	EP	Multi-domain Authorisation And Authentication
20011227.2	CI. I		7/20/2002		DCT/CD2002/002466	W/O	An Apparatus And Method For An Automated
30011237-2	Closed		7/30/2002		PCT/GB2002/003466	WO	Negotiation
							An Automated Method And
30011241-3	Closed		4/11/2002		PCT/GB2002/001680	WO	Apparatus For Aiding Convergence In Negotiation
							Computerised Apparatus And
20011247.2	Closed		4/11/2002		PCT/GB2002/001679	wo	Methods Of Converting A Portfolio Strategy Into A Set Of Tactics
30011247-2	Closed		4/11/2002		1 C1/GB2002/0010/9	WU	Of factics
							Italian Common Made d. A. 1
30011248-3	Closed		4/11/2002		PCT/GB2002/001701	WO	Utility Scoring Method And Apparatus

	1			I		
Closed		4/11/2002		PCT/GB2002/001703	WO	A Preference Map For Negotiation, Which Allows Labeling Of Partial Relationships For Easy Reuse
Closed		4/11/2002		PCT/GB2002/001706	WO	Automatic Contract Negotiation With Multiple Parameters
Closed		2/19/2002		PCT/GB2002/000701	WO	Time-Release Cryptography
Closed	1237332	3/2/2001	11/5/2003	01301921.1	EP	Beacon Based Web Services II
Closed		4/11/2002		PCT/GB2002/001686	WO	Method And Apparatus For Automated Multi-party Multivariate Negotiation
Closed	1282286	7/26/2002	9/21/2005	02255220.2	EP	Method Of Establishing A Secure Data Connection
Closed					EP	Artificial Language Generation
			S. 3200T			Improvements Relating To Document Generation
Closed		4/11/2002		PCT/GB2002/004819	wo	Knowledge Acquisition Apparatus And Method
	Closed  Closed  Closed  Closed  Closed	Closed	Closed 2/19/2002  Closed 1237332 3/2/2001  Closed 1282286 7/26/2002  Closed 1267326 5/13/2002  Closed 1267326 10/25/2002	Closed 4/11/2002  Closed 2/19/2002  Closed 1237332 3/2/2001 11/5/2003  Closed 4/11/2002  Closed 1282286 7/26/2002 9/21/2005  Closed 1267326 5/13/2002 8/4/2004  Closed 10/25/2002	Closed 4/11/2002 PCT/GB2002/001706  Closed 2/19/2002 PCT/GB2002/000701  Closed 1237332 3/2/2001 11/5/2003 01301921.1  Closed 4/11/2002 PCT/GB2002/001686  Closed 1282286 7/26/2002 9/21/2005 02255220.2  Closed 1267326 5/13/2002 8/4/2004 02253325.1  Closed 10/25/2002 PCT/GB2002/004819	Closed 4/11/2002 PCT/GB2002/001706 WO  Closed 1237332 3/2/2001 11/5/2003 01301921.1 EP  Closed 4/11/2002 PCT/GB2002/001686 WO  Closed 1282286 7/26/2002 9/21/2005 02255220.2 EP  Closed 1267326 5/13/2002 8/4/2004 02253325.1 EP

				1	T		1
							Quantum Information Processing Method And
30019969-2	Closed		8/28/2002		PCT/GB2002/003943	WO	Appratus
30950029-1	Closed		4/17/1996		PCT/GB1996/000915	wo	MSG Authenticat
30930029-1	Closed		4/1 //1996		PC1/GB1996/000915	WU	MSG Authenticat
30950029-3	Closed	0824814	4/17/1996	12/12/2001	96910090.8	EP	Method And Apparatus For Authenticating An Originator Of A Message
30950065-1	Closed	0758187	8/9/1995	5/11/2005	95305563.9	EP	Base Station
30960035-2	Closed		3/11/1997		PCT/GB1997/000666	WO	Fast VG Concept
30960035-5	Closed	0824817	3/11/1997	8/3/2005	97906303.9	EP	Apparatus And Method For Communicating Data
30900033-3	Closed	0024017	3/11/1997	6/3/2003	91900303.9	LI	Communicating Data
30960042-2	Closed		12/11/1996		PCT/GB1996/003055	WO	Method Of Accessing Service Resource Items That Are For Use In A Telecommunications System
30960042-7	Closed	0867093	12/11/1996	6/15/2005	96941769.0	EP	Method Of Accessing Service Resource Items That Are For Use In A Telecommunications System
30960046-13	Closed	1207704	12/11/1996	5/12/2004	02000568.2	EP	Determining A Telephone Number For Contacting A Target Enitity

	1	1		1		1	, ,
							TRANSMITTING
30960065-2	Closed		3/27/1997		PCT/GB1997/000897	WO	MESSAGES OVER A NETWORK
3000003-2	Closed		31211771		101/00/1997/1000/0997	WO	
30960077-3	Closed		7/24/1997		PCT/GB1997/002006	wo	Ordered Message Reception In A Distributed Data Processing System
30960106-1	Closed	0953919	5/1/1998	2/19/2003	98303426.5	EP	Flexible Switch
20070071.1		0052007	5/1/1000	7/10/2003	00000401.5		
30970071-1	Closed	0953897	5/1/1998	7/30/2003	98303431.5	EP	Complex Branch
30970073-1	Closed	0954140	5/1/1998	10/29/2003	98303430.7	EP	Table Merge
200700744		005.1120	5/1/1000	114/2005	00000405.7		
30970074-1	Closed	0954139	5/1/1998	4/6/2005	98303425.7	EP	Table Switch
20070120 2	GI I		12/4/1000		POTT/GP 1000/red coa	wo	
30970139-2	Closed		12/4/1998		PCT/GB1998/003632	WO	Object Gateway
30970139-5	Closed	1036457	12/4/1998	5/18/2005	98958346.3	EP	Object Gateway
30970142-4	Closed	0907262	9/21/1998	8/3/2005	98307654.8	EP	Power Management Method For Use In A Wireless Local Area Network (LAN)

			1		Т	1	T
30990020-2	Closed		2/8/2000		PCT/GB2000/000370	wo	Verification Of The Pritvate Components Of A Public-key Cryptographic System
30770020-2	Closed		2/8/2000		1 C1/GB2000/000370	****	Cryptographic system
30990020-5	Closed	1151577	2/8/2000	1/15/2003	00902728.5	EP	Verification Of The Private Components Of A Public Key Cryptographic System
30990075-2	Published		10/30/2001		PCT/GB2001/004799	WO	Metering In A Data Processing System
30990076-2	Closed		5/25/2000		PCT/GB2000/002003	wo	Data Integrity Monitoring In Trusted Computing Entity
	Cicsou		5.25.2000		1 31. 02200. 002003	,,,,	112000 Companing Direct
30990084-2	Closed		2/19/2001		PCT/GB2001/000643	wo	Address Mapping In Solid State Storage Device
307700012	Ciosca		2,17/2001		Tell abzeen docers	,,,,	State Storage Device
30990084-3	Closed	1183606	2/19/2001	10/31/2018	01904210.0	EP	Address Mapping In Solid State Storage Device
30990064-3	Closed	1183606	2/19/2001	10/31/2018	01904210.0	EP	State Storage Device
30990087-2	Closed	1054530	4/19/2000	1/11/2006	00303325.5	EP	Loop Prevention In Networks
30990090-2	Closed		2/19/2001		PCT/GB2001/000656	wo	Data Balancing Scheme In Solid State Storage Devices
30990107-2	Closed		4/26/2002		PCT/GB2002/001956	WO	Diary System
50770101-2	Cioscu		1 7/20/2002		1 C1/GD2002/001930	1 ", ()	Diary System

		T	ı	·	T		
20000121.1	CI 1	1120655	2/21/2000	12/6/2006	00201250 5	ED	Framing Aid For A Document
30990121-1	Closed	1128655	2/21/2000	12/6/2006	00301350.5	EP	Capture Device
30990125-2	Closed		9/19/2000		PCT/GB2000/003613	WO	Multi-state
30990128-2	Closed	1081918	8/25/2000	10/18/2006	00307357.4	EP	JAVA Tunnelling
30990141-2	Closed		8/11/2000		PCT/GB2000/003095	wo	Enforcing Restrictions On The Use Of Stored Data Using A Combination Of Multiple Trusted Devices
30990141-3	Closed	1203278	8/11/2000	2/8/2012	00953292.0	EP	Enforcing Restrictions On The Use Of Stored Data
			10/6/2000		DOT/ODDOOO/000050	WO	Trusted Computing Platform With Biometric
30990154-2	Closed		10/6/2000		PCT/GB2000/003850	WO	Authentication
30990154-4	Closed	1224518	10/6/2000	7/15/2009	00964537.5	EP	Trusted Computing Platform With Biometric Authentication
30990155-2	Published		10/6/2000		PCT/GB2000/003861	WO	Electronic Commerce System
200206289-2	Published		7/22/2004		PCT/GB2004/003158	WO	Improvements Relating To Quantum Cyptography

			1	<b>I</b>	T		1
							Improvements Relating To
200206289-3	Issued	1652334	7/22/2004	11/21/2007	04743493.1	EP	Quantum Cyptography
							Quantum Information Processing Using
200207050 2	CI 1		2/11/2004		DCT/I 100004/000700	WO	Electromagnetically Induced
200207050-2	Closed		2/11/2004		PCT/US2004/003788	WO	Transparency
200207745-2	Closed	1395041	6/16/2003	4/11/2012	03253793.8	EP	Colour Correction Of Images
2002011 <del>4</del> 3-2	Ciosed	1373041	0/10/2003	4/11/2012	05433173.0	Lif	Colour Correction Of images
200208361-1	Closed	1763260	9/12/2005	6/17/2009	05300740.7	EP	Context-based Event Processing
200200301 1	Ciosca	1703200	71122003	0/1//2009	03300740.7	LI	Trocessing
							V1 100 TO 170
200300254-4	Closed	1471680	4/21/2004	6/21/2006	04252330.8	EP	Identifier-Based Encryption Method and Apparatus
							•
							Organic Semiconductor
							Transistors Fabricated By Additive Electroplating And
200300814-2	Closed		7/9/2004		PCT/GB2004/002999	WO	Additive Electropiating And Adhesive Transfer
							REDUNDANT POWER
							MIXING ELEMENT WITH FAULT DETECTION FOR
200301535-3	Closed	0690554	6/28/1995	3/27/2002	95304573.9	EP	DC-TO-DC CONVERTER
							CANCELLA FOR SWITTERING
							SYSTEM FOR SWITCHING POWER AND SCRUBBING
200301537-4	Closed	0690542	6/30/1995	9/15/1999	95304484.9	EP	FOR FAULTS
							EFFICIENT PROTOCOL FOR COMMUNICATING
							BETWEEN
200305848-4	Closed	0352081	7/19/1989	8/16/1995	89307289.2	EP	ASYCHRONOUS DEVICES

		T T	T	1	1
200309140-2	Published	4/9/2004	PCT/US2004/011001	WO	Photon Number Resolving Systems And Methods
200207110 2	T do iisiica		101/05200 1/011001		Bystems Time Fredricus
200309939-2	Published	7/21/2006	PCT/US2006/028406	wo	Quantum Information Conversion Between Matter And Light Representations
200311104-2	Closed	4/28/2005	PCT/US2005/014758	WO	Quantum Optical State Converter
200311116-2	Closed	12/3/2004	PCT/US2004/040647	WO	Games Using Pair-Wise Entanglements
200311663-2	Closed	10/6/2004	PCT/US2004/033117	wo	Photonic Interconnect System
200311003 2	Closed	10/0/2001	16116828611033117	,,,,	Thorome interconnect system
					Use Of Certified Secrets In
200312183-3	Closed	5/21/2004	PCT/GB2004/002185	WO	Communication
					Detecting One Or More Photons From Their
200313970-2	Published	9/28/2004	PCT/US2004/032013	wo	Interactions With Probe Photons In A Matters System
					Nonlinear Electromagnetic
200314217-2	Published	6/28/2005	PCT/US2005/022684	wo	Quantum Information Processing
					Smartcard With Cryptographic
200315004-3	Closed	11/24/2004	PCT/EP2004/053081	wo	Functionality And Method And System For Using Such Cards
•	<u> </u>	1 "=1			

	ı				T	1	T
200315174-4	Closed	1521390	9/29/2004	8/13/2008	04104771.3	EP	Digital Signature Method And Apparatus
200313174-4	Closed	1321370	712712004	8/13/2008	04104771.5	Di	Apparatus
200400664-2	Closed		4/28/2005		PCT/US2005/014601	WO	Non-demolition Photon Detector That Preserves Input State Characteristics
200400664-3	Closed	1761887	4/28/2005	1/10/2018	05741090.4	EP	Non-demolition Photon Detector That Preserves Input State Characteristics
200400004-3	Closed	1/0188/	4/28/2003	1/10/2018	0.5741090.4	Er	State Characteristics
200401266-2	Issued	1643680	8/31/2005	3/19/2008	05018947.1	EP	Method And System For Managing Network Nodes In MPLS-VPN Networks
200404244-2	Closed		9/13/2005		PCT/US2005/032912	wo	Tests Of Quantum Information
200404244-2	Closed		7/13/2003		1617632003/032912	,,,,	Cryptographic Method And
200404976-3	Closed	1605626	6/6/2005	12/26/2007	05104894.0	EP	Apparatus
200405115-2	Closed		7/13/2005		PCT/US2005/024918	WO	Quantum Information Processing With Static Qubits Using Optical Preparation, Addressing And Detection
200406440-2	Published		6/28/2005		PCT/US2005/022969	wo	Quantum Coherent Systems And Operations
200406465-2	Closed		10/28/2005		PCT/EP2005/055640	WO	Virtual Computing Infrastructure

		1			1	ı	
200407104-2	Closed		8/3/2005		PCT/EP2005/053800	wo	Network Virtualization
200407104-2	Closed		8/3/2003		1 C1/E1 2003/033800	****	rectwork virtualization
200407421-1	Closed		8/3/2005		PCT/EP2005/053801	WO	Virtual Network Interface
200407525-2	Closed		10/28/2005		PCT/EP2005/055642	wo	Virtual Computing Infrastructure
200407323-2	Closed		10/28/2003		1 C1/E1 2003/033042	110	Imastructure
							Mapping Discovery For
200407528-1	Closed		8/3/2005		PCT/EP2005/053803	WO	Virtual Network
200407612-2	Closed		10/28/2005		PCT/EP2005/055639	wo	Virtual Computing Infrastructure
200407012-2	Closed		10/20/2005		1 C1/E1 2003/033037	110	Imastructure
							Virtual Computing
200407628-2	Closed		10/28/2005		PCT/EP2005/055638	WO	Infrastructure
200407659-2	Closed		10/6/2005		PCT/EP2005/055040	wo	Proving Relationships Between Data
200401037-2	Ciosca		10/0/2003		1 01/11/2003/033040	1,,0	Detween Data
							Network Management And
200501112-3	Closed	1720315	4/27/2006	7/9/2008	06113237.9	EP	Administration
							Methods And Systems For
200505455-2	Closed		1/20/2007		PCT/LIS2007/002697	wo	Avoiding Transmission- channel Disruptions
200505455-2	Closed	1	1/30/2007		PCT/US2007/002687	LWU	channel Disruptions

	1	Γ			T		
							Methods And Systems For Avoiding Transmission-
200505455-3	Closed	1943757	1/30/2007	5/13/2009	07762845.1	EP	channel Disruptions
200506050-2	Closed		8/11/2006		PCT/US2006/031396	wo	Quantum Repeater
200507116-2	Closed		4/20/2007		PCT/US2007/009711	wo	Optical-based, Self- authenticating Quantum Random Number Generators
200507116-3	Closed	2013707	4/20/2007	7/6/2011	07755829.4	EP	OPTICAL-BASED, SELF- AUTHENTICATING QUANTUM RANDOM NUMBER GENERATORS
200507434-2	Closed		1/3/2007		PCT/EP2007/050025	WO	Call Screening For VOIP Calls At Gateway
200307434-2	Closed		17372007		PC1/EP2007/030023	WO	Referencing A Map To The Coordinate Space Of A
200602300-2	Closed		1/31/2008		PCT/US2008/001280	WO	Positioning System
200603884-3	Closed	2143259	1/29/2008	5/27/2015	08708351.5	EP	Method And System For Facilitating Multi-point Communications
200603986-2	Published		1/29/2008		PCT/EP2008/051036	WO	Service Routing For Communication Systems
200603987-2	Closed		1/29/2008		PCT/EP2008/051033	WO	CONFIGURATION OF MOBILE COMMUNICATION DEVICES

		Т			T	1	
200603987-3	Closed	2127462	1/29/2008	10/24/2018	08708350.7	EP	CONFIGURATION OF MOBILE COMMUNICATION DEVICES
200700240-1	Closed		10/25/2007		PCT/US2007/022629	WO	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
200700652-3	Closed		1/21/2008		PCT/GB2008/050038	WO	TRUSTED COMPUTING ENTITIES
200700652-4	Closed	2126770	1/21/2008	3/19/2014	08702121.8	EP	TRUSTED COMPUTING ENTITIES
200701133-1	Closed		10/25/2007		PCT/US2007/022586	WO	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
200701135-1	Closed		10/25/2007		PCT/US2007/022585	WO	DATA PROCESSING APPARATUS AND METHOD OF PROCESSING DATA
							Binding A Cryptographic
200701766-1	Closed		4/2/2008 12/20/2007		PCT/US2008/059093  PCT/US2007/088336	WO	Module To A Platform  MODEL BASED DEPLOYMENT OF COMPUTER BASED BUSINESS PROCESS ON DEDICATED HARDWARE
200702363-1	Closed		12/20/2007		PCT/US2007/088346	wo	MODELLING COMPUTER BASED BUSINESS PROCESS FOR CUSTOMISATION AND DELIVERY

		_			T		
							Modelling Computer Based
200702377-1	Closed		12/20/2007		PCT/US2007/088331	wo	Business Process And Simulating Operation
200702577 1	Closed		12/20/2007		Telleszeeweeess1	,,,,	Simulating Operation
200702599-1	Closed		1/28/2008		PCT/US2008/052235	WO	DEPLOYMENT OF BOOT IMAGES IN DISKLESS SERVERS
200702600-1	Closed		12/20/2007		PCT/US2007/088322	WO	AUTOMATED MODEL GENERATION FOR COMPUTER BASED BUSINESS PROCESS
200702601-1	Closed		12/20/2007		PCT/US2007/088315	WO	Incorporating Development Tools In System For Deploying Computer Based Process On Shared Infrastructure
200702626-1	Closed		12/21/2007		PCT/EP2007/064460	WO	Liquid Crystal Display
							Three-dimensional Memory
200703074-2	Closed		10/23/2008		PCT/US2008/012118	WO	Module Architectures
							Three-dimensional Memory
200703074-4	Closed	2212887	10/23/2008	4/17/2013	08842157.3	EP	Module Architectures
200703081-1	Closed		2/26/2008		PCT/EP2008/052321	WO	Matrix-addressable Display Device
							Proximity Free Space Optical
200703285-1	Closed		5/9/2008		PCT/US2008/006042	WO	Interconnect

		ı			Т	1	Г
200703934-2	Closed		7/22/2000		PCT/EP2009/059416	WO	QKD Transmitter And
200703934-2	Closed		7/22/2009		PC1/EP2009/059416	WO	Transmission Method
							QUANTUM KEY
							DISTRIBUTION SYSTEM
							USING LDPC CODES WITH A GRAPH HAVING A
200703966-2	Closed		10/14/2008		PCT/GB2008/050939	WO	TOROID STRUCTURE
							Data Processing Arrangements For Use In Data
							Communication Apparatus In
200703966-4	Closed	2227862	10/14/2008	3/30/2011	08806753.3	EP	Connection With Error Correction
							Two-phase Optical
							Communication Methods And Optical Bus Systems For
200703983-1	Closed		3/10/2008		PCT/US2008/003147	WO	Implementing The Same
							Two-phase Optical
							Communication Methods And
200703983-2	Closed	2260594	3/10/2008	12/26/2018	08726645.8	EP	Optical Bus Systems For Implementing The Same
							Optoelectronic Switches
							Using On-chip Optical
200703994-1	Closed		3/11/2008		PCT/US2008/003244	WO	Waveguides
							Optoelectronic Switches
200703994-2	Closed	2252906	3/11/2008	5/23/2018	08726728.2	EP	Using On-chip Optical Waveguides
							SECURING A DATA
200704161-1	Closed		1/29/2009		PCT/EP2009/051025	WO	TRANSMISSION
							Method And Systems For Implementing High-radix
							Switch Topologies On
200704234-1	Published		8/8/2008		PCT/US2008/009524	WO	Relatively Lower-radix Switch Physical Networks

200704391-1	Closed	10/22/2008	PCT/US2008/080796	WO	ALTERING AN IMAGING PARAMETER TO READ A SYMBOL
200704684-1	Closed	4/22/2008	PCT/EP2008/054848	WO	METHOD OF MODULATING A CARRIER TO TRANSMIT POWER TO A DEVICE, AND MODULATOR ADAPTED TO DO THE SAME
200800497-1	Closed	3/16/2009	PCT/EP2009/053057	wo	Optical Structure
200800832-1	Closed	7/7/2009	PCT/US2009/049839	wo	LIGHT DIFFUSERS AND DISPLAYS COMPRISING SAME
200801220-1	Closed	5/9/2008	PCT/US2008/005992	WO	Optically Enabled Broadcast Bus
					Optical Broadcast Systems
200801444-1	Closed	6/17/2008	PCT/US2008/007540	WO	And Methods
200801709-1	Closed	9/16/2009	PCT/US2009/057060	WO	System And Method For Assessing Photgrapher Competence
200801862-1	Closed	12/19/2008	PCT/US2008/087632	WO	Redundant Data Storage For Uniform Read Latency
					Prioritized Optical Arbritration Systems And
200802144-1	Closed	10/31/2008	PCT/US2008/012392	WO	Methods

	1				1	T
200802881-1	Closed	1/27/2	009	PCT/US2009/000529	WO	REDUNDANT RING RESONATORS OF VARYING DIMENSIONS TO REDUCE RING RESONATOR TUNING REQUIREMENTS
200802908-1	Closed	10/31/2	008	PCT/EP2008/064816	WO	A Method And Digital Imaging Appliance For Selecting A Focus Setting With A Normalized Figure-of- merit
200803229-2	Closed	11/13/2	009	PCT/EP2009/065171	WO	Data Centre And Apparatus And Method For Data Centre Cooling
200803285-1	Published	7/31/2	009	PCT/US2009/052394	WO	PHOTONIC QUANTUM SYSTEM ALIGNMENT USING MULTIPLE BEAMS
200803499-3	Closed	10/26/2	009	PCT/EP2009/064067	wo	Quantum Repeater And System And Method For Creating Extended Entanglements
200803817-2	Closed	1/20/2	010	PCT/GB2010/050076	wo	Authentication Method And Apparatus Using One Time Pads
230003017 2	Siosea	1720/2		101/000010	,,,,	A 1000V
200902589-1	Close-d	7/31/2	000	PCT/US2009/052409	WO	Onticed Fiber Course
200902369-1	Closed	//31/2	.007	FC1/U32009/U32409	WU	Optical Fiber Connector
200002804 1	Closed	5.00	000	DCT/1/22000/002700	WO	BUS-BASED SCALABLE
200902804-1	Closed	10/26/2		PCT/US2009/002798 PCT/EP2009/064065	WO	OPTICAL FABRICS METHOD AND APPARATUS FOR INCREASING THE SPEED OF SUCCESSFUL ENTANGLEMENT CREATION AND QUANTUM REPEATER USING THE SAME
		1 13/20/2		1 2 2 2 2 2 2 3 7 0 0 1 0 0 5		

					1
200903066-3	Closed	10/26/2009	PCT/EP2009/064071	WO	Quantum Repeater And System And Method For Creating Extended Entanglements
200903067-3	Closed	10/26/2009	PCT/EP2009/064069	WO	Quantum Repeater And System And Method For Creating Extended Entanglements
200903157-1	Closed	10/15/2009	PCT/US2009/060919	WO	A Hybrid Approach To Automated IT Change Planning
200903161-1	Closed	9/18/2009	PCT/US2009/057565	WO	Privacy Ensured Polling
200903275-1	Closed	10/15/2009	PCT/US2009/060923	WO	HETEROGENEOUS DATA SOURCE MANAGEMENT
200903366-1	Closed	10/26/2009	PCT/GB2009/051437	WO	Method And Apparatus For Selectively Routing Entanglement Building
200903705-1	Closed	12/21/2009	PCT/US2009/069038	WO	CIRCUIT SWITCHED OPTICAL INTERCONNECTION FABRIC
200903822-2	Closed	10/8/2010	PCT/EP2010/065123	WO	METHOD AND SYSTEM FOR PRINTING
200904155-1	Closed	12/18/2009	PCT/US2009/068662	WO	REFLECTIVE DISPLAY

			1	1	1
		.000000			ELECTRONIC SYSTEM HAVING FANOUT
200904501-1	Closed	10/8/2010	PCT/US2010/052052	WO	OPTICAL BUSES
2000040024		0/1/2010	DCT#152010/045405	1110	PERFORMING WHAT-IF
200904802-1	Closed	9/1/2010	PCT/US2010/047495	WO	ANALYSIS
200904806-1	Closed	6/15/2010	PCT/US2010/038666	WO	Volume Management
200004992.1	Closed	6/22/2010	PCT/US2010/039597	wo	Authorization Control
200904882-1	Closed	6/23/2010	PC1/US2010/039597	WU	Authorization Control
201000040-1	Closed	4/9/2010	PCT/US2010/030530	WO	PROJECT CLUSTERING AND RELATIONSHIP VISUALIZATION
201000074-1	Closed	5/19/2010	PCT/US2010/035352	WO	OPTICAL INTERCONNECT FABRICS AND OPTICAL SWITCHES
201000074-1	Ciosca	3/19/2010	1 01/03/2010/03/33/2	****	241101110
					SWITCHING IN A
201000075-1	Closed	5/20/2010	PCT/US2010/035661	WO	NETWORK DEVICE
201000205-2	Closed	10/8/2010	PCT/US2010/051910	WO	DATA DEDUPLICATION
201000352-1	Closed	4/29/2010	PCT/US2010/032891	WO	Multi-jurisdiction Retention Scheduling For Record Management
201000332-1	Closed	+/27/2010	1 C1/O32010/032091	1,10	14 Tallagement

		I			T		T
201000810-1	Published		9/23/2010		PCT/US2010/049947	WO	METHODS, APPARATUS AND SYSTEMS FOR MONITORING LOCATIONS OF DATA WITHIN A NETWORK SERVICE
201001417-1	Closed		10/27/2010		PCT/US2010/054269	WO	RECEIVERS AND TRANSCEIVERS FOR OPTICAL MULTIBUS SYSTEMS
201001768-1	Closed		6/16/2011		PCT/US2011/040658	WO	System and Method for Policy Generation
201001815-1	Closed		1/27/2011		PCT/US2011/022709	wo	IDENTIFY POTENTIAL ACCOUNT NUMBERS IN A SINGLE PASS OF A LIST OF DIGITS
201005054-1	Closed		1/20/2011		PCT/US2011/021891	wo	COMPOSITE PROCESSORS
201005194-1	Closed		9/30/2010		PCT/EP2010/064612	WO	Virtual Machines
300200005-3	Closed	1272221		3/22/2006	03251968.8	EP	Projecting Cost On Past Usage
300200005-3	Closed	1372331	3/28/2003 3/17/2003	312212000	PCT/GB2003/001151	WO	And Differing Qos Services  Auditing Of Secure Communication Sessions Over A Communication Network
300201742-2	Closed		3/17/2003		PCT/GB2003/001151	wo	Ensuring Policy Enforcement Before Allowing Usage Of Private Key

	1	<u> </u>			T	1	1
300202355-3	Closed	1355445	3/28/2003	10/17/2007	03251967.0	EP	Method And Apparatus For Encrypting/decrypting Data
300202333 3	Closed	1333113	3/24/2003	10/11/2007	03237307.0		Method And Apparatus For
300202358-3	Closed	1473868	4/27/2004	2/27/2008	04076265.0	EP	Passing Data Securely Between Parties
							Authentication Method And Apparatus Using Pairing Functions For The Elliptic
300202699-4	Issued	1378821	7/1/2003	1/28/2009	03254190.6	EP	Curves Based Cryptosystems
							RECORDS MANAGEMENT
201005602WO01	Closed		3/3/2011		PCT/US2011/027072	WO	SYSTEM
200904834WO01	Closed		1/28/2011		PCT/US2011/022934	WO	QUANTUM KEY DISTRIBUTION METHOD AND APPARATUS
201000525W001	Classi		1/08/2011		DOTALS2011/022002	WO	QUANTUM KEY DISTRIBUTION METHOD
201000525WO01	Closed		1/28/2011		PCT/US2011/022893	WO	AND APPARATUS
201005676WO01	Closed		6/14/2011		PCT/US2011/040316	WO	DEDUPLICATION IN DISTRIBUTED FILE SYSTEMS
201001755WO01	Closed		4/7/2011		PCT/US2011/031593	WO	Managing Data
201000857WO01	Closed		5/2/2011		PCT/US2011/034804	WO	Digital Signatures

	1				1	1	1
							Data Centre And Apparatus And Method For Data Centre
200803229EP01	Closed	2352953	11/13/2009	1/2/2013	09775127.5	EP	Cooling Cooling
200802144EP01	Closed	2350772	10/31/2008	9/13/2017	08877842.8	EP	Prioritized Optical Arbritration Systems And Methods
200802908EP01	Closed	2353287	10/31/2008	3/13/2013	08875257.1	EP	A Method And Digital Imaging Appliance For Selecting A Focus Setting With A Normalized Figure-of- merit
70000702411004			7(110011		DOTAL SOLUTION OF THE SOLUTION	wo	POLICY-BASED DATA
700205826WO01	Closed		7/11/2011		PCT/US2011/043581	WO	MANAGEMENT
700206063WO01	Closed		6/7/2011		PCT/US2011/039512	wo	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
70000570W001			5// 100/2			Wo	DETERMINING SEGMENT BOUNDARIES FOR
700206579WO01	Closed		5/1/2012		PCT/US2012/035917	WO	DEDUPLICATION
700206167WO01	Closed		7/29/2011		PCT/US2011/045996	wo	CREDENTIAL VALIDATION
700207731WO01	Closed		2/29/2012		PCT/US2012/027056	WO	Continuous Recording Multichannel Disk-based Data Logging
700207697WO01	Closed		1/31/2012		PCT/US2012/023219	WO	HYBRID ELECTRO- OPTICAL PACKAGE FOR AN OPTO- ELECTRONIC ENGINE

	I	I	· ·		Τ		T T
700207236WO01	Closed		10/14/2011		PCT/US2011/056327	wo	PERFORMING A REPLICATION OPERATION IN RESPONSE TO MOVEMENT OF A VIRTUAL DATA CONTAINER
700207337WO01	Closed		11/4/2011		PCT/US2011/059275	WO	Fault Processing in a System
700207297WO01	Closed		10/14/2011		PCT/US2011/056328	wo	USING A VIRTUAL BOOT DEVICE TO ACCESS A SYSTEM RECOVERY IMAGE
700206575WO01	Closed		2/2/2012		PCT/US2012/023649	WO	SYSTEMS AND METHODS FOR DATA CHUNK DEDUPLICATION
700205948WO01	Closed		9/28/2011		PCT/US2011/053723	wo	HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION
							GENERATING A VISUAL
700206165WO01	Closed		10/27/2011		PCT/US2011/057971	WO	REPRESENTATION
200903065EP01	Closed	2427994	10/26/2009	9/25/2013	09743889.9	EP	Method And Apparatus For Creating Entanglements And Quantum Repeater Utilising The Same
700208369WO01	Published		3/30/2012		PCT/US2012/031403	WO	AUTHORIZATION CACHE
700208557WO01	Closed		2/22/2012		PCT/US2012/026040	WO	COMPUTER INFRASTRUCTURE SECURITY MANAGEMENT
700208337 11 001	Closed		2/22/2012		1 € 17 € 82 € 127 € 200 4 €	""	BECCRITT WITH THOEMENT

					Τ		1
700208013WO01	Closed		4/12/2012		PCT/US2012/033179	WO	RECONFIGURATION OF AN OPTICAL CONNECTION INFRASTRUCTURE
700207695WO01	Closed		4/24/2012		PCT/US2012/034758	WO	IDENTIFYING NETWORK COMMUNICATION PATTERNS
200903366EP01	Closed	2909955	10/26/2009	7/13/2016	09748459.6	EP	Method And Apparatus For Selectively Routing Entanglement Building
700207959WO01	Closed		3/13/2012		PCT/US2012/028916	WO	Submatch Extraction
201000525EP01	Closed	2529503	1/28/2011	9/12/2018	11737715.0	EP	QUANTUM KEY DISTRIBUTION METHOD AND APPARATUS
700209844WO01	Closed		3/15/2012		PCT/US2012/029144	WO	Accessing And Replicating Backup Data Objects
700209845WO01	Closed		3/15/2012		PCT/IN2012/000178	WO	REGULATING A REPLICATION OPERATION
700209846WO01	Closed		4/24/2012		PCT/US2012/034794	WO	Determining A Schedule For A Job To Replicate An Object Stored On A Storage Appliance
700206939WO01	Closed		3/8/2012		PCT/US2012/028268	WO	MODIFYING VIRTUAL MACHINE COMMUNICATIONS

	1	Γ				1	
							DATA CENTER SERVICE
700209343WO01	Closed		4/27/2012		PCT/US2012/035334	WO	ORIENTED NETWORKING
							SWITCHING IN A
201000075EP01	Closed	2572475	5/20/2010	5/15/2019	10851886.1	EP	NETWORK DEVICE
700211386WO01	Closed		7/20/2012		PCT/US2012/047680	WO	MIGRATING APPLICATIONS BETWEEN NETWORKS
							APPLICATION
700211525WO01	Closed		9/28/2012		PCT/US2012/057819	WO	RANDOMIZATION
700210840WO01	Closed		1/31/2013		PCT/US2013/024135	WO	RADIX ENHANCEMENT FOR PHOTONIC PACKET SWITCH
700211025WO01	Closed		12/21/2012		PCT/US2012/071222	WO	MEMORY MODULE HAVING ERROR CORRECTION LOGIC
700211025 WO01	Cioscu		14/41/4014		1 C1/032012/0/1222	****	CORRECTION LOUIC
700211139WO01	Closed		10/31/2012		PCT/US2012/062810	WO	WRITING STANDARD TAPE FORMAT TO MEMORY
700212686WO01	Closed		1/30/2013		PCT/US2013/023725	WO	FAILOVER IN RESPONSE TO FAILURE OF A PORT
700205948EP01	Closed	2622487	9/28/2011	7/15/2015	11833057.0	EP	HOST BASED WRITE ORDERING FOR ASYNCHRONOUS REPLICATION

	1	1		Τ	1	
700212144WO01	Closed		4/29/2013	PCT/US2013/038591	WO	NON-VOLATILE MEMORY TO STORE RESETTABLE DATA
700212144 WO01	Closed		4/2//2015	101/032013/030371	WO	DATA
700213368WO01	Closed		4/24/2013	PCT/US2013/038017	WO	LOCATION SIGNATURES
700213367WO01	Closed		4/24/2013	PCT/US2013/038023	WO	DISPLACEMENT SIGNATURES
700212379WO01	Closed		8/9/2013	PCT/US2013/054254	wo	SWITCH ASSEMBLY
						SELECTING A STORE FOR
700213474WO01	Closed		5/16/2013	PCT/US2013/041379	WO	DEDUPLICATED DATA
700213475WO01	Closed		5/16/2013	PCT/US2013/041369	WO	SELECTING A STORE FOR DEDUPLICATED DATA
						REPORTING DEGRADED STATE OF DATA RETRIEVED FOR
700213478WO01	Closed		5/16/2013	PCT/US2013/041360	WO	DISTRIBUTED OBJECT
700213479WO01	Closed		5/16/2013	PCT/US2013/041350	WO	DEDUPLICATED DATA STORAGE SYSTEM HAVING DISTRIBUTED MANIFEST
700213244WO01	Closed		5/14/2013	PCT/US2013/040970	WO	Detection of a Security Event

	T	Т	ı		1	ı	T
700213961WO01	Closed		7/31/2013		PCT/US2013/052969	WO	DETERMINING THE POSITION OF A MOBILE DEVICE WITHIN A STRUCTURE
700214058WO01	Closed		8/29/2013		PCT/EP2013/067948	WO	DETERMINING AN ERROR DURING DATA EXTRACTING
700214102WO01	Closed		7/30/2013		PCT/US2013/052646	WO	DATA MANAGEMENT
700213881WO01	Closed		7/26/2013		PCT/US2013/052337	WO	DATA VIEW BASED ON CONTEXT
700213873WO01	Closed		7/18/2013		PCT/US2013/050990	WO	REMOTE STORAGE
700213893WO01	Closed		7/29/2013		PCT/US2013/052590	WO	INTEGRITY OF FREQUENTLY USED DE- DUPLICATION OBJECTS
700214172WO01	Closed		9/27/2013		PCT/US2013/062168	WO	Application Control Flow Models
201005054EP01	Closed	2666097	1/20/2011	10/25/2017	11855929.3	EP	COMPOSITE PROCESSORS
700215080WO01	Closed		9/30/2013		PCT/EP2013/070383	WO	PROCESSING AN ACTION BASED ON AN ATTRIBUTE

		_			Τ		
700215078WO01	Closed		11/26/2013		PCT/EP2013/074780	WO	DETERMINING COMPRESSION TECHNIQUES TO APPLY TO DOCUMENTS
700214590WO01	Closed		11/27/2013		PCT/US2013/072145	wo	META DATA AND DATA VERIFICATION
							NETWORK DATABASE
700214208WO01	Closed		10/31/2013		PCT/US2013/067825	WO	HOSTING  ASSIGNING RESOURCE
700214969WO01	Closed		10/30/2013		PCT/US2013/067534	WO	TRUSTED FUNCTION BASED DATA ACCESS SECURITY CONTROL
700214957WO01 700214981WO01	Closed		10/31/2013		PCT/US2013/067770  PCT/US2013/067766	WO	MEMORY INTEGRITY CHECKING
700214729WO01	Closed		10/31/2013		PCT/US2013/067759	WO	COPY-ON-WRITE UPDATE-TRIGGERED CONSISTENCY
700207236EP01	Closed	2729876	10/14/2011	6/1/2016	11874029.9	EP	PERFORMING A REPLICATION OPERATION IN RESPONSE TO MOVEMENT OF A VIRTUAL DATA CONTAINER
700215556WO01	Closed		10/29/2013		PCT/US2013/067219	WO	VIRTUAL MACHINE INTROSPECTION

	1	T			T		
700206063EP01	Closed	2719124	6/7/2011	4/11/2018	11867520.6	EP	A SCALABLE MULTI- TENANT NETWORK ARCHITECTURE FOR VIRTUALIZED DATACENTERS
700215509WO01	Closed		4/4/2014		PCT/US2014/032920	WO	STORING AND RETRIEVING CIPHERTEXT IN DATA STORAGE
700215841WO01	Closed		1/29/2014		PCT/US2014/013684	WO	MANAGING A NUMBER OF ETHERNET LINKS
700215821WO01	Closed		2/18/2014		PCT/US2014/016780	WO	RISK ASSESSMENT
700216080WO01	Closed		12/18/2013		PCT/US2013/075904	WO	PATCHING OF VIRTUAL MACHINES DURING DATA RECOVERY
			5/15/2014			Wo	NETWORK TRAFFIC
700216014WO01	Closed		5/15/2014		PCT/US2014/038207	WO	TUNING
700215712WO01	Closed		1/31/2014		PCT/US2014/014060	wo	COMMUNICATING BETWEEN A CLUSTER AND A NODE EXTERNAL TO THE CLUSTER
Tool to stay of			311.1604		DOTALISMO LASSOCIA	N/C	GENANTIC PROTECTION
700214965WO01	Closed		3/14/2014		PCT/US2014/029030	WO	SEMANTIC RESTRICTION
700215885WO01	Closed		3/14/2014		PCT/US2014/028697	WO	RESOURCE RESTRICTION
	•	•			•	•	

		I	<u> </u>		Γ	ı	1
							CREDENTIAL
700206167EP01	Closed	2737656	7/29/2011	9/5/2018	11870379.2	EP	VALIDATION
700216162WO01	Closed		4/30/2014		PCT/US2014/036034	WO	Network Fabric Control
700216781WO01	Closed		5/1/2014		PCT/EP2014/058958	WO	DYNAMICALLY SCALED WEB SERVICE DEPLOYMENTS
700216638WO01	Closed		4/25/2014		PCT/US2014/035483	WO	A statistics-based genetic algorithm for learning classifiers of OS trace data,applied to malware detection
700216450WO01	Closed		5/23/2014		PCT/US2014/039312	WO	READ AHEAD BUFFER PROCESSING
700217207WO01	Closed		3/20/2014		PCT/US2014/031328	WO	Storage System Transactions
70021720711301	Olosea		512012011		101032011031320	,,,,	SCHEDULING
700215735WO01	Closed		3/27/2014		PCT/EP2014/056239	WO	DOWNLOADS
700217169WO01	Closed		7/2/2014		PCT/US2014/045204	WO	MANAGING PORT CONNECTIONS  DATA STORAGE OVER
700216953WO01	Closed		9/5/2014		PCT/US2014/054174	WO	FIBRE CHANNEL

				1	
700217027WO01	Closed	5/23/2014	PCT/US2014/039279	WO	AGGREGATING DATA FOR VISUALIZATION
700217317WO01	Closed	5/15/2014	PCT/US2014/038204	WO	NETWORK SCHEDULING
700217396WO01	Closed	9/26/2014	PCT/US2014/057907	WO	STORAGE OF HYPERVISOR MESSAGES IN NETWORK PACKETS GENERATED BY VIRTUAL MACHINES
700217874WO01	Closed	3/11/2015	PCT/US2015/019968	WO	DYNAMICALLY ADJUSTING A MODEL FOR A SECURITY OPERATIONS CENTER
700217728WO01	Closed	8/13/2014	PCT/US2014/050950	wo	NON-VOLATILE STORAGE OF MANAGEMENT DATA
700217208WO01	Closed	7/29/2014	PCT/US2014/048673	WO	STORAGE TRANSACTIONS
700217635WO01	Closed	7/30/2014	PCT/US2014/048872	WO	KEY SEARCH TOKEN FOR ENCRYPTED DATA
700216796WO01	Closed	6/30/2014	PCT/US2014/044875	wo	CONCURRENT DEAD ACTOR COLLECTION
700217545WO01	Closed	7/25/2014	PCT/US2014/048228	WO	CONSTRAINING AUTHORIZATION TOKENS VIA FILTERING

							<u>,                                      </u>
700217829WO01	Closed		7/31/2014		PCT/US2014/049191	WO	CREATING A SECURITY REPORT FOR A CUSTOMER NETWORK
700217847WO01	Closed		7/31/2014		PCT/US2014/049152	WO	REMEDIATING A SECURITY THREAT TO A NETWORK
700217025WO01	Closed		5/29/2014		PCT/US2014/039903	WO	BACKUP STORAGE
700216352WO02	Closed		8/4/2014		PCT/US2014/049550	WO	NETWORK INFRASTRUCTURE MANAGEMENT
700206575EP01	Closed	2810171	2/2/2012	7/3/2019	12867467.8	EP	SYSTEMS AND METHODS FOR DATA CHUNK DEDUPLICATION
700219207W001	Closed		0/2/2014		DCT/[102014/052925	wo	RELATIONSHIP BASED CACHE RESOURCE NAMING AND
700218297WO01	Closed		9/3/2014		PCT/US2014/053825	WO	EVALUATION
700218366WO01	Closed		7/31/2014		PCT/US2014/049075	WO	SHADOW ELEMENTS
							DATA CENTER SERVICE
700209343EP01	Closed	2842045	4/27/2012	12/5/2018	12875325.8	EP	ORIENTED NETWORKING
700218635WO01	Closed		8/28/2014		PCT/US2014/053158	WO	MOVING DATA CHUNKS

	1				1
					ADMISSIONS CONTROL
700218553WO01	Closed	10/23/2014	PCT/US2014/061934	WO	OF A DEVICE
700218851WO01	Closed	12/2/2014	PCT/US2014/068009	wo	TRACKING OF ASSETS
					SECURE TRANSACTIONS
700218604WO01	Closed	10/30/2014	PCT/US2014/063169	WO	IN A MEMORY FABRIC
700218682WO01	Closed	10/30/2014	PCT/US2014/063174	WO	ENCRYPTION FOR TRANSACTIONS IN A MEMORY FABRIC
700218223WO01	Closed	12/23/2014	PCT/US2014/072231	WO	PREVENTION OF A PREDETERMINED ACTION REGARDING DATA
700217985WO01	Closed	9/18/2014	PCT/US2014/056347	WO	DATA TO BE BACKED UP IN A BACKUP SYSTEM
. 30217303 11 001	Ciosca	7/10/2014	1 01/00201#10303 <b>T</b> /	,,,0	Z. II DITCHOL DI DI LINI
700217986WO01	Closed	9/22/2014	PCT/US2014/056755	wo	IDENTIFICATION OF CONTENT-DEFINED CHUNK BOUNDARIES
700218699WO01	Closed	10/31/2014	PCT/US2014/063281	WO	INDICATING A PRIVILEGE LEVEL
700218786WO01	Closed	10/31/2014	PCT/US2014/063332	WO	SYSTEMS AND METHODS FOR RESTRICTING WRITE ACCESS TO NON- VOLATILE MEMORY

	T	1	·		T		T
700218502WO01	Closed		9/24/2014		PCT/US2014/057151	WO	UTILIZING ERROR CORRECTION (ECC) FOR SECURE SECRET SHARING
700218450WO01	Closed		9/30/2014		PCT/US2014/058286	WO	AN OVERLAY STREAM OF OBJECTS
700217923WO01	Closed		11/17/2014		PCT/US2014/065948	WO	Snapshot Backup
700217925WO01	Closed		12/15/2014		PCT/US2014/070421	WO	DATA RESTORATION USING ALLOCATION MAPS
700218024WO01	Closed		11/11/2014		PCT/US2014/064957	WO	Balancing Thread Groups
700218173WO01	Closed		10/22/2014		PCT/US2014/061801	WO	DATA RESTORATION USING BLOCK DISK PRESENTATIONS
700218146WO01	Closed		1/30/2015		PCT/US2015/013761	WO	DATA ENCRYPTION
700211386EP01	Closed	2875439	7/20/2012	2/20/2019	12881312.8	EP	MIGRATING APPLICATIONS BETWEEN NETWORKS
700218677WO01	Closed		12/15/2014		PCT/US2014/070403	WO	SNAPSHOT CREATION

	1		1		T		
							A TENEVINA A A TENANTA
700219734WO01	Closed		11/28/2014		PCT/US2014/067814	wo	VERIFYING A NETWORK CONFIGURATION
70021775417001	Closed		11/20/2014		1 € 1/6 82 0 1 4/0 0 / 6 1 4	","	CONTIGURATION
							VERIFYING NETWORK
700219735WO01	Closed		11/28/2014		PCT/US2014/067818	wo	ELEMENTS
							NETWORK ANOMALY
700219958WO01	Closed		4/10/2015		PCT/US2015/025454	WO	DETECTION
							DATASTREAM BLOCK
700218916WO01	Closed		3/20/2015		PCT/US2015/021632	WO	ENCRYPTION
							FAILOVER IN RESPONSE
700212686EP01	Closed	2951963	1/30/2013	4/24/2019	13873588.1	EP	TO FAILURE OF A PORT
							MEMORY MODULE
							HAVING ERROR
700211025EP01	Closed	2936496	12/21/2012	11/28/2018	12890251.7	EP	CORRECTION LOGIC
							CONTAINERIZED
			0.000.001.5		DOTE (CO YOU I TO COTT )	****	VIRTUAL NETWORK
700219989WO01	Closed		8/20/2015		PCT/CN2015/087710	WO	FUNCTION
							FIREWALL TO
700220668WO01	Closed		7/29/2015		PCT/US2015/042661	wo	DETERMINE ACCESS TO A PORTION OF MEMORY
700220006 W OUT	Closed		112912013		1 0 1/0 3 2 0 1 3 / 0 4 2 0 0 1	1,,0	TOKTION OF WIEWORT
							REMOTE ATTESTATION
700220614WO01	Closed		6/5/2015		PCT/US2015/034393	WO	OF A NETWORK ENDPOINT DEVICE
.0022001411 001	CIOSCU	1	1 0/3/2013	l	1 2 21 6 3 2 0 1 3 1 0 3 7 3 7 3	, ,, ,	EMPTORIT DEFICE

	1				T		T
							Automated entity-resolution
700220713WO01	Closed		5/18/2015		PCT/EP2015/060913	WO	methods and systems
					D.C.T. (T.D.C.) - 1/0 (4.000		
700220741WO01	Closed		5/28/2015		PCT/EP2015/061892	WO	LINKING DATASETS
700220510WO01	Closed		6/12/2015		PCT/US2015/035576	wo	DISK STORAGE ALLOCATION
700220310WO01	Closed		6/12/2013		PC1/US2013/033376	WU	ALLOCATION
700218700DE01	Issued	102015210734	6/11/2015	3/4/2021	102015210734.5	DE	MANAGEMENT OF CRYPTOGRAPHIC KEYS
7002107002101	155404	102013210131	0/11/2015	37 17 20 21	102013210731.5	22	CHITTOGRAM MC ILLIS
700221077WO01	Closed		7/7/2015		PCT/EP2015/065514	WO	GRAPH DATABASES
							ENCRYPTED DATA
700221087WO01	Closed		8/7/2015		PCT/US2015/044143	WO	CHUNKS
							SNAPSHOT STORAGE
700221119WO01	Closed		9/23/2015		PCT/US2015/051596	WO	MANAGEMENT
							SECURE MEMORY
700221453WO01	Closed		9/14/2015		PCT/US2015/049936	WO	SYSTEMS
70022146937001	Closed		7/21/2015		DCT/ED2015/067722	WO	CATEGORY BASED
700221468WO01	Closed		7/31/2015		PCT/EP2015/067732	WO	EXECUTION SCHEDULING

		1		1		
700221308WO01	Closed		8/14/2015	PCT/EP2015/068792	WO	DATA REPLICATION IN MEMORY SYSTEMS
700221309WO01	Closed		7/31/2015	PCT/EP2015/067690	WO	COMMIT BASED MEMORY OPERATION IN A MEMORY SYSTEM
700221310WO01	Closed		7/31/2015	PCT/EP2015/067683	WO	METHODS TO CREATE LOGICAL TREES OF MEMORY SYSTEMS
700221391WO01	Closed		10/30/2015	PCT/US2015/058240	WO	SOFTWARE KIT RELEASE MANAGEMENT
700221168WO01	Closed		1/21/2016	PCT/US2016/014358	WO	Software Validation for Untrusted Computing Systems
700221911WO01	Closed		8/14/2015	PCT/EP2015/068765	wo	MODIFICATION OF DATA ELEMENTS USING A SEMANTIC RELATIONSHIP
700221711 WOO1	Closed		0/14/2015	T C1/E1 2013/000703	,,,0	KLLATIONSIII
700221311WO01	Closed		9/24/2015	PCT/EP2015/072043	WO	RESILIENT MEMORY FABRIC
700221312WO01	Closed		9/24/2015	PCT/EP2015/072044	WO	MEMORY SYSTEM MANAGEMENT
						MIGRATION OF
700221823WO01	Closed		7/31/2015	PCT/EP2015/067659	WO	COMPUTER SYSTEMS

		1		T	T		T
							SCHEDULING HETEROGENOUS
700221910WO01	Closed		7/27/2015		PCT/EP2015/067172	WO	PROCESSORS
700221913WO01	Closed		7/30/2015		PCT/EP2015/067543	WO	CRYPTOGRAPHIC DATA
							MEMORY ACCESS
700221915WO01	Closed		7/30/2015		PCT/EP2015/067603	wo	CONTROL METHOD AND SYSTEM
							RADIX ENHANCEMENT
							FOR PHOTONIC PACKET
700210840EP01	Closed	2951940	7/31/2015	8/21/2019	13873163.3	EP	SWITCH
700222978WO01	Closed		8/28/2015		PCT/US2015/047381	wo	Managing Sets of Transactions for Replication
							Managing Manifests for
700222979WO01	Closed		8/28/2015		PCT/US2015/047384	WO	Replication
							C 11: 1 11- 12: 5
700222998WO01	Closed		8/28/2015		PCT/US2015/047391	wo	Collision Handling During an Asynchronous Replication
							Distribution of Gen-Z
700222692WO01	Closed		11/27/2015		PCT/EP2015/077889	WO	Transaction Integrity Keys
700222241WO01	Closed		10/21/2015		PCT/GB2015/053155	WO	Assignment of Processes to Computational Resources

	_	Т		<u> </u>	1	1	
700222553WO01	Closed		11/4/2015		PCT/US2015/058950	WO	STORAGE MANAGEMENT OF METADATA
700222333 W O01	Closed		11/4/2013		1 C1/C32013/030/30	","	OI METADATA
							ACCESSING OBJECTS VIA
700222274WO01	Closed		1/19/2016		PCT/US2016/013910	WO	OBJECT REFERENCES
700222275WO01	Closed		12/18/2015		PCT/US2015/066758	wo	DATA TYPE MANAGEMENT
700222273 W O 0 1	Closed		12/16/2015		1 C1/032013/000738	110	WANAGEWENT
							COLLECTING DOMAIN
700222876WO01	Closed		8/31/2015		PCT/US2015/047691	WO	NAME SYSTEM TRAFFIC
							CONFIGURATION OF A
700222494WO01	Closed		11/25/2015		PCT/US2015/062665	wo	MEMORY CONTROLLER FOR COPY-ON-WRITE
700222494WO01	Closed		11/23/2013		1 C1/C32013/002003	****	POR COI 1-ON-WRITE
							HANDLING NETWORK
700222878WO01	Closed		11/17/2015		PCT/US2015/061031	WO	THREATS
							IDENTIFICATION OF A DNS PACKET AS
700221895WO01	Closed		9/21/2015		PCT/US2015/051119	wo	MALICIOUS BASED ON A VALUE
700221073 W OUT	Closed		912112013		101032013/031119	","	VILUE
							SELECTING A STORE FOR
700213474EP01	Closed	2997497	5/16/2013	10/27/2021	13884582.1	EP	DEDUPLICATED DATA
700213475EP01	Closed	2997496	5/16/2013	1/19/2022	13884415.4	EP	SELECTING A STORE FOR DEDUPLICATED DATA
100213473EPU1	Ciosed	_ 477 / <del>4</del> 70	2/10/2013	1/19/2022	13004413.4	LCL	DEDUFLICATED DATA

Closed		1/29/2016		PCT/US2016/015785	WO	DEVICE ATTESTATION
Closed		12/4/2015		PCT/US2015/063945	WO	COMBINING HASHES OF DATA BLOCKS
Closed	3025247	7/26/2013	10/24/2018	13889831 7	EP	DATA VIEW BASED ON CONTEXT
Closed	3023217	772072013	10/2 1/2010	1300/031.7	Ei	CONTEXT
Classi	2021197	9/0/2012	11/6/2010	12800002.2	ED	OWITCH A COEMDLY
Closed	3031187	8/9/2013	11/6/2019	13890993.2	EP	SWITCH ASSEMBLY
						DETERMINING A
						PERSISTENT NETWORK IDENTITY OF A
Closed		4/21/2016		PCT/US2016/028563	WO	NETWORKED DEVICE
						HIERARCHICAL RULE
Closed		4/29/2016		PCT/US2016/030099	WO	CLUSTERING
						SENDING DEDUPLICATED DATA AND
Closed		4/11/2016		PCT/US2016/026914	WO	REHYDRATING AGENT
						CONFIGURATION OF A MEMORY CONTROLLER
						FOR COPY-ON-WRITE
Closed		4/22/2016		PCT/US2016/028902	WO	WITH A RESOURCE CONTROLLER
Closed		6/8/2016		PCT/US2016/036366	WO	EXECUTING SERVICES IN CONTAINERS
	Closed  Closed  Closed  Closed  Closed	Closed 3025247  Closed 3031187  Closed Closed Closed	Closed 3025247 7/26/2013  Closed 3031187 8/9/2013  Closed 4/21/2016  Closed 4/29/2016  Closed 4/11/2016	Closed 3025247 7/26/2013 10/24/2018  Closed 3031187 8/9/2013 11/6/2019  Closed 4/21/2016  Closed 4/11/2016  Closed 4/22/2016	Closed 12/4/2015 PCT/US2015/063945  Closed 3025247 7/26/2013 10/24/2018 13889831.7  Closed 3031187 8/9/2013 11/6/2019 13890993.2  Closed 4/21/2016 PCT/US2016/028563  Closed 4/29/2016 PCT/US2016/030099  Closed 4/11/2016 PCT/US2016/030099	Closed 12/4/2015 PCT/US2015/063945 WO  Closed 3025247 7/26/2013 10/24/2018 13889831.7 EP  Closed 3031187 8/9/2013 11/6/2019 13890993.2 EP  Closed 4/21/2016 PCT/US2016/028563 WO  Closed 4/29/2016 PCT/US2016/030099 WO  Closed 4/11/2016 PCT/US2016/030099 WO  Closed 4/11/2016 PCT/US2016/026914 WO  Closed 4/22/2016 PCT/US2016/026914 WO

	1	1	1	1	T		1
							FAULT ISOLATION IN
710223598WO01	Closed		2/26/2016		PCT/US2016/019740	WO	TRANSACTION LOGS
710223603WO01	Closed		3/24/2016		PCT/US2016/024052	WO	TEXT ENCRYPTION
							MULTI-CREDENTIAL
710223780WO01	Closed		3/31/2016		PCT/US2016/025379	WO	AUTHENTICATION
710223856WO01	Closed		3/31/2016		PCT/US2016/025323	WO	TRANSACTION MANAGEMENT FOR MULTI-NODE CLUSTERS
710223836WO01	Closed		3/31/2010		FC1/032010/025323	WO	MOLTI-NODE CLOSTERS
700215556EP01	Closed	3063692	10/29/2013	7/24/2019	13896266.7	EP	VIRTUAL MACHINE INTROSPECTION
							MEMORY INTEGRITY
700214981EP01	Closed	3063627	10/31/2013	2/26/2020	13896796.3	EP	CHECKING
700215841EP01	Closed	3100416	1/29/2014	10/16/2019	14880912.2	EP	MANAGING A NUMBER OF ETHERNET LINKS
70021304111101	Closed	3100410	112312014	10/10/2019	14000/12.2	E	OF ETHERNET EINKS
SGI00429PCT01	Closed		11/16/2016		PCT/US2016/062316	wo	Method and System for Shared Direct Access Storage
700221308EP01	Closed	3311280	8/14/2015	3/27/2019	15751003.3	EP	DATA REPLICATION IN MEMORY SYSTEMS

	T	T	1				
							METHODS TO CREATE LOGICAL TREES OF
700221310EP01	Closed	3298501	7/31/2015	11/13/2019	15745472.9	EP	MEMORY SYSTEMS
700221312EP01	Closed	3278519	9/24/2015	8/21/2019	15770511.2	EP	MEMORY SYSTEM MANAGEMENT
							Cryptographic Identities of
700221913EP01	Closed	3292495	7/30/2015	10/30/2019	15744571.9	EP	Nodes in TheMachine
700222692EP01	Closed	3262783	11/27/2015	1/8/2020	15801180.9	EP	Distribution of Gen-Z Transaction Integrity Keys
							COLLECTING DOMAIN
700222876EP01	Closed	3275151	8/31/2015	4/29/2020	15903192.1	EP	NAME SYSTEM TRAFFIC
							CONFIGURATION OF A
							MEMORY CONTROLLER FOR COPY-ON-WRITE
710223554EP01	Closed	3274896	4/22/2016	8/21/2019	16894801.6	EP	WITH A RESOURCE CONTROLLER
							DATASTREAM BLOCK
700218916EP01	Closed	3272060	3/20/2015	5/1/2019	15886621.0	EP	ENCRYPTION
700220713EP01	Closed	3265929	5/18/2015	4/17/2019	15724591.1	EP	Automated entity-resolution methods and systems
							ENCRYPTED CAPABILITIES STORED IN
710224250EP01	Closed	3312758	10/19/2017	8/21/2019	17197398.5	EP	GLOBAL MEMORY

		Т	1	г	T	1	1
							RECOVERY SERVICES
710225035EP01	Closed	3370151	2/28/2018	11/13/2019	18159058.9	EP	FOR COMPUTING SYSTEMS
71022303512101	Closed	3370131	2/20/2010	11/13/2017	16137036.9		
700211025EP02	Closed	3425507	7/20/2018	4/8/2020	18184850.8	EP	MEMORY MODULE HAVING ERROR CORRECTION LOGIC
700213478EP01	Closed	2997474	5/16/2013	10/6/2021	13884384.2	EP	REPORTING DEGRADED STATE OF DATA RETRIEVED FOR DISTRIBUTED OBJECT
ARBA0231US03	Issued	10,855,829	4/26/2016	12/1/2020	15/139,300	US	ZERO TOUCH PROVISIONING
710224231US01	Issued	10,878,000	7/29/2016	12/29/2020	15/224,335	US	EXTRACTING GRAPH TOPOLOGY FROM DISTRIBUTED DATABASES
700215841CN01	Issued	106165346	1/29/2014	10/2/2020	201480077711.7	CN	MANAGING A NUMBER OF ETHERNET LINKS
		20020070		10.50			TRANSLATING GQL QUERIES INTO SQL
710224418US01	Abandoned		10/28/2016		15/337,482	US	QUERIES
710224540US01	Abandoned		10/28/2016		15/337,316	US	SOLVING GRAPH ROUTES INTO A SET OF POSSIBLE RELATIONSHIP CHAINS
700216450US01	Abandoned		5/23/2014		15/307,469	US	READ AHEAD BUFFER PROCESSING

	1	1			T		1
							MANAGING PORT
700217169US01	Issued	10,897,506	7/2/2014	1/19/2021	15/305,317	US	CONNECTIONS
							INPUT/OUTPUT DATA
710224822US01	Issued	10,896,267	1/31/2017	1/19/2021	15/420,736	US	ENCRYPTION
	Allowed				15/500,918	TIE	VERIFYING NETWORK
700219735US01	Allowed		11/28/2014		15/500,918	US	ELEMENTS
710225084US01	Issued	10,884,953	8/31/2017	1/5/2021	15/693,149	US	CAPABILITY ENFORCEMENT PROCESSORS
700218786US01	Issued	11,086,797	10/31/2014	8/10/2021	15/518,218	US	SYSTEMS AND METHODS FOR RESTRICTING WRITE ACCESS TO NON- VOLATILE MEMORY
SGI00429US02	Issued	11,029,847	11/16/2016	6/8/2021	15/353,413	US	Method and System for Shared Direct Access Storage
700217925CN01	Issued	107111531	12/15/2014	4/9/2021	201480084442.7	CN	SYSTEM, METHOD AND STORAGE MEDIUM FOR DATA RESTORATION USING ALLOCATION MAPS
710225600US01	Issued	10,853,090	1/22/2018	12/1/2020	15/876,370	US	INTEGRITY VERIFICATION OF AN ENTITY
710225617US01	Issued	11,182,256	10/20/2017	11/23/2021	15/789,198	US	BACKUP ITEM METADATA INCLUDING RANGE INFORMATION

		ı		·	1		1
700222979US01	Abandoned		8/28/2015		15/547,368	US	MANAGING MANIFESTS FOR REPLICATION
					,		
710225782US01	Issued	11,138,315	1/17/2018	10/5/2021	15/873,419	US	DATA STRUCTURE MEASUREMENT COMPARISON
710225812US01	Abandoned		4/30/2018		15/966,423	US	TRUSTED COMPUTING INTEGRITY MEASUREMENT ARCHITECTURE SECURITY FOR CONTAINERS
710225795US01	Abandoned		12/14/2017		15/842,123	US	PERSISTENTLY STORE CACHED DATA OF A WRITE TO A BLOCK DEVICE PRESENTATION
700221468EP01	Closed		7/31/2015		15748014.6	EP	CATEGORY BASED EXECUTION SCHEDULING
700221309US01	Abandoned		7/31/2015		15/572,996	US	COMMIT BASED MEMORY OPERATION IN A MEMORY SYSTEM
700221310US01	Abandoned		7/31/2015		15/572,971	US	METHODS TO CREATE LOGICAL TREES OF MEMORY SYSTEMS
700221911EP01	Closed	3274902	8/14/2015	3/24/2021	15750742.7	EP	MODIFICATION OF DATA ELEMENTS USING A SEMANTIC RELATIONSHIP
700221311EP01	Abandoned		9/24/2015		15771912.1	EP	RESILIENT MEMORY FABRIC

	1	1			1	1	1
							RESILIENT MEMORY
700221311US01	Abandoned		9/24/2015		15/573,093	US	FABRIC
							MEMORY ACCESS CONTROL METHOD AND
700221915EP01	Closed		7/30/2015		15745459.6	EP	SYSTEM
700222692US01	Issued	10.938.553	11/27/2015	3/2/2021	15/573,565	US	DISTRIBUTION AND VERIFICATION OF TRANSACTION INTEGRITY KEYS
7002226920301	Issued	10,938,333	11/2//2015	31212021	13/3/3,303	US	INTEGRITI KETS
700222275EP01	Abandoned		12/18/2015		15910962.8	EP	DATA TYPE MANAGEMENT
. 302222.321.01	- I controlled		12/10/2013		25710702.0		I I I I I I I I I I I I I I I I I I I
700222275US01	Abandoned		12/18/2015		15/577,846	US	DATA TYPE MANAGEMENT
700222494EP01	Abandoned		11/25/2015		15909415.0	EP	CONFIGURATION OF A MEMORY CONTROLLER FOR COPY-ON-WRITE
. CODDDTYTES UI	1 Iouniconect		1112312013		20707110.0		2 SK COLT ON WRITE
710223554US01	Allowed		4/22/2016		15/735,660	US	CONFIGURATION OF A MEMORY CONTROLLER FOR COPY-ON-WRITE WITH A RESOURCE CONTROLLER
700221913CN01	Issued	107534551	7/30/2015	2/9/2021	201580079007.X	CN	METHOD OF PROVIDING CRYPTOGRAPHIC DATA, COMPUTING DEVICE AND READABLE MEDIUM
							MEMORY ACCESS CONTROL METHOD AND
700221915CN01	Abandoned		7/30/2015		201580079048.9	CN	SYSTEM

		Т			T	_	1
700001469CN01	Abandanad		7/31/2015		201580079049.3	CN	CATEGORY BASED EXECUTION SCHEDULING
700221468CN01	Abandoned		//31/2013		201380079049.3	CN	EXECUTION SCHEDULING
700221823CN01	Abandoned		7/31/2015		201580079050.6	CN	Hardware-based Method of Live Migration in a Multi- node System
700221168CN01	Issued	107533594	1/21/2016	1/26/2021	201680023124.9	CN	METHOD OF VALIDATING SOFTWARE, SECURE SOFTWARE SYSTEM, AND READABLE STORAGE MEDIUM
700221911CN01	Issued	107533614	8/14/2015	10/16/2020	201580079042.1	CN	AN APPARATUS FOR STORING DATA AND MACHINE-READABLE STORAGE MEDIUM
700221308CN01	Issued	107533438	8/14/2015	9/8/2020	201580079041.7	CN	DATA REPLICATION IN MEMORY SYSTEMS
700221453CN01	Abandoned		9/14/2015		201580078993.7	CN	SECURE MEMORY SYSTEMS
700221312CN01	Issued	107534621	9/24/2015	6/29/2021	201580079192.2	CN	MEMORY SYSTEM, MEMORY COMPONENT DEVICE, METHOD OF ROUTING AND READABLE STORAGE MEDIUM
700222692CN01	Issued	107534552	11/27/2015	10/9/2020	201580079037.0	CN	A METHOD EXECUTED AT A SERVER DEVICE, A CLIENT DEVICE, AND A SERVER DEVICE
710223554CN01	Issued	107533602	4/22/2016	1/12/2021	201680022878.2	CN	COMPUTING DEVICE AND METHOD THEREOF, AND COMPUTING SYSTEM

	•				1		
700221910EP01	Abandoned		7/27/2015		15745435.6	EP	SCHEDULING HETEROGENOUS PROCESSORS
700220668EP01	Abandoned		7/29/2015		15899851.8	EP	FIREWALL TO DETERMINE ACCESS TO A PORTION OF MEMORY
700222979EP01	Abandoned		8/28/2015		15903169.9	EP	Managing Manifests for Replication
710223603CN01	Abandoned		3/24/2016		201680031687.2	CN	TEXT ENCRYPTION
							SYSTEM AND METHOD FOR TRANSACTION MANAGEMENT FOR MULTI-NODE CLUSTERS
710223856CN01	Issued	107852349	3/31/2016	12/1/2020	201680045042.4	CN	AND STORAGE MEDIUM
7000007131501			5/10/2015		15/575 010	No.	Automated entity-resolution
700220713US01	Abandoned		5/18/2015		15/575,042	US	methods and systems
							Software Validation for
700221168EP01	Closed	3283996	1/21/2016	3/3/2021	16886727.3	EP	Untrusted Computing Systems
700220741US01	Abandoned		5/28/2015		15/577,332	US	LINKING DATASETS
			2.20.2013		22.2,002		
700220741EP01	Closed		5/28/2015		15725620.7	EP	LINKING DATASETS

		1	1	T	1		1
700220741CN01	Abandoned		5/28/2015		201580081319.4	CN	LINKING DATASETS
700220741CIV01	Abandoned		3/26/2013		201380081319.4	CIV	Elivalid DATASETS
							REMOTE ATTESTATION OF A NETWORK
700220614US01	Abandoned		6/5/2015		15/579,904	US	ENDPOINT DEVICE
700221077EP01	Abandoned		7/7/2015		15734403.7	EP	GRAPH DATABASES
700221077EF01	Abandoned		11112013		13734403.7	151	GRAITI DATADASES
700221077CN01	Abandoned		7/7/2015		201580082227.8	CN	GRAPH DATABASES
700221087US01	Abandoned		8/7/2015		15/749,574	US	ENCRYPTED DATA CHUNKS
7002210870301	Abandoned		8/1/2013		13/149,3/4	03	CHONKS
							ENCRYPTION/DECRYPTIO
							N METHOD AND INTEGRATED CIRCUIT IN
710224822CN01	Abandoned	108449172	1/19/2018	12/1/2020	201810053921.2	CN	A COMPUTING DEVICE
710224822EP01	Closed	3355232	1/15/2018	10/7/2020	18151583.4	EP	INPUT/OUTPUT DATA ENCRYPTION
710224022EF01	Ciosca	222222	1/13/2016	10/1/2020	10131303.4	LF	LINCKITION
							CHANGING THE
							DEPLOYMENT STATUS OF A PRE-PROCESSOR OR
710224926EP01	Abandoned		1/15/2018		18151627.9	EP	ANALYTIC
710225032EP01	Closed	3355226	1/15/2018	4/28/2021	18151616.2	EP	SYSTEM CALL POLICIES FOR CONTAINERS
110223032EP01	Closed	1 3333440	1/13/2018	1/20/2021	10101010.2	EP	TOR CONTAINERS

	T	Т			T		T
710223818CN01	Issued	107851032	6/8/2016	4/2/2021	201680042601.6	CN	SYSTEM, DEVICE AND METHOD FOR EXECUTING A SERVICE IN A CONTAINER
710223818EP01	Closed	3308274	6/8/2016	8/4/2021	16904792.5	EP	EXECUTING SERVICES IN CONTAINERS
700220668US01	Issued	11,200,345	7/29/2015	12/14/2021	15/746,494	us	FIREWALL TO DETERMINE ACCESS TO A PORTION OF MEMORY
700222241US01	Issued	11,461,144	10/21/2015	10/4/2022	15/754,581	US	ITERATIVELY ASSIGNING PROCESSES TO COMPUTATIONAL RESOURCES BASED ON LOADING METRIC RANKING (as amended)
710223603US01	Issued	11,070,356	3/24/2016	7/20/2021	15/754,017	US	TEXT ENCRYPTION
							COMPUTING SYSTEM, RECOVERY SERVICE AND MACHINE READABLE
710225035CN01 710226218US01	Issued	201810174681.1	3/2/2018 6/29/2018	4/15/2022 4/5/2022	201810174681.1 16/023,029	US	MEDIUM DYNAMICALLY SCALED HYPERCONVERGED SYSTEM ESTABLISHING MINIMUM SUPPORTED INTEROPERABLE COMMUNICATION PROTOCOL BETWEEN CLUSTERS IN A CLUSTER GROUP (as amended)
710226064US01	Issued	11,119,789	4/25/2018	9/14/2021	15/962,366	US	KERNEL SPACE MEASUREMENT
710226129US01	Issued	11,397,815	9/21/2018	7/26/2022	16/138,119	US	Secure Data Protection

					1	ı	
710226245US01	Issued	11,128,531	4/30/2018	9/21/2021	15/967,583	US	SYSTEMS AND METHODS FOR AGGREGATE BANDWIDTH AND LATENCY OPTIMIZATION
700221168US01	Issued	11,496,317	1/21/2016	11/8/2022	15/756,977	US	SOFTWARE VALIDATION FOR UNTRUSTED COMPUTING SYSTEMS
700222878CN01	Issued	201580084661. X	11/17/2015	8/10/2021	201580084661.X	CN	COMPUTING DEVICE, METHOD AND STORAGE MEDIUM FOR HANDLING NETWORK THREATS
700222878EP01	Closed	3378208	11/17/2015	9/29/2021	15908924.2	EP	HANDLING NETWORK THREATS
.002220701101	CIOSCU	3376200	1111112013	7.27.2021	13700727.2	1.1	
710226324US01	Issued	11,113,408	8/20/2018	9/7/2021	16/105,214	US	Providing a Secure Object Store Using a Hierarchical Key System
71020649914501	Local	10 000 021	10/25/2019	200031	16/171 010	TIC .	SELECTING CLOUD
710226489US01	Issued	10,908,831	10/25/2018	2/2/2021	16/171,019	US	STORAGE
710226473US01	Allowed		6/13/2018		16/007,722	US	MEASURING INTEGRITY OF COMPUTING SYSTEM
710226573US01	Issued	11,017,080	6/13/2018	5/25/2021	16/007,683	US	MEASURING INTEGRITY OF COMPUTING SYSTEM USING JUMP TABLE
700211025CN02	Closed		12/21/2012		201810789570.1	CN	MEMORY MODULE HAVING ERROR CORRECTION LOGIC

	T	1	ı	<u> </u>	ı		
SGI00429EP01	Abandoned		11/16/2016		16867052.9	EP	Method and System for Shared Direct Access Storage
5G100+27E1 01	Remidence		11/10/2010		10001032.)	Li	Shared Direct Access Storage
							SENDING DEDUPLICATED DATA AND
710223694CN01	Abandoned		4/11/2016		201680086240.5	CN	REHYDRATING AGENT
							SENDING DEDUPLICATED
710223694US01	Abandoned		4/11/2016		16/092,403	US	DATA AND REHYDRATING AGENT
·					,		
							EXECUTING SERVICES IN
710223818US01	Issued	10,929,148	6/8/2016	2/23/2021	16/307,922	US	CONTAINERS
							DATA STRUCTURE MEASUREMENT
710225782CN01	Issued	201811541529.9	12/17/2018	12/20/2022	201811541529.9	CN	COMPARISON
							DATA STRUCTURE
710225782FP01	D 11:1 1		12/14/2010		19212721 6	ED	MEASUREMENT COMPARISON
710225782EP01	Published		12/14/2018		18212731.6	EP	COMPARISON
							INTEGRITY VERIFICATION OF AN
710225600CN01	Published		1/22/2019		201910057627.3	CN	ENTITY
							INTEGRITY
710225600EP01	Closed	3514714	1/22/2019	5/26/2021	19153133.4	EP	VERIFICATION OF AN ENTITY
							MEMBIOTIVE DOT
							MEMRISTIVE DOT PRODUCT ENGINE
710225716CN01	Published		1/29/2019		201910085074.2	CN	VIRTUALIZATION

	T			1	Τ	1	1
							ENCLAVE LAUNCH AND
710225781CN01	Published		3/8/2019		201910176311.6	CN	AUTHENTICATION
							ENCLAVE LAUNCH AND
710225781EP01	Closed	3540626	3/7/2019	9/15/2021	19161400.7	EP	AUTHENTICATION
710226218CN01	Published		6/28/2019		201910577108.X	CN	DYNAMICALLY SCALED HYPERCONVERGED SYSTEM
.1022021301101	2 division		0,23,2017		201710577100.71		SISILM
710226218EP01	Published		6/28/2019		19183385.4	EP	DYNAMICALLY SCALED HYPERCONVERGED SYSTEM
710226324CN01	Issued	201910753508.1	8/15/2019	9/23/2022	201910753508.1	CN	COMPUTING SYSTEM AND METHOD FOR USE IN MANAGING SECURE OBJECT STORE IN COMPUTING SYSTEM
710226324EP01	Closed	3614619	8/2/2019	3/31/2021	19189868.3	EP	Providing a Secure Object Store Using a Hierarchical Key System
/10220324EFU1	Cioscu	5014012	01212017	212112021	17107000.3	Lif	Key System
710226917CN01	Issued	201910909058.0	9/25/2019	5/31/2022	201910909058.0	CN	METHOD AND SYSTEM FOR SECURING FIRMWARE, AND COMPUTER-READABLE MEDIUM
710226917EP01	Closed		10/9/2019		19202294.5	EP	Securing Firmware
.102207171101	Diobod		10,712017		27808874.0		SSCORING I HIMWING
CRAY0040US02	Abandoned		7/25/2016		15/218,762	US	METHOD OF DATA DELIVERY ACROSS A NETWORK FABRIC IN A ROUTER OR ETHERNET BRIDGE

	1	T	1	1	T	1	T
							METHOD AND SYSTEM FOR INTEGRITY
710226817CN01	Issued	202010840626.9	8/20/2020	10/25/2022	202010840626.9	CN	DETERMINATION
710224822DE01	Abandoned	602018008351.0	1/15/2018	10/7/2020	18151583.4	DE	INPUT/OUTPUT DATA ENCRYPTION
710224822GB01	Abandoned	3355232	1/15/2018	10/7/2020	18151583.4	GB	INPUT/OUTPUT DATA ENCRYPTION
710226870US01	Issued	11,017,090	12/17/2018	5/25/2021	16/222,293	US	VERIFICATION OF A PROVISIONED STATE OF A PLATFORM
710228619US01	Published		6/11/2020		16/898,802	US	REMOTE RESOURCE CONFIGURATION MECHANISM
710229116US01	Allowed		5/7/2020		16/868,875	US	TRIGGER BASED CONFIGURATION OF CONTINUOUS DELIVERY PIPELINE (as amended)
7102291100301	Allowed		31112020		10/808,873	03	FIFELINE (as amended)
710229572US01	Issued	11,455,395	6/17/2020	9/27/2022	16/903,946	US	PERFORM VERIFICATION CHECK IN RESPONSE TO CHANGE IN PAGE TABLE BASE REGISTER
710229676US01	Issued	11,461,240	10/1/2020	10/4/2022	17/060,456	US	METADATA CACHE FOR STORING MANIFEST PORTION
710229677US01	Published		10/1/2020		17/060,466	US	JOURNALS TO RECORD METADATA CHANGES IN A STORAGE SYSTEM

	T	ī	1		T		T
							INTEGRITY MANIFEST
710226817DE01	Published		8/31/2020		102020122712.4	DE	CERTIFICATE
710229712US01	Published		12/7/2020		17/113,161	US	MEASURING CONTAINERS
					·		
710229728IN01	Filed		1/20/2021		202141002817	IN	MIGRATING APPLICATIONS ACROSS STORGE SYSTEMS
710229420US01	Issued	11,481,520	12/15/2020	10/25/2022	17/122,406	US	SECURE IDENTIFICATION OF A PRINTED CIRCUIT BOARD
710229672US01	Issued	11,550,493	11/6/2020	1/10/2023	17/091,043	US	CONTAINER INDEX INCLUDING A TRACKING DATA STRUCTURE
710229673US01	Issued	11,593,021	11/6/2020	2/28/2023	17/091,048	US	WRITING A CONTAINER INDEX TO PERSISTENT STORAGE
710229791US01	Issued	11,522,723	3/1/2021	12/6/2022	17/188,047	US	SECURE PROVISIONG OF BASEBOARD MANAGEMENT CONTROLLER IDENTITY OF A PLATFORM
710229949US01	Issued	11,636,214	12/11/2020	4/25/2023	17/118,698	US	MEMORY SCAN-BASED PROCESS MONITORING
710230026US01	Published		3/4/2021		17/249,531	US	TUNING DATA PROTECTION POLICY AFTER FAILURES

		ı	<u> </u>	1	1	1	
710230044US01	Published		3/15/2021		17/201,069	US	VISUALIZING CLUSTER NODE STATUSES
710230068US01	Abandoned		4/26/2021		17/239,815	US	ELECTRONIC PAPER- BASED DISPLAY DEVICE NODE FAULT VISUALIZATION
710229088CN01	Issued	202110107032.1	1/27/2021	4/12/2022	202110107032.1	CN	DEDUPLICATION METHOD, SYSTEM, AND MEDIUM
							CONTROL DEVICE, SYSTEM FOR CONTROLLING ACCESS AND
710228596CN01	Issued	202110108588.2	1/27/2021	1/3/2023	202110108588.2	CN	METHOD PERFORMED BY A CONTROLLER
710229088DE01	Issued	102021101239	1/21/2021	12/8/2022	102021101239.2	DE	DEDUPLICATION SYSTEM THRESHOLD BASED ON AN AMOUNT OF WEAR OF A STORAGE DEVICE
1102270005301	Issued	102021101239	172172021	12,6,2022	102021101237.2		TI STORE SELVICE
710228596DE01	Published		1/27/2021		102021101826.9	DE	ACCESS PERMISSIONS FOR MEMORY REGIONS
710229042CN01	Published		3/18/2021		202110291199.8	CN	CATALOG OF FILES ASSOCIATED WITH SNAPSHOTS
710229042DE01	Published		2/3/2021		102021102442.0	DE	CATALOG OF FILES ASSOCIATED WITH SNAPSHOTS
710228901CN01	Allowed		4/19/2021		202110420131.5	CN	METHOD FOR BACKUP OBJECTS, MACHINE- READABLE STORAGE MEDIUM,AND COMPUTING DEVICE

	1	1			1		1
710228901DE01	Published		3/11/2021		102021105996.8	DE	BACKUP OBJECTS FOR FULLY PROVISIONED VOLUMES WITH THIN LISTS OF CHUNK SIGNATURES
710229963US01	Issued	11,625,235	3/26/2021	4/11/2023	17/213,376	US	PROGRAM INSTALLATION IN A VIRTUAL ENVIRONMENT
710229689US01	Issued	11644882	6/2/2021	5/9/2023	17/337,107	US	SYSTEM AND METHOD FOR PREDICTING POWER USAGE OF NETWORK COMPONENTS
710230288US01	Issued	11,663,234	4/23/2021	5/30/2023	17/302,109	US	STORAGE OF A SMALL OBJECT REPRESENTATION IN A DEDUPLICATION SYSTEM
710230289US01	Published		6/8/2021		17/303,796	US	JOURNALS FOR DATA CLONING OPERATIONS
710229572CN01	Allowed		4/21/2021		202110429922.4	CN	METHOD OF VERIFICATION CHECK, COMPUTING SYSTEM, AND MACHINE- READABLE STORAGE MEDIUM
.1022/5/20101	111101100		112112021		20211012/722.7	Ç1,	I.I.J. I.O.I.A
710228619CN01	Published		4/20/2021		202110426262.4	CN	REMOTE RESOURCE CONFIGURATION MECHANISM
710227074CN01	Published		1/8/2019		201980069596.1	CN	SECURING NODE GROUPS
710227074DE01	Published		1/8/2019		112019006586.6	DE	SECURING NODE GROUPS

							<del>,</del>
							MEASURING INTEGRITY
710226573US02	Published		4/16/2021		17/232,264	US	OF COMPUTING SYSTEM USING JUMP TABLE
					,		
710228619DE01	Published		4/13/2021		102021109183.7	DE	REMOTE RESOURCE CONFIGURATION MECHANISM
710229572DE01	Published		4/13/2021		102021109189.6	DE	PERFORM VERIFICATION CHECK IN RESPONSE TO CHANGE IN PAGE TABLE BASE REGISTER
710229728US01	Abandoned		6/18/2021		17/304,332	US	MIGRATING APPLICATIONS ACROSS STORGE SYSTEMS
710227074US01	Published		1/8/2019		17/280,507	US	SECURING NODE GROUPS
710230162US01	Allowed		7/23/2021		17/383,606	US	SYSTEM AND METHOD FOR IMPLEMENTING A NETWORK-INTERFACE- BASED ALLREDUCE OPERATION
7102301020301	THOWEG		172372021		177303,000		OF ENGINEER CO.
710225032DE01	Issued	602018016029.9	1/15/2018	4/28/2021	18151616.2	DE	SYSTEM CALL POLICIES FOR CONTAINERS
710225032GB01	Issued	3355226	1/15/2018	4/28/2021	18151616.2	GB	SYSTEM CALL POLICIES FOR CONTAINERS
710226870US02	Issued	11,604,881	4/28/2021	3/14/2023	17/242,904	US	VERIFICATION OF A PROVISIONED STATE OF A PLATFORM

		T					1
710229088US02	Issued	11,609,849	4/30/2021	3/21/2023	17/245,813	US	DEDUPLICATION SYSTEM THRESHOLD BASED ON A TYPE OF STORAGE DEVICE
710225600DE01	Issued	602019004766.5	1/22/2019	5/26/2021	19153133.4	DE	INTEGRITY VERIFICATION OF AN ENTITY
710225600GB01	Issued	3514717	1/22/2019	5/26/2021	19153133.4	GB	INTEGRITY VERIFICATION OF AN ENTITY
710230492US01	Published		8/10/2021		17/444,774	US	CORRUPTION DETERMINATION OF DATA ITEMS USED BY A BUILD SERVER
710226064US02	Issued	11,663,017	7/12/2021	5/30/2023	17/372,978	US	KERNEL SPACE MEASUREMENT
710230235US01	Issued	11,669,257	10/8/2021	6/6/2023	17/450,359	US	CONTAINER MANAGEMENT IN A STORAGE SYSTEM
710230520US01	Published		9/9/2021		17/447,281	US	DELETING DATA ENTITIES AND DEDUPLICATION STORES IN DEDUPLICATION SYSTEMS
710230572US01	Published		9/27/2021		17/448,968	US	RESOURCE ALLOCATION FOR SYNTHETIC BACKUPS
710230300US01	Published		9/30/2021		17/490,588	US	CONTROL PLANE CONFIGURATION

	1			1	T		1
710230587US01	Published		10/22/2021		17/451,829	US	MULTIPLE PHYSICAL REQUEST INTERFACES FOR SECURITY PROCESSORS
710230845US01	Filed		1/27/2022		17/586,131	US	JOURNAL GROUPS FOR METADATA HOUSEKEEPING OPERATION
710226870US01	Issued	11,017,090	12/17/2018	5/25/2021	16/222,293	US	VERIFICATION OF A PROVISIONED STATE OF A PLATFORM
710228619US01	Published		6/11/2020		16/898,802	US	REMOTE RESOURCE CONFIGURATION MECHANISM
710229116US01	Allowed		5/7/2020		16/868,875	US	TRIGGER BASED CONFIGURATION OF CONTINUOUS DELIVERY PIPELINE (as amended)
710229572US01	Issued	11,455,395	6/17/2020	9/27/2022	16/903,946	US	PERFORM VERIFICATION CHECK IN RESPONSE TO CHANGE IN PAGE TABLE BASE REGISTER
710230559US01	Filed		7/28/2022		17/876,450	US	DYNAMICALLY MODULAR AND CUSTOMIZABLE COMPUTING ENVIRONMENTS
P168929US	Filed		6/24/2022		17/808,777	US	AUTHORIZING SECURE CONNECTIONS RESPONSIVE TO CERTIFICATES BOUND TO LOGICAL IDENTIFIERS
P169543US	Filed		7/25/2022		17/814,575	US	MIGRATION OF JOURNAL GROUPS IN A STORAGE SYSTEM

			1	T	1	
P170602US	Filed	4/26/2023		18/307,379	US	DETECTING MICROSERVICE SECURITY ATTACKS BASED ON METRIC SENSITIVE DEPENDENCIES
710229759US01CON	Filed	5/11/2023		18/315,806	US	APPLICATION OF A DEFAULT SHARED STATE CACHE COHERENCY PROTOCOL
P172048USPRV	Filed	6/16/2023		63/508,712	US	AGENTLESS ATTESTATION AS A SERVICE FOR COMPUTE OPS MANAGEMENT (COM) CUSTOMERS
P170045US	Filed	3/21/2023		18/187,104	US	TRACKING A RESUME POINT AND METRICS IN A COLLECTION OF OPERATIONS
P169553US	Filed	9/14/2022		17/932,036	US	TEMPORARY SPARSE INDEX FOR A DEDUPLICATION STORAGE SYSTEM
						KERNEL INFORMATION
P171008US	Filed	2/17/2023		18/170,720	US	INTEGRITY INSPECTION
710226870US02CON	Allowed	2/13/2023		18/168430	US	VERIFICATION OF A PROVISIONED STATE OF A PLATFORM
P169954CN	Filed	6/25/2023		202310754382.6	CN	UNAUTHORIZED DEVICE DETECTION IN A COMPUTING ENVIRONMENT
P168679US	Filed	8/29/2022		17/898,189	US	CHASSIS SERVICING AND MIGRATION IN A SCALE- UP NUMA SYSTEM

	Т				
P170435US	Filed	6/5/2023	18/329,053	US	SERVICE ORCHESTRATION IN A COMMUNICATION INFRASTRUCTURE WITH DIFFERENT NETWORK DOMAINS
710227178US01CON	Filed	6/2/2023	18/328,195	US	HIGH PERFORMANCE COMPUTE INFRASTRUCTURE AS A SERVICE
710230442US01CON	Filed	6/2/2023	18/328,030	US	BACKING UP DATA FOR A NAMESPACE ASSIGNED TO A TENANT
P170417US	Filed	1/27/2023	18/160,563	US	HEALTH-BASED MANAGEMENT OF A NETWORK
P169926CN	Filed	6/30/2023	202310788894.4	CN	FINGERPRINT TRACKING STRUCTURE FOR STORAGE SYSTEM
P169847US	Filed	1/31/2023	18/103,943	US	DISTRIBUTED STORAGE OF PACKET TRANSFORMATION INFORMATION IN FORWARDING HARDWARE
F109047U3	Filed	1/31/2023	18/103,943	03	HARDWARE
P169926DE	Filed	6/21/2023	102023116322.1	DE	FINGERPRINT TRACKING STRUCTURE FOR STORAGE SYSTEM
710229676US01CON	Published	9/26/2022	17/935,368	US	METADATA CACHE FOR STORING MANIFEST PORTION
					Aggregating small remote
P169510US	Filed	10/28/2022	17/976,728	US	memory access requests

P169746US	Filed	1/3/2023	18/092,837	US	NIC LINE-RATE HARDWARE PACKET PROCESSING
710230889CN01	Filed	10/26/2022	202211321007.4	CN	AUTHENTICATION OF NODES IN A DISTRIBUTED NETWORK
P169775CN	Filed	10/20/2022	202211286728.6	CN	PROVISIONING A DEDUPLICATION DATA STORE
P169774DE	Filed	10/6/2022	102022125770.3	DE	SPARE PART MANAGEMENT AND RESERVATION SYSTEM
710230889DE01	Filed	10/6/2022	102022125813.0	DE	AUTHENTICATION OF NODES IN A DISTRIBUTED NETWORK
P169775DE	Filed	10/19/2022	102022127432.2	DE	PROVISIONING A DEDUPLICATION DATA STORE
P169803CN	Filed	10/21/2022	202211295054.6	CN	DATA INTAKE BUFFERS FOR DEDUPLICATION STORAGE SYSTEM
P169803DE	Filed	10/14/2022	102022126901.9	DE	DATA INTAKE BUFFERS FOR DEDUPLICATION STORAGE SYSTEM
710230559CN01	Filed	10/21/2022	202211293227.0	CN	DYNAMICALLY MODULAR AND CUSTOMIZABLE COMPUTING ENVIRONMENTS

IC16929 145

				-	
710230559DE01	Filed	10/17/2022	10 2022 127 085.8	DE	DYNAMICALLY MODULAR AND CUSTOMIZABLE COMPUTING ENVIRONMENTS
P169543CN	Filed	10/18/2022	202211275179.2	CN	MIGRATION OF JOURNAL GROUPS IN A STORAGE SYSTEM
P169543DE	Filed	10/15/2022	102022127040.8	DE	MIGRATION OF JOURNAL GROUPS IN A STORAGE SYSTEM
P169545US	Filed	10/10/2022	18/045228	US	GENERATING ALERTS FOR UNEXPECTED KERNEL MODULES
P169774CN	Filed	10/26/2022	202211316838.2	CN	SPARE PART MANAGEMENT AND RESERVATION SYSTEM
P169553CN	Filed	5/31/2023	202310638036.1	CN	TEMPORARY SPARSE INDEX FOR A DEDUPLICATION STORAGE SYSTEM
P170200DE	Filed	6/21/2023	102023116330.2	DE	RANSOMWARE DETECTION IN A DEDUPLICATION STORAGE SYSTEM
P171165US	Filed	4/27/2023	18/308,570	US	AUTOMATED PROGRAM CONVERSION FOR HETEROGENEOUS AND FAAS COMPUTING WITH MINIMAL HUMAN INTERVENTION
P169774US	Filed	6/28/2022	17/809,553	US	SPARE PART MANAGEMENT AND RESERVATION SYSTEM

IC16929 146

P168679CN	Filed	5/30/2023	202310624117.6	CN	CHASSIS SERVICING AND MIGRATION IN A SCALE- UP NUMA SYSTEM
P168679DE	Filed	5/17/2023	102023113140.0	DE	CHASSIS SERVICING AND MIGRATION IN A SCALE- UP NUMA SYSTEM
P169553DE	Filed	5/17/2023	102023113139.7	DE	TEMPORARY SPARSE INDEX FOR A DEDUPLICATION STORAGE SYSTEM
P170962US	Filed	3/16/2023	18/185,202	US	BACK-REFERENCE DATA STRUCTURE FOR A DEDUPLICATION STORAGE SYSTEM
P170917US	Filed	3/16/2023	18/185,184	US	HOUSEKEEPING WORK MAP FOR A DEDUPLICATION STORAGE SYSTEM
P170377DE	Filed	5/20/2023	102023113231.8	DE	MACHINE LEARNING BASED FIRMWARE VERSION RECOMMENDER
P170956US	Filed	4/27/2023	18/307,960	US	INLINE HOUSEKEEPING FOR A DEDUPLICATION STORAGE SYSTEM
P170377CN	Filed	6/9/2023	202310681032.1	CN	MACHINE LEARNING BASED FIRMWARE VERSION RECOMMENDER
P169926US	Filed	10/28/2022	18/050,626	US	FINGERPRINT TRACKING STRUCTURE FOR STORAGE SYSTEM

IC16929 147

P170941US	Filed	3/16/2023	18/185,190	US	ESTIMATED STORAGE COST FOR A DEDUPLICATION STORAGE SYSTEM
P170375DE	Filed	4/28/2023	102023111006.3	DE	GENERATING AUDIT RECORDS FOR DISTRIBUTED COMPUTING SYSTEM- BASED MOTOR VEHICLE TESTS
P169954US	Filed	10/19/2022	18/047,785	US	UNAUTHORIZED DEVICE DETECTION IN A COMPUTING ENVIRONMENT
P170435EP	Abandoned	2/24/2023	23305251.3	EP	SERVICE ORCHESTRATION IN A COMMUNICATION INFRASTRUCTURE WITH DIFFERENT NETWORK DOMAINS
710229949US01CON	Filed	3/21/2023	18/187,332	US	MEMORY SCAN-BASED PROCESS MONITORING
P170375US	Filed	9/28/2022	17/936,039	US	GENERATING AUDIT RECORDS FOR DISTRIBUTED COMPUTING SYSTEM- BASED MOTOR VEHICLE TESTS
P171454USPRV	Filed	1/23/2023	63/440,586	US	Scalable Key State for Network Encryption
P170200US	Filed	10/27/2022	18/050,125	US	RANSOMWARE DETECTION IN A DEDUPLICATION STORAGE SYSTEM
P169373US	Filed	10/28/2022	17/976,553	US	CONDUCTING NETWORK PERFORMANCE ANALYSIS

IC16929 148

P170375CN	Filed	6/14/2023	202310702311.1	CN	GENERATING AUDIT RECORDS FOR DISTRIBUTED COMPUTING SYSTEM- BASED MOTOR VEHICLE TESTS
P168897US	Filed	7/26/2022	17/814,943	US	MATCHING OPERATION FOR A DEDUPLICATION STORAGE SYSTEM
P170847USPRV	Filed	10/11/2022	63/379,079	US	SYSTEMS AND METHODS FOR IMPLEMENTING CONGESTION MANAGEMENT AND ENCRYPTION
P169803US	Filed	7/29/2022	17/816,016	US	DATA INTAKE BUFFERS FOR DEDUPLICATION STORAGE SYSTEM
710229572US01CON	Allowed	8/23/2022	17/821,553	US	PERFORM VERIFICATION CHECK IN RESPONSE TO CHANGE IN PAGE TABLE BASE REGISTER
P170260US	Filed	1/27/2023	18/160,493	US	PER-IMSI APN OI REPLACEMENT AVP PARAMETERS AND SUPPRESSION ATTRIBUTE SETTINGS FOR MIMM SUBSCRIBERS
P170200CN	Filed	6/30/2023	202310788515.1	CN	RANSOMWARE DETECTION IN A DEDUPLICATION STORAGE SYSTEM
P169954DE	Filed	5/31/2023	102023114251.8	DE	UNAUTHORIZED DEVICE DETECTION IN A COMPUTING ENVIRONMENT
710230889US01	Filed	6/24/2022	17/808,744	US	AUTHENTICATION OF NODES IN A DISTRIBUTED NETWORK

IC16929 149

**RECORDED: 07/26/2023**