# 504489647 08/04/2017

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4536349

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
EMC CORPORATION	09/06/2016

# **RECEIVING PARTY DATA**

Name:	EMC IP HOLDING COMPANY LLC
Street Address:	176 SOUTH STREET
City:	HOPKINTON
State/Country:	MASSACHUSETTS
Postal Code:	01748

# **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15605133

## **CORRESPONDENCE DATA**

**Fax Number:** (408)973-2595

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:** 4089732585

Email: kwhitlow@ip-patent.com

Correspondent Name: VAN PELT, YI & JAMES LLP

Address Line 1: 10050 N. FOOTHILL BLVD.

Address Line 2: SUITE 200

Address Line 4: CUPERTINO, CALIFORNIA 95014

ATTORNEY DOCKET NUMBER:	EMCCP254C1
NAME OF SUBMITTER:	DANIEL M. SCHNEIDER
SIGNATURE:	/Daniel M. Schneider/
DATE SIGNED:	08/04/2017

#### **Total Attachments: 326**

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## PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT ("Assignment") is made as of September 6, 2016 by and between EMC Corporation, a Massachusetts corporation, with its principal place of business at 176 South Street, Hopkinton, Massachusetts 01748 ("Assignor") and EMC IP Holding Company LLC, a Delaware limited liability company, with its principal place of business at 176 South Street, Hopkinton, Massachusetts 01748 ("Assignee"), each individually referred to as a "Party" and collectively referred to as "Parties."

WHEREAS, Assignor and Assignee are parties to the License Agreement effective as of the Effective Date between Assignor and Assignee ("Patent License");

WHEREAS, Assignor owns certain United States and foreign patents and patent applications, including which are listed on attached <u>Schedule 1</u>; and

WHEREAS, Assignee desires to receive from Assignor assignments to the Assigned Patents;

NOW THEREFORE, for good and valuable consideration, Assignor hereby assigns to Assignee, all of Assignor's entire right, title and interest, including the right to sue for and collect past damages and any other remedies, in and to all United States and foreign patents and patent applications owned by Assignor, including but not limited to those listed on attached <a href="Schedule 1">Schedule 1</a> (the "Assigned Patents"), provided that, notwithstanding anything to the contrary herein, the Assigned Patents shall exclude all United States and foreign patents and patent applications listed on <a href="Schedule 2">Schedule 2</a> (the "Excluded Patents"), and any and all reissue, substitutions, division, continuation patents and re-examination certificates based on any of the foregoing patents or patent applications, and all pending applications therefor, which claim priority from any application from which Assigned Patents are derived, as well as, all foreign counterparts of Assigned Patents. Notwithstanding anything to the contrary herein, (i) the Excluded Patents are not being assigned to Assignee under any circumstances, including without limitation if such Excluded Patents are included on Schedule 1, and (ii) if and to the extent there are any immaterial transcription, typographical or other similar errors in the information provided on Schedule 1 or Schedule 2, any such errors shall not affect the assignment of the Assigned Patents and exclusion of the Excluded Patents hereunder (as applicable).

Assignor hereby authorizes the Commissioner of Patents and Trademarks of the United States Patent and Trademark Office, and the empowered officials of any other applicable offices, authorities, authorized agents, and governments to issue or transfer all said Assigned Patents to Assignee, as assignee thereof, or otherwise as Assignee may direct.

Assignor hereby agrees to execute all documents and take all other actions as may be necessary to effect the assignments and transfers set forth in this Assignment.

Without limiting the foregoing, during the term of the License Agreement, the Parties hereby agree that Assignee shall be the beneficial and record owner of any and all patents and patent applications claiming inventions made by or on behalf of Assignor, and Assignor shall and hereby does assign and transfer to Assignee all of its rights, title and interest in and to such inventions, and the Parties shall reasonably cooperate with respect to Assignee filing for patent applications claiming such inventions in its own name, in each case notwithstanding anything to the contrary in employee invention assignment agreements or similar agreements entered into by Assignor, it being understood and agreed that any such applications, and any patents issuing therefrom, shall be subject to the terms and conditions of the License Agreement.

[Signature Page Follows]

Signed by Assignor and Assignee on the date first written above:

## **EMC CORPORATION**

As Assignor

Ву:

lame: Paul T. Dacier

Title: Executive Vice President and

General Counsel

## EMC IP HOLDING COMPANY LLC

By its sole member, EMC Corporation

As Assignee

By:

Name: Paul T. Dacier

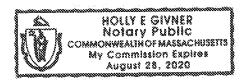
Title: Executive Vice President and

General Counsel

COMMONWEALTH OF MASSACHUSETTS	)	
COUNTY OF [Michigan	) ss. )	
Subscribed and sworn to before me on this	day of SEO LIMBER 2	016

Notary Public

Commission Expires: August 20, 2020



# SCHEDULE 1 TO PATENT ASSIGNMENT AGREEMENT

# ASSIGNED PATENTS

Application	Registration		
Number	Number	Title	Owner
13/428631	8301832	STORAGE SYSTEM WITH GUARANTEED READ LATENCY	DSSD, Inc.
13/555859	8316260	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
13/658437	8448021	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
13/677623	8464095	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID RECONSTRUCTION AND DEFECT AVOIDANCE	DSSD, Inc.
13/745246	8554997	METHOD AND SYSTEM FOR MIRRORED MULTI- DIMENSIONAL RAID	DSSD, Inc.
13428536	8327185	METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
13428705	8554963	STORAGE SYSTEM WITH MULTICAST DMA AND UNIFIED ADDRESS SPACE	DSSD, Inc.
13428771	8370567	STORAGE SYSTEM WITH SELF DESCRIBING DATA	DSSD, Inc.
13428817	8341342	STORAGE SYSTEM WITH INCREMENTAL MULTI- DIMENSIONAL RAID	DSSD, Inc.
13555791	8407377	STORAGE SYSTEM WITH MULTICAST DMA AND UNIFIED ADDRESS SPACE	DSSD, Inc.
13611797	8392428	METHOD AND SYSTEM FOR HASH FRAGMENT REPRESENTATION	DSSD, Inc.
13671996	8589659	METHOD AND SYSTEM FOR GLOBAL NAMESPACE WITH CONSISTENT HASHING	DSSD, Inc.
13673348	8578106	METHOD AND SYSTEM FOR QUEUE DEMULTIPLEXOR WITH SIZE GROUPING	DSSD, Inc.
13826792	8601206	METHOD AND SYSTEM FOR OBJECT-BASED TRANSACTIONS IN A STORAGE SYSTEM	DSSD, Inc.
13827086	9015353	METHOD AND SYSTEM FOR HYBRID DIRECT INPUT/OUTPUT (I/O) WITH A STORAGE DEVICE	DSSD, Inc.
13903125	8595385	METHOD AND SYSTEM FOR SUBMISSION QUEUE ACCELERATION	DSSD, Inc.
14/162250	8949692	METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14/510795	9152499	METHOD AND SYSTEM FOR CALCULATING PARITY VALUES FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
14/982557		PCI EXPRESS FABRIC ROUTING FOR A FULLY- CONNECTED MESH TOPOLOGY	DSSD, Inc.
14041882	8819304	STORAGE SYSTEM WITH MULTICAST DMA AND UNIFIED ADDRESS SPACE	DSSD, Inc.
14096708	8924776	METHOD AND SYSTEM FOR CALCULATING PARITY VALUES FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
14162310		METHOD AND SYSTEM FOR SERVICE-AWARE DATA PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14224846	9003090	PCI EXPRESS FABRIC ROUTING FOR A FULLY-CONNECTED MECH TOPOLOGY	DSSD, Inc.

Application	Registration		
Number	Number	Title	Owner
14387326		METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
14439310	9363317	METHOD AND SYSTEM FOR GLOBAL NAMESPACE WITH CONSISTENT HASHING	DSSD, Inc.
14577862	9367396	METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14639823		PCI EXPRESS FABRIC ROUTING FOR A FULLY- CONNECTED MESH TOPOLOGY	DSSD, Inc.
14771650		METHOD AND SYSTEM FOR OBJECT-BASED TRANSACTIONS IN A STORAGE SYSTEM	DSSD, Inc.
14927186		[REDACTED]	DSSD, Inc.
14982557		PCI EXPRESS FABRIC ROUTING FOR A FULLY- CONNECTED MESH TOPOLOGY	DSSD, Inc.
15/087445		METHOD AND SYSTEM FOR MULTI-DIMENSIONAL RAID	DSSD, Inc.
15/087598		METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	DSSD, Inc.
14663109		[REDACTED]	DSSD, Inc.
15151219		[REDACTED]	DSSD, Inc.
13/730080	9183211	COOPERATIVE STORAGE OF SHARED FILES IN A PARALLEL COMPUTING SYSTEM WITH DYNAMIC BLOCK SIZE	EMC Corporation / US Department of Energy
08/344423	8344423	INLINE EXPANSION METHOD FOR PROGRAMMING LANGUAGES HAVING ARRAY FUNCTIONS	EMC Corporation
08/996809	6145042	TIMING PROTOCOL FOR A DATA STORAGE SYSTEM	EMC Corporation
08300703	6130621	METHOD AND APPARATUS FOR INHIBITING UNAUTHORIZED ACCESS TO OR UTILIZATION OF A PROTECTED DEVICE	EMC Corporation
08423881	6032262	DISK DRIVE RELIABILITY DETERMINATION SYSTEM AND METHOD	EMC Corporation
08431307	6097384	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
08445235	6101525	METHOD AND APPARATUS FOR SHARED MEMORY CLEANUP	EMC Corporation
08474235	6111528	COMMUNICATIONS ARRANGEMENTS FOR NETWORK DIGITAL DATA PROCESSING SYSTEM	EMC Corporation
08491467	6532547	REDUNDANT PERIPHERAL DEVICE SUBSYSTEM	EMC Corporation
08666968	5901227	OBJECT SYSTEM CAPABLE OF USING DIFFERENT OBJECT AUTHORIZATION SYSTEMS	EMC Corporation
08667337	6000030	SOFTWARE FINGERPRINTING AND BRANDING	EMC Corporation
08669592	5819104	DISK ARRAY MEMORY SYSTEM HAVING BUS REPEATER AT DISK BACKPLANE	EMC Corporation
08670858	5886557	REDUNDANT CLOCK SIGNAL GENERATING CIRCUITRY	EMC Corporation
08690142	5933602	SYSTEM FOR SELECTING COMMAND PACKET AND CORRESPONDING RESPONSE PACKET FROM COMMUNICATION STREAM OF PACKETS BY MONITORING PACKETS SENT BETWEEN NODES ON NETWORK	EMC Corporation
08697305	5734815	METHOD AND APPARATUS FOR EFFICIENT CYCLICAL REDUNDANCY CHECK (CRC) MAINTENANCE FOR SUBSECTOR WRITES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
08699503	5822777	DUAL BUS DATA STORAGE SYSTEM HAVING AN ADDRESSABLE MEMORY WITH TIMER CONTROLLER FAULT DETECTION OF DATA TRANSFER BETWEEN THE MEMORY AND THE BUSES	EMC Corporation
08701862	5850528	BUS TIMING PROTOCOL FOR A DATA STORAGE SYSTEM	EMC Corporation
08701868	5954838	DATA STORAGE SYSTEM HAVING ROW/COLUMN ADDRESS PARITY CHECKING	EMC Corporation
08701917	6567903	DATA STORAGE SYSTEM HAVING MASTER/SLAVE ADDRESSABLE MEMORIES	EMC Corporation
08701981	6347365	DATA STORAGE SYSTEM HAVING A MEMORY RESPONSIVE TO CLOCK PULSES AND PRODUCED ON A BUS AND CLOCK PULSES PRODUCED BY AN INTERNAL CLOCK (AS AMENDED)	EMC Corporation
08710745	5892955	CONTROL OF A MULTI-USER DISK STORAGE SYSTEM	EMC Corporation
08717161	6189080	MINIMUM READ RATE THROUGHPUT IN A DISK CACHE SYSTEM	EMC Corporation
08720542	6009481	MASS STORAGE SYSTEM USING INTERNAL SYSTEM-LEVEL MIRRORING	EMC Corporation
08723137	6438586	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
08723971	5822513	METHOD AND APPARATUS FOR DETECTING STALE WRITE DATA	EMC Corporation
08735677	5892828	USER PRESENCE VERIFICATION WITH SINGLE PASSWORD ACROSS APPLICATIONS	EMC Corporation
08738766	5991852	CACHE RAM USING A SECONDARY CONTROLLER AND SWITCHING CIRCUIT AND IMPROVED CHASSIS ARRANGEMENT	EMC Corporation
08740105	5828243	METHOD FOR DETECTING CLOCK FAILURE AND SWITCHING TO BACKUP CLOCK	EMC Corporation
08741620	5966730	BACKUP SYSTEM FOR COMPUTER NETWORK INCORPORATING OPPORTUNISTIC BACKUP BY PRIORITIZING LEAST RECENTLY BACKED UP COMPUTER OR COMPUTER STORAGE MEDIUM	EMC Corporation
08742506	5781724	METHOD AND SYSTEM FOR INTEGRATING ADDITIONAL FUNCTIONALITY INTO A LOGIN SYSTEM	EMC Corporation
08747631	5893140	FILE SERVER HAVING A FILE SYSTEM CACHE AND PROTOCOL FOR TRULY SAFE ASYNCHRONOUS WRITES	EMC Corporation
08747769	6298386	NETWORK FILE SERVER HAVING A MESSAGE COLLECTOR QUEUE FOR CONNECTIONLESS ORIENTED PROTOCOLS	EMC Corporation
08748363	5944789	NETWORK FILE SERVER MAINTAINING LOCAL CACHES OF FILE DIRECTORY INFORMATION IN DATA MOVER COMPUTERS	EMC Corporation
08748889	5913025	METHOD AND APPARATUS FOR PROXY AUTHENTICATION	EMC Corporation
08749311	5922077	FAIL-OVER SWITCHING SYSTEM	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
08753673	5884055	METHOD AND APPARATUS INCLUDING A SHARED RESOURCE AND MULTIPLE PROCESSORS RUNNING A COMMON CONTROL PROGRAM ACCESSING THE SHARED RESOURCE	EMC Corporation
08753952	5926836	COMPUTER AND ASSOCIATED METHOD FOR RESTORING DATA BACKED UP ON ARCHIVE	EMC Corporation
08757122	6029231	MEDIA  RETRIEVAL OF DATA STORED ON REDUNDANT DISKS ACROSS A NETWORK USING REMOTE PROCEDURE CALLS	EMC Corporation
08757123	6460123	MIRRORING COMPUTER DATA	EMC Corporation
08757124	6032224	HIERARCHICAL PERFORMANCE SYSTEM FOR MANAGING A PLURALITY OF STORAGE UNITS WITH DIFFERENT ACCESS SPEEDS	EMC Corporation
08757125	5875478	COMPUTER BACKUP USING A FILE SYSTEM, NETWORK, DISK, TAPE AND REMOTE ARCHIVING REPOSITORY MEDIA SYSTEM	EMC Corporation
08757214	5890219	REDUNDANT WRITING OF DATA TO CACHED STORAGE SYSTEM	EMC Corporation
08757226	5890207	HIGH PERFORMANCE INTEGRATED CACHED STORAGE DEVICE	EMC Corporation
08766525	5832483	DISTRIBUTED CONTROL INTERFACE FOR MANAGING THE INTEROPERABILITY AND CONCURRENCY OF AGENTS AND RESOURCES IN A REAL-TIME ENVIRONMENT	EMC Corporation
08766686	5903720	METHOD AND APPARATUS FOR STORAGE SYSTEM MANAGEMENT IN A MULTI-HOST ENVIRONMENT	EMC Corporation
08771818	5778394	SPACE RECLAMATION SYSTEM AND METHOD FOR USE IN CONNECTION WITH TAPE LOGGING SYSTEM	EMC Corporation
08774121	5909700	BACKUP DATA STORAGE FACILITY INCORPORATING FILTERING TO SELECT DATA ITEMS TO BE BACKED UP	EMC Corporation
08774122	5809435	EFFICIENT INDEX ARRANGEMENT AND METHOD FOR IDENTIFYING VALID RECORDS STORED ON LOGGING DIGITAL DATA STORAGE SUBSYSTEM	EMC Corporation
08774124	6202135	SYSTEM AND METHOD FOR RECONSTRUCTING DATA ASSOCIATED WITH PROTECTED STORAGE VOLUME STORED IN MULTIPLE MODULES OF BACK-UP MASS DATA STORAGE FACILITY	EMC Corporation
08775034	6003047	NON HIERARCHICAL INTERFACE FOR APPLICATION PROGRAMS	EMC Corporation
08775575	5996030	SYSTEM FOR PROVIDING AN INTERROGATING HOST COMPUTER WITH GROUP STATUS INFORMATION ABOUT DISK DEVICES INCLUDING STATUS INFORMATION REGARDING DISK DEVICES NOT ACCESSIBLE TO SAID HOST	EMC Corporation
08775828	5822780	METHOD AND APPARATUS FOR HIERARCHICAL STORAGE MANAGEMENT FOR DATA BASE MANAGEMENT SYSTEMS	EMC Corporation
08786918	5893118	METHOD FOR MANAGING GLOBALLY DISTRIBUTED SOFTWARE COMPONENTS	EMC Corporation

Application	Registration	m.	6
Number	Number	Title	Owner
08790642	6029229	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING	EMC Corporation
		DIRECTORY FOR EFFICIENTLY PROVIDING	
		FORMATTING INFORMATION FOR STORED	
00002777	(105122	RECORDS  COMPLETED NETWORK CRADED	EMC Composition
08802764	6105132	COMPUTER NETWORK GRADED	EMC Corporation
00006200	(0020(0	AUTHENTICATION SYSTEM AND METHOD	EMC Composition
08806390	6002869	SYSTEM AND METHOD FOR AUTOMATICALLY	EMC Corporation
00007505	(2(227)	TESTING SOFTWARE PROGRAMS	EMC Commondian
08806505	6263376	GENERIC RUN-TIME BINDING INTERPRETER	EMC Corporation
08807452	5896548	DATA TRANSFERRING SYSTEM HAVING	EMC Corporation
		FOREGROUND AND BACKGROUND MODES AND	
		UPON DETECTING SIGNIFICANT MODES AND	
		UPON DETECTING SIGNIFICANT PATTERN OF ACCESS IN FOREGROUND MODE TO CHANGE	
		BACKGROUND MODE CONTROL PARAMETERS	
08808723	5860003	I/O CONTROLLER SOFTWARE WITH EACH I/O	EMC Companytion
08808/23	3860003		EMC Corporation
		COMMAND HAVING A PLURALITY OF NETS, EACH WITH A GROUP OF THREADS	
08808846	5922074	METHOD OF AND APPARATUS FOR PROVIDING	EMC Composition
08808846	3922074	SECURE DISTRIBUTED DIRECTORY SERVICES AND	EMC Corporation
		PUBLIC KEY INFRASTRUCTURE	
08815193	6161165	HIGH PERFORMANCE DATA PATH WITH XOR ON	EMC Composition
08813193	0101103	THE FLY	EMC Corporation
08819578	6115039	PROCESSES AND APPARATUSES FOR CREATING	EMC Corporation
00017570	0113037	NON-NATIVE DISPLAYS ON A COMPUTER	Livie corporation
08821496	5900009	RECORD LEVEL CACHING SYSTEM AND METHOD	EMC Corporation
00021190	3,0000	FOR DIGITAL DATA STORAGE SUBSYSTEM	2.vie corporation
08822388	6047353	METHOD AND APPARATUS FOR MONITORING OF	EMC Corporation
		HOST ACTIVITIES RELATING TO AN ATTACHED	
		STORAGE DEVICE	
08822680	5913227	AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
08822971	6321308	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
		ACCESS REQUESTS FROM A PLURALITY OF	
		DEVICES USING DUAL LEVEL QUEUE LOCKING	
		SCHEME AND A DOUBLY-LINKED CIRCULAR	
		QUEUE	
08824081	5864865	MANAGEMENT INFORMATION BASE LISTING	EMC Corporation
		VIEWER	_
08825164	6154853	METHOD AND APPARATUS FOR DYNAMIC	EMC Corporation
		SPARING IN A RAID STORAGE SYSTEM	_
08829559	6018809	APPARATUS AND METHOD FOR CAPTURING	EMC Corporation
		INFORMATION OFF A PLURALITY OF BI-	1
		DIRECTIONAL COMMUNICATION BUSES	
08831393	5940083	MULTI-CURVE RENDERING MODIFICATION	EMC Corporation
		APPARATUS AND METHOD	
08831481	5894485	DISK ARRAY WRITE PROTECTION AT THE SUB-	EMC Corporation
		UNIT LEVEL	
08831503	5943689	ON-DEMAND INITIALIZATION OF MEMORY	EMC Corporation
		LOCATIONS AS THEY ARE REQUESTED COMMAND	_
08835772	5974515	SYSTEM FOR DISTRIBUTING VOLUMES TO AN	EMC Corporation
		HSM SYSTEM FRONT END	<b>,</b>
08842064	5956745	SYSTEM AND METHOD FOR AUTOMATICALLY	EMC Corporation
		RESIZING A DISK DRIVE VOLUME	1

Application	Registration		
Number	Number	Title	Owner
08850878	5935260	METHOD AND APPARATUS FOR PROVIDING	EMC Corporation
		SYSTEM LEVEL ERRORS IN A LARGE DISK ARRAY	
		STORAGE SYSTEM	
08851045	5854759	METHODS AND APPARATUS FOR EFFICIENT	EMC Corporation
		FINITE FIELD BASIS CONVERSION	
08851560	5892915	SYSTEM HAVING CLIENT SENDING EDIT	EMC Corporation
		COMMANDS TO SERVER DURING TRANSMISSION	
		OF CONTINUOUS MEDIA FROM ONE CLIPIN PLAY	
00052064	6021426	LIST FOR EDITING THE PLAY LIST	ED (C) C
08853964	6021436	AUTOMATIC METHOD FOR POLLING A PLURALITY	EMC Corporation
00070007	5050077	OF HETEROGENEOUS COMPUTER SYSTEMS	EMC C
08868005	5958066	ON-LINE SCANNING AND MAINTENANCE OF A	EMC Corporation
0006000	7060104	DISK DRIVE ARRAY	Th to o
08868305	5968184	IMPROVED MAINTENANCE COMMAND	EMC Corporation
00000000	<b>*</b> 000000	STRUCTURE AND EXECUTION	77.40
08868309	5898863	METHOD AND APPARATUS FOR DETERMINING I/O	EMC Corporation
		SIZE DISTRIBUTION OF AN INPUT/OUTPUT	
00071606	6000140	SYSTEM AND ITS USE FOR LOAD SIMULATION	TD 10 0
08874696	6098149	METHOD AND APPARATUS FOR EXTENDING	EMC Corporation
00077000	6277007	COMMANDS IN A CACHED DISK ARRAY	TD 10 0
08877092	6275897	REMOTE CACHE UTILIZATION FOR MIRRORED	EMC Corporation
00077601	(110(22	MASS STORAGE SUBSYSTEM	Th to o
08877631	6118633	PLASTIC DISK WITH HUB AND DISK DRIVE FOR	EMC Corporation
	5002444	USING SAME	77.60.0
08877700	6003114	CACHING SYSTEM AND METHOD PROVIDING	EMC Corporation
	61.1700.6	AGGRESSIVE PREFETCH	T) (G G
08882182	6145006	METHOD AND APPARATUS FOR COORDINATING	EMC Corporation
		LOCKING OPERATIONS OF HETEROGENEOUS	
		HOST COMPUTERS ACCESSING A STORAGE	
08884739	6350140	SUBSYSTEM  LO ADAPTED CARD MOUNTING DUATE	EMC Composition
08884740	6742068	I/O ADAPTER CARD MOUNTING PLATE	EMC Corporation
08884740	0/42008	DATA SERVER WITH HOT REPLACEABLE	EMC Corporation
08884890	6076126	PROCESSING UNIT MODULES SOFTWARE LOCKING MECHANISM FOR LOCKING	EMC Corporation
08884890	00/0120	SHARED RESOURCES IN A DATA PROCESSING	EMC Corporation
		SYSTEM	
08885263	6311252	METHOD AND APPARATUS FOR MOVING DATA	EMC Corporation
00003203	0311232	BETWEEN STORAGE LEVELS OF A	ENIC Corporation
		HIERARCHICALLY ARRANGED DATA STORAGE	
		SYSTEM	
08885379	6523112	OPERATING SYSTEM SOFTWARE BOOT PROGRAM	EMC Corporation
00003377	0323112	EXECUTION METHOD	Livic corporation
08885380	6311256	COMMAND INSERTION AND REORDERING AT THE	EMC Corporation
00002300	0311230	STORAGE CONTROLLER	Livic corporation
08885381	5971804	BACKPLANE HAVING STRIP TRANSMISSION LINE	EMC Corporation
. 5002501	33,1001	ETHERNET BUS	
08885383	6078503	PARTITIONABLE CABINET	EMC Corporation
08885386	6016252	CABLE MANAGEMENT SYSTEM	EMC Corporation
08885630	6023148	POWER MANAGEMENT SYSTEM WITH	EMC Corporation
00000000	0023170	REDUNDANT, INDEPENDENTLY REPLACEABLE	Livic Corporation
		BATTERY CHARGERS	
08885639	6067199	METHOD AND APPARATUS FOR INCREASING DISC	EMC Corporation
00000000	1 300, 177	DRIVE PERFORMANCE	Livie Corporation

Application	Registration		
Number	Number	Title	Owner
08885697	6009535	SCSI ADAPTOR FAILOVER FOR A DISK DRIVE SYSTEM	EMC Corporation
08885698	6891824	AUDIBLE COMMUNICATION WITH A MODEM OVER A WIDE AREA NETWORK	EMC Corporation
08889905	5887151	METHOD AND APPARATUS FOR PERFORMING A MODIFIED PREFETCH WHICH SENDS A LIST IDENTIFYING A PLURALITY OF DATA BLOCKS	EMC Corporation
08893263	6249755	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
08917324	6044468	SECURE TRANSMISSION USING AN ORDINARILY INSECURE NETWORK COMMUNICATION PROTOCOL SUCH AS SNMP	EMC Corporation
08918238	6182166	METHOD/APPARATUS FOR INTERFACING TWO REMOTELY DISPOSED DEVICES COUPLED VIA TRANSMISSION MEDIUM WITH FIRST AND SECOND COMMANDS TRANSMITTED WITHOUT FIRST CHECKING RECEIVING DEVICE FOR READINESS	EMC Corporation
08920848	6185069	MAGNETIC DISK CARTRIDGE HAVING A FLEXIBLE DISK ANTI-DRIFT MECHANISM	EMC Corporation
08920932	6134081	MEDIA HUB MOUNTING SYSTEM FOR MINIMIZING Z-AXIS TRANSLATION DURING CARTRIDGE INSERTION AND EJECTION TRANSLATION	EMC Corporation
08922227	6076143	METHOD AND APPARATUS FOR MANAGING THE PHYSICAL STORAGE LOCATIONS FOR BLOCKS OF INFORMATION IN A STORAGE SYSTEM TO INCREASE SYSTEM PERFORMANCE	EMC Corporation
08924013	6172849	APPARATUS FOR RETAINING A DISK CARTRIDGE SHUTTER IN A CLOSED POSITION	EMC Corporation
08925026	6230200	DYNAMIC MODELING FOR RESOURCE ALLOCATION IN A FILE SERVER	EMC Corporation
08931272	6097562	DISK DRIVE FOR DETECTING A RETROREFLECTIVE MARKER ON A DATA STORAGE CARTRIDGE	EMC Corporation
08932660	6055603	METHOD AND APPARATUS FOR PERFORMING PRE- REQUEST OPERATIONS IN A CACHED DISK ARRAY STORAGE SYSTEM	EMC Corporation
08935458	6041394	DISK ARRAY WRITE PROTECTION AT THE SUB- UNIT LEVEL	EMC Corporation
08936122	6112257	DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
08936672	5886930	BIT INTERLEAVING IN A MEMORY WHICH USES MULTI-BIT DRAMS	EMC Corporation
08936695	5878059	METHOD AND APPARATUS FOR PIPELINING AN ERROR DETECTION ALGORITHM ON AN N-BIT WORD STORED IN MEMORY	EMC Corporation
08936970	6091563	LATENT ILLUMINANCE DISCRIMINATION MARKER SYSTEM FOR DATA STORAGE CARTRIDGES	EMC Corporation
08936973	6205529	METHOD AND APPARATUS FOR DEFRAGMENTING A STORAGE DEVICE USING A COPY FUNCTION IN THE DEVICE CONTROL LOGIC	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
08937467	6209059	METHOD & APPARATUS FOR THE ON-LINE RECONFIGURATION OF THE LOGICAL VOLUMES OF A DATA STORAGE SYSTEM	EMC Corporation
08937897	6101588	DEVICE LEVEL BUSY ARRANGEMENT FOR MASS STORAGE SUBSYSTEM INCLUDING A PLURALITY OF DEVICES	EMC Corporation
08937920	6223269	STACKED MAPPED STORAGE SYSTEM	EMC Corporation
08938723	6192408	NETWORK FILE SERVER SHARING LOCAL CACHES OF FILE ACCESS INFORMATION IN DATA PROCESSORS ASSIGNED TO RESPECTIVE FILE SYSTEMS	EMC Corporation
08938859	6275953	RECOVERY FROM FAILURE OF A DATA PROCESSOR IN A NETWORK SERVER	EMC Corporation
08941439	6148369	METHOD AND APPARATUS FOR PROVIDING LOGICAL DEVICES SPANNING SEVERAL PHYSICAL VOLUMES	EMC Corporation
08941506	5951693	DATA STORAGE SYSTEM HAVING DATA RECONSTRUCTION	EMC Corporation
08941509	5953265	MEMORY HAVING ERROR DETECTION AND CORRECTION	EMC Corporation
08942165	6014667	SYSTEM AND METHOD FOR CACHING IDENTIFICATION AND LOCATION INFORMATION IN A COMPUTER NETWORK	EMC Corporation
08944606	6061761	METHOD FOR EXCHANGING LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE IN RESPONSE TO STATISTICAL ANALYSES AND PRELIMINARY TESTING	EMC Corporation
08948752	5913073	INPUT/OUTPUT DRIVER FOR BENCHMARK TESTING	EMC Corporation
08954712	6076163	SECURE USER IDENTIFICATION BASED ON CONSTRAINED POLYNOMIALS	EMC Corporation / NTRU Cryptosystems, Inc.
08961292	6104608	NOISE REDUCTION HOOD FOR AN ELECTRONIC SYSTEM ENCLOSURE	EMC Corporation
08962637	6170055	SYSTEM FOR COMPUTER RECOVERY USING REMOVABLE HIGH CAPACITY MEDIA	EMC Corporation
08964442	6028725	METHOD AND APPARATUS FOR INCREASING DISK DRIVE PERFORMANCE	EMC Corporation
08966345	5973690	FRONT END/BACK END DEVICE VISUALIZATION AND MANIPULATION	EMC Corporation
08966633	6145089	SERVER FAIL-OVER SYSTEM	EMC Corporation
08968561	6157514	METHOD AND APPARATUS FOR READ-WRITE PROTECTION	EMC Corporation
08970069	6105069	LICENSING CONTROLLER USING NETWORK DIRECTORY SERVICES	EMC Corporation
08975892	6179631	ELECTRICAL CONTACT FOR A PRINTED CIRCUIT BOARD	EMC Corporation
08977268	6035306	METHOD FOR IMPROVING PERFORMANCE OF LARGE DATABASES	EMC Corporation
08980633	6317759	METHOD AND APPARATUS FOR PROVIDING AN APPLICATIONS DEVELOPMENT SYSTEM FOR INTERNET BASED APPLICATIONS	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
08984342	6088224	CABINET FOR STORING A PLURALITY OF	EMC Corporation
00001010	7004604	PROCESSING UNIT MODULES	T) (G G
08984343	5984634	FAN ASSEMBLY FOR A PROCESSING UNIT CASE	EMC Corporation
08988732	6138249	METHOD AND APPARATUS FOR MONITORING	EMC Corporation
		COMPUTER SYSTEMS DURING MANUFACTURING,	
00000776	6010550	TESTING AND IN THE FIELD	EN CO CO
08990556	6018779	SYSTEM FOR ENCAPSULATING A PLURALITY OF	EMC Corporation
		SELECTED COMMANDS WITHIN A SINGLE	
		COMMAND AND TRANSMITTING THE SINGLE	
		COMMAND TO A REMOTE DEVICE OVER A	
00005100	505(200	COMMUNICATION LINK THEREWITH	EMC Composition
08995188	5956288	MODULAR MEMORY SYSTEM WITH SHARED	EMC Corporation
00005450	(050451	MEMORY ACCESS	EMC Composition
08995452	6058451	METHOD AND APPARATUS FOR REFRESHING A	EMC Corporation
00005675	6004207	NON-CLOCKED MEMORY	EMC Commention
08995675	6084397	VERIFICATION GAUGE FOR AN ELECTRONIC	EMC Corporation
09006444	(151(50)	PACKAGE LEAD INSPECTION APPARATUS	EMC Composition
08996444	6151659	DISTRIBUTED RAID STORAGE SYSTEM	EMC Corporation
08996807	6397281	BUS ARBITRATION SYSTEM	EMC Corporation
08997215	6502149	PLURAL BUS DATA STORAGE SYSTEM	EMC Corporation
08998314	6341309	FIREWALL SYSTEM FOR QUALITY OF SERVICE	EMC Corporation
00000000	6110225	MANAGEMENT	EMO C
08998332	6119235	METHOD AND APPARATUS FOR QUALITY OF	EMC Corporation
00000460	6076140	SERVICE MANAGEMENT	E) (C C
08998463	6076148	MASS STORAGE SUBSYSTEM AND BACKUP	EMC Corporation
		ARRANGEMENT FOR DIGITAL DATA PROCESSING	
		SYSTEM WHICH PERMITS INFORMATION TO BE	
		BACKED UP WHILE HOST COMPUTER(S) CONTINUE(S) OPERATING IN CONNECTION WITH	
		INFORMATION STORED ON MASS STORAGE	
		SUBSYSTEM	
08998538	6105085	LOCK MECHANISM FOR SHARED RESOURCES	EMC Corporation
00770550	0103063	HAVING ASSOCIATED DATA STRUCTURE STORED	Livic Corporation
		IN COMMON MEMORY INCLUDE A LOCK PORTION	
		AND A RESERVE PORTION	
08999044	6078953	SYSTEM AND METHOD FOR MONITORING	EMC Corporation
00777011	0070755	QUALITY OF SERVICE OVER NETWORK	Livie corporation
08999516	6292465	LINEAR RULE BASED METHOD FOR BANDWIDTH	EMC Corporation
00,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0232.00	MANAGEMENT	
08999519	6137777	CONTROL TOOL FOR BANDWIDTH MANAGEMENT	EMC Corporation
09/096777	6118636	INTERTIAL LATCH MECHANISM WITH OPPOSING	EMC Corporation
	0110000	LATCH MEMBERS	
09001046	6317815	METHOD AND APPARATUS FOR FORMATTING	EMC Corporation
		DATA IN A STORAGE DEVICE	
09001047	6088814	METHOD AND APPARATUS FOR READING A NON-	EMC Corporation
	,	CONFIGURED DISK DRIVE IN AN AS/400 SYSTEM	
09001298	6233696	DATA VERIFICATION AND REPAIR IN REDUNDANT	EMC Corporation
		STORAGE SYSTEMS	
09001327	6158042	METHOD OF COUNTING BITS	EMC Corporation
09001684	6195761	METHOD AND APPARATUS FOR IDENTIFYING AND	EMC Corporation
		REPAIRING MISMATCHED DATA	
09001857	6167485	ON-LINE DATA VERIFICATION AND REPAIR IN	EMC Corporation
	1	REDUNDANT STORAGE SYSTEMS	Corporation

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09002428	6088766	METHOD FOR EXCHANGING DATA BLOCKS ON	EMC Corporation
		DISK STORAGE DEVICES UTILIZING DISK ACCESS STATISTICS AND TESTING FOR THE EFFECT OF A	
		CHANGE	
09002712	6185661	WORM MAGNETIC STORAGE DEVICE	EMC Corporation
09003579	6014517	AUTOMATIC CREATION OF C TO ASSEMBLER	EMC Corporation
		INTERFACE	
09004105	6725331	METHOD AND APPARATUS FOR MANAGING THE	EMC Corporation
		DYNAMIC ASSIGNMENT OF RESOURCES IN A	
		DATA STORAGE SYSTEM	
09006576	5996024	METHOD AND APPARATUS FOR A SCSI	EMC Corporation
		APPLICATIONS SERVER WHICH EXTRACTS SCSI	
		COMMANDS AND DATA FROM MESSAGE AND	
		ENCAPSULATES SCSI RESPONSES TO PROVIDE TRANSPARENT OPERATION	
09009214	6188131	CLIP RETAINING A HEATSINK ONTO A	EMC Corporation
09009214	0100151	ELECTRONIC COMPONENT	ENIC Corporation
09011721	6122756	HIGH AVAILABILITY COMPUTER SYSTEM AND	EMC Corporation
0,011,21	0122700	METHODS RELATED THERETO	2.00 corporation
09012849	6411924	SYSTEM AND METHOD FOR LINGUISTIC FILTER	EMC Corporation
		AND INTERACTIVE DISPLAY	
09017175	6115211	DATA STORAGE SYSTEM HAVING A CARTRIDGE	EMC Corporation
		HUB LOCKING MECHANISM	
09020048	6253273	LOCK MECHANISM	EMC Corporation
09024177	6442659	A RAID-TYPE STORAGE SYSTEM AND TECHNIQUE	EMC Corporation
09039020	6631477	HOST SYSTEM FOR MASS STORAGE BUSINESS	EMC Corporation
		CONTINUANCE VOLUMES	
09041398	5953689	BENCHMARK TOOL FOR A MASS STORAGE	EMC Corporation
		SYSTEM	_
09041401	6408369	INTERNAL COPY FOR A STORAGE CONTROLLER	EMC Corporation
09045037	6138195	METHOD AND APPARATUS FOR HOT-PLUGGING	EMC Corporation
		CIRCUIT BOARDS HAVING LOW VOLTAGE LOGIC	
00050656	6224674	PARTS INTO A HIGHER VOLTAGE BACKPLANE	EN CO CO di
09050676	6324654	COMPUTER NETWORK REMOTE DATA MIRRORING SYSTEM	EMC Corporation
09052113	6249878	DATA STORAGE SYSTEM	EMC Corporation
09052209	6029166	SYSTEM AND METHOD FOR GENERATING AN	EMC Corporation
07032207	0027100	OPERATING SYSTEM-INDEPENDENT FILE MAP	Livic Corporation
09052263	5936844	MEMORY SYSTEM PRINTED CIRCUIT BOARD	EMC Corporation
09052266	6195770	DATA STORAGE SYSTEM	EMC Corporation
09052267	6327676	TEST EQUIPMENT	EMC Corporation
09052268	5943287	FAULT TOLERANT MEMORY SYSTEM	EMC Corporation
09052318	6360330	SYSTEM AND METHOD FOR BACKING UP DATA	EMC Corporation
		STORED IN MILTIPLE MIRRORS ON A MASS	_
		STORAGE SUBSYSTEM UNDER CONTROL OF A	
		BACKUP SERVER	
09052325	7398286	METHOD AND SYSTEM FOR ASSISTING IN	EMC Corporation
		BACKUPS AND RESTORE OPERATIONS OVER	
		DIFFERENT CHANNELS	

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Number	Number	Title	Owner
09052356	6161111	SYSTEM AND METHOD FOR PERFORMING FILE	EMC Corporation
		HANDLING OPERATIONS IN A DIGITAL DATA	
		PROCESSING SYSTEM USING AN OPERATING	
09052579	6047294	SYSTEM-INDEPENDENT FILE MAP	EMC Companyion
09052579	604/294	LOGICAL RESTORE FROM A PHYSICAL BACKUP IN	EMC Corporation
00052420	6157991	A COMPUTER SYSTEM	EMC Componention
09053420	015/991	METHOD AND APPARATUS FOR ASYNCHRONOUSLY UPDATING A MIRROR OF A	EMC Corporation
		SOURCE DEVICE	
09053964	6070224	VIRTUAL TAPE SYSTEM	EMC Corporation
09057906	6359900	METHOD AND SYSTEM FOR CONTROLLING	EMC Corporation
09037900	0339900	ACCESS TO A RESOURCE	Livic Corporation
09058590	6775739	MIRRORED DRIVE PERFORMANCE USING	EMC Corporation
09030390	0//3/39	MATCHING ALGORITHMS	ENIC Corporation
09069608	6161216	SOURCE CODE DEBUGGING TOOL	EMC Corporation
09073714	6122685	SYSTEM FOR IMPROVING THE PERFORMANCE OF	EMC Corporation
07073714	0122003	A DISK STORAGE DEVICE BY RECONFIGURING A	Livic corporation
		LOGICAL VOLUME OF DATA IN RESPONSE TO THE	
		TYPE OF OPERATIONS BEING PERFORMED	
09085592	6882620	TOKEN EXCHANGE SYSTEM WITH FAULT	EMC Corporation
0,00025,2	0002020	PROTECTION	Zivic Corporation
09085719	6141707	INPUT/OUTPUT REQUEST ALLOCATION BY	EMC Corporation
0,000,11	0111707	ESTABLISHING MASTER COMMAND QUEUE	2e corporation
		AMONG PLURALITY OF COMMAND QUEUES TO	
		RECEIVE AND STORE COMMANDS, DETERMINE	
		LOGICAL VOLUME, AND FORWARDING	
		COMMAND TO DETERMINED LOGICAL VOLUME	
09094649	6269163	ENHANCED BLOCK CIPHERS WITH DATA-	EMC Corporation
		DEPENDENT ROTATIONS	
09096781	6204982	METHOD AND APPARATUS FOR CARTRIDGE	EMC Corporation
		EJECTION AND OVERWRITE PROTECTION	
09096954	6178067	SIDE EDGE ACCESSIBLE DISK CARTRIDGE	EMC Corporation
		SHUTTER LATCH ASSEMBLY	
09103996	6195703	DYNAMIC ROUTING FOR PERFORMANCE	EMC Corporation
		PARTITIONING IN A DATA PROCESSING NETWORK	
09104597	6438595	LOAD BALANCING USING DIRECTORY SERVICES	EMC Corporation
		IN A DATA PROCESSING SYSTEM	
09105064	6128750	FAIL-OVER SWITCHING SYSTEM	EMC Corporation
09106025	6260120	STORAGE MAPPING AND PARTITIONING AMONG	EMC Corporation
		MULTIPLE HOST PROCESSORS	
09106293	6295575	CONFIGURING VECTORS OF LOGICAL STORAGE	EMC Corporation
		UNITS FOR DATA STORAGE PARTITIONING AND	
		SHARING	
09106299	6421711	VIRTUAL PORTS FOR PARTITIONING OF DATA	EMC Corporation
00107077	6061066	STORAGE	EN CO C
09107055	6061966	ELECTRICAL CABINET HAVING A DOOR STOP	EMC Corporation
09107056	6386120	ELECTRICAL CABINET HAVING A PIVOTING	EMC Corporation
00107077	6500600	PLATFORM	FMCC
09107057	6520608	ELECTRICAL CABINET HAVING PRINTED CIRCUIT	EMC Corporation
00107077	(2(2004	BOARD RECEIVING GUIDE SLOTS	EMO C
09107067	6262894	ELECTRICAL CABINET HAVING AN EXTENDABLE	EMC Corporation
		BRACKET SUPPORTING A BATTERY	

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09107202	6493825	AUTHENTICATION OF A HOST PROCESSOR	EMC Corporation
		REQUESTING SERVICE IN A DATA PROCESSING	
		NETWORK	
09107537	5987550	LOCK MECHANISM FOR SHARED RESOURCES IN A	EMC Corporation
00107520	(220005	DATA PROCESSING SYSTEM	EMC C
09107538	6329985	METHOD AND APPARATUS FOR GRAPHICALLY	EMC Corporation
09107613	6282602	DISPLAYING MAPPING OF A LOGICAL OBJECT METHOD AND APPARATUS FOR MANIPULATING	EMC Composition
0910/013	0282002	LOGICAL OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
09107617	6216202	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
02107017	0210202	VIRTUAL STORAGE DEVICES IN A STORAGE	Livic corporation
		SYSTEM	
09107618	7756986	METHOD AND APPARATUS FOR PROVIDING DATA	EMC Corporation
		MANAGEMENT FOR A STORAGE SYSTEM	
		COUPLED TO A NETWORK	
09107679	6366986	METHOD AND APPARATUS FOR DIFFERENTIAL	EMC Corporation
		BACKUP IN A COMPUTER STORAGE SYSTEM	_
09107684	6883063	METHOD AND APPARATUS FOR INITIALIZING	EMC Corporation
		LOGICAL OBJECTS IN A DATA STORAGE SYSTEM	
09107741	6396256	POWER SUPPLY SLEW TIME TESTING OF	EMC Corporation
		ELECTRONIC CIRCUITS	
09107742	6269381	METHOD AND APPARATUS FOR BACKING UP	EMC Corporation
		DATA BEFORE UPDATING THE DATA AND FOR	
		RESTORING FROM THE BACKUPS	
09107792	6484234	METHOD AND APPARATUS FOR EFFICIENTLY	EMC Corporation
		DESTAGING DATA FROM A CACHE TO TWO OR	
09107869	6169249	MORE NON-CONTIGUOUS STORAGE LOCATIONS	EMC Composition
09107809	0109249	ELECTRICAL CABINET HAVING A BULKHEAD WITH ELECTRICAL CONNECTORS	EMC Corporation
09107884	6353837	METHOD & APPARATUS PROVIDING MASS	EMC Corporation
09107004	0333837	STORAGE ACCESS FROM SYSTEMS USING	Livic Corporation
		DIFFERENT META-DEVICE FORMATS	
09107891	6141773	METHOD AND APPARATUS FOR UNDOING	EMC Corporation
		CHANGES TO COMPUTER MEMORY	
09107923	6393540	MOVING A LOGICAL OBJECT FROM A SET OF	EMC Corporation
		SOURCE LOCATIONS TO A SET OF DESTINATION	1
		LOCATIONS USING A SINGLE COMMAND	
09108038	6542909	SYSTEM FOR DETERMINING MAPPING OF	EMC Corporation
		LOGICAL OBJECTS IN A COMPUTER SYSTEM	
09108075	6263445	METHOD AND APPARATUS FOR AUTHENTICATING	EMC Corporation
		CONNECTIONS TO A STORAGE SYSTEM COUPLED	
		TO A NETWORK	
09111211	6324604	MAGNETIC DISK STORAGE FOR STORING DATA IN	EMC Corporation
		DISK BLOCK SIZE FROM FIXED LENGTH OF HOST	
		BLOCK IN NON-INTEGER MULTIPLE OF THE DISK	
00107502	6233589	BLOCK SIZE  METHOD AND SYSTEM FOR REELECTING	EMC Corporation
09127523	0233389	METHOD AND SYSTEM FOR REFLECTING DIFFERENCES BETWEEN TWO FILES	EMIC Corporation
09127999	6266740	DEVICE SEQUENCING AND PLACEMENT	EMC Corporation
U714/777	0200740	PROTECTION USING A DIGITAL SIGNATURE	Livic Corporation
09133564	6269431	VIRTUAL STORAGE AND BLOCK LEVEL DIRECT	EMC Corporation
0/1 <i>000</i> <b>0</b>	0207731	ACCESS OF SECONDARY STORAGE RECOVERY OF	Livic Corporation
	ı	BACKUP DATA	I

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09133701	6366987	COMPUTER DATA STORAGE PHYSICAL BACKUP AND LOGICAL RESTORE	EMC Corporation
09133885	6353878	REMOTE CONTROL OF BACKUP MEDIA IN A SECONDARY STORAGE SUBSYSTEM THROUGH ACCESS TO A PRIMARY STORAGE SUBSYSTEM	EMC Corporation
09134012	6157920	EXECUTABLE DIGITAL CASH FOR ELECTRONIC COMMERCE	EMC Corporation
09135290	5959932	METHOD & APPARATUS FOR DETECTING ERRORS IN THE WRITING OF DATA TO A MEMORY	EMC Corporation
09137852	6141188	SECONDARY ACTUATOR	EMC Corporation
09143683	6189071	METHOD FOR MAXIMIZING SEQUENTIAL OUTPUT IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09143684	6237063	LOAD BALANCING METHOD FOR EXCHANGING DATA IN DIFFERENT PHYSICAL DISK STORAGE DEVICES IN A DISK ARRAY STORAGE DEVICE INDEPENDENTLY OF DATA PROCESSING SYSTEM OPERATION	EMC Corporation
09143698	6308284	METHOD AND APPARATUS FOR MAINTAINING DATA COHERENCY	EMC Corporation
09144741	6201690	RACK CONSOLE ASSEMBLY	EMC Corporation
09156747	6107855	APPARATUS AND METHOD FOR MECHANICAL HARVESTING OF FRUIT	EMC Corporation
09160727	6359745	LATENT ILLUMINANCE DISCRIMINATION MARKER SYSTEM FOR DATA STORAGE CARTRIDGES	EMC Corporation
09160811	6181662	LATENT IRRADIANCE DISCRIMINATION METHOD AND MARKER SYSTEM FOR CARTRIDGELESS DATA STORAGE DISKS	EMC Corporation
09177013	6393447	METHOD AND APPARATUS FOR EXTRACTING UNBIASED RANDOM BITS FROM A POTENTIALLY BIASED SOURCE OF RANDOMNESS	EMC Corporation
09182265	6460141	SECURITY AND ACCESS MANAGEMENT SYSTEM FOR WEB-ENABLED AND NON-WEB-ENABLED APPLICATIONS AND CONTENT ON A COMPUTER NETWORK	EMC Corporation
09182930	6166884	APPARATUS AND SYSTEM FOR STABILIZING A DISK MEDIA SURFACE FOR ENGAGEMENT WITH A DRIVE HEAD	EMC Corporation
09183873	6160680	TWO-PIECE MEDIA HUB AND METHODS OF ATTACHING SAME TO A MEDIUM	EMC Corporation
09183874	6583945	METHOD FOR IRREVERSIBLY WRITE-SECURING A MAGNETIC STORAGE CARTRIDGE	EMC Corporation
09183903	6320717	VELOCITY LIMITED LOADING OF READ HEADS ONTO DISK DRIVE MEDIA	EMC Corporation
09191876	6115219	A READ WRITE HEAD ASSEMBLY THAT HAS A PAIR OF OPPOSED SLIDERS THAT EACH HAVE A TRANSVERSE SLOTTED RAIL ALIGNED WITH A RAIL IN THE OPPOSING SLIDER THAT DOES NOT HAVE A TRANSVERSE SLOTTED RAIL	EMC Corporation
09191903	6129440	SWITCH-OPERATED MEMBER WITH STATUS LIGHT PIPE INCORPORATED THEREIN	EMC Corporation
09195346	6286022	EFFICIENT FINITE FIELD BASIS CONVERSION INVOLVING A DUAL BASIS	EMC Corporation

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Number	Number	Title	Owner
09195527	6446052	DIGITAL COIN TRACING USING TRUSTEE TOKENS	EMC Corporation
09196384	6564219	METHOD AND APPARATUS FOR OBTAINING AN IDENTIFIER FOR A LOGICAL UNIT OF DATA IN A	EMC Corporation
		DATABASE	
09196651	6385626	METHOD AND APPARATUS FOR IDENTIFYING	EMC Corporation
		CHANGES TO A LOGICAL OBJECT BASED ON	
		CHANGES TO THE LOGICAL OBJECT AT PHYSICAL	
		LEVEL	
09205063	6502131	DIRECTORY ENABLED POLICY MANAGEMENT	EMC Corporation
00000007	6178058	TOOL FOR INTELLIGENT TRAFFIC MANAGEMENT	EMC Composition
09209867	61/8058	OFF-TRACK WRITE PROTECTION METHOD AND SYSTEM FOR INDUCED MECHANICAL	EMC Corporation
		DISTURBANCE ON A DISK DRIVE	
09211026	6356943	DISTANCE LEARNING IMPLEMENTATION	EMC Corporation
09211131	6240511	METHOD AND APPARATUS FOR DETECTING	EMC Corporation
0,211131	0210011	SYSTEM CONFIGURATION CHANGES	21.10 Corporation
09211961	6199839	VIBRATION DAMPING MECHANISM	EMC Corporation
09213073	6233730	REVISION COMPATIBILITY BETWEEN PROGRAMS	EMC Corporation
09213139	6397273	SYSTEM HAVING AN ENHANCED PARITY	EMC Corporation
		MECHANISM IN A DATA	_
		ASSEMBLER/DISASSEMBLER FOR USE IN A	
		PIPELINE OF A HOST-STORAGE SYSTEM	
		INTERFACE TO GLOBAL MEMORY	
09213613	7233977	MESSAGING MECHANISM EMPLOYING	EMC Corporation
		MAILBOXES FOR INTER PROCESSOR	
09215840	6317805	COMMUNICATIONS  DATA TRANSFER INTERFACE HAVING PROTOCOL	EMC Composition
09215840	031/803	DATA TRANSFER INTERFACE HAVING PROTOCOL CONVERSION DEVICE AND UPPER, LOWER,	EMC Corporation
		MIDDLE MACHINES: WITH MIDDLE MACHINE	
		ARBITRATING AMONG LOWER MACHINE SIDE	
		REQUESTERS INCLUDING SELECTIVE	
		ASSEMBLY/DISASSEMBLY REQUESTS	
09216174	6711612	A SYSTEM FOR FACILITATING THE TRANSFER OF	EMC Corporation
		MANAGEMENT INFORMATION FROM A REMOTE	_
		MASS STORAGE SUBSYSTEM OVER A SWITCHING	
		FABRIC OR SELECTIVELY OVER A PRIVATE LINK	
		TO A CENTRAL LOCATION FOR SERVICING	
09216254	6308181	ACCESS CONTROL WITH DELAYED BINDING OF	EMC Corporation
00016000	6250050	OBJECT IDENTIFIERS	EN CO CO AT
09216329	6279050	DATA TRANSFER APPARATUS HAVING UPPER,	EMC Corporation
		LOWER, MIDDLE STATE MACHINES, WITH MIDDLE STATE MACHINE ARBITRATING AMONG LOW	
		STATE MACHINE ARBITRATING AMONG LOW STATE MACHINE SIDE REQUESTERS INCLUDING	
		SELECTIVE ASSEMBLY/DISASSEMBLY REQUESTS	
09219026	6487049	DRIVE HEADS FOR STORAGE MEDIA DRIVE	EMC Corporation
09221556	6389442	EFFICIENT FINITE FIELD MULTIPLICATION IN	EMC Corporation
	3505.12	NORMAL BASIS	
09222645	6418511	LARGE CAPACITY DATA STORAGE SYSTEMS	EMC Corporation
		USING REDUNDANT BUSES	<b>,</b>

Application Number	Registration Number	Title	Owner
09222646	6230221	DATA STORAGE SYSTEM HAVING A HOST COMPUTER COUPLED TO BANK OF DISK DRIVES THROUGH INTERFACE COMPRISING PLURALITY OF DIRECTORS, BUSSES, AND REFERENCE VOLTAGE GENERATORS	EMC Corporation
09223092	6314503	METHOD AND APPARATUS FOR MANAGING DATA PLACED ON A STORAGE SUBSYSTEM USING A LAYERED DEVICE DRIVER	EMC Corporation
09223110	6230217	DATA STORAGE SYSTEM HAVING A HOST COMPUTER COUPLED TO BANK OF DISK DRIVES THROUGH INTERFACE COMPRISING PLURALITY OF DIRECTORS, BUSES, AND PCB CONNECTORS	EMC Corporation
09223115	6289401	DATA STORAGE SYSTEM HAVING A HOST COMPUTER COUPLED TO BANK OF DISK DRIVES THROUGH INTERFACE COMPRISING PLURALITY OF DIRECTORS, TWO PAIRS OF BUSES, AND MEMORY SECTIONS	EMC Corporation
09223126	6457139	METHOD AND APPARATUS FOR OPTIMIZING A LOGICAL VOLUME MANAGER OR DEVICE DRIVER	EMC Corporation
09223417	6493795	DATA STORAGE SYSTEM	EMC Corporation
09223519	6389494	SYSTEM FOR INTERFACING A DATA STORAGE SYSTEM TO A HOST UTILIZING A PLURALITY OF BUSSES FOR CARRYING END-USER DATA AND A SEPARATE BUS FOR CARRYING INTERFACE STATE DATA	EMC Corporation
09223596	6341317	METHOD AND APPARATUS FOR MANAGING A LOG OF INFORMATION IN A COMPUTER SYSTEM INCLUDING AN INTELLIGENT STORAGE SYSTEM	EMC Corporation
09223896	6385706	APPARATUS AND METHODS FOR COPYING A LOGICAL OBJECT TO A PRIMARY STORAGE DEVICE USING A MAP OF A STORAGE LOCATION	EMC Corporation
09223998	6434637	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS (AS AMENDED)	EMC Corporation
09224194	6539451	DATA STORAGE SYSTEM HAVING MASTER-SLAVE ARBITERS	EMC Corporation
09224637	7107395	APPARATUS AND METHODS FOR OPERATING A COMPUTER STORAGE SYSTEM	EMC Corporation
09224701	6061274	METHODS AND APPARATUS FOR MESSAGE TRANSFER IN COMPUTER STORAGE SYSTEM	EMC Corporation
09224789	6449652	METHOD AND APPARATUS FOR PROVIDING SECURE ACCESS TO A COMPUTER SYSTEM RESOURCE	EMC Corporation
09224830	6407671	DETECTION SYSTEM FOR AN ELECTRONIC ENCLOSURE	EMC Corporation
09224896	6487561	APPARATUS AND METHODS FOR COPYING, BACKING UP, AND RESTORING DATA USING A BACKUP SEGMENT SIZE LARGER THAN THE STORAGE BLOCK SIZE	EMC Corporation
09224897	6397308	APPARATUS AND METHOD FOR DIFFERENTIAL BACKUP AND RESTORATION OF DATA IN A COMPUTER STORAGE SYSTEM	EMC Corporation

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09224921	6311326	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
09224968	6262668	DETECTION SYSTEM FOR AN ELECTRONIC ENCLOSURE	EMC Corporation
09224969	6369594	TEST CLIP FOR ELECTRICAL TESTING OF AN ELECTRICAL COMPONENT	EMC Corporation
09224973	6360319	METHOD AND APPARATUS FOR STORING AND RETRIEVING SYSTEM REVISION INFORMATION	EMC Corporation
09225033	6397295	CACHE MECHANISM FOR SHARED RESOURCES IN A MULTIBUS DATA PROCESSING SYSTEM	EMC Corporation
09225461	6529944	HOST SYSTEM FOR REMOTE CONTROL OF MASS STORAGE VOLUMES USING CASCADING COMMANDS	EMC Corporation
09225577	6718347	METHOD AND APPARATUS FOR MAINTAINING COHERENCE AMONG COPIES OF A DATABASE SHARED BY MULTIPLE COMPUTERS	EMC Corporation
09236366	6807632	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
09247902	6104561	READ/WRITE PROTECT SCHEME FOR A DISK CARTRIDGE AND DRIVE	EMC Corporation
09251812	6209002	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
09255486	6397307	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
09255614	6286010	METHODS AND APPARATUSES FOR INTERACTION BETWEEN SCHEMATA	EMC Corporation
09261542	6324581	FILE SERVER SYSTEM USING FILE SYSTEM STORAGE, DATA MOVERS, AND AN EXCHANGE OF META DATA AMONG DATA MOVERS FOR FILE LOCKING AND DIRECT ACCESS TO SHARED FILE SYSTEMS	EMC Corporation
09261621	6973455	FILE SERVER SYSTEM PROVIDING DIRECT DATA SHARING BETWEEN CLIENTS WITH A SERVER ACTING AS AN ARBITER AND COORDINATOR	EMC Corporation
09261626	6453354	FILE SERVER SYSTEM USING CONNECTION- ORIENTED PROTOCOL AND SHARING DATA SETS AMONG DATA MOVERS	EMC Corporation
09268142	6304986	METHOD AND APPARATUS FOR INSPECTING RECORDING MEDIUM FOR DEFECTS	EMC Corporation
09268416	6392872	COMPUTER SYSTEM	EMC Corporation
09268494	6424999	SYSTEM AND METHOD FOR RESTORING PREVIOUSLY BACKED-UP DATA IN A MASS STORAGE SUBSYSTEM	EMC Corporation
09271585	6560617	OPERATION OF A STANDBY SERVER TO PRESERVE DATA STORED BY A NETWORK SERVER	EMC Corporation
09272522	6446253	MECHANISM FOR ACHIEVING TRANSPARENT NETWORK COMPUTING	EMC Corporation
09274532	6532451	NESTED STRONG LOADER APPARATUS AND METHOD	EMC Corporation

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Number 09274696	<b>Number</b> 6701433		Owner
092/4696	6/01433	METHOD AND APPARATUS FOR ESCROWING PROPERTIES USED FOR ACCESSING EXECUTABLE MODULES	EMC Corporation
09274971	6615350	MODULE AUTHENTICATION AND BINDING LIBRARY EXTENSIONS	EMC Corporation
09281846	6324065	STIFFENER FOR A PRINTED CIRCUIT BOARD	EMC Corporation
09282482	6323423	HOUSING FOR INTERCONNECTED PRINTED CIRCUIT BOARDS	EMC Corporation
09282673	6285563	SUPPORT BRACKET FOR A PRINTED CIRCUIT BOARD CONNECTABLE TO DAUGHTER BOARDS	EMC Corporation
09283029	6325472	FASTENING DEVICE FOR A PRINTED CIRCUIT BOARD	EMC Corporation
09289290	6163422	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation
09290844	6311257	METHOD AND APPARATUS FOR ALLOCATING MEMORY FOR A COMMAND QUEUE	EMC Corporation
09295718	6931440	METHOD AND APPARATUS FOR DYNAMICALLY DETERMINING WHETHER ACCESS TO A RESOURCE CONNECTED TO A COMPUTER HAS CHANGED AND DETERMINING HOW TO ACCESS THE RESOURCE WITH A NEW IDENTIFIER	EMC Corporation
09301057	6895418	VERSATILE INDIRECTION IN AN EXTENT BASED FILE SYSTEM	EMC Corporation
09301177	6654772	MULTI-VOLUME EXTENT BASED FILE SYSTEM	EMC Corporation
09303242	6370626	METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SHEET	EMC Corporation
09304775	6985583	SYSTEM AND METHOD FOR AUTHENTICATION SEED DISTRIBUTION	EMC Corporation
09306526	6574732	SOFTWARE FINGERPRINTING AND BRANDING	EMC Corporation
09312146	6353869	ADAPTIVE DELAY OF POLLING FREQUENCIES IN A DISTRIBUTED SYSTEM WITH A QUEUED LOCK	EMC Corporation
09315437	6505321	FAULT TOLERANT PARITY GENERATION	EMC Corporation
09316251	6516348	COLLECTING AND PREDICTING CAPACITY INFORMATION FOR COMPOSITE NETWORK RESOURCE FORMED BY COMBINING PORTS OF AN ACCESS SERVER AND/OR LINKS OF WIDE AREA NETWORK	EMC Corporation
09320423	6751735	APPARATUS FOR CONTROL OF CRYPTOGRAPHY IMPLEMENTATIONS IN THIRD PARTY APPLICATIONS	EMC Corporation
09325207	6133544	LASER WELD DISK CARTRIDGE	EMC Corporation
09336461	6526521	METHODS AND APPARATUS FOR PROVIDING DATA STORAGE ACCESS	EMC Corporation
09337059	6201662	LATENT ILLUMINANCE DISCRIMINATION MARKER WITH REFLECTIVE LAYER FOR DATA STORAGE CARTRIDGES	EMC Corporation
09337361	6385762	DATA REDUCTION USING RANK-OF-RANKS METHODOLOGY	EMC Corporation
09338097	6147837	DATA CARTRIDGE HAVING ARCUATE SHUTTER SPRING	EMC Corporation

Application	Registration	m'a	
Number	Number	Title	Owner
09338098	6327105	APPARATUS AND METHODS FOR LOW OVERHEAD, HIGHLY RELIABLE DETERMINATION OF POSITION OF A MAGNETIC STORAGE MEDIUM	EMC Corporation
09338810	6222277	NON-COLLAPSING INTERCONNECTION FOR	EMC Corporation
		SEMICONDUCTOR DEVICES	
09340261	6186890	ELECTRICAL CABINET DOOR AIR MIXING DAM	EMC Corporation
09342277	6220678	ELECTRICAL CABINET	EMC Corporation
09342453	6959368	METHOD AND APPARATUS FOR DUPLICATING COMPUTER BACKUP DATA	EMC Corporation
09342474	6631442	METHOD AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
09342608	6363385	METHOD AND APPARATUS FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
09343000	6135875	ELECTRICAL CABINET	EMC Corporation
09343282	6219249	ELECTRICAL CABINET	EMC Corporation
09343344	6629216	FIBRE CHANNEL BY-PASS	EMC Corporation
09343969	6839747	USER INTERFACE FOR MANAGING STORAGE IN A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
09344999	6662197	METHOD AND APPARATUS FOR MONITORING UPDATE ACTIVITY IN A DATA STORAGE FACILITY	EMC Corporation
09345038	6104048	ELECTROSTATIC DISCHARGE PROTECTION FOR MAGNETO-RESISTIVE HEADS	EMC Corporation
09345048	6581136	FIBRE CHANNEL DATA STORAGE SYSTEM HAVING EXPANSION/CONTRACTION	EMC Corporation
09345053	6636934	FIBRE CHANNEL PORT BY-PASS SELECTOR SECTION FOR DUAL PORTED DISK DRIVES	EMC Corporation
09345216	6845395	METHOD AND APPARATUS FOR IDENTIFYING NETWORK DEVICES ON A STORAGE NETWORK	EMC Corporation
09345254	6665714	METHOD AND APPARATUS FOR DETERMINING AN IDENTITY OF A NETWORK DEVICE	EMC Corporation
09347592	6304946	SYSTEM AND METHOD FOR OPTIMIZING CACHE WRITE BACKS TO DISKS	EMC Corporation
09352353	6249873	METHOD OF AND APPARATUS FOR PROVIDING SECURE DISTRIBUTED DIRECTORY SERVICES AND PUBLIC KEY INFRASTRUCTURE	EMC Corporation
09352651	6567890	FIBRE CHANNEL PORT BY-PASS SELECTOR SECTION FOR DUAL PORTED DISK DRIVES	EMC Corporation
09356600	7111172	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
09359205	7461250	SYSTEM AND METHOD FOR CERTIFICATE EXCHANGE	EMC Corporation
09360337	6529992	SELF-CONTAINED APPLICATION DISK FOR AUTOMATICALLY LAUNCHING APPLICATION SOFTWARE OR STARTING DEVICES AND PERIPHERALS	EMC Corporation
09362270	6587959	SYSTEM AND METHOD FOR ADDRESSING SCHEME FOR USE ON CLUSTERS	EMC Corporation
09362400	6324692	UPGRADE OF A PROGRAM	EMC Corporation
09364727	6839782	COMPUTER STORAGE SYSTEM INCORPORATING ON-BOARD EEPROMS CONTAINING PRODUCT DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
09364931	6467047	COMPUTER STORAGE SYSTEM CONTROLLER	EMC Corporation
		INCORPORATING CONTROL STORE MEMORY	
		WITH PRIMARY AND SECONDARY DATA AND	
		PARITY AREAS	
09365359	6218821	COMPUTER STORAGE SYSTEM INCORPORATING	EMC Corporation
		MARGINABLE POWER SUPPLY AND POWER-UP	
		BYPASS CIRCUIT	
09365360	6560573	STORAGE CONTROLLER WITH HARDWARE	EMC Corporation
		EMULATION CONTROLLER FOR EMULATION	
		BETWEEN CONTROL PROCESSOR AND TRANSFER	
		CIRCUITRY COMPATIBLE TO DIFFERENT	
00265275	6520402	PROCESSOR	EN (C) C
09365375	6539492	SYSTEM AND METHOD FOR MAINTAINING	EMC Corporation
		SYNCHRONIZATION IN A COMPUTER STORAGE	
002/0712	6420714	SYSTEM  FAILURE DETECTION AND ISOLATION	EMO C
09369712	6430714	FAILURE DETECTION AND ISOLATION	EMC Corporation
09372354	6320712	APPARATUS AND METHODS FOR LOW OVERHEAD,	EMC Corporation
		HIGHLY RELIABLE DETERMINATION OF POSITION OF A MAGNETIC STORAGE MEDIUM	
09375331	6832379		EMC Corporation
093/3331	0832379	COMPUTER ARCHITECTURE UTILIZING LAYERED	EMC Corporation
00275960	6671705	DEVICE DRIVERS	EMC Corporation
09375860	66/1/05	REMOTE MIRRORING SYSTEM, DEVICE, AND	EMC Corporation
09376173	7013465	METHOD SYSTEM, DEVICE AND METHOD FOR	EMC Composition
093/01/3	/013403	INTERPROCESSOR COMMUNICATION IN A	EMC Corporation
		COMPUTER SYSTEM	
09377581	6397292	ASYMMETRICAL STRIPING OF MIRRORED	EMC Corporation
09377361	039/292	STORAGE DEVICE ARRAYS AND CONCURRENT	ENIC Corporation
		ACCESS TO EVEN TRACKS ON THE FIRST ARRAY	
		AND ODD TRACKS IN THE SECOND ARRAY TO	
		IMPROVE DATA ACCESS PERFORMANCE	
09378643	6629199	DIGITAL DATA STORAGE SYSTEM INCLUDING	EMC Corporation
07370043	0027177	DIRECTORY FOR EFFICIENTLY PROVIDING	Livie corporation
		FORMATTING INFORMATION FOR STORED	
		RECORDS AND UTILIZATION OF A CHECK VALUE	
		FOR VERIFYING THAT A RECORD IS FROM A	
		PARTICULAR STORAGE LOCATION	
09378644	6330655	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING	EMC Corporation
		DIRECTORY FOR EFFICIENTLY PROVIDING	1
		FORMATTING INFORMATION FOR STORED	
		RECORDS	
09379947	6157925	SYSTEM AND METHOD FOR CACHING	EMC Corporation
		IDENTIFICATION AND LOCATION INFORMATION	_
		IN A COMPUTER NETWORK	
09382752	6611896	DYNAMIC MIRROR SERVICE POLICY WITH SEEK	EMC Corporation
		ADJUSTMENT IN A NON-PHYSICAL MIRRORED	
		STG ENVIRONMENT	
09383821	6243834	APPARATUS AND METHOD FOR CAPTURING	EMC Corporation
		INFORMATION OFF A PLURALITY OF BI-	
		DIRECTIONAL COMMUNICATION BUSES	
09388328	6493796	METHOD AND APPARATUS FOR MAINTAINING	EMC Corporation
		CONSISTENCY OF DATA STORED IN A GROUP OF	
		MIRRORING DEVICES	

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09390012	6295587	METHOD AND APPARATUS FOR MULTIPLE DISK DRIVE ACCESS IN A MULTI-PROCESSOR/MULTI- DISK DRIVE SYSTEM	EMC Corporation
09390728	6162490	METHOD FOR APPLYING AN EMISSIVE MATERIAL TO A SUBSTRATE	EMC Corporation
09391360	6976165	SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
09392192	6275860	METHOD AND APPARATUS FOR SYNCHRONIZING FUNCTION VALUES INA MULTIPLE PROTOCOL SYSTEM	EMC Corporation
09396146	6480930	MAILBOX FOR CONTROLLING STORAGE SUBSYSTEM RECONFIGURATIONS	EMC Corporation
09396217	6405282	METHOD FOR ANALYZING DISK SEEK TIMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09396218	6341333	METHOD FOR TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09396253	6711649	LOAD BALANCING ON DISK ARRAY STORAGE DEVICE	EMC Corporation
09396275	6442650	MAXIMIZING SEQUENTIAL OUTPUT IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09398269	6662241	APPARATUS AND METHOD FOR CONTROLLING A PERIPHERAL DEVICE	EMC Corporation
09404016	6499039	REORGANIZATION OF STRIPED DATA DURING FILE SYSTEM EXPANSION IN A DATA STORAGE SYSTEM	EMC Corporation
09408058	6581137	DATA STORAGE SYSTEM	EMC Corporation
09408234	6519739	FAULT DETECTOR	EMC Corporation
09408429	6915394	MICROPROCESSOR INTERFACE	EMC Corporation
09408430	6735655	INTERRUPT REQUEST CONTROLLER	EMC Corporation
09408807	6836818	CENTRAL PROCESSING UNIT	EMC Corporation
09408811	6543029	ERROR CORRECTOR	EMC Corporation
09410385	6144527	A METHOD FOR ACCESSING A MEDIUM WITHIN A SHUTTER SHELL THAT ENCAPSULATES THE MEDIUM	EMC Corporation
09410514	6389420	FILE MANAGER PROVIDING DISTRIBUTED LOCKING AND METADATA MANAGEMENT FOR SHARED DATA ACCESS BY CLIENTS RELINQUISHING LOCKS AFTER TIME PERIOD EXPIRATION	EMC Corporation
09411612	6505216	METHODS AND APPARATUS FOR BACKING-UP AND RESTORING FILES USING MULTIPLE TRAILS	EMC Corporation
09415144	6550029	TESTING SYSTEM AND METHODS WITH PROTOCOL PATTERN INJECTION AND EXTERNAL VERIFICATION	EMC Corporation
09424180	6816337	MAGNETIC RECORDING UNIT	EMC Corporation
09427451	6557113	SYNCHRONIZATION RECOVERY TECHNIQUE FOR STORAGE MEDIA	EMC Corporation
09431758	6944654	MULTIPLE STORAGE ARRAY CONTROL	EMC Corporation
09434611	6457102	CACHE USING MULTIPLE LRU'S	EMC Corporation
09438137	6714952	METHOD FOR BACKUP AND RESTORE OF MULTI- LINGUAL NETWORK FILE SERVER	EMC Corporation

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09438245	6483041	MICRO SOLDERED CONNECTION	EMC Corporation
09438913	6754897	OPERATION PRIORITIZATION AND SELECTION IN	EMC Corporation
07430713	0/3402/	PROBABILITY-BASED JOB SCHEDULER	Livic Corporation
09439903	6665740	LOGICAL VOLUME SELECTION IN A PROBABILITY-	EMC Corporation
07437703	0003740	BASED JOB SCHEDULER	Livic corporation
09440756	6625750	HARDWARE AND SOFTWARE FAILOVER SERVICES	EMC Corporation
03110750	0025750	FOR A FILE SERVER	2.vic corporation
09442884	6415372	ROLLING BACK STORAGE SUBSYSTEM	EMC Corporation
03112001	0110372	RECONFIGURATIONS	21116 Corporation
09444949	6590731	SYSTEM AND METHOD FOR ADAPTIVE SOFT HEAD	EMC Corporation
		LOADING OF DISK DRIVE HEAD ONTO DISK	<b>.</b>
		MEDIUM	
09452605	6557058	METHOD AND APPARATUS OF SUSTAINED	EMC Corporation
		SEQUENTIAL DATA TRANSFER IN A MEDIA DRIVE	_
09452964	6434681	SNAPSHOT COPY FACILITY FOR A DATA STORAGE	EMC Corporation
		SYSTEM PERMITTING CONTINUED HOST	
		READ/WRITE ACCESS	
09453241	6549992	COMPUTER DATA STORAGE BACKUP WITH TAPE	EMC Corporation
		OVERFLOW CONTROL OF DISK CACHING OF	
		BACKUP DATA STREAM	
09453990	6466944	METHOD FOR CREATION, MANAGEMENT, AND	EMC Corporation
		USE OF FILES CONTAINING MULTIPLE VIRTUAL	
		DATA STREAMS USING STANDARD FILE SYSTEM	
		APIS	
09455072	6338126	CRASH RECOVERY WITHOUT COMPLETE	EMC Corporation
00466206	(1240/2	REMIRROR	EMC C
09466286	6134062	METHOD AND APPARATUS FOR INCREASING DISC	EMC Corporation
09466976	6490598	DRIVE PERFORMANCE SYSTEM AND METHOD FOR EXTERNAL BACKUP	EMC Corporation
09400970	0490396	AND RESTORE FOR A COMPUTER DATA STORAGE	ENIC Corporation
		SYSTEM	
09467354	6487562	DYNAMICALLY MODIFYING SYSTEM	EMC Corporation
03107331	0.07502	PARAMETERS IN A DATA STORAGE SYSTEM	21/10 Corporation
09467355	6651074	METHOD AND APPARATUS FOR STORAGE AND	EMC Corporation
		RETRIEVAL OF VERY LARGE DATABASES USING A	
		DIRECT PIPE	
09467358	6658589	SYSTEM AND METHOD FOR BACKUP A PARALLEL	EMC Corporation
		SERVER DATA STORAGE SYSTEM	_
09468270	6557079	REMOTE DATA FACILITY PREFETCH	EMC Corporation
09470645	7146614	COMPUTER DIRECTORY SYSTEM HAVING AN	EMC Corporation
		APPLICATION INTEGRATION DRIVER	
		INFRASTRUCTURE	
09471848	6401178	DATA PROCESSING METHOD AND APPARATUS	EMC Corporation
		FOR ENABLING INDEPENDENT ACCESS TO	
		REPLICATED DATA	
09471869	7054892	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
		INFORMATION RELATED TO STORAGE ACTIVITIES	
00472592	6520521	OF DATA STORAGE SYSTEMS	EMC Common title
09472583	6529521	DATA STORAGE SYSTEM	EMC Corporation
09473668 09474112	6574687	FIBRE CHANNEL DATA STORAGE SYSTEM	EMC Corporation
094/4112	6571355	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL- OVER MECHANISM	EMC Corporation
09474284	6516370	DATA STORAGE SYSTEM	EMC Corporation
U24/4404	02103/0	DATA STORAGE STSTEM	Livic Corporation

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Number	Number	Title	Owner
09474384	6615315	FIBRE CHANNEL DATA STORAGE SYSTEM	EMC Corporation
		HAVING IMPROVED FRONT-END I/O ADAPTED	
		HUB	
09474385	6283429	MOUNTING ASSEMBLY	EMC Corporation
09474476	6766359	METHOD AND APPARATUS FOR UTILIZING	EMC Corporation
		MULTIPLE PATHS IN A FILE TRANSFER UTILITY	
		EMPLOYING AN INTERMEDIATE DATA STORAGE	
		SYSTEM	
09474500	6560683	FIBRE CHANNEL DATA STORAGE SYSTEM	EMC Corporation
		HAVING IMPROVED REAR-END I/O ADAPTED HUB	
09474607	6983330	METHOD AND APPARATUS FOR USING MULTIPLE	EMC Corporation
		PATHS FOR PROCESSING OUT OF BAND	
		COMMANDS	
09474633	6496951	METHOD FOR TESTING SIGNAL INTEGRITY IN A	EMC Corporation
		DATA STORAGE SYSTEM	
09474886	6466718	METHOD AND APPARATUS FOR TRANSMITTING	EMC Corporation
		FIBRE-CHANNEL AND NON-FIBRE CHANNEL	
		SIGNALS THROUGH A COMMON CABLE	
09475462	6587957	DISK DRIVE CONTROLLER FOR CONTROLLING	EMC Corporation
		DATA FLOW THERETHROUGH BY SWITCHING TO	
		SECONDARY BUS TO RECEIVE CLOCK PULSES	
		WHEN A FAILURE ON MASTER BUS IS DETECTED	
09479488	6574753	PEER LINK FAULT ISOLATION	EMC Corporation
09479512	6718372	METHODS AND APPARATUS FOR PROVIDING	EMC Corporation
		ACCESS BY A FIRST COMPUTING SYSTEM TO	1
		DATA STORED IN A SHARED STORAGE DEVICE	
		MANAGED BY A SECOND COMPUTING SYSTEM	
09479778	6317845	SYSTEM FOR COMPUTER RECOVERY USING	EMC Corporation
		REMOVABLE HIGH CAPACITY MEDIA (ZIP	
		SNIPER/RESCUE)	
09480390	6829609	SYSTEM, DEVICE, AND METHOD FOR PROVIDING	EMC Corporation
		MUTUAL EXCLUSION FOR COMPUTER SYSTEM	
		RESOURCES	
09483405	6654784	COMPUTING ARCHITECTURE	EMC Corporation
09489526	6260109	METHOD & APPARATUS FOR PROVIDING LOGICAL	EMC Corporation
		DEVICES SPANNING SEVERAL PHYSICAL	1
		VOLUMES	
09496308	6711574	RETRIEVAL OF MANAGEMENT INFORMATION	EMC Corporation
09496824	7197639	CRYPTOGRAPHIC COUNTERMEASURES AGAINST	EMC Corporation
		CONNECTION DEPLETION ATTACKS	1
09498287	6742059	PRIMARY AND SECONDARY MANAGEMENT	EMC Corporation
		COMMANDS FOR A PERIPHERAL CONNECTED TO	1
		MULTIPLE AGENTS	
09506637	6587297	SYSTEM AND METHOD FOR DETECTING THE	EMC Corporation
		PRESENCE OF A DATA-STORAGE CARTRIDGE	
		USING PHASE-ROTATED POLARIZED LIGHT	
09515773	6748581	APPARATUS AND METHOD FOR IMPLEMENTING	EMC Corporation
· · <del>-</del>		AN EXISTING OBJECT-ORIENTED CLASS IN AN	
		OBJECT MANAGEMENT SYSTEM	
09516271	6567873	SPINLOCK WITH ADAPTIVE DELAY	EMC Corporation
09517063	6665703	STORAGE SYSTEM WITH INTERNAL LAN	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
09521902	6810396	MANAGED ACCESS OF A BACKUP STORAGE	EMC Corporation
		SYSTEM COUPLED TO A NETWORK	
09521930	6629189	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
		TARGET DEVICES IN A MULTI-PATH COMPUTER	
		SYSTEM	
09524147	6459545	USE OF MATTE MATERIALS TO REDUCE SIGNAL	EMC Corporation
		POLLUTION IN CARTRIDGE DETECTION	
		CIRCUITRY	
09524337	6772339	MIX AND MATCH: A NEW APPROACH TO SECURE	EMC Corporation
		MULTIPARTY COMPUTATION	
09525648	6571367	METHOD AND APPARATUS CONNECTING	EMC Corporation
		BETWEEN A FIBER CHANNEL AND A CACHE	
		MEMORY	
09527156	6466406	DATA STORAGE CARTRIDGE HAVING ONE OR	EMC Corporation
		MORE SURFACE RECESSES FOR IMPROVED	
		INTERNAL AIR CIRCULATION	
09528011	6398324	SYSTEM AND METHOD FOR RECONSTRUCTING	EMC Corporation
		DATA ASSOCIATED WITH PROTECTED STORAGE	
		VOLUME STORED IN MULTIPLE MODULES OF	
		BACK-UP MASS DATA STORAGE FACILITY	
09533009	6553471	CONTROLLING ACCESS TO A STORAGE DEVICE BY	EMC Corporation
		CONTROLLING PORTS THERETO	
09533025	6898727	METHOD AND APPARATUS FOR PROVIDING HOST	EMC Corporation
		RESOURCES FOR AN ELECTRONIC COMMERCE	
		SITE	
09533154	6365904	SYSTEM AND METHOD OF HEAT SIGNATURE	EMC Corporation
		VERIFICATION/AUTHENTICATION OF AN OBJECT	
09533395	6587970	METHOD AND APPARATUS FOR PERFORMING SITE	EMC Corporation
		FAILOVER	
09533409	7281031	METHOD AND APPARATUS FOR PROVIDING	EMC Corporation
		ADDITIONAL RESOURCES FOR A HOST COMPUTER	
09535134	6728836	SEGMENTING CACHE TO PROVIDE VARYING	EMC Corporation
		SERVICE LEVELS	
09536194	6347734	METHODS AND APPARATUS FOR INSTALLING A	EMC Corporation
		MODULE ON A CIRCUIT BOARD USING HEATING	
		AND COOLING TECHNIQUES	
09536195	6398935	METHOD FOR MANUFACTURING PCB'S	EMC Corporation
09539747	6792047	REAL TIME PROCESSING AND STREAMING OF	EMC Corporation
		SPLICED ENCODED MPEG VIDEO AND	
		ASSOCIATED AUDIO	
09539966	7003601	DATA STORAGE SYSTEM HAVING SEPARATE	EMC Corporation
		DATA TRANSFER SECTION AND MESSAGE	
		NETWORK WITH PLURAL DIRECTORS ON A	
		COMMON PRINTED CIRCUIT BOARD	
09539967	6557074	QUALITY OF SWAPS OF DATA STORAGE VOLUMES	EMC Corporation
09539968	6851019	SWAPPING DATA STORAGE VOLUMES	EMC Corporation
09540306	7096481	PREPARATION OF METADATA FOR SPLICING OF	EMC Corporation
		ENCODED MPEG VIDEO AND AUDIO	
09540347	6678332	SEAMLESS SPLICING OF ENCODED MPEG VIDEO	EMC Corporation
		AND AUDIO	
09540671	6614616	DETERMINING SEEK TIMES	EMC Corporation
09540675	6581112	DIRECT MEMORY ACCESS (DMA) RECEIVER	EMC Corporation

Application	Registration	mya.	
Number	Number	Title	Owner
09540825	6993621	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD AND REDUNDANT SWITCHING NETWORKS	EMC Corporation
09540826	6665771	INTRA-DISK SWAPPING OF DATA STORAGE VOLUMES	EMC Corporation
09540827	6584513	DIRECT MEMORY ACCESS (DMA) TRANSMITTER	EMC Corporation
09540828	7117275	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK	EMC Corporation
09541158	6633954	A METHOD FOR ENHANCING HOST APPLICATION PERFORMANCE WITH A DASD USING TASK PRIORITIES	EMC Corporation
09541159	6917569	METHOD FOR DETERMINING SEEK TIMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09542171	6775720	METHOD AND SYSTEM FOR CONFIGURING A MASS STORAGE SYSTEM FOR MEASURING SYSTEM PERFORMANCE	EMC Corporation
09542463	6647458	BENCHMARK TOOL WRITE ANALYSIS FOR A MASS STORAGE SYSTEM	EMC Corporation
09547510	6636250	METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
09547533	6691165	DISTRIBUTED SERVER CLUSTER FOR CONTROLLING NETWORK TRAFFIC	EMC Corporation
09548188	7299294	DISTRIBUTED TRAFFIC CONTROLLER FOR NETWORK DATA	EMC Corporation
09550825	6424502	ROLL-STABILIZED HEAD LIFTING APPARATUS AND METHOD FOR A DATA STORAGE DEVICE	EMC Corporation
09551720	6356441	DISK DRIVE ASSEMBLY WITH IMPROVED SECURING AND RELEASING MECHANISM	EMC Corporation
09552878	7016951	SYSTEM AND METHOD FOR NETWORK SECURITY	EMC Corporation
09556534	6424492	FREQUENCY BASED CARTRIDGE DETECTION SCHEME	EMC Corporation
09558638	6535005	SYSTEMS AND METHODS FOR OBTAINING AN ELECTRICAL CHARACTERISTIC OF A CIRCUIT BOARD ASSEMBLY PROCESS	EMC Corporation
09561161	6611879	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH TRACE BUFFER	EMC Corporation
09561531	6779071	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH STATUS REGISTER	EMC Corporation
09561532	6651130	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH BUS ARBITRATION	EMC Corporation
09564103	6432346	PROCESS OF MAKING MAGNETIC RECORDING DISK	EMC Corporation
09566592	6801949	DISTRIBUTED SERVER CLUSTER WITH GRAPHICAL USER INTERFACE	EMC Corporation
09568386	6754718	PUSHING ATTRIBUTE INFORMATION TO STORAGE DEVICES FOR NETWORK TOPOLOGY ACCESS	EMC Corporation

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Number	Number	Title	Owner
09578121	6260110	VIRTUAL TAPE SYSTEM WITH VARIABLE SIZE	EMC Corporation
09579427	6691209	TOPOLOGICAL DATA CATEGORIZATION AND	EMC Corporation
		FORMATTING FOR A MASS STORAGE SYSTEM	
09579670	7219260	FAULT TOLERANT SYSTEM SHARED SYSTEM	EMC Corporation
		RESOURCE WITH STATE MACHINE LOGGING	
09579671	6678788	DATA TYPE AND TOPOLOGICAL DATA	EMC Corporation
		CATEGORIZATION AND ORDERING FOR A MASS	
		STORAGE SYSTEM	
09580186	6594775	FAULT HANDLING MONITOR TRANSPARENTLY	EMC Corporation
		USING MULTIPLE TECHNOLOGIES FOR FAULT	_
		HANDLING IN A MULTIPLE HIERARCHAL/PEER	
		DOMAIN FILE SERVER WITH DOMAIN CENTERED,	
		CROSS DOMAIN COOPERATIVE FAULT HANDLING	
		MECHANISMS	
09580187	6718481	MULTIPLE HIERARCHAL/PEER DOMAIN FILE	EMC Corporation
0,000107	0710101	SERVER WITH DOMAIN BASED, CROSS DOMAIN	21.10 Corporation
		COOPERATIVE FAULT HANDLING MECHANISMS	
09580539	6578160	FAULT TOLERANT, LOW LATENCY SYSTEM	EMC Corporation
07300337	0570100	RESOURCE WITH HIGH LEVEL LOGGING OF	Livic corporation
		SYSTEM RESOURCE TRANSACTIONS AND CROSS-	
		SERVER MIRRORED HIGH LEVEL LOGGING OF	
		SYSTEM RESOURCE TRANSACTIONS	
00507702	7043715		EMC Composition
09587783	/043/15	METHOD AND APPARATUS FOR CUSTOMIZING	EMC Corporation
00500045	(50.455.4	SOFTWARE	ED (C) C
09589247	6724554	READ/WRITE PROTECT SCHEME FOR A DISK	EMC Corporation
00500500	((22.11.7	CARTRIDGE AND DRIVE	ED (C) C
09590508	6633445	METHOD AND APPARATUS FOR ELECTRICALLY	EMC Corporation
		COUPLING COMPONENTS IN A REMOVABLE	
00.500.500		CARTRIDGE	77.60.0
09590509	6628474	METHOD AND APPARATUS FOR ELECTROSTATIC	EMC Corporation
		DISCHARGE PROTECTION IN A REMOVABLE	
		CARTRIDGE	
09590511	6717762	METHOD AND APPARATUS FOR MAKING A DRIVE	EMC Corporation
		COMPATIBLE WITH A REMOVABLE CARTRIDGE	
09590747	6360276	METHODS AND APPARATUS FOR DETERMINING,	EMC Corporation
		VERIFYING, AND REDISCOVERING NETWORK IP	
		ADDRESSES	
09591540	6624979	METHOD AND APPARATUS FOR PARKING AND	EMC Corporation
		RELEASING A MAGNETIC HEAD	
09591827	6697367	MULTIHOP SYSTEM CALLS	EMC Corporation
09596295	6658522	METHOD TO REDUCE OVERHEAD ASSOCIATED	EMC Corporation
		WITH SYSTEM I/0 IN A MULTIPROCESSOR	•
		COMPUTER SYSTEM	
09599229	7953834	SYSTEM AND METHOD FOR REDUCING	EMC Corporation
		BANDWIDTH CONSUMED BY LOOPING MESSAGE	
		PACKETS IN LOCAL AREA NETWORK	
09604592	6484173	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
09604853	6813686	METHOD AND APPARATUS FOR IDENTIFYING	EMC Corporation
V7UU <b>+0</b> JJ	0013000	LOGICAL VOLUMES IN MULTIPLE ELEMENT	Envic Corporation
		COMPUTER STORAGE DOMAINS	

Application Number	Registration Number	Title	Owner
09605040	6842784	USE OF GLOBAL LOGICAL VOLUME IDENTIFIERS TO ACCESS LOGICAL VOLUMES STORED AMONG A PLURALITY OF STORAGE ELEMENTS IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605043	6760828	METHOD AND APPARATUS FOR USING LOGICAL VOLUME IDENTIFIERS FOR TRACKING OR IDENTIFYING LOGICAL VOLUME STORED IN THE STORAGE SYSTEM	EMC Corporation
09605044	7065610	METHOD AND APPARATUS FOR MAINTAINING INVENTORY OF LOGICAL VOLUMES STORED ON STORAGE ELEMENTS	EMC Corporation
09605172	6728962	CONTEXT SWAPPING IN MULTITASKING KERNEL	EMC Corporation
09605201	6978324	METHOD AND APPARATUS FOR MOVING LOGICAL ENTITIES AMONG STORAGE ELEMENTS IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605378	6708265	METHOD AND APPARATUS FOR MOVING ACCESSES TO LOGICAL ENTITIES FROM ONE STORAGE ELEMENT TO ANOTHER STORAGE ELEMENT IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605553	7225191	METHOD AND APPARATUS FOR VERIFYING STORAGE ACCESS REQUESTS IN A COMPUTER STORAGE SYSTEM WITH MULTIPLE STORAGE ELEMENTS	EMC Corporation
09605554	6912548	LOGICAL VOLUME IDENTIFIER DATABASE FOR LOGICAL VOLUMES IN A COMPUTER STORAGE SYSTEM	EMC Corporation
09605626	6687903	INHIBITING STARVATION IN A MULTITASKING OPERATING SYSTEM	EMC Corporation
09605812	7296271	REPLACEABLE SCHEDULING ALGORITHM IN A MULTITASKING KERNEL	EMC Corporation
09606496	6742017	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH POINTER OR COUNTERS	EMC Corporation
09606505	6816916	DATA STORAGE SYSTEM HAVING MULTI- CAST/UNICAST	EMC Corporation
09606730	7007194	DATA STORAGE SYSTEM HAVING POINT-TO- POINT CONFIGURATION	EMC Corporation
09606734	7073020	METHOD FOR MESSAGE TRANSFER IN COMPUTER STORAGE SYSTEM	EMC Corporation
09608050	6771703	EFFICIENT SCALING OF NONSCALABLE MPEG-2 VIDEO	EMC Corporation
09608469	6938039	CONCURRENT FILE ACCESS AT A TARGET FILE SERVER DURING MIGRATION OF FILE SYSTEMS BETWEEN FILE SERVERS USING A NETWORK FILE SYSTEM ACCESS PROTOCOL	EMC Corporation
09608521	8281022	METHOD AND APPARATUS FOR IMPLEMENTING HIGH-PERFORMANCE, SCALEABLE DATA PROCESSING AND STORAGE SYSTEMS	EMC Corporation
09608919	6871006	PROCESSING OF MPEG ENCODED VIDEO FOR TRICK MODE OPERATION	EMC Corporation
09609966	6385551	METHODS AND APPARATUS FOR OBTAINING A CONNECTION CHARACTERISTIC OF A CONNECTION ASSEMBLY	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
09609967	6681353	METHODS AND APPARATUS FOR OBTAINING A	EMC Corporation
		TRACE OF A DIGITAL SIGNAL WITHIN A FIELD	
		PROGRAMMABLE GATE ARRAY DEVICE	
09610405	6535994	METHOD AND APPARATUS FOR IDENTIFYING AND	EMC Corporation
		REPAIRING MISMATCHED DATA	
09611913	7185192	METHOD AND APPARATUS FOR CONTROLLING	EMC Corporation
00610110	(======================================	ACCESS TO A RESOURCE	77.40.0
09613118	6754682	METHOD AND APPARATUS FOR ENABLING	EMC Corporation
		CONSISTENT ANCILLARY DISK ARRAY STORAGE	
		DEVICE OPERATIONS WITH RESPECT TO A MAIN	
00/14920	6584544	APPLICATION  METHOD AND ADDADATHS FOR DREDADING A	EMC Composition
09614820	6584544	METHOD AND APPARATUS FOR PREPARING A	EMC Corporation
00/14050	(5701(4	DISK FOR USE IN A DISK ARRAY	EMC Commontion
09614859	6578164	METHOD FOR DETECTING TRANSIENT WRITE	EMC Corporation
		ERRORS IN A DISK DRIVE HAVING A DUAL	
09618488	6480380	TRANSDUCER SLIDER METHODS AND APPARATUS FOR COOLING A DISK	EMC Corporation
09010400	0480380	DRIVE	ENIC Corporation
09620013	6658592	ERROR DETECTION IN A DISK STORAGE SYSTEM	EMC Corporation
09620176	7502922	COMPUTER NETWORK HAVING A SECURITY	EMC Corporation
09020170	7302922	LAYER INTERFACE INDEPENDENT OF THE	Livic Corporation
		APPLICATION TRANSPORT MECHANISM	
09620491	6328590	METHODS AND APPARATUS FOR CONTROLLING	EMC Corporation
07020471	0328370	ATTACHMENT OF AN ELECTRONIC MODULE WITH	Livic Corporation
		A CIRCUIT BOARD CONNECTOR	
09628967	6487071	METHODS AND APPARATUS FOR DAMPENING	EMC Corporation
07020707	0107071	VIBRATION OF A DISK DRIVE	Livie corporation
09628968	6515854	DISK DRIVE ASSEMBLY WITH PRESS FIT LEVER	EMC Corporation
09629652	6523036	INTERNET DATABASE SYSTEM	EMC Corporation
09630711	7356696	PROOFS OF WORK AND BREAD PUDDING	EMC Corporation
0,000,11	7550050	PROTOCOLS	2e corporation
09634967	6389511	ON-LINE DATA VERIFICATION AND REPAIR IN	EMC Corporation
	000,000	REDUNDANT STORAGE SYSTEMS	
09636293	6898650	QUEUEING METHOD SUPPORTING MULTIPLE	EMC Corporation
		CLIENT ACCESSES SIMULTANEOUSLY	· · · · · · · · · · · · · · · · · · ·
09636360	6386435	SYSTEMS AND METHODS FOR DISTRIBUTING	EMC Corporation
		SOLDER PASTE USING A TOOL HAVING A SOLDER	•
		PASTE APPERTURE WITH A NON-CIRCULAR	
		CROSS-SECTIONAL SHAPE	
09637615	6701451	SELECTIVE CORRECTION OF DATA ERRORS	EMC Corporation
09641224	7082441	METHOD FOR STORAGE AND MANIPULATION OF	EMC Corporation
		STORAGE SYSTEM METRICS	
09641227	6886020	METHOD AND APPARATUS FOR MANAGING AND	EMC Corporation
		ARCHIVING PERFORMANCE INFORMATION	
		RELATING TO STORAGE SYSTEM	
09641773	6865514	POST TEST DATA PROCESSING OF A MASS	EMC Corporation
		STORAGE SYSTEM	
09642267	7171338	OUTPUT PERFORMANCE TRENDS OF A MASS	EMC Corporation
	40.155.11	STORAGE SYSTEM	
09642268	6845344	GRAPHICAL USER INPUT INTERFACE FOR TESTING	EMC Corporation
00611156	(0.50.5.1.1	PERFORMANCE OF A MASS STORAGE SYSTEM	77.40.0
09644472	6278566	METHOD AND APPARATUS FOR INCREASING DISC	EMC Corporation
		DRIVE PERFORMANCE	

Application	Registration		
Number	Number	Title	Owner
09654440	6519610	DISTRIBUTED REFERENCE LINKS FOR A	EMC Corporation
		DISTRIBUTED DIRECTORY SERVER SYSTEM	
09658764	6552277	TECHNIQUES FOR FORMING A CONNECTION	EMC Corporation
		BETWEEN A PIN AND A CIRCUIT BOARD	
09661103	7051101	METHODS AND APPARATUS FOR CONTROLLING	EMC Corporation
		DEVICES WITHIN STORAGE NETWORKS	
09662306	6356057	METHODS AND APPARATUS FOR TESTING A	EMC Corporation
		POWERABILITY CHARACTERISTIC OF A BACKUP	
00662540	((22221	POWER SUPPLY	EMC C
09663540	6622221	WORKLOAD ANALYZER AND OPTIMIZER	EMC Corporation
09665039	6583959	INTEGRATION READ WRITE HEAD ASSEMBLY HAVING AIR	EMC Corporation
09003039	0383939	BEARING FEATURES FOR CONTAMINANT	EMC Corporation
		CONTROL IN FLEXIBLE MEDIA HEAD-DISK	
		INTERFACE	
09669347	6571259	PREALLOCATION OF FILE SYSTEM CACHE	EMC Corporation
07007317	03/123/	BLOCKS IN A DATA STORAGE SYSTEM	Livic corporation
09669939	6823336	DATA STORAGE SYSTEM AND METHOD FOR	EMC Corporation
0,00,,5,	0023330	UNINTERRUPTED READ-ONLY ACCESS TO A	Livie corporation
		CONSISTENT DATASET BY ONE HOST PROCESSOR	
		CONCURRENT WITH READ-WRITE ACCESS BY	
		ANOTHER HOST PROCESSOR	
09670137	6535891	METHOD AND APPARATUS FOR IDENTIFYING	EMC Corporation
		ACCESSES TO A REPOSITORY OF LOGICAL	1
		OBJECTS STORED ON A STORAGE SYSTEM BASED	
		UPON INFORMATION IDENTIFYING ACCESSES TO	
		PHYSICAL STORAGE LOCATIONS	
09670429	6618649	METHODS AND APPARATUS FOR	EMC Corporation
		CHARACTERIZING A CIRCUIT BREAKER DEVICE	
09670454	6816891	NETWORK FILE SERVER SHARING LOCAL CACHES	EMC Corporation
		OF FILE ACCESS INFORMATION IN DATA	
		PROCESSORS ASSIGNED TO RESPECTIVE FILE	
00670707	((0.42(0	SYSTEMS  DATA STOPAGE SYSTEM HANDING SEPARATE	EMO C
09670707	6684268	DATA TRANSFER SECTION AND MESSACE	EMC Corporation
		DATA TRANSFER SECTION AND MESSAGE NETWORK HAVING CPU BUS SELECTOR	
09670709	6631433	BUS ARBITER FOR A DATA STORAGE SYSTEM	EMC Corporation
09670783	7680819	MANAGING DIGITAL IDENTITY INFORMATION	EMC Corporation
09670933	6801960	SWITCH-BASED ACCELERATION OF COMPUTER	EMC Corporation
07070733	0001700	DATA STORAGE EMPLOYING AGGREGATIONS OF	Livic corporation
		DISK ARRAYS	
09671038	6901468	DATA STORAGE SYSTEM HAVING SEPARATE	EMC Corporation
0,071000	0501100	DATA TRANSFER SECTION AND MESSAGE	2e corporation
		NETWORK HAVING BUS ARBITRATION	
09672421	6928466	METHOD AND SYSTEM FOR IDENTIFYING	EMC Corporation
		MEMORY COMPONENT IDENTIFIERS ASSOCIATED	F
		WITH DATA	
09672739	6769115	ADAPTIVE INTERFACE FOR A SOFTWARE	EMC Corporation
		DEVELOPMENT ENVIRONMENT	
09675396	7065763	METHOD OF REDUCING CONTENTION OF A	EMC Corporation
		HIGHLY CONTENTED LOCK PROTECTING	
		MULTIPLE DATA ITEMS	

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09675420	6611852	SYSTEM AND METHOD FOR CLEANING A LOG STRUCTURE	EMC Corporation
09675423	6865650	SYSTEM AND METHOD FOR HIERARCHICAL DATA STORAGE	EMC Corporation
09675485	6625591	VERY EFFICIENT IN-MEMORY REPRESENTATION OF LARGE FILE SYSTEM DIRECTORIES	EMC Corporation
09676222	6507890	SYSTEM AND METHOD FOR EXPANDING A LOG STRUCTURE IN A DISK ARRAY	EMC Corporation
09676449	6604171	MANAGING A CACHE MEMORY	EMC Corporation
09676686	6591335	FAULT TOLERANT DUAL CACHE SYSTEM	EMC Corporation
09676709	6546457	METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
09676732	6789206	COMPUTER ELEMENT	EMC Corporation
09677120	6915516	APPARATUS AND METHOD FOR PROCESS DISPATCHING BETWEEN INDIVIDUAL PROCESSORS OF A MULTI-PROCESSOR SYSTEM	EMC Corporation
09679456	7167867	SELF-DESCRIBING FILE SYSTEM	EMC Corporation
09680156	7010575	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK HAVING BUS ARBITRATION	EMC Corporation
09680157	6609164	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH DATA PIPE DMA	EMC Corporation
09688593	6282041	METHOD AND APPARATUS FOR INCREASING DISC DRIVE PERFORMANCE	EMC Corporation
09691490	6912686	APPARATUS AND METHODS FOR DETECTING ERRORS IN DATA	EMC Corporation
09692974	6728840	METHODS AND APPARATUS FOR PROVIDING HOST-CONTROLLED CACHING OF DATA IN A STORAGE SYSTEM	EMC Corporation
09694071	7475199	SCALABLE NETWORK FILE SYSTEM	EMC Corporation
09697454	6516390	METHODS AND APPARATUS FOR ACCESSING DATA WITHIN A DATA STORAGE SYSTEM	EMC Corporation
09697765	6640285	METHOD AND APPARATUS FOR IMPROVING THE EFFICIENCY OF CACHE MEMORIES USING STORED ACTIVITY MEASURES	EMC Corporation
09702187	6442706	RESOURCE ALLOCATION THROTTLE FOR REMOTE DATA MIRRORING SYSTEM	EMC Corporation
09705991	6529998	ADAPTIVE PREFETCHING OF DATA FROM A DISK	EMC Corporation
09709077	6664964	CORRELATION CRITERIA FOR LOGICAL VOLUMES	EMC Corporation
09715643	7216366	STORAGE BASED APPARATUS FOR ANTI-VIRUS	EMC Corporation
09715681	7861302	PHYSICAL SCANNING OF STORAGE BASED APPARATUS FOR ANTIVIRUS	EMC Corporation
09723606	6609178	SELECTIVE VALIDATION FOR QUEUED MULTIMODAL LOCKING SERVICES	EMC Corporation
09724014	6757769	COOPERATIVE LOCK OVERRIDE PROCEDURE	EMC Corporation
09724043	6718448	QUEUED LOCKING OF A SHARED RESOURCE USING MULTIMODAL LOCK TYPES	EMC Corporation
09724044	6691194	SELECTIVE ASSOCIATION OF LOCK OVERRIDE PROCEDURES WITH QUEUED MULTIMODAL LOCK	EMC Corporation
09725407	6487635	MANAGEMENT OF ORPHAN TRACKS	EMC Corporation

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Number	Number	Title	Owner
09726498	6772285	SYSTEM AND METHOD FOR IDENTIFYING BUSY DISK STORAGE UNITS	EMC Corporation
09731244	6633925	OPERATING SYSTEM FOR GENERATING OVERLAPPED INPUT-OUTPUT REQUESTS TO A DEVICE IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
09731245	6665739	DATA PROCESSING SYSTEM WITH PARALLEL ACCESS TO A LOGICAL VOLUME ON A DISK ARRAY STORAGE DEVICE	EMC Corporation
09731513	6665738	DISK ARRAY STORAGE DEVICE CAPABLE OF HANDLING OVERLAPPED INPUT-OUTPUT REQUESTS	EMC Corporation
09731930	6678748	METHOD FOR OPTIMIZING MULTIPLE INPUT/OUTPUT REQUESTS TO A SINGLE LOGICAL DEVICE	EMC Corporation
09740281	6687718	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
09741494	6948031	METHODS AND APPARATUS FOR TRANSFERRING A DATA ELEMENT WITHIN A DATA STORAGE SYSTEM	EMC Corporation
09742720	7051108	METHOD AND SYSTEM OF INTERPROCESS COMMUNICATIONS	EMC Corporation
09745573	6779150	CRC ERROR DETECTION SYSTEM AND METHOD	EMC Corporation
09745814	6636933	DATA STORAGE SYSTEM HAVING CROSSBAR SWITCH WITH MULTI-STAGED ROUTING	EMC Corporation
09745859	6604176	DATA STORAGE SYSTEM HAVING PLURAL FAULT DOMAINS	EMC Corporation
09746090	7103652	AMBIGUITY-PURGING AND TEMPLATE-CONFLICT-RESOLUTION IN COMPUTER NETWORK EVENTS-NOTIFICATION	EMC Corporation
09746166	6665812	STORAGE ARRAY NETWORK BACKUP CONFIGURATION	EMC Corporation
09746174	6993705	CYCLIC REDUNDANCY CHECK (CRC) PARITY CHECK SYSTEM AND METHOD	EMC Corporation
09746304	6781782	METHOD AND APPARATUS FOR SAVING CALIBRATION PARAMETERS FOR A REMOVABLE CARTRIDGE	EMC Corporation
09746496	6868516	METHOD FOR VALIDATING WRITE DATA TO A MEMORY	EMC Corporation
09747054	6990493	FILE ACCESS SYSTEM	EMC Corporation
09747179	6934724	METHODS AND APPARATUS FOR REDUCING RESOURCE CONTENTION IN PARALLEL DATA BACKUP PROCESSES	EMC Corporation
09747376	6583989	COMPUTER SYSTEM	EMC Corporation
09747737	7266817	METHOD AND SYSTEM FOR CREATING PACKAGES FOR MULTIPLE PLATFORMS	EMC Corporation
09748053	7260636	METHOD AND APPARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
09749160	6751703	DATA STORAGE SYSTEMS AND METHODS WHICH UTILIZE AN ON-BOARD CACHE	EMC Corporation
09749333	6804690	METHOD FOR PHYSICAL BACKUP IN DATA LOGICAL ORDER	EMC Corporation

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09750554	7023924	METHOD OF PAUSING AN MPEG CODED VIDEO STREAM	EMC Corporation
09750565	6937770	ADAPTIVE BIT RATE CONTROL FOR RATE REDUCTION OF MPEG CODED VIDEO	EMC Corporation
09751494	6477618	DATA STORAGE SYSTEM CLUSTER ARCHITECTURE	EMC Corporation
09751659	7080375	PARALLEL DISPATCH WAIT SIGNALING METHOD, METHOD FOR REDUCING CONTENTION OF HIGHLY CONTENDED DISPATCHER LOCK, AND RELATED OPERATING SYSTEMS, MULTIPROCESSOR COMPUTER SYSTEMS AND PRODUCTS	EMC Corporation
09751684	7165152	METHOD AND APPARATUS FOR MANAGING ACCESS TO STORAGE DEVICES IN A STORAGE SYSTEM WITH ACCESS CONTROL	EMC Corporation
09752176	6813522	METHOD OF SHARING MEMORY IN A MULTI- PROCESSOR SYSTEM INCLUDING A CLONING OF CODE AND DATA	EMC Corporation
09752193	6708297	METHOD AND SYSTEM FOR MONITORING ERRORS ON FIELD REPLACEABLE UNITS	EMC Corporation
09752199	7200641	METHOD AND SYSTEM FOR ENCODING SCSI REQUESTS FOR TRANSMISSION USING TCP/IP	EMC Corporation
09753373	6574667	DYNAMIC ROUTING FOR PERFORMANCE PARTITIONING IN A DATA PROCESSING NETWORK	EMC Corporation
09754860	6862659	UTILIZING DISK CACHE AS PART OF DISTRIBUTED CACHE	EMC Corporation
09760176	6763521	LOW COST STORAGE DEVICE AND METHOD OF USING THE SAME	EMC Corporation
09766526	6826580	DISTRIBUTED STORAGE RESOURCE MANAGEMENT IN A STORAGE AREA NETWORK	EMC Corporation
09767773	6938122	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
09768323	7870195	INTER-PROCESSOR MESSAGING	EMC Corporation
09768994	6883018	SCANNING A MESSAGE-LIST	EMC Corporation
09769581	6721766	RESTORING MULTIPLE WORK ITEMS SIMULTANEOUSLY FROM BACKUP AND DATA RESTORE	EMC Corporation
09769600	6704886	DATA BACKUP SYSTEM HAVING INDEPENDENT DATA RESTORE EXECUTION	EMC Corporation
09769604	7558840	DATA BACKUP SYSTEM HAVING A FLEXIBLE RESTORE ARCHITECTURE	EMC Corporation
09774532	6766397	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
09776327	6799255	STORAGE MAPPING AND PARTITIONING AMONG MULTIPLE HOST PROCESSORS	EMC Corporation
09777002	7509420	SYSTEM AND METHOD FOR INTELLIGENT, GLOBALLY DISTRIBUTED NETWORK STORAGE	EMC Corporation
09777486	6631043	ELIMINATION OF 3-PASS WRITE	EMC Corporation
09777977	6578121	FILE MAPPING SYSTEM AND RELATED TECHNIQUES	EMC Corporation
09778449	6629105	FACILITATING USER ADMINISTRATION OF DIRECTORY TREES	EMC Corporation
09783162	6742146	TECHNIQUES FOR PROVIDING DATA WITHIN A DATA STORAGE SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
09784381	7134138	METHODS AND APPARATUS FOR PROVIDING	EMC Corporation
09704301	/134136	SECURITY FOR A DATA STORAGE SYSTEM	ENIC Corporation
09794656	6732231	SYSTEM AND METHOD FOR MANAGEMENT OF	EMC Corporation
07/7 <del>T</del> 030	0732231	MIRRORED STORAGE DEVICES STORING DEVICE	Zivie corporation
		SERIAL NUMBERS	
09794696	6813731	METHODS AND APPARATUS FOR ACCESSING	EMC Corporation
		TRACE DATA	· · · · · · · · · · · · · · · ·
09794862	6732117	TECHNIQUES FOR HANDLING CLIENT-ORIENTED	EMC Corporation
		REQUESTS WITHIN A DATA STORAGE SYSTEM	
09796078	6968347	DATA RECOVERY METHOD AND APPARATUS	EMC Corporation
09796168	7082100	STORAGE SYSTEM ADAPTER AND METHOD OF	EMC Corporation
		USING SAME	
09796259	6804794	ERROR CONDITION HANDLING	EMC Corporation
09797347	7032228	COMMON DEVICE INTERFACE	EMC Corporation
09798571	6839750	SINGLE MANAGEMENT POINT FOR A STORAGE	EMC Corporation
		SYSTEM OR STORAGE AREA NETWORK	
09798580	6516394	SYSTEM AND METHOD FOR MANAGEMENT OF	EMC Corporation
		STORAGE DEVICES USING LABELS	
09800091	6687787	CONFIGURATION OF A DATA STORAGE SYSTEM	EMC Corporation
09800392	6509752	TESTING APPARATUS WITH MECHANISM FOR	EMC Corporation
		PREVENTING DAMAGE TO UNIT UNDER TEST	
09801252	6553464	OBTAINING DATA FROM A REMOTE STORAGE	EMC Corporation
		DEVICE	
09802278	7472093	TARGETED DELIVERY OF INFORMATIONAL	EMC Corporation
0000000	==1.6101	CONTENT WITH PRIVACY PROTECTION	77.60
09802485	7716484	SYSTEM AND METHOD FOR INCREASING THE	EMC Corporation
		SECURITY OF ENCRYPTED SECRETS AND	
09804320	7363657	AUTHENTICATION USING A VIRUS CHECKER IN ONE FILE SERVER TO	EMC Corporation
09804320	/30303/	CHECK FOR VIRUSES IN ANOTHER FILE SERVER	EMC Corporation
09804372	6654855	METHOD AND APPARATUS FOR IMPROVING THE	EMC Corporation
09004372	0054655	EFFICIENCY OF CACHE MEMORIES USING	Livic Corporation
		CHAINED METRICS	
09804460	7359507	SERVER-ASSISTED REGENERATION OF A STRONG	EMC Corporation
0,001100	7337507	SECRET FROM A WEAK SECRET	Zivie corporation
09804479	6839763	SYSTEM AND METHOD FOR EXPEDITING	EMC Corporation
		TRANSFER OF DATA FROM A LOCAL STORAGE	
		FACILITY TO A REMOTE STORAGE FACILITY	
09808248	6481527	METHODS AND APPARATUS FOR ATTENUATING	EMC Corporation
		NOISE FROM A CABINET THAT HOUSES	1
		COMPUTER EQUIPMENT	
09808351	6985849	SYSTEM AND METHOD FOR PORTABLE	EMC Corporation
		EMULATION OF OPERATING ENVIRONMENT	
09809001	6675274	METHOD AND APPARATUS FOR DETERMINING	EMC Corporation
		VOLUME SWAPS	
09812740	6775679	BUILDING A META FILE SYSTEM FROM FILE	EMC Corporation
		SYSTEM FROM FILE SYSTEM CELLS	
09812911	6718352	METHODS AND APPARATUS FOR MANAGING A	EMC Corporation
		DATA SET STORED ON A DATA STORAGE DEVICE	
09814642	7088703	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
09814662	6496914	METHOD AND SYSTEM FOR ADMINISTERING	EMC Corporation
		STORAGE DEVICES ON A NETWORK	

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Number	Number	Title	Owner
09814994	7152178	METHOD AND SYSTEM FOR DETECTING PATH	EMC Corporation
		FAILURE AND PERFORMING INPUT/OUTPUT	
		RECOVERY IN A MULTI-PATH INPUT/OUTPUT	
		SYSTEM	
09815128	6721812	METHOD AND SYSTEM FOR ADAPTIVE RESOURCE	EMC Corporation
00017171		MANAGEMENT	77.40.0
09815454	7370351	CROSS DOMAIN AUTHENTICATION AND	EMC Corporation
		SECURITY SERVICES USING PROXIES FOR HTTP	
09815560	7219368	ACCESS ROBUST VISUAL PASSWORDS	EMC Corporation
09817328	6671774	METHOD AND APPARATUS FOR PERFORMING	EMC Corporation
0901/320	00/1//4	SWAP ANALYSIS	ENIC Corporation
09817437	7406682	TRANSLATOR-COMPILER FOR CONVERTING	EMC Corporation
07017437	7400002	LEGACY MANAGEMENT SOFTWARE	Livic Corporation
09819012	6710979	METHOD AND SYSTEM FOR HEAD RETRACTION IN	EMC Corporation
07017012	0/105/5	A DATA STORAGE DEVICE	Livie corporation
09821045	6721758	SYSTEM AND METHOD FOR USING SCHEMA	EMC Corporation
		ATTRIBUTES AS META-DATA IN A DIRECTORY	
		SERVICE	
09821102	6643722	DATA STORAGE SYSTEM HAVING DIRECTOR	EMC Corporation
		BOARDS WITH PLURAL PROCESSORS	_
09821484	6738842	SYSTEM HAVING PLURAL PROCESSORS AND A	EMC Corporation
		UNI-CAST/BROADCAST COMMUNICATION	
		ARRANGEMENT	
09821485	6880032	DATA STORAGE SYSTEM HAVING CONCURRENT	EMC Corporation
		ESCON CHANNELS	
09821493	6578128	ADDRESS MANAGEMENT FOR A SHARED	EMC Corporation
		MEMORY REGION ON A MULTI-PROCESSOR	
09822709	6912630	CONTROLLER BOARD  METHOD AND APPARATUS FOR COMPUTING FILE	EMC Corporation
09822709	0912030	STORAGE ELEMENTS FOR BACKUP AND RESTORE	ENIC Corporation
09822742	6411535	POWER FACTOR CORRECTION CIRCUIT WITH	EMC Corporation
09022742	0411333	INTEGRAL BRIDGE FUNCTION	ENIC Corporation
09823024	6907081	MPEG ENCODER CONTROL PROTOCOL FOR ON-	EMC Corporation
07023024	0707001	LINE ENCODING AND MPEG DATA STORAGE	Livie Corporation
09824083	6961818	METHOD, SYSTEM AND COMPUTER PROGRAM	EMC Corporation
	0,01010	PRODUCT FOR MANAGING DATA IN A MIRRORED	
		CACHE USING AN ACCESS BALANCING	
		TECHNIQUE	
09829452	6762912	HEAD CLEANER FOR A DISK DRIVE INTO WHICH A	EMC Corporation
		DISK MEDIA CARTRIDGE IS INSERTED	_
09830747	6762906	LOW PROFILE DISK DRIVE DEVICE	EMC Corporation
09833906	6963905	SYSTEM AND METHOD INCLUDING A	EMC Corporation
		COMMUNICATION INTERFACE FOR	
		TRANSFERRING INFORMATION BETWEEN AT	
00024427	717176	LEAST TWO PROCESSES	E) (C C
09834427	7174561	MPEG DUAL-CHANNEL DECODER DATA AND	EMC Corporation
		CONTROL PROTOCOLS FOR REAL-TIME VIDEO	
00940422	6/10/100	STREAMING DATA TRANSCED STATE MACHINES	EMC Componetion
09840422	6418488	DATA TRANSFER STATE MACHINES  HEAD ASSEMBLY HAVING LEADING EDGE STED	EMC Corporation
09841717	6580584	HEAD ASSEMBLY HAVING LEADING EDGE STEP	EMC Corporation
		SCHEME FOR TUNED AIR ENTRAINMENT	

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09845385	6766418	METHOD AND APPARATUS FOR ACCESSING DATA USING A CACHE	EMC Corporation
09850551	6594742	CACHE MANAGEMENT VIA STATISTICALLY ADJUSTED SLOT AGING	EMC Corporation
09851039	6886164	SELECTION OF A RESOURCE IN A DISTRIBUTED COMPUTER SYSTEM	EMC Corporation
09852580	7027439	DATA STORAGE SYSTEM WITH IMPROVED NETWORK INTERFACE	EMC Corporation
09854719	6717758	DISK PARTITIONING TO CREATE A USABLE, LOWER CAPACITY DISK CARTRIDGE	EMC Corporation
09855592	6785678	METHOD OF IMPROVING THE AVAILABILITY OF A COMPUTER CLUSTERING SYSTEM THROUGH THE USE OF A NETWORK MEDIUM LINK STATE FUNCTION	EMC Corporation
09855993	6779067	METHOD AND APPARATUS FOR PROVIDING EXTENDED FUNCTIONALITY FOR A BUS	EMC Corporation
09858032	6721814	SYSTEM AND METHOD OF IMPROVING HOST PERFORMANCE CHARACTERISTICS BY INTELLIGENT SHIFT OF DATA CACHING FROM HOST TO CACHE-ENABLED MASS STORAGE SUBSYSTEM	EMC Corporation
09858073	6496362	METHOD AND APPARATUS FOR PROTECTING A HARD DISK DRIVE FROM SHOCK	EMC Corporation
09859547	6687797	ARBITRATION SYSTEM AND METHOD	EMC Corporation
09859605	6609185	DATA STORAGE SYSTEM HAVING MAJORITY GATE FILTER	EMC Corporation
09859659	7010740	DATA STORAGE SYSTEM HAVING NO-OPERATION COMMAND	EMC Corporation
09860924	6496908	REMOTE MIRRORING	EMC Corporation
09862813	6760862	METHODS AND APPARATUS FOR PERFORMING A MAINTENANCE PROCEDURE ON A DATA STORAGE SYSTEM	EMC Corporation
09862828	7526811	METHODS FOR DETECTING EXECUTABLE CODE WHICH HAS BEEN ALTERED	EMC Corporation
09864481	6762362	METHODS AND APPARATUS FOR CONNECTING A POWER SUPPLY TO MULTIPLE BACKPLANES WITHIN AN ELECTRONIC EQUIPMENT CABINET	EMC Corporation
09865072	6611923	SYSTEM AND METHOD FOR BACKING UP DATA STORED IN MULTIPLE MIRRORS ON A MASS STORAGE SUBSYSTEM UNDER CONTROL OF A BACKUP SERVER	EMC Corporation
09866284	6445523	READABLE INDELIBLE MARK ON STORAGE MEDIA	EMC Corporation
09867136	6970959	MULTI-EXECUTE SYSTEM CALLS	EMC Corporation
09871196	6684397	AUTO-INSTALL APPARATUS AND METHOD	EMC Corporation
09872596	7145866	VIRTUAL NETWORK DEVICES	EMC Corporation
09876492	7149787	APPARATUS AND METHOD FOR MIRRORING AND RESTORING DATA	EMC Corporation
09877287	6971090	COMMON INFORMATION MODEL (CIM) TRANSLATION TO AND FROM WINDOWS MANAGEMENT INTERFACE (WMI) IN CLIENT SERVER ENVIRONMENT	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
09877454	6778811	OFFLINE COMPUTER PRODUCT PROMOTION	EMC Corporation
		METHOD AND SYSTEM	_
09877808	6628513	MASS STORAGE DEVICE MOUNTING SYSTEM	EMC Corporation
09877810	7107337	DATA STORAGE SYSTEM WITH INTEGRATED	EMC Corporation
		SWITCHING	_
09877848	7346674	CONFIGURABLE FIBRE CHANNEL LOOP SYSTEM	EMC Corporation
09877862	7010622	SCALABLE COMMUNICATION WITHIN A	EMC Corporation
		DISTRIBUTED SYSTEM USING DYNAMIC	
		COMMUNICATION TREES	
09877869	6549979	ADDRESS MAPPING IN MASS STORAGE DEVICE	EMC Corporation
		MOUNTING SYSTEM (AS AMENDED)	
09879269	6478604	METHODS AND APPARATUS FOR FORMING AN	EMC Corporation
		INSULATION DISPLACEMENT CONNECTION	
09879347	6742138	DATA RECOVERY METHOD AND APPARATUS	EMC Corporation
09879431	6721870	PREFETCH ALGORITHM FOR SHORT SEQUENCES	EMC Corporation
09879554	7222257	METHOD AND SYSTEM FOR REPAIRING A	EMC Corporation
		REDUNDANT ARRAY OF DISK DRIVES	
09879583	6965936	METHOD FOR DETECTING AND RESOLVING A	EMC Corporation
		PARTITION CONDITION IN A CLUSTER	
09882167	6504717	FAILURE-TOLERANT HIGH-DENSITY CARD RACK	EMC Corporation
		COOLING SYSTEM AND METHOD	
09882707	6862690	HIERARCHICAL RECOVERY METHOD FOR FIBRE-	EMC Corporation
		CHANNEL DEVICES	
09885310	6751758	METHOD AND SYSTEM FOR HANDLING ERRORS IN	EMC Corporation
		A DATA STORAGE ENVIRONMENT	
09887498	6697207	METHOD AND CIRCUIT FOR PROVIDING	EMC Corporation
		VELOCITY-CONTROLLED HEAD LOADING OR	
		UNLOADING	
09887590	6717765	METHOD AND CIRCUIT FOR SENSING BACK EMF	EMC Corporation
09891020	7403974	TRUE ZERO-COPY SYSTEM AND METHOD	EMC Corporation
09891110	6640280	OBTAINING DATA FROM A REMOTE STORAGE	EMC Corporation
		DEVICE USING MULTIPLE JOBS PER DEVICE ON RA	
09891143	7577957	MULTIPLE JOBS PER DEVICE THAT ARE LINKED	EMC Corporation
		VIA A DEVICE RECORD FOR SERVICING BY	
		DIFFERENT ADAPTERS	
09891695	6697813	DATA STRUCTURES AND METHODS FOR IMAGING	EMC Corporation
		COMPUTER READABLE MEDIA	
09892161	7389312	MIRRORING NETWORK DATA TO ESTABLISH	EMC Corporation
		VIRTUAL STORAGE AREA NETWORK	
09893295	6732194	METHOD AND APPARATUS FOR MULTI-	EMC Corporation
		SEQUENTIAL DATA OPERATIONS	
09893825	7444662	VIDEO FILE SERVER CACHE MANAGEMENT USING	EMC Corporation
		MOVIE RATINGS FOR RESERVATION OF MEMORY	
00001122	# 61000 C	AND BANDWIDTH RESOURCES	
09894422	7613806	SYSTEM AND METHOD FOR MANAGING	EMC Corporation
		REPLICATION SETS OF DATA DISTRIBUTED OVER	
00001001	C#C0000	ONE OR MORE COMPUTER SYSTEMS	F) (C C
09894804	6560098	DISK DRIVE MODULE	EMC Corporation
09895466	7581048	METHOD AND APPARATUS FOR PROVIDING	EMC Corporation
		CONTINUOUS COMMUNICATION BETWEEN	
000076:3	CO # 4000	COMPUTERS	
09895941	6954833	EXPEDITED DYNAMIC MIRROR SERVICE POLICY	EMC Corporation

Application	Registration		_
Number	Number	Title	Owner
09896860	7178145	QUEUES FOR SOFT AFFINITY CODE THREADS AND	EMC Corporation
		HARD AFFINITY CODE THREADS FOR	
		ALLOCATION OF PROCESSORS TO EXECUTE THE	
		THREADS IN A MULTI-PROCESSOR SYSTEM	
09900295	6502162	CONFIGURING VECTORS OF LOGICAL STORAGE	EMC Corporation
		UNITS FOR DATA STORAGE PARTITIONING AND	
		SHARING	
09901534	6623177	SYSTEMS AND METHODS FOR PROVIDING FIBER	EMC Corporation
		OPTIC COMMUNICATIONS BETWEEN CIRCUIT	
		BOARDS	
09903113	6947257	SYSTEM AND METHOD OF INTRODUCING A	EMC Corporation
		PREFERENTIAL CURVATURE TO A FLEXIBLE	
		MEDIUM FOR REDUCED MEDIUM VIBRATION AND	
		SENSOR TO MEDIUM SPACING WITH A DISK DRIVE	
		HEAD STACK ASSEMBLY HAVING A NON-ZERO	
		STATIC ROLL ATTITUDE	
09909025	7200609	ATTRIBUTE BASED RESOURCE ALLOCATION	EMC Corporation
09915854	6886116	DATA STORAGE SYSTEM ADAPTED TO VALIDATE	EMC Corporation
		ERROR DETECTION LOGIC USED IN SUCH SYSTEM	_
09916842	6672914	METHODS AND APPARATUS FOR MOUNTING A	EMC Corporation
		BUS BAR ASSEMBLY	1
09920169	6530002	METHOD AND APPARATUS FOR MULTIPLE DISK	EMC Corporation
		DRIVE ACCESS IN A MULTI-PROCESSOR/MULTI-	
		DISK DRIVE SYSTEM	
09924777	6763446	SYSTEMS AND METHODS FOR HANDLING	EMC Corporation
		STORAGE ACCESS REQUESTS	
09924923	6807618	ADDRESS TRANSLATION	EMC Corporation
09928207	6904541	METHODS AND APPARATUS FOR PROVIDING	EMC Corporation
		POWER TO ELECTRONIC CIRCUITRY	1
09929439	6687801	ADAPTIVE COPY PENDING OFF MODE	EMC Corporation
09933468	7401271	TESTING SYSTEM AND METHOD OF USING SAME	EMC Corporation
09935556	6697208	SYSTEM AND METHODS FOR USING OFFSET	EMC Corporation
		INFORMATION ON A DATA STORAGE MEDIUM	· · · · · · · · · · · · · · · · · · ·
09940903	7249193	SRDF ASSIST	EMC Corporation
09941060	6636418	METHODS AND APPARATUS FOR INSTALLING	EMC Corporation
0,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0050110	ELECTRONIC CABINETS USING IMPROVED	Livie corporation
		STABILIZATION TECHNIQUES	
09941975	6482042	TECHNIQUES FOR ACCESSING A CIRCUIT BOARD	EMC Corporation
0)) 11) // 5	0102012	UTILIZING AN IMPROVED ADAPTOR	Livie corporation
09943244	6621692	COMPUTERIZED SYSTEM HAVING AN INTERFACE	EMC Corporation
07743244	0021072	APPARATUS WITH IMPROVED MOUNTING	Livie corporation
		FEATURES	
09944287		[REDACTED]	EMC Corporation
09944288	7783727	DYNAMIC HOST CONFIGURATION PROTOCOL IN A	EMC Corporation
07777200	1 105121	STORAGE ENVIRONMENT	Livic Corporation
09945657	6832330	REVERSIBLE MIRRORED RESTORE OF AN	EMC Corporation
077T2U2/	0032330	ENTERPRISE LEVEL PRIMARY DISK	Livic Corporation
09945939	7111298	INTER-PROCESSOR COMPETITION FOR A SHARED	EMC Corporation
U774 <i>3</i> 737	/111298		ENIC Corporation
00046005	(079292	RESOURCE	EMC Comments
09946005	6978282	INFORMATION REPLICATION SYSTEM HAVING	EMC Corporation
		AUTOMATED REPLICATION STORAGE	

Application	Registration		
Number	Number	Title	Owner
09946007	7076685	INFORMATION REPLICATION SYSTEM MOUNTING	EMC Corporation
		PARTIAL DATABASE REPLICATIONS	
09946078	7096250	INFORMATION REPLICATION SYSTEM HAVING	EMC Corporation
		ENHANCED ERROR DETECTION AND RECOVERY	
09950165	7023869	DATA STORAGE SYSTEM WITH ONE OR MORE	EMC Corporation
		INTEGRATED SERVER-LIKE BEHAVIORS	
09950546	6594739	MEMORY SYSTEM AND METHOD OF USING SAME	EMC Corporation
09951016	6715039	CACHE SLOT PROMOTION IN A REPLACEMENT	EMC Corporation
		QUEUE CACHE USING DETERMINATIONS OF	
		PROBABILITIES AND COSTS	
09951853	6980594	GENERATION OF MPEG SLOW MOTION PLAYOUT	EMC Corporation
09953226	7203925	GRAPHICAL COMPILER	EMC Corporation
09955225	6968091	INSERTION OF NOISE FOR REDUCTION IN THE	EMC Corporation
		NUMBER OF BITS FOR VARIABLE-LENGTH	1
		CODING OF (RUN, LEVEL) PAIRS	
09955505	6959116	LARGEST MAGNITUDE INDEX SELECTION FOR	EMC Corporation
		SCALING OF BLOCK CODED VIDEO	
09957219	7290017	SYSTEM AND METHOD FOR MANAGEMENT OF	EMC Corporation
		DATA REPLICATION	· · · · · · · · · · · · · · · ·
09957278	7155463	SYSTEM AND METHOD FOR REPLICATION OF ONE	EMC Corporation
***************************************	, 200 100	OR MORE DATABASES	
09960177	6578126	MEMORY SYSTEM AND METHOD OF USING SAME	EMC Corporation
09960713	6823349	METHOD AND SYSTEM FOR ESTABLISHING,	EMC Corporation
07700713	0023347	MAINTAINING, AND USING A PERSISTENT	Livic corporation
		FRACTURE LOG	
09962408	8055555	MEDIATION DEVICE FOR SCALABLE STORAGE	EMC Corporation
07702400	0033333	SERVICE	Livic Corporation
09962485	7401322	SOFTWARE DEBUGGING TOOL	EMC Corporation
09962790	7552056	SCALABLE STORAGE SERVICE REGISTRATION	EMC Corporation
07702770	7332030	APPLICATION	Livic corporation
09964977	7269648	RESOLVING MULTIPLE MASTER NODE CONFLICT	EMC Corporation
07704777	7207040	IN A DDB	Livic corporation
09965168	6415292	SHUTTLE-BASED MECHANISM FOR NUMBERING	EMC Corporation
09903100	0413292	CONCURRENT CHAINS OF INDEPENDENT DATA	Livic Corporation
		TRANSFERS	
09965393	7020669		EMC Corporation
09903393	7020009	DATA TO NETWORK ACCESSIBLE FILE SYSTEM	ENIC Corporation
		WHILE MINIMIZING RISK OF CACHE DATA	
		LOSS/DATA CORRUPTION	
09965421	6633955	FOUR WAY SUPPORT FOR DYNAMIC MIRROR	EMC Corporation
09903421	0033933	SERVICE POLICY	ENIC Corporation
09965430	7120690	MANAGING A DISTRIBUTED DIRECTORY	EMC Corporation
09903430	/120090		ENIC Corporation
00065421	7024517	DATABASE SYSTEM AND METHOD FOR CONFIGURING DATA	EMC Compandia
09965431	7024517		EMC Corporation
		STORAGE IN ACCORDANCE WITH WORKLOAD	
00065907	7027019	REQUIREMENTS  OPPERED WRITES FOR SPICE ASSIST	EMC Comment:
09965897	7237018	ORDERED WRITES FOR SRDF ASSIST	EMC Corporation
09965926	7237040	ERROR RECOVERY FOR SRDF ASSIST	EMC Corporation
09966322	6525273	CABLE MANAGEMENT	EMC Corporation
09966475	7032186	METHODS AND APPARATUS FOR REPRESENTING	EMC Corporation
		RESOURCES IN A COMPUTING SYSTEM	
		ENVIRONMENT	

Application	Registration		
Number	Number	Title	Owner
09966529	6966033	METHOD AND APPARATUS FOR GRAPHICALLY MANAGING RESOURCES	EMC Corporation
09966615	7010796	METHODS AND APPARATUS PROVIDING REMOTE OPERATION OF AN APPLICATION PROGRAMMING INTERFACE	EMC Corporation
09966639	6874046	METHOD AND APPARATUS FOR ENHANCING ACCESS TO REDUNDANT DATA STORAGE FACILITIES	EMC Corporation
09966709	8417788	FILE SYSTEM FOR VIRTUAL LOCAL AREA NETWORK	EMC Corporation
09966878	6978422	METHODS AND APPARATUS FOR DISPLAYING MANAGED RESOURCE INFORMATION	EMC Corporation
09967111	7254814	METHODS AND APPARATUS FOR MANAGING PLUG-IN SERVICES	EMC Corporation
09969079	6862697	METHOD AND SYSTEM FOR PSEUDO-RANDOM TESTING A FAULT TOLERANT NETWORK	EMC Corporation
09969295	6826582	METHOD AND SYSTEM FOR USING FILE SYSTEMS FOR CONTENT MANAGEMENT	EMC Corporation
09972284	7076636	DATA STORAGE SYSTEM HAVING AN IMPROVED MEMORY CIRCUIT BOARD CONFIGURED TO RUN SCRIPTS	EMC Corporation
09972314	7234021	METHODS AND APPARATUS FOR ACCESSING DATA ELEMENTS USING IMPROVED HASHING TECHNIQUES	EMC Corporation
09972321	6941308	METHODS AND APPARATUS FOR ACCESSING A DOUBLY LINKED LIST IN A DATA STORAGE SYSTEM	EMC Corporation
09982492	6842810	RESTRICTED ACCESS DEVICES	EMC Corporation
09989479	7660902	DYNAMIC ACCESS CONTROL AND MANAGEMENT	EMC Corporation
09994476	7602904	ORDER INVARIANT FUZZY COMMITMENT SYSTEM	EMC Corporation
09995464	6968369	REMOTE DATA FACILITY OVER AN IP NETWORK	EMC Corporation
09995919	6738268	METHODS AND APPARATUS FOR PROVIDING POWER SIGNALS TO OPERATING CIRCUITRY MOUNTED ON CIRCUIT BOARDS	EMC Corporation
09996831	6678161	FRAME CONNECTING TECHNIQUES FOR USE IN ELECTRONIC SYSTEMS	EMC Corporation
09997643	7296125	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
09997656	6941490	DUAL CHANNEL RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SERVERS	EMC Corporation
09997810	6862632	DYNAMIC RDF SYSTEM FOR TRANSFERRING INITIAL DATA BETWEEN SOURCE AND DESTINATION VOLUME WHEREIN DATA MAY BE RESTORED TO EITHER VOLUME AT SAME TIME OTHER DATA IS WRITTEN	EMC Corporation
09997926	6859894	SYSTEM AND METHOD FOR RISK MANAGEMENT OF ERRORS IN SOFTWARE PROGRAM CODE	EMC Corporation
09998494	6701392	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
09998683	6976139	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
10/962301	7217982	PHOTODIODE HAVING VOLTAGE TUNABLE SPECTRAL RESPONSE	EMC Corporation
10001317	6973537	DISK CACHE INTERFACING SYSTEM AND METHOD (AS AMENDED)	EMC Corporation
10001717	6782444	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS	EMC Corporation
10002053	6594726	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING ARRANGEMENT FOR EFFICIENTLY CONTROLLING FAST WRITE STORAGE OPERATION	EMC Corporation
10004090	7174422	DATA STORAGE DEVICE WITH TWO-TIER RAID CONTROL CIRCUITRY	EMC Corporation
10007003	7685126	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
10007762	6681390	UPGRADE OF A PROGRAM	EMC Corporation
10010769	7363494	METHOD AND APPARATUS FOR PERFORMING ENHANCED TIME-BASED AUTHENTICATION	EMC Corporation
10010778	7010620	NETWORK ADAPTER HAVING INTEGRATED SWITCHING CAPABILITIES AND PORT CIRCUITRY THAT MAY BE USED IN REMOTE MIRRORING	EMC Corporation
10012007	6804733	OPTIMIZER IMPROVED DATA COMPRESSION	EMC Corporation
10013184	7113936	OPTIMIZER IMPROVED STATISTICS COLLECTION	EMC Corporation
10016440	6941503	METHOD AND APPARATUS FOR RETAINING ERROR-CONTROL CODE PROTECTION ACROSS BLOCK-SIZE DISCONTINUITIES	EMC Corporation
10017183	7596791	METHODS AND TECHNIQUES FOR DELIVERING RICH JAVA APPLICATIONS OVER THIN-WIRE CONNECTIONS WITH HIGH PERFORMANCE AND SCALABILITY	EMC Corporation
10017304	7539745	NETWORK MANAGEMENT FOR REPLICATION OF DATA STORED IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10020146	7120161	NETWORK ADAPTER AND METHOD OF USING SAME	EMC Corporation
10021949	6910145	DATA TRANSMISSION ACROSS ASYNCHRONOUS CLOCK DOMAINS	EMC Corporation
10022080	7020754	METHOD AND SYSTEM FOR MAINTAINING DATA INTEGRITY USING DUAL WRITE OPERATIONS	EMC Corporation
10024796	8549048	WORKFLOW DATABASE FOR SCALABLE STORAGE SERVICE	EMC Corporation
10024971	7146387	SYSTEM AND METHOD FOR CONFIGURING AND PREFORMING APPLICATION BACKUPS AND RESTORES IN DIVERSE ENVIRONMENTS	EMC Corporation
10025005	7024427	VIRTUAL FILE SYSTEM	EMC Corporation
10026194	6680847	ELECTRONIC CIRCUITRY ENCLOSURE WITH AIR VENTS THAT COMPLY WITH EMISSIONS AND SAFETY STANDARDS	EMC Corporation
10027694	7054910	DATA REPLICATION FACILITY FOR DISTRIBUTED COMPUTING ENVIRONMENTS	EMC Corporation
10029054	6534716	FIBRE CHANNEL CABLE	EMC Corporation

Application Number	Registration Number	Title	Owner
10029189	6871271	INCREMENTALLY RESTORING A MASS STORAGE	EMC Corporation
		DEVICE TO A PRIOR STATE	_
10029344	6934725	MANAGEMENT OF FILE EXTENT MAPPING TO HASTEN MIRROR BREAKING IN FILE LEVEL MIRRORED BACKUPS	EMC Corporation
10029638	7539746	HIGHLY AVAILABLE TRANSACTION FAILURE DETECTION AND RECOVERY FOR ELECTRONIC COMMERCE TRANSACTIONS	EMC Corporation
10032075	7266574	IDENTIFICATION OF UPDATED FILES FOR INCREMENTAL BACKUP	EMC Corporation
10032077	6938180	LOGICAL RESTORES OF PHYSICALLY BACKED UP DATA	EMC Corporation
10032825	6848017	METHOD AND APPARATUS FOR DETERMINING CONNECTIONS IN A CROSSBAR SWITCH	EMC Corporation
10034854	7143394	ANALYZING SOFTWARE BEHAVIOR	EMC Corporation
10036333	7624265	METHODS AND APPARATUS FOR ESTABLISHING COMMUNICATIONS WITH A DATA STORAGE SYSTEM	EMC Corporation
10036547	6799248	CACHE MANAGEMENT SYSTEM FOR A NETWORK DATA NODE HAVING A CACHE MEMORY MANAGER FOR SELECTIVELY USING DIFFERENT CACHE MANAGEMENT METHODS	EMC Corporation
10037117	6526487	PERFORMING ACKNOWLEDGED OPERATIONS ON ORIGINAL AND MIRRORED COPIES OF DATA	EMC Corporation
10038949	7054367	EDGE DETECTION BASED ON VARIABLE-LENGTH CODES OF BLOCK CODED VIDEO	EMC Corporation
10050974	6976134	POOLING AND PROVISIONING STORAGE RESOURCES IN A STORAGE NETWORK	EMC Corporation
10051093	7558264	PACKET CLASSIFICATION IN A STORAGE SYSTEM	EMC Corporation
10051164	7185062	SWITCH-BASED STORAGE SERVICES	EMC Corporation
10051321	7707304	STORAGE SWITCH FOR STORAGE AREA NETWORK	EMC Corporation
10051339	7421509	ENFORCING QUALITY OF SERVICE IN A STORAGE NETWORK	EMC Corporation
10051396	7864758	VIRTUALIZATION IN A STORAGE SYSTEM	EMC Corporation
10051415	7404000	PROTOCOL TRANSLATION IN A STORAGE SYSTEM	EMC Corporation
10054241	6988152	DATA STORAGE SYSTEM	EMC Corporation
10056401	6574703	INITIALIZING SELECTED EXTENTS OF A STORAGE DEVICE	EMC Corporation
10058651	7093021	ELECTRONIC DEVICE AND METHOD FOR SECURE AUTHENTICATION OF OBJECTS SUCH AS COMPUTERS IN A DATA NETWORK	EMC Corporation
10061081	7007141	ARCHIVAL DATA STORAGE SYSTEM AND METHOD	EMC Corporation
10061895	7487535	AUTHENTICATION ON DEMAND IN A DISTRIBUTED NETWORK ENVIRONMENT	EMC Corporation
10068079	6941492	DEBUGGING TOOL FOR EFFICIENT SWITCHING BETWEEN TARGETS IN A MULTI-PROCESSOR ENVIRONMENT	EMC Corporation
10072988		SYSTEM AND METHOD OF INDEXING UNIQUE ELECTRONIC MAIL MESSAGES AND USES FOR THE SAME	EMC Corporation
10073708	7031966	METHOD FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
10074027	6792510	SYSTEM AND METHOD FOR UPDATING A CACHE	EMC Corporation
10076016	6879556	METHOD AND APPARATUS FOR OPTICAL DATA STORAGE	EMC Corporation
10078923	6757790	DISTRIBUTED, SCALABLE DATA STORAGE FACILITY WITH CACHE MEMORY	EMC Corporation
10079090	6985914	CLUSTER META FILE SYSTEM OF FILE SYSTEM CELLS MANAGED BY RESPECTIVE DATA MOVERS OF A NETWORK FILE SERVER	EMC Corporation
10080321	7177853	CACHE MANAGEMENT VIA STATISTICALLY ADJUSTED TIMESTAMP QUEUE	EMC Corporation
10081682	7406574	MANAGEMENT OF INVALID TRACKS	EMC Corporation
10083195	6736308	SYSTEMS AND METHODS FOR DISTRIBUTING SOLDER PASTE USING A TOOL HAVING A SOLDER PASTE APERTURE WITH A NON-CIRCULAR CROSS- SECTIONAL SHAPE	EMC Corporation
10083670	7181727	PROVIDING DATA INDICATIVE OF THE PERFORMANCE OF A COMPETING ALGORITHM AND AN INCUMBENT ALGORITHM	EMC Corporation
10093142	7093018	METHODS, SYSTEMS, AND DATA STRUCTURES TO CONNECT SERVICES	EMC Corporation
10098499	7103637	NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation
10100458	6973593	SYSTEM ANALYZER FOR A DATA STORAGE SYSTEM	EMC Corporation
10100520	7024593	END-TO-END CHECKSUMMING FOR DATABASE ENVIRONMENTS	EMC Corporation
10100560	7062503	SHUTTLE-BASED MECHANISM FOR NUMBERING CONCURRENT CHAINS OF INDEPENDENT DATA TRANSFERS	EMC Corporation
10102460	6845556	TECHNIQUES FOR REWORKING CIRCUIT BOARDS WITH NI/AU FINISH	EMC Corporation
10103012	7058835	SYSTEM, METHOD AND APPARATUS FOR CONTROLLING SUPPLY OF BACKUP POWER TO FIRST AND SECOND POWER PLANES IN THE EVENT OF A POWER FAILURE OF A MAIN POWER SUPPLY	EMC Corporation
10104146	7386835	TECHNIQUE FOR GRAPHICAL USER INTERFACE MODIFICATION	EMC Corporation
10105492	6952699	METHOD AND SYSTEM FOR MIGRATING DATA WHILE MAINTAINING ACCESS TO DATA WITH USE OF THE SAME PATHNAME	EMC Corporation
10105821	6922761	METHOD AND SYSTEM FOR MIGRATING DATA	EMC Corporation
10105976	7080102	METHOD AND SYSTEM FOR MIGRATING DATA WHILE MAINTAINING HARD LINKS	EMC Corporation
10106337	7178146	PIZZA SCHEDULER	EMC Corporation
10109013	7350149	BACKUP REPORTING FRAMEWORK GRAPHICAL USER INTERFACE	EMC Corporation
10109036	7404145	GENERIC MECHANISM FOR REPORTING ON BACKUPS	EMC Corporation
10109244	7228353	GENERATING AND LAUNCHING REMOTE METHOD INVOCATION SERVERS FOR INDIVIDUAL CLIENT APPLICATIONS	EMC Corporation
10109499	6795904	SYSTEM AND METHOD FOR IMPROVING PERFORMANCE OF A DATA BACKUP OPERATION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
10109504	6715048	A SYSTEM AND METHOD FOR EFFICIENTLY PERFORMING A RESTORE OPERATION IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10109583	6907483	DATA STORAGE SYSTEM HAVING DUMMY PRINTED CIRCUIT BOARDS WITH JUMPERS	EMC Corporation
10109603	6868479	DATA STORAGE SYSTEM HAVING REDUNDANT SERVICE PROCESSORS	EMC Corporation
10109614	6597232	DATA STORAGE HAVING ENVIRONMENTAL COMMUNICATION MODULE (ECM)	EMC Corporation
10109997	6877059	COMMUNICATIONS ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR	EMC Corporation
10112089	6865643	COMMUNICATIONS ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR PROVIDING USER DATA PRIORITY ON SHARED CHANNELS	EMC Corporation
10112209	6813689	COMMUNICATIONS ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR EMPLOYING EXTENSIVE I/O PARALLELIZATION	EMC Corporation
10112342	7774844	INTRUSION DETECTION THROUGH STORAGE MONITORING	EMC Corporation
10112598	6877061	DATA STORAGE SYSTEM HAVING DUMMY PRINTED CIRCUIT BOARDS	EMC Corporation
10113023	6792506	MEMORY ARCHITECTURE FOR A HIGH THROUGHPUT STORAGE PROCESSOR	EMC Corporation
10113027	7209979	STORAGE PROCESSOR ARCHITECTURE FOR HIGH THROUGHPUT APPLICATIONS PROVIDING EFFICIENT USER DATA CHANNEL LOADING	EMC Corporation
10113168	7752316	METHOD AND SYSTEM FOR SECURING NETWORK ACCESS TO DATA STORED IN A DATA STORAGE SYSTEM	EMC Corporation
10113249	6901477	PROVISION OF A VICTIM CACHE WITHIN A STORAGE CACHE HIERARCHY	EMC Corporation
10113307	7870239	SYSTEM AND METHOD FOR SECURING NETWORK ACCESS TO DYNAMICALLY UPDATEABLE DATA STORED IN A DATA STORAGE SYSTEM	EMC Corporation
10113368	7266538	METHOD AND APPARATUS FOR CONTROLLING ACCESS TO DATA IN A DATA STORAGE SYSTEM	EMC Corporation
10116369	7010554	DELEGATION OF METADATA MANAGEMENT IN A STORAGE SYSTEM BY LEASING OF FREE FILE SYSTEM BLOCKS AND I-NODES FROM A FILE SYSTEM OWNER	EMC Corporation
10117397	6544392	METHOD FOR MANUFACTURING PCB'S	EMC Corporation
10118518	6542974	METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SHEET	EMC Corporation
10120016	7340489	VIRTUAL STORAGE DEVICES	EMC Corporation
10120957	6957285	DATA STORAGE SYSTEM	EMC Corporation
10122556	7076690	METHOD AND APPARATUS FOR MANAGING ACCESS TO VOLUMES OF STORAGE	EMC Corporation
10122601	6889309	METHOD AND APPARATUS FOR IMPLEMENTING AN ENTERPRISE VIRTUAL STORAGE SYSTEM	EMC Corporation
10123661	7330956	BUCKET BASED MEMORY ALLOCATION	EMC Corporation

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Number	Number	Title	Owner
10124630	7277953	INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE	EMC Corporation
10124881	7383357	SUBSCRIBERS IMPLEMENTING MANAGED NETWORK SERVICES FOR CUSTOMERS WITH DUPLICATE IP NETWORKS	EMC Corporation
10126711	7159085	METHOD OF ALLOWING POINT-IN-TIME VIEW OF DATA ON A DISK	EMC Corporation
10132434	7319661	HIGH AVAILABILITY FOR COMMUNICATION FOR WIRELESS NETWORKS	EMC Corporation
10132769	7240323	PLUG AND PLAY INTERFACE FOR USER ACTIONS	EMC Corporation
10133392	7634557	APPARATUS AND METHOD FOR NETWORK ANALYSIS	EMC Corporation
10134420	6983353	METHOD AND APPARATUS FOR ENHANCING OPERATIONS IN DISK ARRAY STORAGE DEVICES	EMC Corporation
10135070	6513102	INTERNAL COPY FOR A STORAGE CONTROLLER	EMC Corporation
10139490	6988130	VIRTUAL PORTS FOR PARTITIONING OF DATA STORAGE	EMC Corporation
10139500	6637641	SYSTEMS AND METHODS FOR MANUFACTURING A CIRCUIT BOARD	EMC Corporation
10142164	6581143	DATA PROCESSING METHOD AND APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
10142478	6772198	SYSTEM AND METHOD FOR RESTORING PREVIOUSLY BACKED-UP DATA IN A MASS STORAGE SUBSYSTEM	EMC Corporation
10145932	6542944	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS	EMC Corporation
10147751	7546364	REPLICATION OF REMOTE COPY DATA FOR INTERNET PROTOCOL (IP) TRANSMISSION	EMC Corporation
10152080	6834330	PRE-FETCH OF RECORDS IDENTIFIED BY AN I/O TRACE	EMC Corporation
10153583	7124171	IN A NETWORKED COMPUTING CLUSTER STORAGE SYSTEM AND PLURALITY OF SERVERS SHARING FILES, IN THE EVENT OF SERVER UNAVAILABILITY, TRANSFERRING A FLOATING IP NETWORK ADDRESS FROM FIRST SERVER TO SECOND SERVER TO ACCESS AREA OF DATA	EMC Corporation
10154269	6826337	METHOD AND APPARATUS FOR TRANSMITTING FIBRE-CHANNEL AND NON-FIBRE CHANNEL SIGNALS THROUGH A COMMON CABLE	EMC Corporation
10155299	7383330	METHOD FOR MAPPING A NETWORK FABRIC	EMC Corporation
10156574	6615284	METHOD AND APPARATUS FOR PERFORMING INPUT/OUTPUT OPERATIONS BETWEEN REQUESTING DEVICE AND RESPONDING DEVICE (AS AMENDED)	EMC Corporation
10157427	6609183	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
10166433	6694405	METHOD FOR ANALYZING DISK SEEK TIMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
10171288	6990520	SYSTEM AND METHOD FOR MANAGING COMPUTER NETWORKS	EMC Corporation

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Number	Number	Title	Owner
10172615	7130899	ROBUST INDICATION PROCESSING	EMC Corporation
10174115	6889301	DATA STORAGE SYSTEM	EMC Corporation
10175811	7203738	SYSTEM AND METHOD FOR DISTRIBUTING	EMC Corporation
		APPLICATION OBJECTS	
10178085	7143393	METHOD FOR CACHE MANAGEMENT FOR	EMC Corporation
		POSITIONING CACHE SLOT	
10179113	7062675	DATA STORAGE CACHE SYSTEM SHUTDOWN	EMC Corporation
		SCHEME	
10179421	7039659	METHOD AND APPARATUS FOR MAKING	EMC Corporation
		DIFFERENTIAL INDEPENDENT DATA COPIES IN A	
		DATA PROCESSING SYSTEM	
10179536	6865648	DATA STRUCTURE FOR WRITE PENDING	EMC Corporation
10179753	6941429	SYSTEM AND METHOD FOR IMPROVING	EMC Corporation
		PERFORMANCE OF A DATA BACKUP OPERATION	1
10180639	8145788	DISTRIBUTED ISP LOAD BALANCER	EMC Corporation
10180703	6820035	SYSTEM AND METHOD FOR DETERMINING	EMC Corporation
		WORKLOAD CHARACTERISTICS FOR ONE OR	1
		MORE APPLICATIONS OPERATING IN A DATA	
		STORAGE ENVIRONMENT	
10180704	6944702	DATA STORAGE SYSTEM	EMC Corporation
10180716	7035970	SYSTEM AND METHOD FOR DETERMINING	EMC Corporation
		WORKLOAD CHARACTERISTICS FOR ONE OR	
		MORE APPLICATIONS OPERATING IN A DATA	
		STORAGE ENVIRONMENT	
10180749	6914784	DATA STORAGE SYSTEM CABINET	EMC Corporation
10180750	6934158	DISK DRIVE SYSTEM FOR A DATA STORAGE	EMC Corporation
10100720	0,5,120	SYSTEM	2e corporation
10180751	7117305	DATA STORAGE SYSTEM HAVING CACHE	EMC Corporation
		MEMORY MANAGER	
10180805	8463781	PRE-FETCH OF DATA RECORDS IDENTIFIED BY AN	EMC Corporation
		INDEX RECORD	
10180849	6775826	SYSTEM AND METHOD FOR REPLAYING	EMC Corporation
10100017	0.110020	WORKLOAD DATA IN A DATA STORAGE	
		ENVIRONMENT	
10184495	6716072	SYSTEMS AND METHODS FOR DISPOSING A	EMC Corporation
		CIRCUIT BOARD COMPONENT ON A CIRCUIT	
		BOARD USING A SOLDERING PIN	
10185814	6701393	SYSTEMS AND METHODS FOR MANAGING	EMC Corporation
		STORAGE LOCATION DESCRIPTORS	1
10185898	7089379	LARGE HIGH BANDWIDTH MEMORY SYSTEM	EMC Corporation
10186250	7003527	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
		DEVICES WITHIN STORAGE AREA NETWORKS	1
10188626	7546354	DYNAMIC NETWORK BASED STORAGE WITH HIGH	EMC Corporation
		AVAILABILITY	
10196867	6920537	APPARATUS AND METHODS FOR COPYING,	EMC Corporation
		BACKING UP AND RESTORING LOGICAL OBJECTS	
		IN A COMPUTER STORAGE SYSTEM BY	
		TRANSFERRING BLOCKS OUT OF ORDER OR IN	
		PARALLEL	
10198005	7149960	METHOD AND APPARATUS FOR CONTROLLING	EMC Corporation
		CREATION AND MANAGEMENT OF PAGES OF	
		PORTAL CONTENT IN A DIRECTORY	1

Application	Registration		
Number	Number	Title	Owner
10206377	7308417	METHOD FOR CREATING AND DISPLAYING A	EMC Corporation
		MULTI-DIMENSIONAL BUSINESS MODEL	
		COMPARATIVE STATIC	
10209774	6601133	MAILBOX FOR CONTROLLING STORAGE	EMC Corporation
		SUBSYSTEM RECONFIGURATIONS	
10213241	6792518	DATA STORAGE SYSTEM HAVING META BIT MAPS	EMC Corporation
		FOR INDICATING WHETHER DATA BLOCKS ARE	
		INVALID IN SNAPSHOT COPIES	
10213242	6934822	ORGANIZATION OF MULTIPLE SNAPSHOT COPIES	EMC Corporation
		IN A DATA STORAGE SYSTEM	
10213335	6957362	INSTANTANEOUS RESTORATION OF A	EMC Corporation
		PRODUCTION COPY FROM A SNAPSHOT COPY IN A	
		DATA STORAGE SYSTEM	
10215394	6943463	SYSTEM AND METHOD OF TESTING	EMC Corporation
		CONNECTIVITY BETWEEN A MAIN POWER SUPPLY	
10017770	6607140	AND A STANDBY POWER SUPPLY	TD 10 0
10215573	6695149	TECHNIQUES FOR FASTENING A PANEL TO AN	EMC Corporation
10016000	<b>772.772</b> 0	ELECTRONIC CABINET FRAME	F1 (C C
10216030	7725730	CRYPTOGRAPHIC METHODS AND APPARATUS FOR	EMC Corporation
10001006	6044506	SECURE AUTHENTICATION	77.60.0
10224006	6944726	DISTRIBUTED BACKGROUND TRACK PROCESSING	EMC Corporation
10224918	7117386	SAR RESTART AND GOING HOME PROCEDURES	EMC Corporation
10225021	7024528	STORAGE AUTOMATED REPLICATION	EMC Corporation
10000000	6640040	PROCESSING	77.60.0
10225916	6618818	RESOURCE ALLOCATION THROTTLING IN	EMC Corporation
10000015		REMOTE DATA MIRRORING SYSTEM	77.60.0
10226845	6909052	TECHNIQUES FOR MAKING A CIRCUIT BOARD	EMC Corporation
10000710	<b>-</b> 100 <b>-</b> 01	WITH IMPROVED IMPEDANCE CHARACTERISTICS	T) (G G
10228513	7120721	FIBRE CHANNEL ARCHITECTURE PORT HAVING	EMC Corporation
10000050	6504545	OPTICAL AND COPPER CONNECTORS	ED (C) C
10229259	6584545	MAXIMIZING SEQUENTIAL OUTPUT IN A DISK	EMC Corporation
10220705	7002702	ARRAY STORAGE DEVICE	EMC Commention
10229685	7003702	END-TO-END CHECKSUMMING FOR READ	EMC Corporation
10220720	7604244	OPERATIONS  METHOD AND SYSTEM FOR ENEOPOING	EMC Commention
10229730	7694344	METHOD AND SYSTEM FOR ENFORCING	EMC Corporation
		NETWORK SECURITY BY PRESERVING EVENT	
		EXECUTION INFORMATION UTILIZING A SERVICE	
10235137	6807619	EVENT STACK ADVANCING BANK POINTER IN PRIME NUMBERS	EMC Composition
10233137	080/019	UNIT	EMC Corporation
10238219	6993581	METHOD AND APPARATUS FOR PROVIDING	EMC Composition
10238219	0993381	SECURE ACCESS TO A COMPUTER SYSTEM	EMC Corporation
		RESOURCE	
10238806	6993589	METHOD AND APPARATUS FOR PROVIDING	EMC Corneration
10230000	6955569 	SECURE ACCESS TO A COMPUTER SYSTEM	EMC Corporation
		RESOURCE	
10242176	7136489	METHOD AND SYSTEM FOR ENHANCING	EMC Corporation
102421/0	/130489	NETHOD AND SYSTEM FOR ENHANCING NETWORK SECURITY USING A MULTILATERAL	EMIC Corporation
		AUTHORIZATION MECHANISM	
10242521	7076691	ROBUST INDICATION PROCESSING FAILURE MODE	EMC Corporation
10242321	/0/0031	HANDLING	Livic Corporation

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10245895	6567888	METHOD AND APPARATUS FOR EFFICIENTLY	EMC Corporation
		DESTAGING DATA FROM A CACHE TO TWO OR	
		MORE NON-CONTIGUOUS STORAGE LOCATIONS	
10250262	7426726	SYSTEM AND METHOD FOR CONFIGURING A HOST	EMC Corporation
		FOR OPERATIONALLY COOPERATING WITH DATA	
		STORAGE SYSTEM AND INCLUDING SELECTIVE	
		HOST ADAPTER SETTINGS	
10253255	6826057	ELECTRONIC CABINET PANEL WITH IMPROVED	EMC Corporation
		LATCHING MECHANISM	
10254228	7065624	SYSTEM AND METHOD FOR DETERMINING	EMC Corporation
		WORKLOAD CHARACTERISTICS FOR ONE OR	
		MORE APPLICATIONS OPERATING IN A DATA	
		STORAGE ENVIRONMENT	
10255148	7475124	NETWORK BLOCK SERVICES FOR CLIENT ACCESS	EMC Corporation
		OF NETWORK-ATTACHED DATA STORAGE IN AN	
400.77000		IP NETWORK	77.60.0
10255223	6809505	SYSTEM AND METHOD OF DETECTING AN	EMC Corporation
40077004	600400	IMPROPER CABLE CONNECTION IN A SYSTEM	77.60
10255291	6901202	STORAGE SYSTEM WITH A DISKLESS ENCLOSURE	EMC Corporation
10259011	7356452	SYSTEM AND METHOD FOR SIMULATING	EMC Corporation
		PERFORMANCE OF ONE OR MORE DATA STORAGE	
10250052	(550000	SYSTEMS	EN CO CO CO
10259053	6773269	CIRCUIT BOARD ASSEMBLY WHICH UTILIZES A	EMC Corporation
		PIN ASSEMBLY AND TECHNIQUES FOR MAKING	
10250225	7254741	THE SAME ATTAINING HIGH AVAILABILITY THROUGH A	EMC Composition
10259335	/254/41	POWER SYSTEM BRANCH ARCHITECTURE	EMC Corporation
10260945	7287046	METHOD AND SYSTEM OF COMPACTING SPARSE	EMC Corporation
10200943	7287040	DIRECTORIES IN A FILE SYSTEM	ENIC Corporation
10261168	7206961	METHOD OF PRESERVING SNAPSHOTS DURING	EMC Corporation
10201100	/200701	DISK-BASED RESTORE PROCESSING	Elvic Corporation
10261727	6800545	MICRO SOLDERED CONNECTION	EMC Corporation
10262684	6910075	DYNAMIC RDF GROUPS	EMC Corporation
10264972	6775905	METHOD FOR FORMING AN IMPROVED ADAPTOR	EMC Corporation
10270912	7793342	SINGLE SIGN-ON WITH BASIC AUTHENTICATION	EMC Corporation
10270912	1175572	FOR A TRANSPARENT PROXY	Livic Corporation
10279517	7383442	NESTED STRONG LOADER APPARATUS AND	EMC Corporation
10277017	, 5 05 1.12	METHOD	2e corporation
10281467	7146524	SYSTEM AND METHODS FOR PROVIDING A	EMC Corporation
		DISTRIBUTED FILE SYSTEM UTILIZING	
		METADATA TO TRACK INFORMATION ABOUT	
		DATA STORED THROUGHOUT THE SYSTEM	
10281524	7546482	METHOD AND APPARATUS FOR MONITORING THE	EMC Corporation
		STORAGE OF DATA IN A COMPUTER SYSTEM	1
10283908	7945669	METHOD AND APPARATUS FOR PROVISIONING	EMC Corporation
		STORAGE RESOURCES	
10283960	7653645	MULTI-EPOCH METHOD FOR SAVING AND	EMC Corporation
		EXPORTING FILE SYSTEM EVENTS	
10283976	6954835	INTERCEPTING CONTROL OF A HOST I/O PROCESS	EMC Corporation
10304935	7040491	TECHNIQUES FOR MANAGING A SET OF CABLES	EMC Corporation
10306268	7340461	DEACTIVATING VIRTUAL DEVICES AND ROLLING	EMC Corporation
		BACKUP	
10306378	7249130	VIRTUAL STORAGE DEVICES	EMC Corporation

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10306659	7266572	RESTORING VIRTUAL DEVICES	EMC Corporation
10306706	8032492	SIMULTANEOUS ACTIVATION OF VIRTUAL DEVICES	EMC Corporation
10308159	6889288	REDUCING DATA COPY OPERATIONS FOR WRITING DATA FROM A NETWORK TO STORAGE OF A CACHED DATA STORAGE SYSTEM BY ORGANIZING CACHE BLOCKS AS LINKED LISTS OF DATA FRAGMENTS	EMC Corporation
10308161	7028218	REDUNDANT MULTI-PROCESSOR AND LOGICAL PROCESSOR CONFIGURATION FOR A FILE SERVER	EMC Corporation
10308445	7284016	CLIENT-SERVER PROTOCOL FOR DIRECTORY ACCESS OF SNAPSHOT FILE SYSTEMS IN A STORAGE SYSTEM	EMC Corporation
10315412	7263696	DYNAMIC WEB BASED JAR FILE FINDER	EMC Corporation
10315472	7080225	METHOD AND APPARATUS FOR MANAGING MIGRATION OF DATA IN A COMPUTER SYSTEM	EMC Corporation
10315791	7376764	METHOD AND APPARATUS FOR MIGRATING DATA IN A COMPUTER SYSTEM	EMC Corporation
10316286	7084353	TECHNIQUES FOR MOUNTING A CIRCUIT BOARD COMPONENT TO A CIRCUIT BOARD	EMC Corporation
10318949	6791841	METHODS AND APPARATUS FOR MANAGING A SET OF CABLES	EMC Corporation
10320019	7065661	USING REQUEST AND GRANT SIGNALS TO READ REVISION INFORMATION FROM AN ADAPTER BOARD THAT INTERFACES A DISK DRIVE	EMC Corporation
10320212	6829658	COMPATIBLE SIGNAL-TO-PIN CONNECTOR ASSIGNMENTS FOR USAGE WITH FIBRE CHANNEL AND ADVANCED TECHNOLOGY ATTACHMENT DISK DRIVES	EMC Corporation
10327338	7194673	DETECTING INTERMITTENT LOSSES OF SYNCHRONIZATION IN A FIBRE CHANNEL LOOP	EMC Corporation
10327483	7127621	PEER POWER CONTROL	EMC Corporation
10330806	7127638	METHOD AND APPARATUS FOR PRESERVING DATA IN A HIGH-AVAILABILITY SYSTEM	EMC Corporation
10331366	6973551	DATA STORAGE SYSTEM HAVING ATOMIC MEMORY OPERATION	EMC Corporation
10331423	7062620	DUAL POWER BUS DATA STORAGE SYSTEM	EMC Corporation
10333426	7949840	METHOD FOR SAVING COMPUTER DATA	EMC Corporation
10334964	7472182	DATA COLLECTION POLICY FOR STORAGE DEVICES	EMC Corporation
10335329	6804627	SYSTEM AND METHOD FOR GATHERING AND ANALYZING DATABASE PERFORMANCE STATISTICS	EMC Corporation
10335330	7315985	METHODS AND APPARATUS FOR MANAGING NETWORK RESOURCES USING A NETWORK TOPOLOGY VIEW	EMC Corporation
10335349	7587713	SYSTEM AND METHOD FOR CONTROLLING INSTALLATION OF ONE OR MORE COMPONENTS FOR A DATA STORAGE MANAGEMENT SYSTEM	EMC Corporation
10335497	7197489	METHODS AND APPARATUS FOR MAINTAINING OBJECT DATA FOR COMPONENTS IN A NETWORK	EMC Corporation

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Number	Number	Title	Owner
10335509	7587715	SYSTEM AND METHOD FOR SELECTIVE	EMC Corporation
		INSTALLATION OF ONE OR MORE COMPONENTS	
10225546	7454407	FOR A DATA STORAGE MANAGEMENT SYSTEM	EMO C
10335546	7454487	METHODS AND APPARATUS PROVIDING AN	EMC Corporation
		EXTENSIBLE MANAGEABLE ENTITY MODEL FOR	
10335591	7401298	A NETWORK STREAMING ALGORITHM THAT POPULATES USER	EMC Componention
10335391	/401298	INFORMATION FROM DATABASE BASED ON	EMC Corporation
		SCROLLING ACTIVITY	
10335601	7228306	POPULATION OF DISCOVERY DATA	EMC Corporation
10335603	7469290	AUTOMATIC SYSTEM RESOURCE MANAGEMENT	EMC Corporation
10335643	6769054	SYSTEM AND METHOD FOR PREPARATION OF	EMC Corporation
10333043	0709034	WORKLOAD DATA FOR REPLAYING IN A DATA	ENIC Corporation
		STORAGE ENVIRONMENT	
10343893	7660954	TECHNIQUES FOR SAVING DATA	EMC Corporation
10353322	7707151	METHOD AND APPARATUS FOR MIGRATING DATA	EMC Corporation
10359864	7246246	SYSTEM FOR KEYING PROTECTED ELECTRONIC	EMC Corporation
10327001	7210210	DATA TO PARTICULAR MEDIA TO PREVENT	Livie corporation
		UNAUTHORIZED COPY USING A COMPOUND	
10368720	6938059	SYSTEM FOR DETERMINING MAPPING OF	EMC Corporation
		LOGICAL OBJECTS IN A COMPUTER SYSTEM	
10374694	6931502	RECOVERY OF DATA USING WRITE REQUEST	EMC Corporation
100,100,1	0,0100	COPIES IN DELTA QUEUE	
10375991	7216336	SEQUENTIAL EVENT MONITORING MODULE	EMC Corporation
10376855	6993530	METHOD AND APPARATUS FOR OBTAINING AN	EMC Corporation
		IDENTIFIER FOR A LOGICAL UNIT OF DATA IN A	1
		DATABASE	
4000000	600=604		77.60.0
10382662	6987631	DATA READ/WRITE METHOD AND APPARATUS	EMC Corporation
10392626	7383492	FIRST-IN/FIRST-OUT (FIFO) INFORMATION	EMC Corporation
		PROTECTION AND ERROR DETECTION METHOD	
10206022	7254752	AND APPARATUS	EMO O
10396033	7254752	PROTECTING DATABASE RECORDS AGAINST A FAILED WRITE OPERATION	EMC Corporation
10396786	6898685	ORDERING DATA WRITES FROM A LOCAL	EMC Componentian
10390/80	0898083	STORAGE DEVICE TO A REMOTE STORAGE	EMC Corporation
		DEVICE	
10396800	7113945	VIRTUAL STORAGE DEVICE THAT USES VOLATILE	EMC Corporation
10370800	/113743	MEMORY	Livic Corporation
10397403	6904470	DEVICE SELECTION BY A DISK ADAPTER	EMC Corporation
10377103	0501170	SCHEDULER	Livie corporation
10400208	6718437	METHOD AND APPARATUS FOR RECONFIGURING	EMC Corporation
		STRIPED LOGICAL DEVICES IN A DISK ARRAY	
		STORAGE	
10400333	6850410	ADVANCED TECHNOLOGY ATTACHMENT DISK	EMC Corporation
		DRIVE MODULE WITH FIBRE CHANNEL SYSTEM	
		CHARACTERISTICS	
10400718	6868367	APPARATUS AND METHOD FOR EVENT	EMC Corporation
		CORRELATION AND PROBLEM REPORTING	_
10401523	7068500	MULTI-DRIVE HOT PLUG DRIVE CARRIER	EMC Corporation
10402009	7818447	END-TO-END BROADCAST BASED FLOW CONTROL	EMC Corporation
		IN A SWITCH FABRIC	l

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Number	Number	Title	Owner
10402334	7216188	TECHNIQUES FOR ACCESSING DEVICES THROUGH	EMC Corporation
		A SET OF SERIAL BUSES AUTOMATICALLY	
		SETTING UNIQUE ENCLOSURE ADDRESSES AND	
		DETECTING NON-UNIQUE ENCLOSURE	
		ADDRESSES UPON INITIALIZATION	
10402363	7216195	ARCHITECTURE FOR MANAGING DISK DRIVES	EMC Corporation
10402514	7252100	SYSTEMS AND METHODS FOR PROCESSING A SET	EMC Corporation
		OF CIRCUIT BOARDS	1
10402594	7516272	MIDPLANE-INDEPENDENT IMPLEMENTATIONS OF	EMC Corporation
		DATA STORAGE SYSTEM ENCLOSURES	
10402883	6955410	TECHNIQUES FOR INTERCONNECTING	EMC Corporation
		ELECTRONIC CABINET FRAMES	1
10403262	7143306	DATA STORAGE SYSTEM	EMC Corporation
10403263	6981111	DATA STORAGE SYSTEM	EMC Corporation
10403473	7249184	ARCHITECTURE FOR DETERMINING A WORLD	EMC Corporation
		WIDE NAME FOR USE WITH A HOST FOR	
		ENABLING COMMUNICATION WITH A DATA	
		STORAGE SYSTEM WITHOUT REQUIRING THAT	
		THE HOST AND DATA STORAGE SYSTEM BE IN	
		COMMUNICATION DURING THE DETERMINATION	
10403748	7440949	SYSTEM AND METHOD FOR CONFIGURING A HOST	EMC Corporation
		FOR OPERATIONALLY COOPERATING WITH DATA	
		STORAGE SYSTEM	
10408383	6883072	MEMORY SYSTEM AND METHOD OF USING SAME	EMC Corporation
10411500	6760823	FILE MAPPING SYSTEM AND RELATED	EMC Corporation
10111200	0700023	TECHNIQUES	2. Te corporation
10421239	7415591	METHOD AND APPARATUS FOR MIGRATING DATA	EMC Corporation
10121207	, 110091	AND AUTOMATICALLY PROVISIONING A TARGET	2e corporation
		FOR THE MIGRATION	
10421252	7093088	METHOD AND APPARATUS FOR UNDOING A DATA	EMC Corporation
		MIGRATION IN A COMPUTER SYSTEM	
10421401	7080221	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
		MIGRATION OF DATA IN A CLUSTERED	
		COMPUTER SYSTEM ENVIRONMENT	
10421478	7263590	METHOD AND APPARATUS FOR MIGRATING DATA	EMC Corporation
		IN A COMPUTER SYSTEM	·
10421500	7805583	METHOD AND APPARATUS FOR MIGRATING DATA	EMC Corporation
		IN A CLUSTERED COMPUTER SYSTEM	1
		ENVIRONMENT	
10435322	7100049	METHOD AND APPARATUS FOR AUTHENTICATION	EMC Corporation
		OF USERS AND WEB SITES	· •
10442805	7022916	TECHNIQUES FOR CONTROLLING MOVEMENT OF	EMC Corporation
		A SET OF CABLES	1
10447923	7587656	METHOD AND APPARATUS FOR DETECTING AND	EMC Corporation
	_	CORRECTING ERRORS IN STORAGE INFORMATION	
10452688	7194492	METHOD AND APPARATUS FOR EFFICIENTLY	EMC Corporation
	_	COPYING DISTRIBUTED DATA FILES	F
10462949	7136969	USING THE MESSAGE FABRIC TO MAINTAIN	EMC Corporation
	== = = = = =	CACHE COHERENCY OF LOCAL CACHES OF	Supulation
		GLOBAL MEMORY	
10463247	7047366	QOS FEATURE KNOBS	EMC Corporation

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Number	Number	Title	Owner
10463649	7254595	METHOD AND APPARATUS FOR STORAGE AND RETRIEVAL OF VERY LARGE DATABASES USING A DIRECT PIPE	EMC Corporation
10468181	8442957	EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
10468184	7500246	SHARING OBJECTS BETWEEN COMPUTER SYSTEMS	EMC Corporation
10468185	8484172	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
10469951	7499889	TRANSACTION SYSTEM	EMC Corporation
10549542	7979707	SECURE SEED GENERATION PROTOCOL	EMC Corporation
10578591	9076132	SYSTEM AND METHOD OF ADDRESSING EMAIL AND ELECTRONIC COMMUNICATION FRAUD	EMC Corporation
10600133	6986009	INTERCEPTING CONTROL OF A HOST I/O PROCESS	EMC Corporation
10601359	7099875	METHOD AND APPARATUS FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
10603411	7567991	REPLICATION OF SNAPSHOT USING A FILE SYSTEM COPY DIFFERENTIAL	EMC Corporation
10603951	7275177	DATA RECOVERY WITH INTERNET PROTOCOL REPLICATION WITH OR WITHOUT FULL RESYNC	EMC Corporation
10606483	6971805	TECHNIQUES FOR PROVIDING MULTIPLE COMMUNICATIONS PATHWAYS	EMC Corporation
10606617	6870093	ADAPTABLE EMI/RFI SHIELDING FOR A FRONT- PANEL ATTACHMENT TO AN ENCLOSURE	EMC Corporation
10606699	7380082	READING VIRTUAL ORDERED WRITES AT LOCAL STORAGE DEVICE	EMC Corporation
10606819	7099971	ARBITRATION SYSTEM	EMC Corporation
10606872	7272668	SYSTEM HAVING BACKPLANE PERFORMANCE CAPABILITY SELECTION LOGIC	EMC Corporation
10607041	7051176	READING VIRTUAL ORDERED WRITES AT A REMOTE STORAGE DEVICE	EMC Corporation
10607400	7159758	CIRCUIT BOARD PROCESSING TECHNIQUES USING SOLDER FUSING	EMC Corporation
10607653	7146439	MANAGEMENT OF BACKGROUND COPY TASK FOR POINT-IN-TIME COPIES	EMC Corporation
10608608	7275098	METHODS AND APPARATUS FOR ADMINISTERING SOFTWARE MODULES IN A STORAGE AREA NETWORK MANAGEMENT APPLICATION	EMC Corporation
10608618	6934152	SYSTEMS AND METHODS FOR CONNECTING AN ELECTRONIC APPARATUS TO A BACKPLANE	EMC Corporation
10608635	7154723	HIGHLY AVAILABLE DUAL SERIAL BUS ARCHITECTURE	EMC Corporation
10608745	6924986	INVERTIBLE, PLUGGABLE MODULE FOR VARIABLE I/O DENSITIES	EMC Corporation
10608757	7827136	MANAGEMENT FOR REPLICATION OF DATA STORED IN A DATA STORAGE ENVIRONMENT INCLUDING A SYSTEM AND METHOD FOR FAILOVER PROTECTION OF SOFTWARE AGENTS OPERATING IN THE ENVIRONMENT	EMC Corporation
10611237	7424498	PROBABILISTIC SUMMARY DATA STRUCTURE BASED ENCODING FOR GARBAGE COLLECTION	EMC Corporation
10611291	7451168	INCREMENTAL GARBAGE COLLECTION OF DATA IN SECONDARY STORAGE	EMC Corporation

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Number	Number	Title	Owner
10611309	7143251	DATA STORAGE USING IDENTIFIERS	EMC Corporation
10611312	7318071	SYSTEM AND METHOD FOR TRANSFERRING DATA	EMC Corporation
		FROM A SOURCE MACHINE TO A TARGET	
		MACHINE	
10613114	7103797	RESOURCE ALLOCATION THROTTLING IN	EMC Corporation
		REMOTE DATA MIRRORING SYSTEM	
10614630	7627779	MULTIPLE HIERARCHAL/PEER DOMAIN FILE	EMC Corporation
		SERVER WITH DOMAIN BASED, CROSS DOMAIN	
		COOPERATIVE FAULT HANDLING MECHANISMS	
10619886	7603481	DYNAMIC ROUTING THROUGH A CONTENT	EMC Corporation
		DISTRIBUTION NETWORK	
10623103	7281111	METHODS AND APPARATUS FOR INTERFACING TO	EMC Corporation
		A DATA STORAGE SYSTEM	
10623234	7484049	DATA STORAGE SYSTEM PACKER/DEPACKER	EMC Corporation
10631989	7730518	METHOD AND APPARATUS FOR GRAPH-BASED	EMC Corporation
		PARTITION OF CRYPTOGRAPHIC FUNCTIONALITY	
10641467	7107418	METHOD AND SYSTEM FOR MIRRORING AND	EMC Corporation
		ARCHIVING MASS STORAGE	
10642912	7266719	HOST SYSTEM FOR MASS STORAGE BUSINESS	EMC Corporation
		CONTINUANCE VOLUMES	
10645976	7412496	MANAGEMENT OF THE FILE-MODIFICATION TIME	EMC Corporation
		ATTRIBUTE IN A MULTI-PROCESSOR FILE SERVER	
10110		SYSTEM	77.60.0
10646851	7953819	MULTI-PROTOCOL SHARABLE VIRTUAL STORAGE	EMC Corporation
10670071	7500650	OBJECTS MANAGEMENT AND CONTROL	F1 (C C
10652371	7702670	SYSTEM AND METHOD FOR TRACKING CHANGES	EMC Corporation
10653065	7167177	ASSOCIATED WITH INCREMENTAL COPYING	EN CO C
10652967	7165155	SYSTEM AND METHOD FOR TRACKING CHANGES	EMC Corporation
10754127	7040112	ASSOCIATED WITH INCREMENTAL COPYING	EMC Commention
10654137	7849112	USING A FILE HANDLE FOR ASSOCIATING THE	EMC Corporation
10654852	7149947	FILE WITH A TREE QUOTA IN A FILE SERVER METHOD OF AND SYSTEM FOR VALIDATING AN	EMC Corporation
10034832	/14994/	ERROR CORRECTION CODE AND PARITY	EMC Corporation
		INFORMATION ASSOCIATED WITH A DATA WORD	
10655693	7051182	MAPPING OF HOSTS TO LOGICAL STORAGE UNITS	EMC Corporation
10033073	7031162	AND DATA STORAGE PORTS IN A DATA	Livic Corporation
		PROCESSING SYSTEM	
10658695	6987673	TECHNIQUES FOR COOLING A SET OF CIRCUIT	EMC Corporation
10030073	0,0,0,0	BOARDS WITHIN A RACK MOUNT CABINET	Livie corporation
10662082	7921080	SYSTEM AND METHOD FOR BACKUP A PARALLEL	EMC Corporation
10002002	7,521000	SERVER DATA STORAGE SYSTEM	Livie corporation
10666773	7343432	MESSAGE-BASED GLOBAL DISTRIBUTION LOCKS	EMC Corporation
100007.10		WITH AUTOMATIC EXPIRATION FOR INDICATING	
		THAT SAID LOCKS IS EXPIRED	
10667170	7363431	MESSAGE-BASED DISTRIBUTED	EMC Corporation
		SYNCHRONIZATION IN A STORAGE SYSTEM	
10667564	7089357	LOCALLY BUFFERED CACHE EXTENSIONS	EMC Corporation
-		HAVING ASSOCIATED CONTROL PARAMETERS TO	
		DETERMINE USE FOR CACHE ALLOCATION OR	
		SUBSEQUENT REQUESTS	

Application	Registration		
Number	Number	Title	Owner
10668467	7865485	MULTI-THREADED WRITE INTERFACE AND METHODS FOR INCREASING THE SINGLE FILE READ AND WRITE THROUGHPUT OF A FILE SERVER	EMC Corporation
10668546	7555504	MAINTENANCE OF A FILE VERSION SET INCLUDING READ-ONLY AND READ-WRITE SNAPSHOT COPIES OF A PRODUCTION FILE	EMC Corporation
10668783	7035881	ORGANIZATION OF READ-WRITE SNAPSHOT COPIES IN A DATA STORAGE SYSTEM	EMC Corporation
10673305	7188202	TECHNIQUES FOR ACCESSING DEVICES THROUGH A SET OF SERIAL BUSES	EMC Corporation
10673356	7503076	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
10673540	6970070	METHOD AND APPARATUS FOR SELECTIVE BLOCKING OF RADIO FREQUENCY IDENTIFICATION DEVICES	EMC Corporation
10673664	7447860	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10673722	7096331	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND REPLICATION PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10673829	7102893	METHODS AND APPARATUS FOR FORMING A COHESIVE BACKPLANE INTERCONNECT SYSTEM	EMC Corporation
10673836	7346805	PROTECTION OF MIRRORED DATA	EMC Corporation
10673853	7257653	SWITCHING BETWEEN COPY MODE AND SYNCHRONOUS RDF MODE	EMC Corporation
10673864	7133985	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND REPLICATION PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10674080	7416106	TECHNIQUES FOR CREATING OPTIMIZED PAD GEOMETRIES FOR SOLDERING	EMC Corporation
10674321	7340747	SYSTEM AND METHODS FOR DEPLOYING AND INVOKING A DISTRIBUTED OBJECT MODEL	EMC Corporation
10674322	7603458	SYSTEM AND METHODS FOR PROCESSING AND DISPLAYING AGGREGATE STATUS EVENTS FOR REMOTE NODES	EMC Corporation
10675002	7712004	METHOD OF AND SYSTEM FOR ERROR CHECKING IN A DATA STORAGE SYSTEM	EMC Corporation
10675016	7281236	SYSTEM AND METHODS FOR DEVELOPING AND DEPLOYING A REMOTE DOMAIN SYSTEM	EMC Corporation
10675039	7124245	DATA STORAGE SYSTEM HAVING CACHE MEMORY MANAGER WITH PACKET SWITCHING NETWORK	EMC Corporation
10675040	7437425	DATA STORAGE SYSTEM HAVING SHARED RESOURCE	EMC Corporation
10675041	7073024	DATA PROTECTION METHOD WHEREIN DATA PROTECTION CODE IS STORED TOGETHER WITH PARITY	EMC Corporation

Application Number	Registration Number	Title	Owner
10675058	7136959	DATA STORAGE SYSTEM HAVING CROSSBAR	
100/3038	/130939	PACKET SWITCHING NETWORK	EMC Corporation
10675164	7158976	SPATIAL DOMAIN MECHANISM	EMC Corporation
10675166	7454536		
		DATA SYSTEM HAVING A VIRTUAL QUEUE	EMC Corporation
10675205	7233957	METHOD AND APPARATUS FOR IDENTIFYING AND PROCESSING CHANGES TO MANAGEMENT INFORMATION	EMC Corporation
10675218	7555719	METHODS AND APPARATUS FOR DISPLAYING DATA STORAGE MANAGEMENT INFORMATION	EMC Corporation
10675220	7600229	METHODS AND APPARATUS FOR LOAD BALANCING PROCESSING OF MANAGEMENT INFORMATION	EMC Corporation
10675281	7444355	SYSTEM AND METHOD FOR ASSIGNING MANAGEMENT RESPONSIBILITY FOR MANAGEABLE ENTITIES	EMC Corporation
10675423	7234073	SYSTEM AND METHODS FOR FAILOVER	EMC Corporation
100/5425	7254075	MANAGEMENT OF MANAGEABLE ENTITY AGENTS	Livie corporation
10675561	7159139	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STOPPED RECORDS AND UTILIZATION OF A CHECK VALUE FOR VERIFYING THAT A RECORD IS FROM A PARTICULAR STORAGE LOCATION	EMC Corporation
10675586	7437676	METHODS AND APPARATUS FOR MANAGING NETWORK RESOURCES VIA USE OF A RELATIONSHIP VIEW	EMC Corporation
10676138	7770204	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
10676831	7325097	METHOD AND APPARATUS FOR DISTRIBUTING A LOGICAL VOLUME OF STORAGE FOR SHARED ACCESS BY MULTIPLE HOST COMPUTERS	EMC Corporation
10676833	7124249	METHOD AND APPARATUS FOR IMPLEMENTING A SOFTWARE CACHE	EMC Corporation
10679662	7188223	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10679726	7353351	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10688180	6839773	DATA PROCESSING SYSTEM WITH PARALLEL ACCESS TO A LOGICAL VOLUME ON A DISK ARRAY STORAGE DEVICE	EMC Corporation
10692120	6990536	METHOD FOR ENABLING OVERLAPPED INPUT/OUTPUT REQUESTS TO A LOGICAL DEVICE FROM MULTIPLE HOSTS WITH EXPLICIT ALLEGIANCES	EMC Corporation
10692285	7516168	METHOD AND APPARATUS FOR MONITORING UPDATE ACTIVITY IN A DATA STORAGE FACILITY	EMC Corporation
10692641	7016150	METHOD AND APPARATUS FOR CLEANING HEAD WITH OVER-DAMPED HARMONIC OSCILLATION	EMC Corporation

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10699572	7640496	METHOD AND APPARATUS FOR GENERATING REPORT VIEWS	EMC Corporation
10701167	7395497	SYSTEM AND METHODS FOR PROCESSING LARGE DATASETS	EMC Corporation
10702259	8527541	METHOD FOR MAPPING A FLAT NAMESPACE ONTO A HIERARCHICAL NAMESPACE USING LOCALITY OF REFERENCE CUES	EMC Corporation
10703754	6980384	EXTENDED POSITION ERROR SIGNAL FOR ANALOGUE SERVO DISK DRIVE	EMC Corporation
10705772	7395283	METHOD AND APPARATUS FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
10714039	7092202	ENHANCED AIRFLOW CONDITIONING SYSTEM FOR REMOVABLE DATA STORAGE CARTRIDGE	EMC Corporation
10714326	7937421	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
10718341	7230781	INFORMATION STORAGE SYSTEM AND A METHOD OF OPERATING IT	EMC Corporation
10720629	7085781	MULTI-VOLUME EXTENT BASED FILE SYSTEM	EMC Corporation
10720969	7428558	PERSISTENT RESTORE OF VIRTUAL DEVICES	EMC Corporation
10722146	7962914	METHOD AND APPARATUS FOR LOAD BALANCING OF DISTRIBUTED PROCESSING UNITS BASED ON PERFORMANCE METRICS	EMC Corporation
10724034	7502933	IDENTITY AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
10724269	7447875	METHOD AND SYSTEM FOR MANAGEMENT OF GLOBAL QUEUES UTILIZING A LOCKED STATE	EMC Corporation
10724669	7054883	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
10724670	7228456	DATA RECOVERY FOR VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
10727386	7153723	METHOD OF FORMING A BALL GRID ARRAY DEVICE	EMC Corporation
10728262	6972607	CLOCK SIGNAL REGENERATION CIRCUITRY	EMC Corporation
10731603	7162571	METHODS AND APPARATUS FOR PARSING A CONTENT ADDRESS TO FACILITATE SELECTION OF A PHYSICAL STORAGE LOCATION IN A DATA STORAGE SYSTEM	EMC Corporation
10731613	7263576	METHODS AND APPARATUS FOR FACILITATING ACCESS TO CONTENT IN A DATA STORAGE SYSTEM	EMC Corporation
10731622	7502886	DATA STORAGE DEVICE WITH TWO-TIER RAID CONTROL CIRCUITRY	EMC Corporation
10731790	9075851	METHOD AND APPARATUS FOR DATA RETENTION IN A STORAGE SYSTEM	EMC Corporation
10731796	7159070	METHODS AND APPARATUS FOR CACHING A LOCATION INDEX IN A DATA STORAGE SYSTEM	EMC Corporation
10731845	7444389	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
10735238	7039737	METHOD AND APPARATUS FOR RESOURCE ARBITRATION	EMC Corporation

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10735422	7171428	TESTING SYSTEM WITH DATABASE-GENERIC FRONT END	EMC Corporation
10735432	8176156	SERVER IDENTIFICATION ASSIGNMENT IN A DISTRIBUTED SWITCHED STORAGE ENVIRONMENT	EMC Corporation
10736954	7454349	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
10737170	7131025	RESOURCE ALLOCATION AWARE QUEUING OF REQUESTS FOR MEDIA RESOURCES	EMC Corporation
10737305	7174406	SYSTEM AND METHOD FOR ARBITRATING ACCESS TO A SHARED RESOURCE	EMC Corporation
10737317	6862200	METHOD AND APPARATUS FOR PROVIDING POWER SIGNALS TO OPERATING CIRCUITRY MOUNTED ON CIRCUIT BOARDS	EMC Corporation
10737505	7404087	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
10739504	7123446	REMOVABLE CARTRIDGE RECORDING DEVICE INCORPORATING ANTIFERROMAGNETICALLY COUPLED RIGID MAGNETIC MEDIA	EMC Corporation
10740219	7231492	DATA STORAGE SYSTEM	EMC Corporation
10740220	7099980	DATA STORAGE SYSTEM HAVING PORT DISABLE MECHANISM	EMC Corporation
10740343	7073031	MULTI-PROCESSOR SYSTEM HAVING DATA COHERENCY	EMC Corporation
10740990	7457118	METHOD AND APPARATUS FOR DISPERSING HEAT FROM HIGH-POWER ELECTRONIC DEVICES	EMC Corporation
10741829	7275141	SYSTEM AND METHOD FOR PERFORMING A FULL COPY IN A DATA STORAGE ENVIRONMENT HAVING A CAPABILITY FOR PERFORMING AN INCREMENTAL COPY	EMC Corporation
10742668	7072995	METHODS AND APPARATUS FOR INDICATING WHETHER A DEVICE IS CONNECTED TO A SERIAL ATA COMMUNICATIONS CABLE	EMC Corporation
10744536	7206795	PREFETCHING AND MULTITHREADING FOR IMPROVED FILE READ PERFORMANCE	EMC Corporation
10745100	7145776	MIDPLANE-LESS DATA STORAGE ENCLOSURE	EMC Corporation
10745431	8244903	DATA STREAMING AND BACKUP SYSTEMS HAVING MULTIPLE CONCURRENT READ THREADS FOR IMPROVED SMALL FILE PERFORMANCE	EMC Corporation
10745732	7111158	TECHNIQUES FOR TRANSITIONING CONTROL OF A SERIAL ATA DEVICE AMONG MULTIPLE HOSTS USING SLEEP AND WAKE COMMANDS	EMC Corporation
10746317	7590776	DATA STORAGE TECHNIQUES UTILIZING HOST- SIDE MULTIPLEXERS	EMC Corporation
10748008	8544096	ON-ACCESS AND ON-DEMAND DISTRIBUTED VIRUS SCANNING	EMC Corporation
10748753	7155586	METHOD OF ALLOWING POINT-IN-TIME VIEW OF DATA ON A DISK USING A MAP ON CACHE DISK	EMC Corporation
10749114	7457868	METHODS AND APPARATUS FOR MEASURING NETWORK PERFORMANCE	EMC Corporation
10749692	7627619	DATA VERIFICATION FOLLOWING DATABASE WRITE	EMC Corporation

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10750227	7559065	METHODS AND APPARATUS PROVIDING AN EVENT SERVICE INFRASTRUCTURE	EMC Corporation
10750334	7590714	METHODS AND APPARATUS FOR PROVIDING EXTENSIBLE LIGHTWEIGHT SERVICES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10750336	7401137	METHODS AND APPARATUS FOR APPLICATION OF MANAGEMENT ACTIONS TO RESOURCES SHARING RELATIONSHIPS	EMC Corporation
10750413	7552446	METHODS AND APPARATUS FOR A TIMER EVENT SERVICE INFRASTRUCTURE	EMC Corporation
10752256	7313578	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
10758327	7546367	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
10761767	7639713	DATABASE BLOCK NETWORK ATTACHED STORAGE PACKET JOINING	EMC Corporation
10761826	7430645	METHODS AND APPARATUS FOR EXTENDING A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10762036	7801920	METHODS AND APPARATUS FOR INDIRECTLY IDENTIFYING A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10762043	7249251	METHODS AND APPARATUS FOR SECURE MODIFICATION OF A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10762044	7580961	METHODS AND APPARATUS FOR MODIFYING A RETENTION PERIOD FOR DATA IN A STORAGE SYSTEM	EMC Corporation
10767884	7647256	TECHNIQUES FOR ESTABLISHING AND MANAGING A DISTRIBUTED CREDENTIAL STORE	EMC Corporation
10769943	7555569	QUICK CONFIGURATION STATUS	EMC Corporation
10771591	7383463	INTERNET PROTOCOL BASED DISASTER RECOVERY OF A SERVER	EMC Corporation
10771811	7380043	METHOD AND APPARATUS FOR ARBITRATING FOR SERIAL BUS ACCESS	EMC Corporation
10779355	7574418	METHOD AND APPARATUS FOR STORING COMPOSITE DATA STREAMS	EMC Corporation
10782309	7532104	LOW-COMPLEXITY CRYPTOGRAPHIC TECHNIQUES FOR USE WITH RADIO FREQUENCY IDENTIFICATION DEVICES	EMC Corporation
10785614	7281157	METHOD AND APPARATUS FOR ENABLING CONSISTENT ANCILLARY DISK ARRAY STORAGE DEVICE OPERATIONS WITH RESPECT TO A MAIN APPLICATION	EMC Corporation
10786644	7640342	SYSTEM AND METHOD FOR DETERMINING CONFIGURATION OF ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10787337	9229646	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
10795682	7505972	METHOD AND SYSTEM FOR DYNAMIC ASSIGNMENT OF ENTITLEMENTS	EMC Corporation

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10795686	7228396		
10/93080	/228390	SWITCHING BETWEEN VIRTUAL ORDERED WRITES MODE OR SYNCHRONOUS OR SEMI-	EMC Corporation
		SYNCHRONOUS RDF TRANSFER MODE AND	
		SYNCHRONOUS RDF TRANSFER MODE AND SYNCHRONOUS OR SEMI-SYNCHRONOUS RDF	
		TRANSFER MODE	
10795851	7240131	METHOD AND APPARATUS FOR IMPROVING THE	EMC Componentian
10/93831	/240131	PROCESS OF MAKING INDEPENDENT DATA	EMC Corporation
		COPIES IN A DATA PROCESSING SYSTEM	
10802489	7318134	CONTINUOUS DATA BACKUP USING DISTRIBUTED	EMC Corporation
10002409	/310134	JOURNALING	ENIC Corporation
10802584	7281156	SYSTEM AND METHOD FOR WRITING DATA TO A	EMC Corporation
10002304	/201130	DISK DRIVE ASSEMBLY TO MINIMIZE THE EFFECT	ENIC Corporation
		OF A SINGLE HEAD FAILURE	
10803377	7178000	TRACE BUFFER FOR DDR MEMORIES	EMC Corporation
10805852	7234009	USE OF AN OPTICAL INTERFACE FOR REMOVABLE	EMC Corporation
10003032	/ 43 <b>T</b> 003	MAGNETIC MEDIA	Livic Corporation
10807945	7321972	ISOLATING MULTIPLE AUTHENTICATION	EMC Corporation
10007743	7321772	CHANNELS, EACH USING MULTIPLE	Livic Corporation
		AUTHENTICATION MODELS	
10808781	7599951	CONTINUOUS DATA BACKUP	EMC Corporation
10808839	7293198	TECHNIQUES FOR MAINTAINING OPERATION OF A	EMC Corporation
10000000	7273170	DATA STORAGE SYSTEM DURING A FAILURE	Livie corporation
10809732	7016240	NON-DESTRUCTIVE MEMORY READ STROBE	EMC Corporation
10007/32	7010210	PULSE OPTIMIZATION TRAINING SYSTEM	Livie corporation
10809733	7107424	MEMORY READ STROBE PULSE OPTIMIZATION	EMC Corporation
10007733	7107121	TRAINING SYSTEM	Livie corporation
10809959	7216264	SYSTEM AND METHOD FOR MANAGING STORAGE	EMC Corporation
10007767	, 21020 .	NETWORKS AND FOR HANDLING ERRORS IN SUCH	2c corporation
		A NETWORK	
10810431	7281150	METHODS AND APPARATUS FOR CONTROLLING	EMC Corporation
		OPERATION OF A DATA STORAGE SYSTEM	1
10810530	7162666	MULTI-PROCESSOR SYSTEM HAVING A	EMC Corporation
		WATCHDOG FOR INTERRUPTING THE MULTIPLE	1
		PROCESSORS AND DEFERRING PREEMPTION	
		UNTIL RELEASE OF SPINLOCKS	
10810971	7225317	SYSTEM AND METHOD FOR MANAGING STORAGE	EMC Corporation
		NETWORKS AND FOR MANAGING SCALABILITY	
		OF VOLUMES IN SUCH A NETWORK	
10810988	7206863	SYSTEM AND METHOD FOR MANAGING STORAGE	EMC Corporation
		NETWORKS AND PROVIDING VIRTUALIZATION OF	
		RESOURCES IN SUCH A NETWORK	
10811566	7302526	HANDLING MEMORY FAULTS FOR MIRRORED	EMC Corporation
		MEMORY	
10812262	7350884	TRAY WITH INTEGRATED RAIL GUIDES FOR	EMC Corporation
		FACILITATING INSTALLATION OF EQUIPMENT	
10012272	7100016	UNITS INTO A CABINET RACK	EMO C
10812263	7188916	ADJUSTABLE SIDE RAILS AND METHOD OF	EMC Corporation
		ATTACHING SAME TO MOUNTING RAILS OF	
10012201	7472221	CABINET RACKS  MIDDODED MEMORY	EMC C
10812291	7472221	MIRRORED MEMORY	EMC Corporation
10812429	7477502	METHOD AND SYSTEM FOR PROVIDING FAULT	EMC Corporation
		PROTECTION IN A POWER SUPPLY SYSTEM	

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10812442	7372693	DATA STORAGE SYSTEM WITH IMPROVED POWER SUPPLY INSTALLATION MECHANISM	EMC Corporation
10812456	7278003	DATA STORAGE SYSTEM HAVING ACCURATE AND COHERENT TIME INFORMATION	EMC Corporation
10812458	6992507	METHOD FOR SELECTING OPTIMAL I/O BUFFER	EMC Corporation
10812490	7243248	METHOD AND SYSTEM FOR PROVIDING REDUNDANT POWER TO A DISK DRIVE SYSTEM	EMC Corporation
10812498	7478404	SYSTEM AND METHODS FOR EVENT IMPACT ANALYSIS	EMC Corporation
10812509	7499994	SYSTEM AND METHOD OF PROVIDING PERFORMANCE INFORMATION FOR A COMMUNICATIONS NETWORK	EMC Corporation
10812511	7376898	METHODS AND APPARATUS FOR MANAGING RESOURCES	EMC Corporation
10812512	7539706	METHODS AND APPARATUS FOR COLLECTING AND PROCESSING FILE SYSTEM DATA	EMC Corporation
10812580	7331004	DATA STORAGE SYSTEM ANALYZER HAVING SELF RESET	EMC Corporation
10812860	7437445	SYSTEM AND METHODS FOR HOST NAMING IN A MANAGED INFORMATION ENVIRONMENT	EMC Corporation
10813842	7930158	METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING	EMC Corporation
10813989	7254654	SPLIT-FIFO MULTI-STATION DATA TRANSFER SYSTEM	EMC Corporation
10814117	7523187	METHODS AND APPARATUS FOR MANAGING NETWORK RESOURCES	EMC Corporation
10814206	8589513	REMOTE MIRRORING OF GROUP NAME SERVICES	EMC Corporation
10814663	7254575	SYSTEM AND METHODS FOR IMPLEMENTING AN ADAPTIVE OBJECT MODEL	EMC Corporation
10814666	7543019	METHODS AND APPARATUS PROVIDING BACKWARD COMPATIBILITY FOR APPLICATIONS THAT ACCESS A CHANGING OBJECT MODEL	EMC Corporation
10814964	6965845	METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
10816202	7752176	SELECTIVE DATA RESTORATION	EMC Corporation
10827123	7409687	OPERATION PRIORITIZATION AND SELECTION IN PROBABILITY-BASED JOB SCHEDULER	EMC Corporation
10833457	7484058	REACTIVE DEADLOCK MANAGEMENT IN STORAGE AREA NETWORKS	EMC Corporation
10835746	7409391	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
10836104	8171170	STORAGE SWITCH TASK PROCESSING SYNCHRONIZATION	EMC Corporation
10836133	7773521	STORAGE SWITCH TRAFFIC BANDWIDTH CONTROL	EMC Corporation
10836415	7240150	METHODS AND APPARATUS FOR PROCESSING ACCESS REQUESTS IN A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10836502	7240151	METHODS AND APPARATUS FOR TRANSFERRING DATA IN A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10837240	7818475	STORAGE SWITCH MIRRORED WRITE SEQUENCE COUNT MANAGEMENT	EMC Corporation

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Number	Number	Title	Owner
10837248	7529781	ONLINE INITIAL MIRROR SYNCHRONIZATION AND MIRROR SYNCHRONIZATION VERIFICATION IN STORAGE AREA NETWORKS	EMC Corporation
10837311	7428611	METHODS AND APPARATUS FOR FORWARDING ACCESS REQUESTS IN A CONTENT ADDRESSABLE COMPUTER SYSTEM	EMC Corporation
10846386	8356124	METHOD AND SYSTEM FOR PROCESSING PACKET TRANSFERS	EMC Corporation
10852789	7236361	FAN ASSEMBLY FOR INSTALLING AND REMOVING FANS INDIVIDUALLY AND COLLECTIVELY	EMC Corporation
10852897	7232193	LOCKING MECHANISM FOR SECURING THE BEZEL OF AN ELECTRONICS ENCLOSURE TO A RACK STRUCTURE	EMC Corporation
10853014	8463748	EILE CYCTEM OLITECCING	EMC Composition
10853014	7155573	FILE SYSTEM QUIESCING  CACHE FALL THROUGH TIME ESTIMATION	EMC Corporation EMC Corporation
10853250	7000074	SYSTEM AND METHOD FOR UPDATING A CACHE	EMC Corporation
10853746	7254016	DATA STORAGE SYSTEM WITH IMPROVED SERVICEABILITY FEATURES	EMC Corporation
10854007	7502954	HIGH AVAILABILITY DATA STORAGE SYSTEM	EMC Corporation
10858597	7519696	METHOD AND APPARATUS FOR DYNAMICALLY MODIFYING A COMPUTER SYSTEM CONFIGURATION	EMC Corporation
10860523	7206915	VIRTUAL SPACE MANAGER FOR COMPUTER HAVING A PHYSICAL ADDRESS EXTENSION FEATURE	EMC Corporation
10861796	7272602	SYSTEM AND METHOD FOR UNORCHESTRATED DETERMINATION OF DATA SEQUENCES USING STICKY BYTE FACTORING TO DETERMINE BREAKPOINTS IN DIGITAL SEQUENCES	EMC Corporation
10861830	8352439	DATABASE VERIFICATION FOLLOWING DATABASE WRITE	EMC Corporation
10864266	7734829	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR TRANSPARENTLY CONTROLLING COMMUNICATIONS BETWEEN NETWORK APPLICATIONS AND A PLURALITY OF NETWORK COMMUNICATIONS PROTOCOL STACKS USING DEFERRED PROTOCOL STACK ASSOCIATION	EMC Corporation
10865136	7984136	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR DETERMINING LOCATIONS OF INTERCONNECTED PROCESSING MODULES AND FOR VERIFYING CONSISTENCY OF INTERCONNECT WIRING OF PROCESSING MODULES	EMC Corporation
10868266	7254685	METHOD FOR MAINTAINING HIGH PERFORMANCE WHILE PRESERVING RELATIVE WRITE I/O ORDERING FOR A SEMI-SYNCHRONOUS REMOTE REPLICATION SOLUTION	EMC Corporation
10869807	7565610	SYSTEM AND METHOD PROVIDING DETAILED NETWORK OBJECT PERFORMANCE INFORMATION TO LOCATE ROOT CAUSE	EMC Corporation
10872074	7707186	METHOD AND APPARATUS FOR DATA SET MIGRATION	EMC Corporation

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10872123	7827476	SYSTEM AND METHODS FOR A TASK	EMC Corporation
10012120		MANAGEMENT USER INTERFACE	
10873744	8356015	FILE SYSTEM QUIESCING DRIVER	EMC Corporation
10874647	7536687	SYSTEM AND METHOD FOR AUTOMATIC	EMC Corporation
		INSTALLATION OF EMBEDDED SOFTWARE	1
		PACKAGES	
10874833	7899933	USE OF GLOBAL LOGICAL VOLUME IDENTIFIERS	EMC Corporation
		TO ACCESS LOGICAL VOLUMES STORED AMONG	
		A PLURALITY OF STORAGE ELEMENTS IN A	
		COMPUTER STORAGE SYSTEM	
10875466	6889292	METHOD AND APPARATUS FOR ACCESSING DATA	EMC Corporation
		USING A CACHE	
10875494	7797483	WRITE INTERCEPTOR FOR TRACKING CHANGES	EMC Corporation
		TO A DISK IMAGE	
10875785	7660310	INDEX PROCESSING	EMC Corporation
10877152	7783798	SYSTEM AND METHOD FOR MANAGING USE OF	EMC Corporation
		AVAILABLE BANDWIDTH FOR A LINK USED FOR	
		MOVEMENT OF DATA BEING COPIED IN A DATA	
100==11		STORAGE ENVIRONMENT	
10877244	7004764	CIRCUIT BOARD RETAINER	EMC Corporation
10878075	7660334	SINGLE PRINTED CIRCUIT BOARD	EMC Corporation
10050164	7040174	CONFIGURATION FOR A DATA STORAGE SYSTEM	EN CO C
10878164	7240154	LOW COST FLEXIBLE NETWORK ACCESSED	EMC Corporation
10070200	7202101	STORAGE ARCHITECTURE	EMC C
10878300	7293181	USE OF ONE VOLTAGE REGULATOR MODULE TO SUPPORT TWO PROCESSORS TO IMPROVE POWER	EMC Corporation
		AND THERMAL LIMITATIONS	
10879383	7640408	ONLINE DATA MIGRATION	EMC Corporation
10879543	7574538	CONTIGUOUS I/O COMMAND QUEUING WITHIN A	EMC Corporation
10077545	737 <b>4</b> 336	DATA STORAGE DEVICE	Livic Corporation
10879687	7711813	METHODS AND APPARATUS FOR DISPLAYING	EMC Corporation
10073007	,,,11013	STORAGE RESOURCES	2. The Corporation
10879688	7730428	METHODS AND APPARATUS FOR DISPLAYING	EMC Corporation
		STORAGE RESOURCES	
10880279	7434022	DISTRIBUTED WORKFLOW TECHNIQUES	EMC Corporation
10880431	7475363	METHODS AND APPARATUS FOR VIEWING	EMC Corporation
		NETWORK RESOURCES	1
10881131	8051260	DETERMINING ENVIRONMENTAL AVAILABILITY	EMC Corporation
		IN A STORAGE SUBSYSTEM	
10881331	7353358	SYSTEM AND METHODS FOR REPORTING	EMC Corporation
		STORAGE UTILIZATION	
10881332	7836448	SYSTEM AND METHODS FOR TASK MANAGEMENT	EMC Corporation
10881530	7281097	METHOD OF CONTROLLING THE PERFORMANCE	EMC Corporation
		OF A DATA STORAGE SYSTEM	
10881553	7062594	ROOT COMPLEX CONNECTION SYSTEM	EMC Corporation
10881558	8677086	SYSTEM FOR CACHING DATA	EMC Corporation
10881562	8688934	METHOD FOR CACHING DATA	EMC Corporation
10881588	7155821	TECHNIQUES FOR MANUFACTURING A CIRCUIT	EMC Corporation
100015:-		BOARD HAVING A COUNTERSUNK VIA	
10881705	8037072	SYSTEM AND METHOD FOR GENERATING	EMC Corporation
		CHARGE INFORMATION FOR USERS OF A DATA	
		STORAGE SYSTEM	

Application	Registration		
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10881880	7266652	SYSTEM AND METHOD FOR MANAGING DATA	EMC Corporation
		CONSISTENCY BETWEEN DIFFERENT DATA	
		VOLUMES ON ONE OR MORE DATA STORAGE	
		SYSTEMS IN A DATA STORAGE ENVIRONMENT	
10882651	7308529	EFFICIENT MOUNTING AND DISMOUNTING OF	EMC Corporation
		STORAGE MEDIA	
10882843	7546428	COMPUTER ARCHITECTURE FOR MANAGING	EMC Corporation
		REPLICATION OF DATA IN A DATA STORAGE	
		ENVIRONMENT	
10883017	7076327	SIMULTANEOUS PROCESSING OF MEDIA	EMC Corporation
		REQUESTS	
10883451	7549027	SYSTEM AND METHOD FOR MANAGING	EMC Corporation
		REPLICATION OF DATA IN A DATA STORAGE	
		ENVIRONMENT	
10883624	8561076	PRIORITIZATION AND QUEUING OF MEDIA	EMC Corporation
		REQUESTS	
10884345	7499531	METHOD AND SYSTEM FOR INFORMATION	EMC Corporation
		LIFECYCLE MANAGEMENT	
10884453	8103873	METHOD AND SYSTEM FOR PROCESSING	EMC Corporation
		AUDITORY COMMUNICATIONS	
10884473	7457396	AUTOMATED CALL MANAGEMENT	EMC Corporation
10884477	7330536	MESSAGE INDEXING AND ARCHIVING	EMC Corporation
10886509	7000143	SYSTEM AND METHOD FOR DATA PROTECTION	EMC Corporation
		WITH MULTIDIMENSIONAL PARITY	1
10893839	7930550	CONTENT ADDRESSABLE INFORMATION	EMC Corporation
		ENCAPSULATION, REPRESENTATION, AND	
		TRANSFER	
10894450	7415731	CONTENT ADDRESSABLE INFORMATION	EMC Corporation
20071120		ENCAPSULATION, REPRESENTATION, AND	
		TRANSFER	
10903898	7461399	PIN RECOVERY IN A SMART CARD	EMC Corporation
10905389	7337250	LOW LATENCY DATA TRANSMISSION METHOD	EMC Corporation
		AND SYSTEM	
10905391	8270322	METHOD AND SYSTEM FOR ARBITRATING DATA	EMC Corporation
		TRANSMISSIONS	
10905393	7400672	METHOD AND SYSTEM FOR DETECTING	EMC Corporation
10,000,0		TRANSMITTER ERRORS	
10909633	7376134	PRIVILEGED NETWORK ROUTING	EMC Corporation
10910076	7478022	COMPONENT EMULATION DEVICE AND METHOD	EMC Corporation
10710070	7.70022	OF DESIGN	2e corporation
10910985	7539813	METHODS AND APPARATUS FOR SEGREGATING A	EMC Corporation
10310302	7557015	CONTENT ADDRESSABLE COMPUTER SYSTEM	21116 Corporation
10911330	8069269	METHODS AND APPARATUS FOR ACCESSING	EMC Corporation
10711330	0007207	CONTENT IN A VIRTUAL POOL ON A CONTENT	Zivie corporation
		ADDRESSABLE STORAGE SYSTEM	
10911365	7552282	METHOD, COMPUTER READABLE MEDIUM, AND	EMC Corporation
10711000	. 332232	DATA STORAGE SYSTEM FOR SELECTIVE DATA	2.11C Corporation
		REPLICATION OF CACHED DATA	
10915189	7298243	RADIO FREQUENCY IDENTIFICATION SYSTEM	EMC Corporation
10/10/10/	, 2702-13	WITH PRIVACY POLICY IMPLEMENTATION BASED	Livic Corporation
		ON DEVICE CLASSIFICATION	
		ON DEVICE CEABBITICATION	1

Application	Registration		
Number	Number	Title	Owner
10917616	7292969	METHOD AND SYSTEM FOR SIMULATING PERFORMANCE ON ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10917737	7382824	METHOD AND APPARATUS FOR ACCURATE MODELING OF MULTI-DOMAIN CLOCK INTERFACES	EMC Corporation
10917753	7392360	METHOD AND SYSTEM FOR CAPACITY PLANNING AND CONFIGURING ONE OR MORE DATA STORAGE SYSTEMS	EMC Corporation
10918012	7483968	SYSTEM AND METHOD FOR CONFIGURING RESOURCE GROUPS	EMC Corporation
10918161	7383430	SYSTEM AND METHOD FOR VALIDATING RESOURCE GROUPS	EMC Corporation
10918578	7398471	SYSTEM AND METHOD FOR THE ADMINISTRATION OF RESOURCE GROUPS	EMC Corporation
10918805	7321893	SYSTEM AND METHOD FOR THE CONFIGURATION OF RESOURCES IN RESOURCE GROUPS	EMC Corporation
10925379	7730237	FLOW CONTROL MECHANISM	EMC Corporation
10931322	7210053	SYSTEMS AND METHODS FOR ASSIGNING TASKS TO DERIVED TIMERS OF VARIOUS RESOLUTIONS IN REAL-TIME SYSTEMS TO MAXIMIZE TIMER USAGE	EMC Corporation
10931325	7617365	SYSTEMS AND METHODS TO AVOID DEADLOCK AND GUARANTEE MIRROR CONSISTENCY DURING ONLINE MIRROR SYNCHRONIZATION AND VERIFICATION	EMC Corporation
10931681	8209185	INTERFACE FOR MANAGEMENT OF AUDITORY COMMUNICATIONS	EMC Corporation
10931794	7516214	RULES ENGINE FOR MANAGING VIRTUAL LOGICAL UNITS IN A STORAGE NETWORK	EMC Corporation
10931951	7072787	METHOD FOR ANALYZING DATA STORAGE SYSTEM TEST DATA	EMC Corporation
10932365	7373472	STORAGE SWITCH ASYNCHRONOUS REPLICATION	EMC Corporation
10934874	7165196	METHOD FOR TESTING SERIALIZERS/DE- SERIALIZERS	EMC Corporation
10935551	7346799	SYSTEMS AND METHODS FOR RECOVERING AND BACKING UP DATA	EMC Corporation
10935552	8645496	SYSTEMS AND METHODS FOR BACKING UP DATA	EMC Corporation
10936439	7095829	DATA MESSAGE MIRRORING AND REDIRECTION	EMC Corporation
10936442	7725098	DATA MESSAGE PROCESSING	EMC Corporation
10936443	7450937	MIRRORED DATA MESSAGE PROCESSING	EMC Corporation
10938422	8966276	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
10938848	8572391	SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
10940408	7631144	WRITE LATENCY EFFICIENT STORAGE SYSTEM	EMC Corporation
10941671	7493458	TWO-PHASE SNAP COPY	EMC Corporation
10942174	7689633	NETWORK FILE SYSTEM-BASED DATA STORAGE SYSTEM	EMC Corporation
10943090	8631038	MANAGING DIGITAL IDENTITY INFORMATION	EMC Corporation

Application Number	Registration Number	Title	Owner
10945653	8166005	PATHNAME CACHING AND PROTECTION OF THE ROOT DIRECTORY IN A NESTED MULTILAYER	EMC Corporation
10945654	7315926	DIRECTORY STRUCTURE  LOCK MANAGEMENT FOR CONCURRENT ACCESS TO A SINGLE FILE FROM MULTIPLE DATA MOVER	EMC Corporation
10945677	7529724	COMPUTERS  SERVICING WORK REQUESTS BETWEEN UNITS OF A STORAGE DEVICE	EMC Corporation
10945831	7353908	METHOD AND SYSTEM FOR ATTENUATING NOISE FROM A CABINET HOUSING COMPUTER EQUIPMENT	EMC Corporation
10946148	8122201	BACKUP WORK REQUEST PROCESSING BY ACCESSING A WORK REQUEST OF A DATA RECORD STORED IN GLOBAL MEMORY	EMC Corporation
10947063	7454437	METHODS AND APPARATUS FOR NAMING RESOURCES	EMC Corporation
10948270	7203782	QUEUEING METHOD SUPPORTING MULTIPLE CLIENT ACCESSES SIMULTANEOUSLY	EMC Corporation
10948514	7565581	ERROR HANDLING POLICY	EMC Corporation
10948620	7653915	N X M SNAPSHOT PLATFORM	EMC Corporation
10949415	7441023	METHOD AND APPARATUS FOR MODELING AND ANALYZING MPLS AND VIRTUAL PRIVATE NETWORKS	EMC Corporation
10949539	7516492	INFERRING DOCUMENT AND CONTENT SENSITIVITY FROM PUBLIC ACCOUNT ACCESSIBILITY	EMC Corporation
10949545	7523301	INFERRING CONTENT SENSITIVITY FROM PARTIAL CONTENT MATCHING	EMC Corporation
10949552	7954151	PARTIAL DOCUMENT CONTENT MATCHING USING SECTIONAL ANALYSIS	EMC Corporation
10949589	7720003	MODEL-BASED METHOD AND APPARATUS FOR DETERMINING MPLS NETWORK PROPERTIES	EMC Corporation
10949852	7716315	ENCLOSURE CONFIGURABLE TO PERFORM IN- BAND OR OUT-OF-BAND ENCLOSURE MANAGEMENT	EMC Corporation
10950150	7783778	MODEL-BASED MODEL-BASED METHOD AND APPARATUS FOR DETERMINING VIRTUAL PRIVATE NETWORK TOPOLOGIES	EMC Corporation
10950950	7305572	DISK DRIVE INPUT SEQUENCING FOR STAGGERED DRIVE SPIN-UP	EMC Corporation
10950951	7155552	APPARATUS AND METHOD FOR HIGHLY AVAILABLE MODULE INSERTION	EMC Corporation
10952320	7698424	TECHNIQUES FOR PRESENTING MULTIPLE DATA STORAGE ARRAYS TO ISCSI CLIENTS AS A SINGLE AGGREGATED NETWORK ARRAY	EMC Corporation
10953156	7423859	SYSTEM FOR PROTECTING COMPUTER EQUIPMENT FROM LIGHTNING VOLTAGE SURGES	EMC Corporation
10953541	8307174	SYSTEM AND METHOD FOR MANAGING SESSIONS AND REALLOCATING MEMORY RESOURCES USED FOR REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
10953639	7509465	SYSTEM AND METHOD FOR MANAGING MEMORY OR SESSION RESOURCES USED FOR MOVEMENT OF DATA BEING COPIED IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10953830	7299332	SYSTEM AND METHOD FOR MANAGING SESSIONS AND ALLOCATING MEMORY RESOURCES USED FOR REPLICATION OF DATA IN A DATA STORAGE ENVIRONMENT	EMC Corporation
10954015	7315807	SYSTEM AND METHODS FOR STORAGE AREA NETWORK SIMULATION	EMC Corporation
10954915	7260689	METHODS AND APPARATUS FOR DETECTING USE OF COMMON RESOURCES	EMC Corporation
10954991	7546323	SYSTEM AND METHODS FOR MANAGING BACKUP STATUS REPORTS	EMC Corporation
10954992	7934018	METHODS AND APPARATUS FOR SYNCHRONIZING CONFIGURATION DATA	EMC Corporation
10955033	7246187	METHOD AND APPARATUS FOR CONTROLLING EXCLUSIVE ACCESS TO A SHARED RESOURCE IN A DATA STORAGE SYSTEM	EMC Corporation
10955136	8082397	PRIVATE SLOT	EMC Corporation
10955142	8185708	HOST IMPLEMENTATION OF TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
10955354	7263569	METHOD AND SYSTEM FOR DISTRIBUTING POWER IN A COMPUTER SYSTEM	EMC Corporation
10955355	7424554	METHOD OF AND SYSTEM FOR CHANGING THE ADDRESS OF A DISK ARRAY ENCLOSURE	EMC Corporation
10955470	8078813	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
10955588	7499834	SYSTEM AND METHODS FOR REPORTING DEVICE ALLOCATION	EMC Corporation
10955805	8918677	METHODS AND APPARATUS FOR PERFORMING DATA VALIDATION IN A NETWORK MANAGEMENT APPLICATION	EMC Corporation
10955964	7478018	SYSTEM AND METHODS FOR NETWORK CALL LOAD SIMULATION	EMC Corporation
10956482	7801922	FILE INDEX PROCESSING	EMC Corporation
10956484	7685129	DYNAMIC DATA SET MIGRATION	EMC Corporation
10956493	7114033	HANDLING DATA WRITES COPIED FROM A REMOTE DATA STORAGE DEVICE	EMC Corporation
10956814	8626514	INTERFACE FOR MANAGEMENT OF MULTIPLE AUDITORY COMMUNICATIONS	EMC Corporation
10956822	7239241	METHOD AND SYSTEM FOR INVENTORY CONTROL	EMC Corporation
10956833	7245221	INVENTORY CONTROL	EMC Corporation
10957069	7716262	INDEX PROCESSING	EMC Corporation
10960447	8135861	BACKUP PROXY	EMC Corporation
10962031	7930649	METHOD AND SYSTEM FOR SHARING AND MANAGING CONTEXT INFORMATION	EMC Corporation
10966873	9329905	METHOD AND APPARATUS FOR CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
10971892	8046560	SERIAL NUMBER BASED STORAGE DEVICE ALLOCATION	EMC Corporation

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10978025	7418619	BACKUP AND RESTORE OPERATIONS OF INTERDEPENDENT SYSTEM COMPONENTS	EMC Corporation
10978505	7260692	METHODS AND APPARATUS FOR ACCESSING TRACE DATA	EMC Corporation
10981885	7634518	METHOD AND APPARATUS FOR MANAGING AND ARCHIVING PERFORMANCE INFORMATION RELATING TO STORAGE SYSTEM	EMC Corporation
10982707	7949682	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
10984678	8161013	IMPLEMENTING APPLICATION SPECIFIC MANAGEMENT POLICIES ON A CONTENT ADDRESSED STORAGE DEVICE	EMC Corporation
10984686	7444464	CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
10985389	8626719	METHOD AND SYSTEM TO PROVIDE FILES TO A CLIENT COMPUTER	EMC Corporation
10995810	7409470	DETERMINING CONFIGURATION DATA IN CONNECTION WITH DYNAMIC RDF	EMC Corporation
10996997		MICRO-PAYMENT SCHEME ENCOURAGING COLLABORATION IN MULTI-HOP CELLULAR NETWORKS	EMC Corporation
10997580	7716684	SOFTWARE CONFIGURATION METHODS AND COMMON PRESENTATION LAYER	EMC Corporation
10998458	7558856	SYSTEM AND METHOD FOR INTELLIGENT, GLOBALLY DISTRIBUTED NETWORK STORAGE	EMC Corporation
10998491	7363453	METHOD AND APPARATUS FOR IMPROVING STORAGE DEVICE PERFORMANCE BY SELECTIVE VOLUME SWAPPING BASED ON HOT SPOT ANALYSIS	EMC Corporation
10999820	7734051	KEY DISTRIBUTION	EMC Corporation
11/034192	7003433	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
11/134479	8781975	SYSTEM AND METHOD OF FRAUD REDUCTION	EMC Corporation
11/536157	7725669	BACKUP AND RESTORE OPERATIONS USING COHERENCY GROUPS FOR ISB PROTOCOL SYSTEMS	EMC Corporation
11/769747	7631128	PROTOCOL CONTROLLER FOR A DATA STORAGE SYSTEM	EMC Corporation
11/774857	9280871	GAMING SYSTEMS WITH AUTHENTICATION TOKEN SUPPORT	EMC Corporation
11/840629	8494959	PAYMENT CARD WITH DYNAMIC ACCOUNT NUMBER	EMC Corporation
11/845163	7828004	METHOD AND DEVICE FOR STORING CHEMICAL PRODUCTS IN A CONTAINER	EMC Corporation
11/965254	9350595	SYSTEM AND METHOD FOR SERIALIZING AND DESERIALIZING DATA OBJECTS INTO A SINGLE BINARY STREAM	EMC Corporation
11001201	9268780	CONTENT-DRIVEN INFORMATION LIFECYCLE MANAGEMENT	EMC Corporation

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11001229	7359927	METHOD FOR PERFORMING PERIODIC REPLICATION OF DATA ON A REMOTE STORAGE SYSTEM	EMC Corporation
11001448	7478026	APPLICATION PROGRAMMING INTERFACE SIMULATOR FOR A DATA STORAGE SYSTEM	EMC Corporation
11001489	7620720	METHODS AND APPARATUS FOR DEALLOCATION OF RESOURCES	EMC Corporation
11002543	7475285	METHOD AND APPARATUS FOR PROVIDING HOST RESOURCES FOR AN ELECTRONIC COMMERCE SITE	EMC Corporation
11006472	7529181	METHOD AND APPARATUS FOR ADAPTIVE MONITORING AND MANAGEMENT OF DISTRIBUTED SYSTEMS	EMC Corporation
11008861	7123485	TECHNIQUES FOR MOVING A POWER SUPPLY WITHIN AN ELECTRONIC CABINET	EMC Corporation
11011177	8996821	METHODS AND SYSTEMS FOR PROVIDING RESOURCE SHARING THROUGH FILE ISOMORPHISM DESCRIPTOR	EMC Corporation
11011345	7676587	DISTRIBUTED IP TRUNKING AND SERVER CLUSTERING FOR SHARING OF AN IP SERVER ADDRESS AMONG IP SERVERS	EMC Corporation
11014338	7707331	PATH DETERMINATION USING PREFERRED PATHS OR RANDOMLY SELECTING SOURCE AND TARGET PORTS	EMC Corporation
11014405	7743171	FORMATTING AND INITIALIZATION OF DEVICE MIRRORS USING INITIALIZATION INDICATORS	EMC Corporation
11014597	7634595	METHOD FOR SUSPENDING A DISCOVERY PROCESS, SAVING THE STATE OF THE DISCOVERY PROCESS, AND RESUMING THE DISCOVERY PROCESS DURING A DISTRIBUTED COPY OPERATION	EMC Corporation
11015219	7308670	SYSTEM AND METHOD FOR DESIGNING ELECTRICAL TRACE LENGTHS ON PRINTED CIRCUIT BOARDS BETWEEN IMPEDANCE DISCONTINUITIES	EMC Corporation
11017244	7424785	LABEL CASSETTE FOR AN ELECTRONICS ENCLOSURE	EMC Corporation
11017292	7398431	SYSTEM AND METHOD OF DYNAMICALLY SETTING A FAULT THRESHOLD FOR AN OPERATIONAL MODULE	EMC Corporation
11017307	7386772	TEST MODULE FOR TESTING OF ELECTRONIC SYSTEMS	EMC Corporation
11017308	7238030	MULTI-FUNCTION EXPANSION SLOTS FOR A STORAGE SYSTEM	EMC Corporation
11017554	7343467	METHOD TO PERFORM PARALLEL DATA MIGRATION IN A CLUSTERED STORAGE ENVIRONMENT	EMC Corporation
11019483	7095578	DETECTION OF FLY HEIGHT CHANGE IN A DISK DRIVE USING HEAD DRAG	EMC Corporation
11019696	7746875	SYSTEM AND METHOD FOR PROTECTING AND SHARING DATA ACROSS A NETWORK	EMC Corporation

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11019699	7275107	SYSTEM AND METHOD FOR DETERMINING A WORLD WIDE NAME FOR USE WITH A HOST FOR ENABLING COMMUNICATION WITH A DATA STORAGE SYSTEM WITHOUT REQUIRING THAT THE HOST AND DATA STORAGE SYSTEM BE IN COMMUNICATION DURING THE DETERMINATION	EMC Corporation
11019700		[REDACTED]	EMC Corporation
11020722	7133795	TECHNIQUES FOR TESTING AN ELECTRONIC SYSTEM USING IN-LINE SIGNAL DISTORTION	EMC Corporation
11020805	7222983	ELECTRONIC SYSTEM HAVING FRONT PANEL ASSEMBLY WITH REFLECTIVE CAPABILITY	EMC Corporation
11021012	7979665	METHOD AND APPARATUS FOR PROCESSING ACCESS REQUESTS IN A COMPUTER SYSTEM	EMC Corporation
11021107	7881946	METHODS AND APPARATUS FOR GUIDING A USER THROUGH A SAN MANAGEMENT PROCESS	EMC Corporation
11021355	8301739	STORAGE SYSTEM INITIALIZATION UTILITY	EMC Corporation
11021378	7376681	METHODS AND APPARATUS FOR ACCESSING INFORMATION IN A HIERARCHICAL FILE SYSTEM	EMC Corporation
11021565	7478107	METHODS AND APPARATUS FACILITATING MANAGEMENT OF A SAN	EMC Corporation
11021892	7366836	SOFTWARE SYSTEM FOR PROVIDING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
11022211	7406633	ARCHITECTURE FOR HANDLING ERRORS IN ACCORDANCE WITH A RISK SCORE FACTOR	EMC Corporation
11022509	7262972	ELECTRONIC SYSTEM HAVING SPACE-EFFICIENT FRONT PANEL ASSEMBLY	EMC Corporation
11022512	7393193	TECHNIQUES FOR MAKING A METALLIC PRODUCT UTILIZING ELECTRIC CURRENT IN A CONSOLIDATION PROCESS	EMC Corporation
11022530	7401266	SYSTEM AND METHOD FOR HANDLING ERRORS IN ACCORDANCE WITH A RISK SCORE FACTOR	EMC Corporation
11022998	7729239	PACKET SWITCHING NETWORK END POINT CONTROLLER	EMC Corporation
11022999	7211767	TECHNIQUES FOR TREATING A SURFACE CRACK ON A COMPONENT	EMC Corporation
11023000	7313656	PRE-FETCH PREDICTION METHOD FOR DISK DRIVES	EMC Corporation
11023103	7302821	TECHNIQUES FOR MANUFACTURING A PRODUCT USING ELECTRIC CURRENT DURING PLASTIC DEFORMATION OF MATERIAL	EMC Corporation
11023301	7774445	SYSTEM AND METHOD FOR MANAGING ZONING IN A STORAGE AREA NETWORK BY COMPARING ZONE SETS AND IDENTIFYING DIFFERENCES BETWEEN ZONE SETS	EMC Corporation
11023668	7457824	METHODS AND APPARATUS FOR MANAGING GROUPS OF RESOURCES	EMC Corporation
11023773	7284011	SYSTEM AND METHODS FOR PROCESSING A MULTIDIMENSIONAL DATABASE	EMC Corporation
11024231	7469284	METHODS AND APPARATUS FOR ASSIGNING MANAGEMENT RESPONSIBILITIES TO MULTIPLE AGENTS	EMC Corporation

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Number	Number	Title	Owner
11025580	8190715	SYSTEM AND METHODS FOR REMOTE AGENT INSTALLATION	EMC Corporation
11026736	7254673	PROVISION OF A VICTIM CACHE WITHIN A STORAGE CACHE HIERARCHY	EMC Corporation
11027505	7293135	INVERTIBLE DISK DRIVE CONNECTION SCHEME	EMC Corporation
11027997	8180742	POLICY BASED INFORMATION MANAGEMENT	EMC Corporation
11028080	8180743	INFORMATION MANAGEMENT	EMC Corporation
11028089	8229904	STORAGE POOLS FOR INFORMATION MANAGEMENT	EMC Corporation
11034613	7428621	METHODS AND APPARATUS FOR STORING A REFLECTION ON A STORAGE SYSTEM	EMC Corporation
11034732	7698516	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
11034737	7281084	METHOD AND APPARATUS FOR MODIFYING A RETENTION PERIOD	EMC Corporation
11037932	7437515	DATA STRUCTURE FOR WRITE PENDING	EMC Corporation
11049817	7392361	GENERIC REALLOCATION FUNCTION FOR HEAP RECONSTITUTION IN A MULTI-PROCESSOR SHARED MEMORY ENVIRONMENT	EMC Corporation
11050549	7730321	SYSTEM AND METHOD FOR AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
11052395	7624167	METHOD AND APPARATUS FOR ARRANGING DISTRIBUTED SYSTEM TOPOLOGY AMONG A PLURALITY OF NETWORK MANAGERS	EMC Corporation
11054331	7568156	LANGUAGE RENDERING	EMC Corporation
11054577	7698406	METHOD AND SYSTEM FOR IDENTIFYING AND CLASSIFYING NETWORK-BASED APPLICATIONS	EMC Corporation
11054578	7761527	METHOD AND APPARATUS FOR DISCOVERING NETWORK BASED DISTRIBUTED APPLICATIONS	EMC Corporation
11059885	7672303	ARBITRATION METHOD AND SYSTEM	EMC Corporation
11059961	7853716	DATA STORAGE SYSTEM HAVING PACKET SWITCHING NETWORK WITH LATENCY ARBITRATION	EMC Corporation
11069373	7000086	VIRTUAL ORDERED WRITES	EMC Corporation
11070516	7295398	HIGH SPEED CLEANUP OF REMOVABLE STORAGE DEVICE	EMC Corporation
11072128	7310716	TECHNIQUES FOR PRODUCING A CONSISTENT COPY OF SOURCE DATA AT A TARGET LOCATION	EMC Corporation
11072141	8005795	TECHNIQUES FOR RECORDING FILE OPERATIONS AND CONSISTENCY POINTS FOR PRODUCING A CONSISTENT COPY	EMC Corporation
11072612	7177994	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
11076618	7162559	SYSTEM FOR CONTROLLING INTERRUPTS BETWEEN INPUT/OUTPUT DEVICES AND CENTRAL PROCESSING UNITS	EMC Corporation
11077932	7949739	METHOD AND APPARATUS FOR DETERMINING CAUSALITY MAPPING OF DISTRIBUTED SYSTEMS	EMC Corporation
11077933	7546609	METHOD AND APPARATUS FOR DETERMINING MONITORING LOCATIONS IN DISTRIBUTED SYSTEMS	EMC Corporation
11079560	7606804	SYSTEM AND METHOD FOR INFORMATION MANAGEMENT IN A DISTRIBUTED NETWORK	EMC Corporation

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11080047	7210060	SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
11080229	7526514	SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
11081177	7703091	METHODS AND APPARATUS FOR INSTALLING AGENTS IN A MANAGED NETWORK	EMC Corporation
11083486	8812595	SCANNING A MESSAGE-LIST	EMC Corporation
11083571	7574555	MEMORY SYSTEM HAVING DAISY CHAINED MEMORY CONTROLLERS	EMC Corporation
11084065	8676862	INFORMATION MANAGEMENT	EMC Corporation
11084003	8260753	BACKUP INFORMATION MANAGEMENT	EMC Corporation
11084679	8200733	VERSATILE INFORMATION MANAGEMENT	EMC Corporation
11085898	8055724		
11083898	8033724	SELECTION OF MIGRATION METHODS INCLUDING PARTIAL READ RESTORE IN DISTRIBUTED STORAGE MANAGEMENT	EMC Corporation
11085911	7546431	DISTRIBUTED OPEN WRITABLE SNAPSHOT COPY FACILITY USING FILE MIGRATION POLICIES	EMC Corporation
11087111	7281105	METHOD AND APPARATUS FOR SELECTING DATA STORAGE DEVICES FOR PARTICIPATING IN LOGICAL VOLUME EXCHANGE PROCESS BASED ON AGGREGATED WORKLOAD STATISTICS	EMC Corporation
11087113	7281106	METHOD AND APPARATUS FOR SELECTIVE VOLUME SWAPPING IN A DATA STORAGE DEVICE BASED ON MERGING MULTIPLE SETS OF CANDIDATE STORAGE DEVICES	EMC Corporation
11087114	7334092	METHOD AND APPARATUS FOR SCORING DATA STORAGE DEVICES FOR PARTICIPATING IN LOGICAL VOLUME EXCHANGE PROCESS	EMC Corporation
11088349	7562222	SYSTEM AND METHOD FOR AUTHENTICATING ENTITIES TO USERS	EMC Corporation
11089702	7457914	ASYNCHRONOUS EVENT NOTIFICATION	EMC Corporation
11089817	7121857	TOLERANCE-ABSORBING INTERCONNECT SYSTEM USING A SPRING-LOADED CONNECTOR	EMC Corporation
11090732	7097477	TECHNIQUES FOR CONTROLLING COUPLING BETWEEN A MOTHERBOARD AND A DAUGHTER CARD	EMC Corporation
11091910	7793160	SYSTEMS AND METHODS FOR TRACING ERRORS	EMC Corporation
11092006	7363520	TECHNIQUES FOR PROVIDING POWER TO A SET OF POWERABLE DEVICES	EMC Corporation
11092039	7362572	TECHNIQUES FOR REDUNDANT COMPUTING WITHIN A 1U FORM FACTOR WITH IMPROVED RESOURCE PARTITIONING AND MANAGEMENT	EMC Corporation
11092535	7486526	TECHNIQUES FOR REDUNDANT COMPUTING FROM WITHIN A 1U FORM FACTOR WITH IMPROVED SERVICEABILITY AND HIGH AVAILABILITY CHARACTERISTICS	EMC Corporation
11093019	7606815	NON-RECURSIVE PROCESSING OF HIERARCHICAL DATA	EMC Corporation
11093632	7945756	SYSTEM AND METHOD FOR MANAGING A DATA STORAGE SYSTEM BY CONTACTING A SINGLE PROCESSOR IN A DATA STORAGE SYSTEM HAVING MORE THAN ONE PROCESSOR	EMC Corporation
11094024	7173787	APPARATUS AND METHOD FOR CONTROLLING DISK DRIVE SPIN UP	EMC Corporation

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11094026	8261066	SYSTEM AND METHOD FOR SECURE STORAGE,	EMC Corporation
		TRANSFER AND RETRIEVAL OF CONTENT	
		ADDRESSABLE INFORMATION	
11094050	7321948	HIGHLY AVAILABLE SYSTEM TEST MECHANISM	EMC Corporation
11094118	7277986	SECTOR-EDGE CACHE	EMC Corporation
11094494	7954098	SYSTEM AND METHODS FOR SAN AGENT	EMC Corporation
		INSTALLATION	
11094637	7395198	TECHNIQUES FOR POWERING AN ELECTRONIC	EMC Corporation
		DEVICE WITH SIMULATED BACKUP POWER	
		SUPPLY COMMUNICATIONS	
11094649	8086569	ASYNCHRONOUS DETECTION OF LOCAL EVENT	EMC Corporation
		BASED POINT-IN-TIME STATE OF LOCAL-COPY IN	
		THE REMOTE-COPY IN A DELTA-SET	
		ASYNCHRONOUS REMOTE REPLICATION	
11094772	7694007	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
		REQUESTS	
11094773	7640533	SYSTEM AND METHODS FOR DEFINING A	EMC Corporation
		SOFTWARE BUILD	
11094817	7653712	METHODS AND APPARATUS FOR PROCESSING	EMC Corporation
		CONFIGURATION DATA	
11095099	7219175	METHOD AND SYSTEM FOR IMPROVING THE	EMC Corporation
		LATENCY IN A DATA TRANSMISSION SYSTEM	
11095406	7546309	METHODS AND APPARATUS FOR CREATING	EMC Corporation
		MIDDLEWARE INDEPENDENT SOFTWARE	
11095420	7243177	METHOD AND SYSTEM FOR THROTTLING DATA	EMC Corporation
		PACKETS IN A DATA TRANSMISSION SYSTEM	
11095421	7444350	METHOD AND APPARATUS FOR PROCESSING	EMC Corporation
		MANAGEMENT INFORMATION	
11095885	7328318	SYSTEM AND METHOD FOR ATOMIC MULTI-	EMC Corporation
		VOLUME OPERATIONS	
11095886	7334096	ARCHITECTURE AND APPARATUS FOR ATOMIC	EMC Corporation
1100#006		MULTI-VOLUME OPERATIONS	T7 (C C
11095986	7516452	METHOD AND SYSTEM FOR MANAGING	EMC Corporation
		INSTALLATION OF SOFTWARE ON A COMPUTER	
11006016	<b>55</b> 0 <b>5</b> 0 <b>5</b> 0	SYSTEM PLATFORM	EL CO C
11096816	7707037	ARCHIVING OF SURVEILLANCE DATA	EMC Corporation
11096962	7444287	EFFICIENT MONITORING SYSTEM AND METHOD	EMC Corporation
11097887	8244542	VIDEO SURVEILLANCE	EMC Corporation
11104735	7275201	MEMORY SYSTEM	EMC Corporation
11107063	7392235	METHODS AND APPARATUS FOR RETRIEVAL OF	EMC Corporation
		CONTENT UNITS IN A TIME-BASED DIRECTORY	
11107104		STRUCTURE	T1 10 0
11107194	7765191	METHODS AND APPARATUS FOR MANAGING THE	EMC Corporation
11105005	765550	REPLICATION OF CONTENT	EN CO C
11107995	7657579	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
11112059	8132011	METHOD AND APPARATUS FOR AUTHENTICATION	EMC Corporation
11112020	0751001	OF USERS AND WEB SITES	FMCC
11112938	8751801	SYSTEM AND METHOD FOR AUTHENTICATING	EMC Corporation
11114521	7200220	USERS USING TWO OR MORE FACTORS	EN CO C
11114761	7290330	COUPLING INVERTIBLE AND PLUGGABLE	EMC Corporation
		MODULE TO A CIRCUIT BOARD	
11120602	7716642	TECHNIQUES FOR DETECTING CODING	EMC Corporation
		INCOMPATIBILITIES	

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11121213	8522086	METHOD AND APPARATUS FOR PROVIDING RELOCATION NOTIFICATION	EMC Corporation
11124776	7243046	SYSTEM AND METHOD FOR PREPARING TRACE DATA FOR ANALYSIS	EMC Corporation
11124875	7797585	SYSTEM AND METHOD FOR HANDLING TRACE DATA FOR ANALYSIS	EMC Corporation
11129023	7240116	DYNAMIC RDF GROUPS	EMC Corporation
11129858	7434093	DUAL CHANNEL RESTORATION OF DATA	EMC Corporation
11130042	7626939	BETWEEN PRIMARY AND BACKUP SERVERS METHOD AND APPARATUS FOR AUTOMATED	EMC Corporation
		TIME-BASED PEER-TO-PEER THRESHOLDING	
11130046	7970945	METHOD AND APPARATUS FOR AUTOMATIC PEER-TO-PEER CONTENT COMPARISON	EMC Corporation
11134935	7444485	METHOD AND APPARATUS FOR DUPLICATING COMPUTER BACKUP DATA	EMC Corporation
11137749	7797675	CATEGORICAL APPROACH FOR IMPLEMENTING A SOFTWARE COMPONENT DEVELOPMENT ARCHITECTURE	EMC Corporation
11138065	7801859	TRACKING FILESYSTEM BACKUPS	EMC Corporation
11139013	8335768	SELECTING DATA IN BACKUP DATA SETS FOR GROOMING AND TRANSFERRING	EMC Corporation
11143272	7337289	METHOD AND APPARATUS FOR COMPUTING FILE STORAGE ELEMENTS FOR BACKUP AND RESTORE	EMC Corporation
11143813	7281086	DISK QUEUE MANAGEMENT FOR QUALITY OF SERVICE	EMC Corporation
11148477	7818735	SYSTEM AND METHOD FOR ENABLING ACCESS AND USE OF SOFTWARE INSTALLED ON A DATA STORAGE SYSTEM	EMC Corporation
11151619	7591022	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
11153678	8261336	SYSTEM AND METHOD FOR MAKING ACCESSIBLE A SET OF SERVICES TO USERS	EMC Corporation
11153932	7454561	METHOD FOR OPERATING DISK DRIVES IN A DATA STORAGE SYSTEM	EMC Corporation
11154234	8423728	PHYSICAL BASED SCHEDULER USING RUN COUNT AND SKIP COUNT VALUES	EMC Corporation
11154964	8301851	CONSECUTIVE SCHEDULING OF JOBS FOR A DEVICE USING RUN COUNT VALUES	EMC Corporation
11158591	7331619	LATCH-SPRING ASSEMBLY FOR ENCLOSURES	EMC Corporation
11158722	7809888	CONTENT-AWARE CACHING TECHNIQUES	EMC Corporation
11158769	7774763	TECHNIQUES FOR FORMING A MULTI-TASKING EXECUTABLE PROGRAM AND USING THE SAME	EMC Corporation
11158866	7849460	METHODS AND APPARATUS FOR MULTIPLE POINT IN TIME DATA ACCESS	EMC Corporation
11159279	8244811	METHOD AND APPARATUS FOR SEARCHING MESSAGING IDENTITIES	EMC Corporation
11159280	7908326	METHOD AND APPARATUS FOR MANAGING MESSAGING IDENTITIES	EMC Corporation
11159281	7899868	METHOD AND APPARATUS FOR DEFINING MESSAGING IDENTITIES	EMC Corporation

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11165104	7805470	METHODS AND APPARATUS FOR MANAGING THE	EMC Corporation
11166579	7783883	STORAGE OF CONTENT IN A FILE SYSTEM METHOD AND APPARATUS FOR VALIDATING E-	EMC Corporation
111005/9	//83883	MAIL MESSAGES	EMIC Corporation
11166822	7298167	POWER SUPPLY SYSTEM	EMC Corporation
11166934	7673285	SYSTEM AND METHODS FOR GENERATING A	EMC Corporation
11100934	7073283	SOFTWARE COMPONENT INTERFACE	ENIC Corporation
11166956	8281152	STORAGE DATA ENCRYPTION	EMC Corporation
11167704	7577866	TECHNIQUES FOR FAULT TOLERANT DATA	EMC Corporation
		STORAGE	1
11167884	7472210	MULTIPLEXING AND BYPASS CIRCUIT FOR	EMC Corporation
		INTERFACING EITHER SINGLE OR DUAL PORTED	
		DRIVES TO MULTIPLE STORAGE PROCESSORS	
11168136	7620671	DELEGATION OF METADATA MANAGEMENT IN A	EMC Corporation
		STORAGE SYSTEM BY LEASING OF FREE FILE	
		SYSTEM BLOCKS FROM A FILE SYSTEM OWNER	
11169418	7716185	CREATION OF A SINGLE CLIENT SNAPSHOT USING	EMC Corporation
		A CLIENT UTILITY	
11169419	8024292	CREATION OF A SINGLE SNAPSHOT USING A	EMC Corporation
		SERVER JOB REQUEST	
11169458	7577681	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
44460460		CONTENTS OF A DATABASE	77.10.0
11169460	7716498	POWER CONTROL IN A DATA STORAGE SYSTEM	EMC Corporation
11169463	8209354	TRANSACTION LIFECYCLE MANAGEMENT IN	EMC Corporation
11170474	7447700	DISTRIBUTED MANAGEMENT SYSTEMS	EMC C
11169464	7447709	METHODS AND APPARATUS FOR SYNCHRONIZING CONTENT	EMC Corporation
11169473	7447833	TECHNIQUES FOR PROVIDING COMMUNICATIONS	EMC Corporation
		IN A DATA STORAGE SYSTEM USING A SINGLE IC	F
		FOR BOTH STORAGE DEVICE COMMUNICATIONS	
		AND PEER-TO-PEER COMMUNICATIONS	
11169853	7549028	BACKUP AND RESTORE OPERATIONS USING A	EMC Corporation
		SINGLE SNAPSHOT DRIVEN BY A SERVER JOB	
		REQUEST	
11170015	7523278	BACKUP AND RESTORE OPERATIONS USING A	EMC Corporation
		SINGLE SNAPSHOT	
11170026	7506336	SYSTEM AND METHODS FOR VERSION	EMC Corporation
	212221	COMPATIBILITY CHECKING	
11170027	8180846	METHOD AND APPARATUS FOR OBTAINING	EMC Corporation
		AGENT STATUS IN A NETWORK MANAGEMENT	
11171041	9620964	APPLICATION	EMC Composition
11171841	8639864	METHOD AND SYSTEM FOR FACILITATING	EMC Corporation
		COMMUNICATION BETWEEN A HOST AND DOWNSTREAM DEVICES IN A DATA STORAGE	
		SYSTEM	
11171906	8646070	VERIFYING AUTHENTICITY IN DATA STORAGE	EMC Corporation
111/1700	0040070	MANAGEMENT SYSTEMS	Livic Corporation
11172378	7886345	PASSWORD-PROTECTION MODULE	EMC Corporation
11173174	8059805	ENHANCED SERVICES PROVIDED USING	EMC Corporation
111/31/7	0057005	COMMUNICATION REDIRECTION AND	Livic Corporation
		PROCESSING	
11173910	8161005	EFFICIENT INDEX PROCESSING	EMC Corporation

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11173949	8605878	REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
11174070	8156079	SYSTEM AND METHOD FOR INDEX PROCESSING	EMC Corporation
11174083	7966292	INDEX PROCESSING	EMC Corporation
11174288	8831194	TELEPHONIC COMMUNICATION REDIRECTION AND COMPLIANCE PROCESSING	EMC Corporation
11176784	7065467	METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
11183461	7174423	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
11186554	8239518	METHOD FOR DETECTING AND RESOLVING A PARTITION CONDITION IN A CLUSTER	EMC Corporation
11188220	7779296	STORING DATA REPLICAS REMOTELY	EMC Corporation
11189043	7747763	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
11191633	7750793	METHODS AND APPARATUS FOR RFID DEVICE AUTHENTICATION	EMC Corporation
11196928	7793112	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
11197126		[REDACTED]	EMC Corporation
11197854	7506157	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
11207588	7716171	SNAPSHOT INDEXING	EMC Corporation
11207596	9026512	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
11207606		SEARCHABLE BACKUPS	EMC Corporation
11208096		[REDACTED]	EMC Corporation
11208291	7293136	MANAGEMENT OF TWO-QUEUE REQUEST STRUCTURE FOR QUALITY OF SERVICE IN DISK STORAGE SYSTEMS	EMC Corporation
11210477	7530115	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
11211050	8195153	MOBILE ACCESS TO BACKUP AND RECOVERY SERVICES	EMC Corporation
11211234	7860016	METHOD AND APPARATUS FOR CONFIGURATION AND ANALYSIS OF NETWORK ROUTING PROTOCOLS	EMC Corporation
11211250	7912055	METHOD AND SYSTEM FOR CONFIGURATION AND ANALYSIS OF NETWORK MULTICAST ROUTING PROTOCOLS	EMC Corporation
11212898	7350041	METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT	EMC Corporation
11213233	7320059	METHODS AND APPARATUS FOR DELETING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
11213565	7636704	METHODS AND APPARATUS FOR SCHEDULING AN ACTION ON A COMPUTER	EMC Corporation
11214549	7193809	METHOD OF COMPENSATING FOR MICROJOG ERROR DUE TO REPEATABLE RUN-OUT	EMC Corporation
11220780	7617216	METADATA OFFLOAD FOR A FILE SERVER CLUSTER	EMC Corporation
11224408	7430589	REMOTE DATA FACILITY OVER AN IP NETWORK	EMC Corporation

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11224509	7577767	DATA STORAGE SYSTEM HAVING PLURAL STORAGE PROCESSORS IN A SINGLE CHASSIS	EMC Corporation
11229976	7673115	DATA OPERATION VALIDATION	EMC Corporation
11230706	7355417	TECHNIQUES FOR OBTAINING ELECTROMAGNETIC DATA FROM A CIRCUIT BOARD	EMC Corporation
11231705	7571387	METHODS AND APPARATUS FACILITATING MANAGEMENT OF A SAN	EMC Corporation
11231730	7434012	TECHNIQUES FOR MEDIA SCRUBBING	EMC Corporation
11233261	7603376	FILE AND FOLDER SCANNING METHOD AND APPARATUS	EMC Corporation
11233292	7668924	METHODS AND SYSTEM FOR INTEGRATING SAN SERVERS	EMC Corporation
11233643	7475076	METHOD AND APPARATUS FOR PROVIDING REMOTE ALERT REPORTING FOR MANAGED RESOURCES	EMC Corporation
11233687	7640264	SYSTEM AND METHODS FOR QUERYING A REPORT DATABASE	EMC Corporation
11233810	7721211	METHODS AND APPARATUS PROVIDING FILTERING IN A MANAGEMENT APPLICATION	EMC Corporation
11233811	7546312	SYSTEM AND METHODS FOR MODELING A REPORT QUERY DATABASE	EMC Corporation
11233838	7668877	SYSTEM AND METHODS FOR DEFINING A CANONICAL QUERY EXPRESSION	EMC Corporation
11233843	7783743	METHODS AND APPARATUS FOR PROCESSING ELECTRONIC MAIL-RELATED DATA	EMC Corporation
11234612	7454668	TECHNIQUES FOR DATA SIGNATURE AND PROTECTION AGAINST LOST WRITES	EMC Corporation
11237051	7363418	DATA STORAGE SYSTEM VOLUME MATRIX	EMC Corporation
11237628	7584338	REPLICATION OF DEDUPLICATED STORAGE SYSTEM	EMC Corporation
11238283	7405942	MODULE INSERTION/EXTRACTION DEVICE	EMC Corporation
11238284	7134902	POWER CORD RETAINER	EMC Corporation
11238350	7621460	DATA STORAGE SYSTEM HAVING COOLING FAN SPEED PROTECTION	EMC Corporation
11238352	7307832	CHASSIS COVER WITH AIR FLOW CONTROL FLAPS	EMC Corporation
11238475	7509535	SYSTEM AND METHOD FOR MANAGING FAILOVER IN A DATA STORAGE ENVIRONMENT	EMC Corporation
11238512	7370235	SYSTEM AND METHOD FOR MANAGING AND SCHEDULING RECOVERY AFTER A FAILURE IN A DATA STORAGE ENVIRONMENT	EMC Corporation
11238548	7574542	SAS EXPANSION TOPOLOGY FOR RAID DATA STORAGE INCLUDING MULTIPLEXERS AND SAS EXPANDERS FOR INTERFACING WITH SINGLE OR DUAL PORTS DRIVES	EMC Corporation
11238561	7401251	ARCHITECTURE FOR MANAGING FAILOVER AND RECOVERY AFTER FAILOVER IN A DATA STORAGE ENVIRONMENT	EMC Corporation

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11238563	7377800	RAID DATA STORAGE SYSTEM HAVING KEYED SAS EXPANSION CABLES	EMC Corporation
11238600	7627005	MULTIPLEXING SYSTEM	EMC Corporation
11238601	7624206	RAID DATA STORAGE SYSTEM WITH SAS EXPANSION	EMC Corporation
11238604	8072883	INTERNET SMALL COMPUTER SYSTEMS INTERFACE (ISCSI) DISTANCE ACCELERATION DEVICE	EMC Corporation
11239037	8086760	MANAGING COMMUNICATIONS CONNECTIONS WITH DATA STORAGE SYSTEMS	EMC Corporation
11239568	7549002	ENCLOSURE NUMBERING IN RAID DATA STORAGE SYSTEMS	EMC Corporation
11239776	7810094	DISTRIBUTED TASK SCHEDULING FOR SYMMETRIC MULTIPROCESSING ENVIRONMENTS	EMC Corporation
11239801	7571333	METHOD AND SYSTEM FOR AUTOMATICALLY SETTING THE OPERATING VOLTAGE AND SPEED OF DIPLEX COMMUNICATION IN A DATA STORAGE SYSTEM	EMC Corporation
11240003	7680905	METHODS AND SYSTEM FOR VIEWING SAN RESOURCES	EMC Corporation
11240164	7587483	SYSTEM AND METHOD FOR MANAGING COMPUTER NETWORKS	EMC Corporation
11241053	7805416	FILE SYSTEM QUERY AND METHOD OF USE	EMC Corporation
11241054	8135763	APPARATUS AND METHOD FOR MAINTAINING A FILE SYSTEM INDEX	EMC Corporation
11241132	7783615	APPARATUS AND METHOD FOR BUILDING A FILE SYSTEM INDEX	EMC Corporation
11241146	7536484	SYSTEM FOR SETTING THE OPERATING VOLTAGE OF DISK ARRAY ENCLOSURES IN A DATA STORAGE DEVICE	EMC Corporation
11241165	8072987	FULL ARRAY NON-DISRUPTIVE DATA MIGRATION	EMC Corporation
11241166	7386666	GLOBAL SPARING OF STORAGE CAPACITY ACROSS MULTIPLE STORAGE ARRAYS	EMC Corporation
11241167	7954034	METHOD OF AND SYSTEM FOR PROTECTING DATA DURING CONVERSION FROM AN ECC PROTECTION SCHEME TO A PARITY PROTECTION SCHEME	EMC Corporation
11241338	7464132	METHOD AND APPARATUS FOR REFERENCE MODEL CHANGE GENERATION IN MANAGED SYSTEMS	EMC Corporation
11242179	7627609	INDEX PROCESSING USING TRANSFORMED VALUES	EMC Corporation
11242218	7698325	INDEX PROCESSING FOR LEGACY SYSTEMS	EMC Corporation
11242514	7752211	ADAPTIVE INDEX PROCESSING	EMC Corporation
11244978	7451175	SYSTEM AND METHOD FOR MANAGING COMPUTER NETWORKS	EMC Corporation
11251618	7870103	TOLERATING AND REPORTING COLLISIONS IN CONTENT-DERIVED IDENTIFIERS OF DATA SEGMENTS USING SECONDARY IDENTIFIERS	EMC Corporation
11251627	7624335	VERIFYING A FILE IN A SYSTEM WITH DUPLICATE SEGMENT ELIMINATION USING SEGMENTION-INDEPENDENT CHECKSUMS	EMC Corporation
11254089	7558919	DYNAMIC CACHE PARTITIONING	EMC Corporation

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11255337	7917474	SYSTEMS AND METHODS FOR ACCESSING AND UPDATING DISTRIBUTED DATA	EMC Corporation
11255346	7346720	SYSTEMS AND METHODS FOR MANAGING CONCURRENT ACCESS REQUESTS TO A SHARED RESOURCE	EMC Corporation
11255817	7788303	SYSTEMS AND METHODS FOR DISTRIBUTED SYSTEM SCANNING	EMC Corporation
11255818	7797283	SYSTEMS AND METHODS FOR MAINTAINING DISTRIBUTED DATA	EMC Corporation
11256317	7386675	SYSTEMS AND METHODS FOR USING EXCITEMENT VALUES TO PRE3DICT FUTURE ACCESS TO RESOURCES	EMC Corporation
11256410	7551572	SYSTEMS AND METHODS FOR PROVIDING VARIABLE PROTECTION	EMC Corporation
11262306	8055711	NON-BLOCKING COMMIT PROTOCOL SYSTEMS AND METHODS	EMC Corporation
11262308	8051425	DISTRIBUTED SYSTEM WITH ASYNCHRONOUS EXECUTION SYSTEMS AND METHODS	EMC Corporation
11262314	8238350	MESSAGE BATCHING WITH CHECKPOINTS SYSTEMS AND METHODS	EMC Corporation
11265510	7502467	SYSTEM AND METHOD FOR AUTHENTICATION SEED DISTRIBUTION	EMC Corporation
11265539	7739733	STORING DIGITAL SECRETS IN A VAULT	EMC Corporation
11273279	7634601	METHOD AND APPARATUS FOR PROVIDING CONTINUOUS COMMUNICATION BETWEEN COMPUTERS	EMC Corporation
11276929	7358752	SIGNAL LAUNCH FOR HIGH SPEED DIFFERENTIAL SIGNALS	EMC Corporation
11277790		COMBINED CONTENT INDEXING AND DATA REDUCTION	EMC Corporation
11277958	7600070	DISK DRIVE PACKAGING ENCLOSURE	EMC Corporation
11278152	7821922	FAULT ISOLATION AND HANDLING IN A PACKET SWITCHING NETWORK	EMC Corporation
11278157	8554943	METHOD AND SYSTEM FOR REDUCING PACKET LATENCY IN NETWORKS WITH BOTH LOW LATENCY AND HIGH BANDWIDTHS REQUIREMENTS	EMC Corporation
11281157	7770228	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
11283447	7187547	TECHNIQUES FOR COOLING A SET OF CIRCUIT BOARDS WITHIN A RACK MOUNT CABINET	EMC Corporation
11286168	7539824	POOLING AND PROVISIONING STORAGE RESOURCES IN A STORAGE NETWORK	EMC Corporation
11287106	7343429	SCALABLE COMMUNICATION WITHIN A DISTRIBUTED SYSTEM USING DYNAMIC COMMUNICATION TREES	EMC Corporation
11288578	7765187	REPLICATION OF A CONSISTENCY GROUP OF DATA STORAGE OBJECTS FROM SERVERS IN A DATA NETWORK	EMC Corporation
11290971	7647624	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation

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1 TOTAL PC	1 Summer	1100	Owner
11301975	8549252	FILE BASED VOLUMES AND FILE SYSTEMS	EMC Corporation
11303602	7409667	TECHNIQUES FOR MODELING A CIRCUIT BOARD	EMC Corporation
11303002	7 103007	STRUCTURE	Livie corporation
11303752	8060922	CONSUMER INTERNET AUTHENTICATION DEVICE	EMC Corporation
11305308	7454579	MANAGING ACCESS TO SHARED RESOURCES	EMC Corporation
11311565	7697391	MASSIVELY MULTI-LEVEL OPTICAL DATA	EMC Corporation
		STORAGE USING SUBWAVELENGTH SIZED NANO-	1
		GRATING STRUCTURES	
11318675	7500134	VIRTUAL ARRAY FAILOVER	EMC Corporation
11318719	7697515	ON-LINE DATA MIGRATION OF A	EMC Corporation
		LOGICAL/VIRTUAL STORAGE ARRAY	_
11318734	7697554	ON-LINE DATA MIGRATION OF A	EMC Corporation
		LOGICAL/VIRTUAL STORAGE ARRAY BY	_
		REPLACING VIRTUAL NAMES	
11318756	8107467	FULL ARRAY NON-DISRUPTIVE FAILOVER	EMC Corporation
11318757	9348530	PRESENTATION OF VIRTUAL ARRAYS USING N-	EMC Corporation
		PORT ID VIRTUALIZATION	
11321066	7693889	AUTOMATED BACKUP AND RECOVERY FOR	EMC Corporation
		CONTENT REPOSITORY	
11322174	8832705	ORDERED MUTUAL EXCLUSION	EMC Corporation
11323483	7653624	FILE SYSTEM CHANGE TRACKING	EMC Corporation
11324017	7974952	TRACKING FILE SYSTEM CHANGES FOR BACKUP	EMC Corporation
11324351	7581044	DATA TRANSMISSION METHOD AND SYSTEM	EMC Corporation
		USING CREDITS, A PLURALITY OF BUFFERS AND A	
		PLURALITY OF CREDIT BUSES	77.60.0
11324352	7675929	METHOD AND SYSTEM FOR MANAGING DATA	EMC Corporation
11004054	7200740	FLOW IN A DATA TRANSMISSION SYSTEM	EMO C
11324354	7388749	SUPPORT CARRIER FOR A DISK-DRIVE WITH	EMC Corporation
11224410	7634617	INTEGRATED HEAT-SINK	EMC Composition
11324418	/63461/	METHODS, SYSTEMS, AND COMPUTER PROGRAM	EMC Corporation
		PRODUCTS FOR OPTIMIZED COPYING OF LOGICAL	
		UNITS (LUNS) IN A REDUNDANT ARRAY OF INEXPENSIVE DISKS (RAID) ENVIRONMENT USING	
		BUFFERS THAT ARE LARGER THAN LUN DELTA	
		MAP CHUNKS	
11324452	7441078	MANAGING DISK DRIVE STATUS	EMC Corporation
11324461	7627873	SYSTEM AND METHOD FOR HANDLING DEVICE	EMC Corporation
11321101	7027075	OBJECTS IN A DATA STORAGE ENVIRONMENT	Ente corporation
		FOR MAINTAINING CONSISTENCY DURING DATA	
		REPLICATION	
11324530	7784049	SYSTEM AND METHOD FOR PROVIDING A	EMC Corporation
		PLURALITY OF VIRTUAL COMPUTING	1
		ENVIRONMENTS THAT EFFICIENTLY USE DATA IN	
		THE VIRTUAL ENVIRONMENTS	
11324553	7574560	METHODS, SYSTEMS, AND COMPUTER PROGRAM	EMC Corporation
		PRODUCTS FOR DYNAMIC MAPPING OF LOGICAL	
		UNITS IN A REDUNDANT ARRAY OF INEXPENSIVE	
		DISKS (RAID) ENVIRONMENT	
11324593	7574445	GENERATING A SELECTION REPRESENTATION	EMC Corporation
		FOR ITEMS IN TREE STRUCTURES	

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11324642	8095542	METHODS AND APPARATUS FOR ALLOWING ACCESS TO CONTENT	EMC Corporation
11324646	7539838	METHODS AND APPARATUS FOR INCREASING THE STORAGE CAPACITY OF A STORAGE SYSTEM	EMC Corporation
11324666	7325084	MESSAGES SIGNALING INTERRUPT (MSI) PROCESSING SYSTEM	EMC Corporation
11324667	7398343	INTERRUPT PROCESSING SYSTEM	EMC Corporation
11324695	7328296	INTERRUPT PROCESSING SYSTEM	EMC Corporation
11324721	7634618	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR OPTIMIZED COPYING OF LOGICAL UNITS (LUNS) IN A REDUNDANT ARRAY OF INEXPENSIVE DISKS (RAID) ENVIRONMENT USING BUFFERS THAT ARE SMALLER THAN LUN DELTA MAP CHUNKS	EMC Corporation
11324726	7958101	METHODS AND APPARATUS FOR MOUNTING A FILE SYSTEM	EMC Corporation
11324728	7529972	METHODS AND APPARATUS FOR RECONFIGURING A STORAGE SYSTEM	EMC Corporation
11324740	7664125	INDICATION FORWARDING IN A DISTRIBUTED ENVIRONMENT	EMC Corporation
11324750	8015235	GROUP SERVICES	EMC Corporation
11324751	8631114	INFORMATION ROLL-UP IN DISTRIBUTED ENVIRONMENTS	EMC Corporation
11324766	8046545	CONTINUOUS BACKUP	EMC Corporation
11324785	8892750	TRANSPARENT HBA REPLACEMENT	EMC Corporation
11324786	8185639	SERVER IDENTIFICATION IN STORAGE NETWORKS	EMC Corporation
11324839	7609651	METHODS AND SYSTEMS FOR MAINTAINING CONFIGURATION INFORMATION	EMC Corporation
11324841	8032621	METHODS AND APPARATUS PROVIDING ROOT CAUSE ANALYSIS ON ALERTS	EMC Corporation
11324842	7895520	METHODS AND APPARATUS FOR MANAGING SCHEDULED ACTIVITIES IN A STORAGE AREA NETWORK	EMC Corporation
11324843	7596572	METHODS AND APPARATUS PROVIDING A CATEGORICAL APPROACH TO VALUETYPE BRIDGE SUPPORT	EMC Corporation
11324844	7606811	METHODS AND APPARATUS FOR SYNCHRONIZING INFORMATION	EMC Corporation
11324970	7182623	LEVER-AND-SPRING ASSEMBLY FOR AN ELECTRONICS MODULE	EMC Corporation
11324973	7447834	MANAGING SERIAL ATTACHED SMALL COMPUTER SYSTEMS INTERFACE COMMUNICATIONS	EMC Corporation
11324974	7315449	APPARATUS FOR SUPPORTING A HEATSINK	EMC Corporation
11324975	7552279	SYSTEM AND METHOD FOR MULTIPLE VIRTUAL COMPUTING ENVIRONMENTS IN DATA STORAGE ENVIRONMENT	EMC Corporation
11324984	7440215	MANAGING DISK DRIVE SPIN UP	EMC Corporation
11324989	7996848	SYSTEMS AND METHODS FOR SUSPENDING AND RESUMING THREADS	EMC Corporation
11324992	7751407	SETTING A CEILING FOR BANDWIDTH USED BY BACKGROUND TASKS IN A SHARED PORT ENVIRONMENT	EMC Corporation

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11325001	7574540	MANAGING MANAGEMENT CONTROLLER COMMUNICATIONS	EMC Corporation
11325078	8677087	CONTINUOUS BACKUP TO A REMOTE STORAGE DEVICE	EMC Corporation
11325108		METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN RFID NETWORKS	EMC Corporation
11325109	7797420	METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN VOIP NETWORKS	EMC Corporation
11325144	7512595	METHODS AND SYSTEMS FOR UTILIZING CONFIGURATION INFORMATION	EMC Corporation
11325146	7739688	TECHNIQUES FOR MANAGING DISTRIBUTION OF WELL-DEFINED OBJECTS IN A CLIENT/SERVER SYSTEM	EMC Corporation
11325172	7788677	METHODS AND APPARATUS PROVIDING A CATEGORICAL APPROACH TO STRONGLY TYPED COMPONENT MANAGEMENT	EMC Corporation
11325228	7631143	DATA STORAGE SYSTEM EMPLOYING VIRTUAL DISK ENCLOSURE	EMC Corporation
11325285	9064046	USING CORRELATED STACK TRACES TO DETERMINE FAULTS IN CLIENT/SERVER SOFTWARE	EMC Corporation
11325286	7849469	SYSTEM AND METHODS FOR GENERIC INSTALLATION PREREQUISITE VERIFICATION	EMC Corporation
11325494	7634496	TECHNIQUES FOR MANAGING STATE CHANGES OF A DATA STORAGE SYSTEM UTILIZING THE OBJECT ORIENTED PARADIGM	EMC Corporation
11325689	7526495	REAL-TIME CONSTRUCTION OF A SELECTION REPRESENTATION FOR ITEMS IN TREE STRUCTURES	EMC Corporation
11325914	7715378	ERROR NOTIFICATION AND FORCED RETRY IN A DATA STORAGE SYSTEM	EMC Corporation
11326035	9268659	DETECTING FAILOVER IN A DATABASE MIRRORING ENVIRONMENT	EMC Corporation
11327961	7197616	VIRTUAL ORDERED WRITES	EMC Corporation
11336461	7254515	METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
11341353	8560569	METHOD AND APPARATUS FOR PERFORMING BULK FILE SYSTEM ATTRIBUTE RETRIEVAL	EMC Corporation
11343012	8150936	METHODS AND APPARATUS TO MANAGE SHADOW COPY PROVIDERS	EMC Corporation
11343152	8914596	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
11343313	8170985	PRIMARY STUB FILE RETENTION AND SECONDARY RETENTION COORDINATION IN A HIERARCHICAL STORAGE SYSTEM	EMC Corporation
11345816	8341127	CLIENT INITIATED RESTORE	EMC Corporation
11345859 11346005	8886902 7913044	DISK BACKUP SET ACCESS  EFFICIENT INCREMENTAL BACKUPS USING A	EMC Corporation EMC Corporation

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Number	Number	Title	Owner
11346898	8015441	IMPROVED VERIFICATION OF COMPUTER BACKUP DATA	EMC Corporation
11347117	8042172	REMOTE ACCESS ARCHITECTURE ENABLING A CLIENT TO PERFORM AN OPERATION	EMC Corporation
11347124	7890746	AUTOMATIC AUTHENTICATION OF BACKUP CLIENTS	EMC Corporation
11347758	7966513	AUTOMATIC CLASSIFICATION OF BACKUP CLIENTS	EMC Corporation
11347759	7421551	FAST VERIFICATION OF COMPUTER BACKUP DATA	EMC Corporation
11348982	7822717	POINT-IN-TIME DATABASE RESTORE	EMC Corporation
11353360	7346636	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
11354730	7490072	ROLE BASED ACCESS CONTROLS	EMC Corporation
11355097	8214398	ROLE BASED ACCESS CONTROLS	EMC Corporation
11355286	7647639	METHODS FOR DETECTING EXECUTABLE CODE WHICH HAS BEEN ALTERED	EMC Corporation
11357724	8370638	DERIVATIVE SEEDS	EMC Corporation
11357740	7848261	SYSTEMS AND METHODS FOR PROVIDING A QUIESCING PROTOCOL	EMC Corporation
11360270	7624155	DATA REPLICATION FACILITY FOR DISTRIBUTED COMPUTING ENVIRONMENTS	EMC Corporation
11361907	7516348	SELECTIVE POWER MANAGEMENT OF DISK DRIVES DURING SEMI-IDLE TIME IN ORDER TO SAVE POWER AND INCREASE DRIVE LIFE SPAN	EMC Corporation
11365261	7529777	CROSS-OBJECT ATTRIBUTE RESTORATION	EMC Corporation
11369488	8528057	METHOD AND APPARATUS FOR ACCOUNT VIRTUALIZATION	EMC Corporation
11372651	7788537	TECHNIQUES FOR COLLECTING CRITICAL INFORMATION FROM A MEMORY DUMP	EMC Corporation
11376355	7830770	TECHNIQUES FOR STORING AND RETRIEVING DATA USING A SPHERE-SHAPED DATA STORAGE STRUCTURE	EMC Corporation
11377129	7264497	METHOD AND APPARATUS FOR RETAINING A POWER CORD	EMC Corporation
11378722	7421552	TECHNIQUES FOR MANAGING DATA WITHIN A DATA STORAGE SYSTEM UTILIZING A FLASH-BASED MEMORY VAULT	EMC Corporation
11380082	7605815	SELECTION REPRESENTATION METHODS APPLIED TO LOGICAL GROUPINGS	EMC Corporation
11381336	7689597	MIRRORED STORAGE ARCHITECTURE USING CONTINUOUS DATA PROTECTION TECHNIQUES	EMC Corporation

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11381339	7765190	PSEUDOSNAPSHOT CREATION AND	EMC Corporation
		IMPLEMENTATION USING CONTINUOUS DATA	
		PROTECTION	
11381345	7509358	PERFORMING REPLICATION OPERATIONS ON	EMC Corporation
		CONTINUOUS DATA PROTECTION SYSTEMS USING	
		PSEUDOSNAPSHOTS	
11382075	7945726	PRE-ALLOCATION AND HIERARCHICAL MAPPING	EMC Corporation
		OF DATA BLOCKS DISTRIBUTED FROM A FIRST	_
		PROCESSOR TO A SECOND PROCESSOR FOR USE	
		IN A FILE SYSTEM	
11382193	7676514	DISTRIBUTED MAINTENANCE OF SNAPSHOT	EMC Corporation
		COPIES BY A PRIMARY PROCESSOR MANAGING	•
		METADATA AND A SECONDARY PROCESSOR	
		PROVIDING READ-WRITE ACCESS TO A	
		PRODUCTION DATASET	
11382233	7653832	STORAGE ARRAY VIRTUALIZATION USING A	EMC Corporation
		STORAGE BLOCK MAPPING PROTOCOL CLIENT	· · · · · · · · · · · · · · · · · · ·
		AND SERVER	
11382464	7546432	PASS-THROUGH WRITE POLICIES OF FILES IN	EMC Corporation
	1010102	DISTRIBUTED STORAGE MANAGEMENT	
11384756	8825882	METHOD AND APPARATUS FOR IMPLEMENTING	EMC Corporation
11501750	002002	HIGH-PERFORMANCE, SCALEABLE DATA	2.vic corporation
		PROCESSING AND STORAGE SYSTEMS	
11386029	7383373	DERIVING CORRESPONDING SIGNALS	EMC Corporation
11386884	7552125	SYNERGISTIC DATA STRUCTURES	EMC Corporation
11387129	7603529	METHODS, SYSTEMS, AND COMPUTER PROGRAM	EMC Corporation
1130/129	7003329	PRODUCTS FOR MAPPED LOGICAL UNIT (MLU)	Livic Corporation
		REPLICATIONS, STORAGE, AND RETRIEVAL IN A	
		REDUNDANT ARRAY OF INEXPENSIVE DISKS	
		(RAID) ENVIRONMENT	
11387426	7585005	LOCKING MECHANISM FOR SECURING BEZELS	EMC Corporation
11367420	7363003	LOCKING WILCHAMSWIT OR SECORING BEZEES	Livic corporation
11389786	8095937	METHODS AND APPARATUS PROVIDING PAYLOAD	EMC Corporation
11309700	0093937	EVENT PROCESSING FOR MANAGED OBJECTS	ENIC Corporation
11389800	7211739	ELECTROMAGNETIC INTERFERENCE (EMI) SHIELD	EMC Corporation
11303000	/211/39	FOR A CABLE-BULKHEAD INTERFACE	ENIC Corporation
11390899	7849176	METHODS AND APPARATUS FOR RENDERING	EMC Corporation
11390099	/0491/0	MESSAGES  MESSAGES	ENIC Corporation
11200000	7577704		EMC Corporation
11390900	7577724	METHODS AND APPARATUS ASSOCIATED WITH	EMC Corporation
11201012	7406551	ADVISORY GENERATION	EMC Composition
11391012	7496551	METHODS AND APPARATUS ASSOCIATED WITH	EMC Corporation
11201104	7012109	ADVISORY GENERATION  SYSTEM AND METHOD FOR IMPROVING DISK	EMC Companytis:
11391104	7913108	SYSTEM AND METHOD FOR IMPROVING DISK	EMC Corporation
		DRIVE PERFORMANCE DURING HIGH FREQUENCY	
11201107	7014107	VIBRATION CONDITIONS  METHODS AND APPARATUS FOR MARRING	EMC Comment:
11391106	7814196	METHODS AND APPARATUS FOR MAPPING	EMC Corporation
		RESOURCES	

<b>Number</b> 8132266	Title METHODS, SYSTEMS, AND COMPUTER PROGRAM	Owner
	PRODUCTS FOR IDENTIFYING AND ENFORCING SOFTWARE FEATURE LIMITS ACROSS DIFFERENT HARDWARE PLATFORMS, SOFTWARE RELEASES, AND TIERS	EMC Corporation
7519504	METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN SURVEILLANCE NETWORKS	EMC Corporation
7475203	METHODS AND SYSTEMS FOR ENABLING NON- DESTRUCTIVE ERASURE OF DATA	EMC Corporation
7409525	IMPLICIT LOCKS IN A SHARED VIRTUAL MEMORY SYSTEM	EMC Corporation
9026679	METHODS AND APPARATUS FOR PERSISTING MANAGEMENT INFORMATION CHANGES	EMC Corporation
7899780	METHODS AND APPARATUS FOR STRUCTURED PARTITIONING OF MANAGEMENT INFORMATION	EMC Corporation
7694119 7680987	TECHNIQUES FOR DEVICE INITIALIZATION SUB-PAGE-GRANULAR CACHE COHERENCY USING SHARED VIRTUAL MEMORY MECHANISM	EMC Corporation EMC Corporation
7711711	NETWORKED STORAGE SYSTEM EMPLOYING INFORMATION LIFECYCLE MANAGEMENT IN CONJUNCTION WITH A DISTRIBUTED GLOBAL FILE SYSTEM	EMC Corporation
7512578	SMADT CONTAINEDS	EMC Corporation
7962464	FEDERATED SEARCH	EMC Corporation
8230384	TECHNIQUES FOR GENERATING AND PROCESSING A SCHEMA INSTANCE	EMC Corporation
7214888	ADAPTIVE ELECTROMAGNETIC INTERFERENCE- RADIO FREQUENCY INTERFERENCE (EMI/RFI) SHIELD EXTENSION	EMC Corporation
7258569	CONNECTOR-ALIGNMENT COLLAR FOR BLIND MATING ELECTRICAL CONNECTORS	EMC Corporation
7930727	SYSTEM AND METHOD FOR MEASURING AND ENFORCING SECURITY POLICY COMPLIANCE FOR SOFTWARE DURING THE DEVELOPMENT PROCESS OF THE SOFTWARE	EMC Corporation
7774645	TECHNIQUES FOR MIRRORING DATA WITHIN A SHARED VIRTUAL MEMORY SYSTEM	EMC Corporation
7536507	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PRESERVING ATOMIC WRITES USING LEAVES AND BITMAPS	EMC Corporation
8635594	SCRIPT LANGUAGE FOR STORAGE MANAGEMENT OPERATIONS	EMC Corporation
	7475203 7409525 9026679 7899780 7694119 7680987 7711711 7512578 7962464 8230384 7214888 7258569 7930727 7774645 7536507	AND TIERS  METHOD AND APPARATUS FOR REPRESENTING, MANAGING AND PROBLEM REPORTING IN SURVEILLANCE NETWORKS  7475203 METHODS AND SYSTEMS FOR ENABLING NONDESTRUCTIVE ERASURE OF DATA  7409525 IMPLICIT LOCKS IN A SHARED VIRTUAL MEMORY SYSTEM  9026679 METHODS AND APPARATUS FOR PERSISTING MANAGEMENT INFORMATION CHANGES  7899780 METHODS AND APPARATUS FOR STRUCTURED PARTITIONING OF MANAGEMENT INFORMATION  7694119 TECHNIQUES FOR DEVICE INITIALIZATION  7680987 SUB-PAGE-GRANULAR CACHE COHERENCY USING SHARED VIRTUAL MEMORY MECHANISM  7711711 NETWORKED STORAGE SYSTEM EMPLOYING INFORMATION LIFECYCLE MANAGEMENT IN CONJUNCTION WITH A DISTRIBUTED GLOBAL FILE SYSTEM  7512578 SMART CONTAINERS  7692464 FEDERATED SEARCH  7214888 ADAPTIVE ELECTROMAGNETIC INTERFERENCE-RADIO FREQUENCY INTERFERENCE (EMI/RFI) SHIELD EXTENSION  72258569 CONNECTOR-ALIGNMENT COLLAR FOR BLIND MATING ELECTRICAL CONNECTORS  7930727 SYSTEM AND METHOD FOR MEASURING AND ENFORCING SECURITY POLICY COMPLIANCE FOR SOFTWARE DURING THE DEVELOPMENT PROCESS OF THE SOFTWARE  7774645 TECHNIQUES FOR MIRRORING DATA WITHIN A SHARED VIRTUAL MEMORY SYSTEM  7774645 TECHNIQUES FOR MIRRORING DATA WITHIN A SHARED VIRTUAL MEMORY SYSTEM  7774645 SCRIPT LANGUAGE FOR STORAGE MANAGEMENT

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Number	Number	Title	Owner
11393638	7529887	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR POSTPONING BITMAP TRANSFERS AND ELIMINATING CONFIGURATION INFORMATION TRANSFERS DURING TRESPASS OPERATIONS IN A DISK ARRAY ENVIRONMENT	EMC Corporation
11393641	7681011	METHODS AND APPARATUS FOR PARTITIONING MANAGEMENT INFORMATION	EMC Corporation
11394536	7873835	ACCESSING DATA STORAGE DEVICES	EMC Corporation
11394651	7681130	METHODS AND APPARATUS FOR DISPLAYING NETWORK DATA	EMC Corporation
11394665	7647525	RESUMPTION OF OPERATIONS FOLLOWING FAILOVER IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11394666	7620612	PERFORMING MODEL-BASED ROOT CAUSE ANALYSIS USING INTER-DOMAIN MAPPINGS	EMC Corporation
11394698	7852781	MANAGING COMMUNICATIONS SETTINGS	EMC Corporation
11394700	7676694	MANAGING SYSTEM COMPONENTS	EMC Corporation
11394701	7904909	ARCHITECTURE FOR USING A MODEL-BASED APPROACH FOR MANAGING RESOURCES IN A NETWORKED ENVIRONMENT	EMC Corporation
11394768	7676628	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PROVIDING ACCESS TO SHARED STORAGE BY COMPUTING GRIDS AND CLUSTERS WITH LARGE NUMBERS OF NODES	EMC Corporation
11394919	7502992	METHOD AND APPARATUS FOR DETECTING THE PRESENCE OF ERRORS IN DATA TRANSMITTED BETWEEN COMPONENTS IN A DATA STORAGE SYSTEM USING AN I2C PROTOCOL	EMC Corporation
11394943	8089903	METHOD AND APPARATUS FOR PROVIDING A LOGICAL SEPARATION OF A CUSTOMER DEVICE AND A SERVICE DEVICE CONNECTED TO A DATA STORAGE SYSTEM	EMC Corporation
11395427	7792857	MIGRATION OF CONTENT WHEN ACCESSED USING FEDERATED SEARCH	EMC Corporation
11395429	8285827	METHOD AND APPARATUS FOR RESOURCE MANAGEMENT WITH A MODEL-BASED ARCHITECTURE	EMC Corporation
11395441	7854006	DIFFERENTIAL VIRUS SCAN	EMC Corporation
11395456	7792045	METHOD AND APPARATUS FOR CONFIGURATION AND ANALYSIS OF INTERNAL NETWORK ROUTING PROTOCOLS	EMC Corporation
11395460	7279856	ENVIRONMENTAL AND HEALTH MONITORING CIRCUITRY FOR STORAGE PROCESSOR I/O ANNEX MODULE	EMC Corporation
11395621	7752340	ATOMIC COMMAND RETRY IN A DATA STORAGE SYSTEM	EMC Corporation
11395635	7613890	CONSISTENT REPLICATION ACROSS MULTIPLE STORAGE DEVICES	EMC Corporation
11395755	8205261	INCREMENTAL VIRUS SCAN	EMC Corporation
11396280	7953905	METHODS AND APPARATUS FOR MODELING A STORAGE AREA NETWORK	EMC Corporation
11396282	7756898	SYSTEMS AND METHODS FOR NOTIFYING LISTENERS OF EVENTS	EMC Corporation

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11396336	7430646	PLANNED SWITCHOVER IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11397025	8843783	FAILOVER TO SYNCHRONOUS BACKUP SITE IN CONNECTION WITH TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11401047	7423830	DETECTING HEAD/DISK CONTACT IN A DISK DRIVE USING A CALIBRATION PARAMETER	EMC Corporation
11402631	7562186	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
11403146	7949824	EFFICIENT DATA STORAGE USING TWO LEVEL DELTA RESEMBLANCE	EMC Corporation
11403154	7844652	EFFICIENT COMPUTATION OF SKETCHES	EMC Corporation
11406849	7502960	METHOD AND APPARATUS FOR MANAGING ACCESS TO VOLUMES OF STORAGE	EMC Corporation
11409304	7444420	APPARATUS AND METHOD FOR MIRRORING AND RESTORING DATA	EMC Corporation
11418363	7507104	MATING FOR SINGLE CONNECTOR ATTACHMENT (SCA) DISK CONNECTORS	EMC Corporation
11424427	7831837	ENCODING TOKEN COMMANDS/DATA WITHIN DATA STREAMS FOR STANDARD INTERFACES	EMC Corporation
11426071	8307359	EMBEDDED VIRTUAL STORAGE AREA NETWORK USING A VIRTUAL BLOCK NETWORK FABRIC	EMC Corporation
11426641	8185751	ACHIEVING STRONG CRYPTOGRAPHIC CORRELATION BETWEEN HIGHER LEVEL SEMANTIC UNITS AND LOWER LEVEL COMPONENTS IN A SECURE DATA STORAGE SYSTEM	EMC Corporation
11426645	8176319	IDENTIFYING AND ENFORCING STRICT FILE CONFIDENTIALITY IN THE PRESENCE OF SYSTEM AND STORAGE ADMINISTRATORS IN A NAS SYSTEM	EMC Corporation
11427074	8417747	VIRTUALLY PROVISIONED VOLUME RECOVERY	EMC Corporation
11427082	7552280	ASYMMETRICALLY INTERLEAVING ACCESS TO REDUNDANT STORAGE DEVICES	EMC Corporation
11427140	7425026	SEISMIC-RESISTANT EQUIPMENT CABINETS AND DOOR LATCHES	EMC Corporation
11427208	7385472	MULTI-LEVEL PRINTED CIRCUIT BOARD INTERSTITIAL VIAS	EMC Corporation
11427526	7509461	METHOD AND APPARATUS FOR INTELLIGENT BUFFER CACHE PRE-EMPTION	EMC Corporation
11427584	8078585	REACTIVE FILE RECOVERY BASED ON FILE NAMING AND ACCESS INFORMATION	EMC Corporation
11427585	7519769	SCALABLE STORAGE NETWORK VIRTUALIZATION	EMC Corporation
11427646	7685395	SPANNING VIRTUAL ARRAYS ACROSS MULTIPLE PHYSICAL STORAGE ARRAYS	EMC Corporation
11427664	8589504	FULL ARRAY NON-DISRUPTIVE MANAGEMENT DATA MIGRATION	EMC Corporation
11427677	7484056	PARTITIONING OF A STORAGE ARRAY INTO N- STORAGE ARRAYS USING FULL ARRAY NON- DISRUPTIVE DATA MIGRATION	EMC Corporation
11427685	7484057	CONSOLIDATING N-STORAGE ARRAYS INTO ONE STORAGE ARRAY USING FULL ARRAY NON- DISRUPTIVE DATA MIGRATION	EMC Corporation

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11427699	7484059	FULL ARRAY NON-DISRUPTIVE MIGRATION OF EXTENDED STORAGE FUNCTIONALITY	EMC Corporation
11427724	7757059	VIRTUAL ARRAY NON-DISRUPTIVE MANAGEMENT DATA MIGRATION	EMC Corporation
11427731	8539177	PARTITIONING OF A STORAGE ARRAY INTO N- STORAGE ARRAYS USING VIRTUAL ARRAY NON- DISRUPTIVE DATA MIGRATION	EMC Corporation
11427744	8533408	CONSOLIDATING N-STORAGE ARRAYS INTO ONE STORAGE ARRAY USING VIRTUAL ARRAY NON- DISRUPTIVE DATA MIGRATION	EMC Corporation
11427749	8452928	VIRTUAL ARRAY NON-DISRUPTIVE MIGRATION OF EXTENDED STORAGE FUNCTIONALITY	EMC Corporation
11427759	8583861	PRESENTATION OF MANAGEMENT FUNCTIONALITY OF VIRTUAL ARRAYS	EMC Corporation
11427889	7904681	METHODS AND SYSTEMS FOR MIGRATING DATA WITH MINIMAL DISRUPTION	EMC Corporation
11428117	7676689	BROWSING AND SELECTING ITEMS IN RECOVERY STORAGE GROUPS TO PERFORM RECOVERY ONTO PRODUCTION SERVER	EMC Corporation
11430433		[REDACTED]	EMC Corporation
11431337	7369380	HIGHLY AVAILABLE DUAL SERIAL BUS ARCHITECTURE	EMC Corporation
11433961	7822974	IMPLICIT TRUST OF AUTHORSHIP CERTIFICATION	EMC Corporation
11438975	7281108	METHOD AND APPARATUS FOR MIGRATING DATA IN A COMPUTER SYSTEM	EMC Corporation
11439022		[REDACTED]	EMC Corporation
11440964	7937369	DATA MOVER DISCOVERY OF OBJECT EXTENT	EMC Corporation
11441752		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11441926		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11441927		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11442569		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11443325	8676960	NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
11444566	8406421	METHOD AND SYSTEM FOR MULTI-LEVEL SECURE PERSONAL PROFILE MANAGEMENT AND ACCESS CONTROL TO THE ENTERPRISE MULTI-MODAL COMMUNICATION ENVIRONMENT IN HETEROGENEOUS CONVERGENT COMMUNICATION NETWORKS	EMC Corporation
11448524	8112396	BACKUP AND RECOVERY OF INTEGRATED LINKED DATABASES	EMC Corporation
11449104		METHOD AND APPARATUS FOR PROCESSING A DATABASE REPLICA	EMC Corporation
11449153	8140623	NON-BLOCKING COMMIT PROTOCOL SYSTEMS AND METHODS	EMC Corporation

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11449163		METHOD AND APPARATUS FOR PROCESSING A DATABASE REPLICA	EMC Corporation
11452458	8478952	FLEXIBLE OPTIMIZED GROUP-BASED BACKUPS	EMC Corporation
11454739	8085794	TECHNIQUES FOR FAULT TOLERANT ROUTING IN A DESTINATION-ROUTED SWITCH FABRIC	EMC Corporation
11457177	8028011	GLOBAL UNIX FILE SYSTEM CYLINDER GROUP CACHE	EMC Corporation
11465119	7620646	REAL-TIME CONSTRUCTION OF A SELECTION REPRESENTATION FOR ITEMS IN TREE STRUCTURES	EMC Corporation
11471761	7844681	CLIENT/SERVER NETWORK FILE SHARING METHOD AND APPARATUS	EMC Corporation
11472685	7571293	EMULATION OF POINT-IN-TIME DATA COPYING OPERATIONS	EMC Corporation
11473475	7577808	EFFICIENT BACKUP DATA RETRIEVAL	EMC Corporation
11473485	7694103	EFFICIENT USE OF MEMORY AND ACCESSING OF STORED RECORDS	EMC Corporation
11473617	8533163	DATABASE OFFLOAD PROCESSING	EMC Corporation
11474192	7685463	DISK DRIVE MANAGEMENT SYSTEM	EMC Corporation
11474556	7502669	APPARATUS AND METHOD FOR GRAPHICALLY DISPLAYING DISK DRIVE ENCLOSURES AND CABLING IN A DATA STORAGE SYSTEM	EMC Corporation
11474635	7600088	TECHNIQUES FOR PROVIDING STORAGE ARRAY SERVICES TO A CLUSTER OF NODES USING PORTAL DEVICES	EMC Corporation
11474658	7627710	CONVERTING AN OBJECT IDENTIFIER TO A BLOCK I/O ADDRESS TO IDENTIFY A STORAGE LOCATION ON A SERVER	EMC Corporation
11474802	8429242	METHODS AND APPARATUS FOR PROVIDING CONTENT	EMC Corporation
11475060	7962567	SYSTEMS AND METHODS FOR DISABLING AN ARRAY PORT FOR AN ENTERPRISE	EMC Corporation
11475774	7779101	METHOD AND APPARATUS FOR MAPPING AND IDENTIFYING THE ROOT CAUSES OF PERFORMANCE PROBLEMS IN NETWORK-BASED SERVICES	EMC Corporation
11475775	8230051	METHOD AND APPARATUS FOR MAPPING AND IDENTIFYING RESOURCES FOR NETWORK-BASED SERVICES	EMC Corporation
11476380	7680831	METHODS AND APPARATUS FOR DETECTION AND RECOVERY OF DATABASE OUT OF SYNCHRONIZATION CONDITIONS	EMC Corporation
11476478	8386732	METHODS AND APPARATUS FOR STORING COLLECTED NETWORK MANAGEMENT DATA	EMC Corporation
11476521	7478099	METHODS AND APPARATUS FOR COLLECTING DATABASE TRANSACTIONS	EMC Corporation
11476523	7711705	METHODS AND APPARATUS FOR PROCESSING PARTITIONED CHANGES	EMC Corporation

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Number	Number	Title	Owner
11476887	7315914	SYSTEMS AND METHODS FOR MANAGING VIRTUALIZED LOGICAL UNITS USING VENDOR SPECIFIC STORAGE ARRAY COMMANDS LOGICAL UNITS USING VENDOR SPECIFIC STORAGE ARRAY COMMANDS	EMC Corporation
11476951		[REDACTED]	EMC Corporation
11476957	8868718	METHOD AND APPARATUS FOR PROVIDING SCALABILITY IN RESOURCE MANAGEMENT AND ANALYSIS SYSTEMS	EMC Corporation
11477022	7685368	METHODS AND APPARATUS FOR REMOVING DATA FROM A CACHE	EMC Corporation
11477026	7689565	METHODS AND APPARATUS FOR SYNCHRONIZING NETWORK MANAGEMENT DATA	EMC Corporation
11477058	8095966	METHODS AND APPARATUS FOR PASSWORD MANAGEMENT	EMC Corporation
11477215	8171098	TECHNIQUES FOR PROVIDING STORAGE SERVICES USING NETWORKED COMPUTERIZED DEVICES HAVING DIRECT ATTACHED STORAGE	EMC Corporation
11477216	8087084	SECURITY FOR SCANNING OBJECTS	EMC Corporation
11477292	8862996	METHOD AND APPARATUS FOR CONTAINER MAPPING PRESENTATION OF DISTRIBUTED SYSTEMS	EMC Corporation
11477301	8069309	SERVICING MEMORY IN RESPONSE TO SYSTEM FAILURE	EMC Corporation
11477302	7757123	MANAGING FAULTS	EMC Corporation
11477634	8443445	RISK-AWARE SCANNING OF OBJECTS	EMC Corporation
11477635	8122507	EFFICIENT SCANNING OF OBJECTS	EMC Corporation
11477965	7865677	ENHANCING ACCESS TO DATA STORAGE	EMC Corporation
11478029	7725653	METHOD FOR ENABLING A MEMORY AS A FUNCTION OF ESTIMATED POWER SOURCE CAPACITY	EMC Corporation
11478090	7818203	METHOD FOR SCORING CUSTOMER LOYALTY AND SATISFACTION	EMC Corporation
11478244	7761770	DISK CONTROLLER ARCHITECTURE TO ALLOW ON-THE-FLY ERROR CORRECTION AND WRITE DISRUPTION DETECTION	EMC Corporation
11478245	7460328	COMPENSATION FOR VARIABLE SERVO TRACK	EMC Corporation
11478370	7408734	PREVENTING DAMAGE TO THE HEADS AND MEDIA IN A REMOVABLE CARTRIDGE AND DISK DRIVE	EMC Corporation
11478557	7672077	AUTO LOADING DEVICE FOR DATA STORAGE CARTRIDGES	EMC Corporation
11478833	7555614	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PREVENTING CONCURRENT EXECUTION OF CONFLICTING SOFTWARE OPERATIONS ON THE SAME AND DIFFERENT STORAGE PROCESSORS HAVING ACCESS TO A COMMON STORAGE MEDIUM WHILE AVOIDING DEADLOCKS	EMC Corporation
11478897	7469313	METHODS AND SYSTEMS FOR PRESERVING DISK GEOMETRY OF VIRTUALIZED DATA VOLUMES	EMC Corporation

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11478946	7536503	METHODS AND SYSTEMS FOR PRESERVING DISK GEOMETRY WHEN MIGRATING EXISTING DATA VOLUMES	EMC Corporation
11478958	7606825	METHOD AND APPARATUS FOR PRESENTING OBJECTS IN AN ARRANGED FASHION	EMC Corporation
11479317	7873601	BACKUP OF INCREMENTAL METADATA IN BLOCK BASED BACKUP SYSTEMS	EMC Corporation
11479336	7620774	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK USING ONE OR MORE CONTROL PATH CONTROLLERS WITH AN EMBEDDED ASIC ON EACH CONTROLLER	EMC Corporation
11479556	7606889	METHODS AND SYSTEMS FOR COMPARING STORAGE AREA NETWORK CONFIGURATIONS	EMC Corporation
11479557	7580938	METHODS AND APPARATUS FACILITATING EFFICIENT DISPLAY OF DATA	EMC Corporation
11479649	7620775	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK USING ONE OR MORE ASICS	EMC Corporation
11479864	7673099	AFFINITY CACHING	EMC Corporation
11479939	8473566	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR MANAGING QUALITY-OF-SERVICE ASSOCIATED WITH STORAGE SHARED BY COMPUTING GRIDS AND CLUSTERS WITH A PLURALITY OF NODES	EMC Corporation
11480322	7640262	POSITIONAL ALLOCATION	EMC Corporation
11480323	7720892	BULK UPDATES AND TAPE SYNCHRONIZATION	EMC Corporation
11480346	7930559	DECOUPLED DATA STREAM AND ACCESS STRUCTURES	EMC Corporation
11482912	7673100	METHODS AND SYSTEMS FOR DISTRIBUTED CACHE TAG MANAGEMENT	EMC Corporation
11483131	7882064	FILE SYSTEM REPLICATION	EMC Corporation
11483839	7814365	BACKING UP SELECTED FILES OF A COMPUTER SYSTEM	EMC Corporation
11484881	7504969	LOCALITY-BASED STREAM SEGMENTATION FOR DATA DEDUPLICATION	EMC Corporation
11485813	7478205	TECHNIQUES FOR PERFORMING DATA OPERATIONS SPANNING MORE THAN TWO DATA PARTITIONS	EMC Corporation
11486957	7979584	PARTITIONING A DATA STREAM USING EMBEDDED ANCHORS	EMC Corporation
11487439	8006052	SYSTEMS AND METHODS FOR TRACKING PORTIONS OF A LOGICAL VOLUME THAT HAVE NEVER BEEN WRITTEN BY A HOST	EMC Corporation
11488907	7562250	RESOURCE ALLOCATION THROTTLING IN REMOTE DATA MIRRORING SYSTEM	EMC Corporation
11489397	7660953	METHOD AND SYSTEM FOR MIRRORING AND ARCHIVING MASS STORAGE	EMC Corporation
11489963	7389339	AMBIGUITY-PURGING AND TEMPLATE-CONFLICT-RESOLUTION IN COMPUTER NETWORK EVENTS-NOTIFICATION	EMC Corporation

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Number	Number	Title	Owner
11493010	7739735	SYSTEM AND METHOD FOR DYNAMIC	EMC Corporation
		OPTIMIZATIONS USING SECURITY ASSERTIONS	
11497806	8539056	SYSTEMS AND METHODS FOR CONFIGURING	EMC Corporation
		MULTIPLE NETWORK INTERFACES	
11499929	7529883	METHODS AND APPARATUS FOR PARSING A	EMC Corporation
		CONTENT ADDRESS TO FACILITATE SELECTION	
		OF A PHYSICAL STORAGE LOCATION IN A DATA	
11502210	5500504	STORAGE SYSTEM	EN CO C
11503318	7509524	SYSTEMS AND METHODS FOR A DISTRIBUTED	EMC Corporation
11503333	7386668	FILE SYSTEM WITH DATA RECOVERY	EMC Composition
11505555	/380008	HANDLING DATA WRITES COPIED FROM A	EMC Corporation
11503338	7383408	REMOTE DATA STORAGE DEVICE STORAGE DEVICE THAT USES VIRTUAL ORDERED	EMC Companytion
11303338	/383408	WRITES	EMC Corporation
11505559	8255998	INFORMATION PROTECTION METHOD AND	EMC Corporation
11303339	0233990	SYSTEM	ENIC Corporation
11506397	8079091	COMPLIANCE PROCESSING OF RIGHTS MANAGED	EMC Corporation
11300377	0077071	DATA	Livic Corporation
11506591	7680842	SYSTEMS AND METHODS FOR A SNAPSHOT OF	EMC Corporation
11200271	7000012	DATA	Elvic Corpolation
11506596	7953704	SYSTEMS AND METHODS FOR A SNAPSHOT OF	EMC Corporation
11000000	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	DATA	
11506597	7899800	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		NONLINEAR JOURNALING	
11506610	7680836	SYSTEMS AND METHODS FOR A SNAPSHOT OF	EMC Corporation
		DATA	1
11507069	7882071	SYSTEMS AND METHODS FOR A SNAPSHOT OF	EMC Corporation
		DATA	
11507070	7822932	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		NONLINEAR JOURNALING	
11507073	7676691	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		NONLINEAR JOURNALING	
11507075	7590652	SYSTEMS AND METHODS OF REVERSE LOOKUP	EMC Corporation
11507076	7752402	SYSTEMS AND METHODS FOR ALLOWING	EMC Corporation
		INCREMENTAL JOURNALING	
11510028	8667494	CONTROLLING RESOURCE ALLOCATION USING	EMC Corporation
11711000	5046555	THRESHOLDS AND SCHEDULING	F1 (C C
11511998	7346775	SYSTEM AND METHOD FOR AUTHENTICATION OF	EMC Corporation
11510547	7500011	USERS AND WEB SITES	EMC Commonwellow
11512547	7590811	METHODS AND SYSTEM FOR IMPROVING DATA	EMC Corporation
11519373	7565493	AND APPLICATION AVAILABILITY IN CLUSTERS  METHODS FOR ASSISTING COMPUTER USERS	EMC Corporation
11319373	/303493	PERFORMING MULTIPLE TASKS	ENIC Corporation
11519390	7451225	CONFIGURING A CACHE PREFETCH POLICY IN A	EMC Corporation
11317370	7731223	COMPUTER SYSTEM EMPLOYING OBJECT	Livic Corporation
		ADDRESSABLE STORAGE	
11519391	7565494	CONFIGURING A BOUNDED CACHE PREFETCH	EMC Corporation
11017071	/303174	POLICY IN A COMPUTER SYSTEM EMPLOYING	Livie Corporation
		OBJECT ADDRESSABLE STORAGE	
11519950	7526553	CONFIGURING A CACHE IN A COMPUTER SYSTEM	EMC Corporation
		EMPLOYING OBJECT ADDRESSABLE STORAGE	

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11520979	7600202	TECHNIQUES FOR PROVIDING A FAILURES IN TIME (FIT) RATE FOR A PRODUCT DESIGN PROCESS	EMC Corporation
11522194	8250178	PROTECTING CLIENT-SIDE CODE	EMC Corporation
11525283	7685171	TECHNIQUES FOR PERFORMING A RESTORATION OPERATION USING DEVICE SCANNING	EMC Corporation
11525499	8028199	METHOD AND APPARATUS FOR DETERMINING A SOURCE OF PERFORMANCE DEGRADATION IN DISTRIBUTED SYSTEMS TRANSMISSION	EMC Corporation
11525647	8082231	TECHNIQUES USING IDENTIFIERS AND SIGNATURES WITH DATA OPERATIONS	EMC Corporation
11525649	7725704	TECHNIQUES FOR PERFORMING A PRIORITIZED DATA RESTORATION OPERATION	EMC Corporation
11527539	7908223	SYSTEM AND METHOD FOR CONDUCTING SECURE TRANSACTIONS	EMC Corporation
11527992	7702496	METHOD AND APPARATUS FOR ANALYZING AND PROBLEM REPORTING IN GRID COMPUTING NETWORKS	EMC Corporation
11528767	7617372	AVOIDING COPY ON FIRST WRITE	EMC Corporation
11528772	8135685	INFORMATION CLASSIFICATION	EMC Corporation
11528783		CASCADED DISCOVERY OF INFORMATION ENVIRONMENT	EMC Corporation
11528790	8832246	SERVICE LEVEL MAPPING METHOD	EMC Corporation
11528895	7603366	UNIVERSAL DATABASE SCHEMA AND USE	EMC Corporation
11528898	9135322	ENVIRONMENT CLASSIFICATION	EMC Corporation
11528900	7640345	INFORMATION MANAGEMENT	EMC Corporation
11529038	7701877	METHODS AND APPARATUS FOR REPRESENTING AND QUERYING STORAGE AREA NETWORK (SAN) TOPOLOGY	EMC Corporation
11529123	8108882	METHOD AND APPARATUS FOR INTERFACING AN OPERATING SYSTEM WITH A NETWORK INTERFACE DEVICE	EMC Corporation
11529124	7849350	RESPONDING TO A STORAGE PROCESSOR FAILURE WITH CONTINUED WRITE CACHING	EMC Corporation
11529125	7571279	ACCESSING A DISK DRIVE AT MULTIPLE SPEEDS	EMC Corporation
11529143	7472223	SURFACE LEVEL SPARING IN DISK DRIVES	EMC Corporation
11529675	7606813	MODEL CONSOLIDATION IN A DATABASE SCHEMA	EMC Corporation
11529864	8145865	VIRTUAL ORDERED WRITES SPILLOVER MECHANISM	EMC Corporation
11529866	7624229	SPILLOVER SLOT	EMC Corporation
11529901	8194547	CONFIGURING FLOW CONTROL SETTINGS	EMC Corporation
11529911	7229294	SUPPLYING POWER	EMC Corporation
11529919	7945776	SECURING A PASSPHRASE	EMC Corporation
11530655	8607045	TOKENCODE EXCHANGES FOR PERIPHERAL AUTHENTICATION	EMC Corporation
11530998	7562221	AUTHENTICATION METHOD AND APPARATUS UTILIZING PROOF-OF-AUTHENTICATION MODULE	EMC Corporation
11536033	7483268	DISK DRIVE CARRIER	EMC Corporation
11536044	7515427	BACK-TO-BACK DATA STORAGE SYSTEM	EMC Corporation

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11536064	7425685	CABLE ASSEMBLIES FOR CONNECTING DATA	EMC Corporation
		STORAGE CHASSIS TO A CABLE CONDUIT WITHIN	
11.50 (000	704000	A DATA STORAGE SYSTEM	E) (C) C
11536088	7840992	SYSTEM AND METHOD FOR ENVIRONMENTALLY	EMC Corporation
11706101	7.50.4000	AWARE DATA PROTECTION	TD (C C
11536121	7584339	REMOTE BACKUP AND RESTORE OPERATIONS	EMC Corporation
11706100		FOR ISB PROTOCOL SYSTEMS	77.40
11536130	7587565	GENERATING AUTOMATED AND SCHEDULED SAN	EMC Corporation
11707141	5405010	COPY SESSIONS FOR ISB PROTOCOL SYSTEMS	E) (C C
11536141	7487310	ROTATION POLICY FOR SAN COPY SESSIONS FOR	EMC Corporation
11506164	7/07//0	ISB PROTOCOL SYSTEMS	EN (C C
11536164	7685460	MULTIPLE CONCURRENT RESTORE USING SAME	EMC Corporation
11526050	0555001	USER INTERFACE	EN CO C
11536850	8555021	SYSTEMS AND METHODS FOR AUTOMATING AND	EMC Corporation
11706070	0515005	TUNING STORAGE ALLOCATIONS	TD (C C
11536952	8745005	CHECKPOINT RECOVERY USING B-TREE INTENT	EMC Corporation
11506005	7000010	LOG WITH SYNCPOINTS	F) (C C
11536995	7809912	METHODS AND SYSTEMS FOR MANAGING I/O	EMC Corporation
		REQUESTS TO MINIMIZE DISRUPTION REQUIRED	
11505001	0145045	FOR DATA MIGRATION	EN CO C
11537001	8145947	USER CUSTOMIZABLE CVFS NAMESPACE	EMC Corporation
11537028	7900088	SYSTEM FOR PERFORMING INCREMENTAL FILE	EMC Corporation
		SYSTEM CHECK	
11537073	8935751	METHOD FOR EXTENDING THE FRAGMENT	EMC Corporation
		MAPPING PROTOCOL TO PREVENT MALICIOUS	
44.50.50.00		ACCESS TO VIRTUALIZED STORAGE	77.60.0
11537202	7817562	METHODS AND SYSTEMS FOR BACK END	EMC Corporation
		CHARACTERIZATION USING I/O SAMPLING	
11538307	7640406	DETECTING AND MANAGING ORPHAN FILES	EMC Corporation
		BETWEEN PRIMARY AND SECONDARY DATA	
11520212	7500071	STORES FOR CONTENT ADDRESSED STORAGE	EMO C
11538313	7599971	DETECTING AND MANAGING MISSING PARENTS	EMC Corporation
		BETWEEN PRIMARY AND SECONDARY DATA	
11720216	7.00207	STORES FOR CONTENT ADDRESSED STORAGE	EN CO C
11538316	7603397	DETECTING AND MANAGING MISSING PARENTS	EMC Corporation
		BETWEEN PRIMARY AND SECONDARY DATA	
11520251	7/05177	STORES DETECTING AND MANAGING ORDINAN FILES	EN (C C
11538351	7685177	DETECTING AND MANAGING ORPHAN FILES	EMC Corporation
		BETWEEN PRIMARY AND SECONDARY DATA	
11520546	7209266	STORES TRACKING INCREMENTAL CHANGES IN A MASS	FMC Companyion
11538546	7398366	TRACKING INCREMENTAL CHANGES IN A MASS	EMC Corporation
11520554	7900707	STORAGE SYSTEM	EMC Companyion
11538554	7890796	AUTOMATIC MEDIA ERROR CORRECTION IN A	EMC Corporation
11540017		FILE SERVER	EMC Compandia
11540017	7690796	[REDACTED]	EMC Corporation
11540018	7689786	TECHNIQUES FOR OVERRIDING DEVICE	EMC Corporation
11540049	0522150	RESERVATIONS  RECLANDING DATA SPACE BY REWRITING	EMC C
11540048	8533158	RECLAIMING DATA SPACE BY REWRITING	EMC Corporation
11540050	7900964	METADATA	EMO C: 4
11540058	7809884	DATA STORAGE SYSTEM POWER MANAGEMENT	EMC Corporation
11540096	8769065	METHODS AND APPARATUS FOR IMPLEMENTING	EMC Corporation
		A DATA MANAGEMENT FRAMEWORK TO	
		COLLECT NETWORK MANAGEMENT DATA	1

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11540105	8041683	METHODS AND APPARATUS FOR LOCATING NETWORK LOGS	EMC Corporation
11540106		[REDACTED]	EMC Corporation
11540159	8024171	MANAGED RESOURCE SIMULATOR FOR STORAGE	EMC Corporation
11340137	0024171	AREA NETWORKS	Livic Corporation
11540160	8020108	SEPARATION OF PRESENTATION AND BUSINESS	EMC Corporation
115 10100	0020100	MODELS FOR COMMON MANAGEMENT	Livie corporation
		PLATFORM TASKS IN A STORAGE AREA NETWORK	
11540183	8024712	COLLECTING APPLICATION LOGS	EMC Corporation
11540184	7743030	METHODS AND APPARATUS FOR DECLARATIVE	EMC Corporation
		LOG COLLECTION	_
11540336	7770059	FAILURE PROTECTION IN AN ENVIRONMENT	EMC Corporation
		INCLUDING VIRTUALIZATION OF NETWORKED	_
		STORAGE RESOURCES	
11540415	7756831	COOPERATIVE LOCKING BETWEEN MULTIPLE	EMC Corporation
		INDEPENDENT OWNERS OF DATA SPACE	
11540416	7818517	ARCHITECTURE FOR VIRTUALIZATION OF	EMC Corporation
		NETWORKED STORAGE RESOURCES	
11540437	8862639	LOCKING ALLOCATED DATA SPACE	EMC Corporation
11540458	8424013	METHODS AND SYSTEMS FOR HANDLING	EMC Corporation
****	0.555.00	INTERRUPTS ACROSS INSTANCES OF SOFTWARE	77.60.0
11540459	8533696	METHODS AND SYSTEMS FOR ALLOCATING	EMC Corporation
		HARDWARE RESOURCES TO INSTANCES OF	
11540470	7040747	SOFTWARE IMAGES	EMC C
11540472	7969747	LINE CORD FILTER  DATA PACKET ROUTING MECHANISM UTILIZING	EMC Corporation
11540474	7502881	THE TRANSACTION ID TAG FIELD	EMC Corporation
		THE TRANSACTION ID TAG FIELD	
11540525	7526623	OPTIMIZING RECLAMATION OF DATA SPACE	EMC Corporation
11540832	7647466	LINEAR SPACE ALLOCATION MECHANISMS IN	EMC Corporation
11540052	7047400	DATA SPACE	Livie corporation
11540998	7587431	UPDATING SNAPSHOTS	EMC Corporation
11541062	7594085	RECLAIMING DATA SPACE	EMC Corporation
11541261	8645816	CUSTOMIZING USER DOCUMENTATION	EMC Corporation
11541262	7849262	SYSTEM AND METHOD FOR VIRTUALIZATION OF	EMC Corporation
		NETWORKED STORAGE RESOURCES	· · · · · · · · · · · · · · · · · · ·
11541327		[REDACTED]	EMC Corporation
			1
11541413	8468604	METHOD AND SYSTEM FOR DETECTING	EMC Corporation
		MALWARE	-
11550765	7743388	COMPUTER DIRECTORY SYSTEM HAVING AN	EMC Corporation
		APPLICATION INTEGRATION DRIVER	
		INFRASTRUCTURE	
11551827	7711858	MANAGEMENT OF BACKGROUND COPY TASK FOR	EMC Corporation
******	0.500.55	POINT-IN-TIME COPIES	77.60.0
11551943	8589550	ASYMMETRIC DATA STORAGE SYSTEM FOR HIGH	EMC Corporation
11776706	7040222	PERFORMANCE AND GRID COMPUTING	EMC C
11556506	7849323	PASSWORD PRESENTATION FOR MULTIMEDIA	EMC Corporation
11557041	7922729	DEVICES	EMC Comments
11557941	7822728	METADATA PIPELINING AND OPTIMIZATION IN A	EMC Corporation
		FILE SERVER	

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11563450	7818609	METHODS AND SYSTEMS FOR MANAGING CORRUPTED META-DATA IN A COMPUTER	EMC Corporation
11563467	7793166	SYSTEM OR NETWORK  METHODS AND SYSTEMS FOR RECOVERING	EMC Corporation
11000 107	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	META-DATA IN A CACHE MEMORY AFTER A CORRUPTION EVENT	Zine corporation
11582610	7702782	USING WATERMARKS TO INDICATE ALERTS IN A STORAGE AREA NETWORK MANAGEMENT CONSOLE	EMC Corporation
11584433	7599932	DATA STORAGE USING IDENTIFIERS	EMC Corporation
11585319	8417592	INVENTORY OF LIBRARIES	EMC Corporation
11585389	7874012	PRIVILEGED ACCESS TO ENCRYPTED DATA	EMC Corporation
11595272	7945534	CONTINUOUS DATA BACKUP	EMC Corporation
11607067	7770053	SYSTEMS AND METHODS FOR MAINTAINING DATA INTEGRITY DURING A MIGRATION	EMC Corporation
11607836	7810147	DETECTING AND PREVENTING REPLAY IN AUTHENTICATION SYSTEMS	EMC Corporation
11608240	8527618	REPERCUSSIONLESS EPHENERAL AGENT FOR SCALABLE PARALLEL OPERATION OF DISTRIBUTED COMPUTERS	EMC Corporation
11608770	8706833	DATA STORAGE SERVER HAVING COMMON REPLICATION ARCHITECTURE FOR MULTIPLE STORAGE OBJECT TYPES	EMC Corporation
11608780	7769722	REPLICATION AND RESTORATION OF MULTIPLE DATA STORAGE OBJECT TYPES IN A DATA NETWORK	EMC Corporation
11608952	7857688	ELECTRICAL CABINET HAVING MULTI-CHANNEL EXHAUST WITH BLEEDING VENTS TO ALLEVIATE BACK-PRESSURE	EMC Corporation
11610623	7694163	SYSTEM FOR GENERATING AND MONITORING VOLTAGES GENERATED FOR A VARIETY OF DIFFERENT COMPONENTS ON A COMMON PRINTED CIRCUIT BOARD	EMC Corporation
11610745	8762636	DATA STORAGE SYSTEM HAVING A GLOBAL CACHE MEMORY DISTRIBUTED AMONG NON-VOLATILE MEMORIES WITHIN SYSTEM DISK DRIVES	EMC Corporation
11611219	7577787	METHODS AND SYSTEMS FOR SCHEDULING WRITE DESTAGES BASED ON A TARGET	EMC Corporation
11612761	7720666	METHOD FOR ESTABLISHING BIT ERROR RATE (BER) REQUIREMENT FOR A DATA COMMUNICATION SYSTEM	EMC Corporation
11616342	8234465	DISASTER RECOVERY USING MIRRORED NETWORK ATTACHED STORAGE	EMC Corporation
11619132	7631009	REDUNDANCY CHECK OF TRANSACTION RECORDS IN A FILE SYSTEM LOG OF A FILE SERVER	EMC Corporation
11621762	8032558	ROLE POLICY MANAGEMENT	EMC Corporation
11626186	7689862	APPLICATION FAILOVER IN A CLUSTER ENVIRONMENT	EMC Corporation
11627000	7383385	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation

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11634355	7757013	TECHNIQUES FOR CONTROLLING DATA STORAGE SYSTEM PERFORMANCE	EMC Corporation
11636151	7502898	METHOD AND APPARATUS FOR MANAGING ACCESS TO STORAGE DEVICES IN A STORAGE SYSTEM WITH ACCESS CONTROL	EMC Corporation
11638125	7430495	METHOD AND APPARATUS FOR REPRESENTING, MANAGING, ANALYZING AND PROBLEM REPORTING IN HOME NETWORKS	EMC Corporation
11640068	8082403	METHOD FOR CERTIFYING ERASURE OF ONE OR MORE DATA STORAGE DISK DRIVES	EMC Corporation
11640599	7673031	RESOURCE MAPPING IN A NETWORK ENVIRONMENT	EMC Corporation
11640600	8046477	CONFIGURATION VALIDATION AND AMBIGUOUS MAPPING	EMC Corporation
11640667	7870276	INTERFACE PLUGIN	EMC Corporation
11640668	7624300	MANAGING STORAGE STABILITY	EMC Corporation
11640669	7486083	MANAGING SYSTEM STABILITY	EMC Corporation
11640670	7870220	METHODS AND APPARATUS FOR ANALYZING VSAN CONFIGURATION	EMC Corporation
11640671	7958450	MATCHING USER INTERFACE	EMC Corporation
11640741	7860015	METHODS AND APPARATUS FOR PHYSICAL AND LOGICAL SAN FABRIC ANALYSIS	EMC Corporation
11641411	7792796	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR OPTIMIZING RESOURCE ALLOCATION IN A HOST-BASED REPLICATION ENVIRONMENT	EMC Corporation
11643725	8286029	SYSTEMS AND METHODS FOR MANAGING	EMC Corneration
11043/23	8280029	UNAVAILABLE STORAGE DEVICES	EMC Corporation
11644088	7882061	MULTI-THREAD REPLICATION ACROSS A NETWORK	EMC Corporation
11644174	7818536	METHODS AND APPARATUS FOR STORING CONTENT ON A STORAGE SYSTEM COMPRISING A PLURALITY OF ZONES	EMC Corporation
11644341	8027970	QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
11644421	7734889	METHODS AND APPARATUS FOR DISTRIBUTING INFORMATION TO MULTIPLE NODES	EMC Corporation
11644428	8046561	METHODS AND APPARATUS FOR SELECTING A STORAGE ZONE FOR A CONTENT UNIT	EMC Corporation
11644857	7913051	METHODS AND APPARATUS FOR INCREASING THE STORAGE CAPACITY OF A ZONE OF A STORAGE SYSTEM	EMC Corporation

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11645216	7593938	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
11645332	7930456	DATA PACKET ARBITRATION SYSTEM	EMC Corporation
11646638	7779118	METHOD AND APPARATUS FOR REPRESENTING, MANAGING, ANALYZING AND PROBLEM REPORTING IN STORAGE NETWORKS	EMC Corporation
11646946	7930159	METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING	EMC Corporation
11647920	7779291	FOUR SITE TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11648069	8577680	MONITORING AND LOGGING VOICE TRAFFIC ON DATA NETWORK	EMC Corporation
11648734	7734884	SIMULTANEOUS CONCURRENT AND CASCADED TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11648770	7752404	TOGGLING BETWEEN CONCURRENT AND CASCADED TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
11648772	7680997	DATA RECOVERY SIMULATION	EMC Corporation
11650572	7509448	SYSTEMS AND METHODS FOR MANAGING SEMANTIC LOCKS	EMC Corporation
11651400	7660956	SAVE SET BUNDLING FOR STAGING	EMC Corporation
11668932	7702655	MAINTAINING AND USING USER-CREATED MAPPING HISTORY FOR NETWORK RESOURCE MAPPING	EMC Corporation
11671264	9137012	WIRELESS AUTHENTICATION METHODS AND APPARATUS	EMC Corporation
11671275	8378786	SECURITY PROVISION IN STANDARDS COMPLIANT RFID SYSTEMS	EMC Corporation
11672390	7839783	SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation
11673060	7599905	METHOD AND SYSTEM FOR ALLOCATING MULTIPLE ATTRIBUTE STORAGE PROPERTIES TO SELECTED DATA STORAGE RESOURCES	EMC Corporation
11674996	8156195	SYSTEMS AND METHODS FOR OBTAINING ULTRA- HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
11675397	7769931	METHODS AND SYSTEMS FOR IMPROVED VIRTUAL DATA STORAGE MANAGEMENT	EMC Corporation
11678049	7870356	CREATION OF SNAPSHOT COPIES USING A SPARSE FILE FOR KEEPING A RECORD OF CHANGED BLOCKS	EMC Corporation
11678430	7742404	SYSTEMS AND METHODS OF NETWORK MONITORING	EMC Corporation
11680618	7672981	OBJECT CLASSIFICATION AND INDEXING OF VERY LARGE NAME SPACES USING GRID TECHNOLOGY	EMC Corporation
11682049	7957398	METHODS AND SYSTEMS FOR DYNAMIC DIVISION OF PATH CAPACITY	EMC Corporation
11682783	8301901	SYSTEM AND METHOD FOR EXPRESSING AND EVALUATING SIGNED REPUTATION ASSERTIONS	EMC Corporation
11684108	7818302	SYSTEM AND METHOD FOR PERFORMING FILE SYSTEM CHECKS ON AN ACTIVE FILE SYSTEM	EMC Corporation
11684139	7730090	ARCHITECTURE FOR PERFORMING FILE SYSTEM CHECKING ON AN ACTIVE FILE SYSTEM	EMC Corporation

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11688203	7747831	HIGH EFFICIENCY PORTABLE ARCHIVE AND DATA PROTECTION USING A VIRTUALIZATION LAYER	EMC Corporation
11690147	7779306	METHOD FOR AUTOMATICALLY DIAGNOSING HARDWARE FAULTS IN A DATA STORAGE SYSTEM	EMC Corporation
11690153	8166315	METHOD FOR CALCULATING POWER FOR DATA STORAGE SYSTEMS	EMC Corporation
11690165	7538453	FAN POWER SUPPLY SYSTEM	EMC Corporation
11692051	7752312	GLOBAL VIEW OF SERVICE AREAS/LOCAL VIEW OF SERVICE NEEDS	EMC Corporation
11692058	8046366	ORCHESTRATING INDEXING	EMC Corporation
11692881	7653612	DATA PROTECTION SERVICES OFFLOAD USING SHALLOW FILES	EMC Corporation
11693165	8156516	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
11694094	7481679	ELECTRICAL CONNECTOR AND CIRCUIT CARD ASSEMBLY	EMC Corporation
11694753	8346748	ENVIRONMENT CLASSIFICATION AND SERVICE ANALYSIS	EMC Corporation
11694764	8543615	AUCTION-BASED SERVICE SELECTION	EMC Corporation
11700388	8997091	TECHNIQUES FOR COMPLIANCE TESTING	EMC Corporation
11701309	7966492	SYSTEM AND METHOD FOR ALLOWING AN E- MAIL MESSAGE RECIPIENT TO AUTHENTICATE THE MESSAGE	EMC Corporation
11705553	8234696	METHOD AND SYSTEM FOR PROVIDING A ONE TIME PASSWORD TO WORK IN CONJUNCTION WITH A BROWSER	EMC Corporation
11706172	8532300	SYMMETRIC ENCRYPTION KEY MANAGEMENT	EMC Corporation
11714714	8126854	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
11714715	8347271	SOFTWARE TESTING	EMC Corporation
11724030	7849281	METHOD AND SYSTEM FOR IMPLEMENTING HIERARCHICAL PERMISSION MAPS IN A LAYERED VOLUME GRAPH	EMC Corporation
11724477	7739448	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
11725346	8037243	INSTALLING DATA STORAGE SYSTEM SOFTWARE ON DISK DRIVE SYSTEMS	EMC Corporation
11725882	7962595	METHOD AND APPARATUS FOR DIAGNOSING HOST TO STORAGE DATA PATH LOSS DUE TO FIBRECHANNEL SWITCH FABRIC SPLITS	EMC Corporation
11726311	7797500	GEOMETRY ADAPTION USING DATA REDISTRIBUTION	EMC Corporation
11726326	7930161	METHOD AND APPARATUS FOR HORIZONTAL AND VERTICAL MODELED REPRESENTATION AND ANALYSIS OF DISTRIBUTED SYSTEMS	EMC Corporation
11726744	8069310	METHODS AND SYSTEMS FOR INCORPORATING SEQUENTIAL STREAM READ REQUESTS INTO PREFETCH MANAGEMENT FOR DATA STORAGE HAVING A CACHE MEMORY	EMC Corporation

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Number	Number	Title	Owner
11726831	9152349	AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
11728538	7634630	STORING AUTHENTICATION INFORMATION IN A CONTENT UNIT ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11728539	7904557	GRANTING ACCESS TO A CONTENT UNIT STORED ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11728540	7734886	CONTROLLING ACCESS TO CONTENT UNITS STORED ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11728749	8032785	ARCHITECTURE FOR MANAGING DISK DRIVES	EMC Corporation
11728768	7739470	LIMIT ALGORITHM USING QUEUE DEPTH TO CONTROL APPLICATION PERFORMANCE	EMC Corporation
11728907	8458263	METHOD AND APPARATUS FOR ELECTRONIC MESSAGE ARCHIVE VERIFICATION	EMC Corporation
11729164	8261029	DYNAMIC BALANCING OF WRITES BETWEEN MULTIPLE STORAGE DEVICES	EMC Corporation
11729166	7751398	TECHNIQUES FOR PRIORITIZATION OF MESSAGING TRAFFIC	EMC Corporation
11729222	8051324	MASTER-SLAVE PROVIDER ARCHITECTURE AND FAILOVER MECHANISM	EMC Corporation
11729707	7925829	I/O OPERATIONS FOR A STORAGE ARRAY	EMC Corporation
11729716	7945758	STORAGE ARRAY PARTITIONING	EMC Corporation
11729722	7970992	ASYMMETRICAL DEVICE DISTRIBUTION FOR A PARTITIONED STORAGE SUBSYSTEM	EMC Corporation
11729728	7809975	RECOVERY FROM A STORAGE PROCESSOR FAILURE WRITE CACHE PRESERVATION	EMC Corporation
11731130	8239692	AUTOMATIC POWER-ON SYSTEM AND METHOD USING HIGH-SPEED COMMUNICATION LINE	EMC Corporation
11731181	7716435	PROTECTION OF POINT-IN-TIME APPLICATION DATA	EMC Corporation
11731331	8527593	CHANGE OF AN ARCHIVED EMAIL PROPERTY IN THE EMAIL SYSTEM LOCAL STORE	EMC Corporation
11731467	8103685	METHODS AND APPARATUS FOR CAPTURING LAST DISCOVERY TIME OF MANAGED OBJECTS	EMC Corporation
11731468	7984515	SOFTWARE LICENSE ENFORCEMENT BY RUNTIME FEATURE ENABLEMENT	EMC Corporation
11731469	8219681	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
11731582	7720884	AUTOMATIC GENERATION OF ROUTINES AND/OR SCHEMAS FOR DATABASE MANAGEMENT	EMC Corporation
11731608	8032599	DISPLAY OF ARCHIVED EMAIL CONTENT IN A PREVIEW PANE	EMC Corporation
11731609	7730146	LOCAL EMAIL ARCHIVE STORE SIZE MANAGEMENT	EMC Corporation
11731675	8032701	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
11731679	7904965	USER ACTION SECURITY AUDITING	EMC Corporation

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Number	Number	Title	Owner
11731694	7860919	METHODS AND APPARATUS FOR ASSIGNING OPERATIONS TO AGENTS BASED ON VERSIONS	EMC Corporation
11731696	8203965	LAYERED APPROACH FOR REPRESENTING AND ANALYZING VIRTUAL PRIVATE NETWORK SERVICES	EMC Corporation
11731775	8015375	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PARALLEL PROCESSING AND SAVING TRACKING INFORMATION FOR MULTIPLE WRITE REQUESTS IN A DATA REPLICATION ENVIRONMENT INCLUDING MULTIPLE DATA STORAGE DEVICES	EMC Corporation
11731921	8463798	PRIORITIZED RESTORE	EMC Corporation
11731931	8375005	RAPID RESTORE	EMC Corporation
11732383	9391828	STORING AND MONITORING COMPUTED RELATIONSHIPS BETWEEN NETWORK COMPONENTS	EMC Corporation
11732664	8898126	METHOD AND APPARATUS FOR PROVIDING CONCURRENT DATA INSERTION AND UPDATING	EMC Corporation
11739311	9317222	CENTRALIZED CONTENT ADDRESSED STORAGE	EMC Corporation
11744200	9110920	CIFS ACCESS TO NFS FILES AND DIRECTORIES BY TRANSLATING NFS FILE HANDLES INTO PSEUDO-PATHNAMES	EMC Corporation
11746399	8065273	AUTOMATED PRIORITY RESTORES	EMC Corporation
11747567		[REDACTED]	EMC Corporation
11747871	7721144	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
11748457	7822927	DYNAMICALLY CONFIGURABLE REVERSE DNLC LOOKUP	EMC Corporation
11757280	7680998	JOURNALED DATA BACKUP DURING SERVER QUIESCENCE OR UNAVAILABILITY	EMC Corporation
11761918	8260949	METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA INFORMATION ON DEMAND OVER WIDE AREA NETWORKS	EMC Corporation
11764355	8301789	TECHNIQUES FOR PORT HOPPING	EMC Corporation
11766301	8046596	RESET-TOLERANT AUTHENTICATION DEVICE	EMC Corporation
11768319	8416772	DATA STORAGE SYSTEM HAVING OPTICAL/NON- OPTICAL COMMUNICATION LCC	EMC Corporation
11768608	7848746	WIRELESS AUTHENTICATION METHODS AND APPARATUS	EMC Corporation
11768648	7626237	NON-VOLATILE MEMS MEMORY CELL AND METHOD OF FORMING SUCH MEMORY CELL	EMC Corporation
11769407	8499331	POLICY BASED NETWORK COMPLIANCE	EMC Corporation
11769499	7809667	RULE-BASED NETWORK RESOURCE COMPLIANCE	EMC Corporation
11769561	7934248	NETWORK POLICY ENFORCEMENT DASHBOARD VIEWS	EMC Corporation
11769737	7979572	DATA STORAGE SYSTEM HAVING OPERATION CODE IN ADDRESS PORTION FOR ATOMIC OPERATIONS	EMC Corporation
11769739	7707367	DATA STORAGE SYSTEM HAVING SEPARATE ATOMIC OPERATION/NON-ATOMIC OPERATION PATHS	EMC Corporation

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Number	Number	Title	Owner
11769740	7979588	DATA STORAGE SYSTEM HAVING ACCELERATION PATH FOR CONGESTED PACKET SWITCHING	EMC Corporation
11769743	7769928	NETWORK  DATA STORAGE SYSTEM HAVING CPUS ADAPTED TO PERFORM A SECOND ATOMIC OPERATION REQUEST PRIOR TO COMPLETION OF A FIRST	EMC Corporation
11769744	7987229	ATOMIC OPERATION REQUEST  DATA STORAGE SYSTEM HAVING PLURAL DATA PIPES	EMC Corporation
11769745	8090789	METHOD OF OPERATING A DATA STORAGE SYSTEM HAVING PLURAL DATA PIPES	EMC Corporation
11769746	8645623	METHOD FOR PERFORMING A RAID OPERATION IN A DATA STORAGE SYSTEM	EMC Corporation
11769790	7984131	NETWORK CONFIGURATION HISTORY TRACKING	EMC Corporation
11769855	9071439	METHOD AND APPARATUS FOR REMOTE ADMINISTRATION OF CRYPTOGRAPHIC DEVICES	EMC Corporation
11770059	8700575	SYSTEM AND METHOD FOR INITIALIZING A NETWORK ATTACHED STORAGE SYSTEM FOR DISASTER RECOVERY	EMC Corporation
11770216	7689587	AUTOREP PROCESS TO CREATE PRE-LOADED REPOSITORY AND UPGRADE SCRIPTS	EMC Corporation
11770824	8060759	SYSTEM AND METHOD OF MANAGING AND OPTIMIZING POWER CONSUMPTION IN A STORAGE SYSTEM	EMC Corporation
11770837	9158466	POWER-SAVING MECHANISMS FOR A DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
11771561	7882373	SYSTEM AND METHOD OF REDUCING POWER CONSUMPTION IN A STORAGE SYSTEM THROUGH SHORTENING OF SEEK DISTANCES	EMC Corporation
11771604	9098211	SYSTEM AND METHOD OF NON-DISRUPTIVE DATA MIGRATION BETWEEN A FULL STORAGE ARRAY AND ONE OR MORE VIRTUAL ARRAYS	EMC Corporation
11771655	9063895	SYSTEM AND METHOD OF NON-DISRUPTIVE DATA MIGRATION BETWEEN HETEROGENEOUS STORAGE ARRAYS	EMC Corporation
11771686	9063896		EMC Corporation
11772129	7631155	THIN PROVISIONING OF A FILE SYSTEM AND AN ISCSI LUN THROUGH A COMMON MECHANISM	EMC Corporation
11772138	8285758	TIERING STORAGE BETWEEN MULTIPLE CLASSES OF STORAGE ON THE SAME CONTAINER FILE SYSTEM	EMC Corporation
11772149	7694191	SELF HEALING FILE SYSTEM	EMC Corporation
11772154	7818535	IMPLICIT CONTAINER PER VERSION SET	EMC Corporation
11772179	9361354	HIERARCHY OF SERVICE AREAS	EMC Corporation
11772182	9002800	ARCHIVE AND BACKUP VIRTUALIZATION	EMC Corporation
11772183	9235477	VIRTUALIZED BACKUP SOLUTION	EMC Corporation
11772192	8612570	DATA CLASSIFICATION AND MANAGEMENT USING TAP NETWORK ARCHITECTURE	EMC Corporation
11772513	7769736	SYSTEM AND METHOD FOR EFFICIENT ISSUANCE OF QUERIES	EMC Corporation

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11772552	8898261	CONFIGURING AGENT SERVICES OPERABLE BY	EMC Corporation
		AGENTS IN A STORAGE AREA NETWORK	
11772805	7792800	DATA REPOSITORY UPGRADE PROCESS	EMC Corporation
11779486	8099401	EFFICIENTLY INDEXING AND SEARCHING	EMC Corporation
		SIMILAR DATA	
11781739	7852581	NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
11782594	7707166	PROBABILISTIC SUMMARY DATA STRUCTURE	EMC Corporation
		BASED ENCODING FOR GARBAGE COLLECTION	
11784171	7730147	PRIORITIZING ARCHIVED EMAIL REQUESTS	EMC Corporation
11784172	7730148	BACKFILLING A LOCAL EMAIL ARCHIVE STORE	EMC Corporation
11784173	8156188	EMAIL ARCHIVE SERVER PRIMING FOR A CONTENT REQUEST	EMC Corporation
11784193	8930464	EMAIL CONTENT PRE-CACHING TO A LOCAL ARCHIVE STORE	EMC Corporation
11784194	8856241	MANAGEMENT OF EMAIL ARCHIVE SERVER REQUESTS	EMC Corporation
11784963	9235641	METHOD AND APPARATUS FOR ARCHIVE PROCESSING OF ELECTRONIC MESSAGES	EMC Corporation
11787117	7900015	SYSTEMS AND METHODS OF QUOTA ACCOUNTING	EMC Corporation
11787224	8966080	SYSTEMS AND METHODS OF MANAGING RESOURCES UTILIZATION ON A THREADED COMPUTER SYSTEM	EMC Corporation
11787225	7779048	SYSTEMS AND METHODS FOR PROVIDING POSSIBLE VALUE RANGES	EMC Corporation
11788407	7747581	NETWORK FILE SYSTEM-BASED DATA STORAGE SYSTEM	EMC Corporation
11789554	7567978	POPULATION OF DISCOVERY DATA	EMC Corporation
11799847	7925796	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PERFORMING AN INPUT/OUTPUT (I/O) OPERATION THAT INCLUDES A VIRTUAL DRAIN	EMC Corporation
11800091	7996574	MESSAGING MECHANISM FOR INTER PROCESSOR COMMUNICATION	EMC Corporation
11801484	7836272	METHODS AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
11803385	8010697	ORDERED WRITES FOR SRDF ASSIST	EMC Corporation
11803607	7546220	SYSTEM AND METHOD FOR PREPARING TRACE DATA FOR ANALYSIS	EMC Corporation
11804578	8768895	SUBSEGMENTING FOR EFFICIENT STORAGE, RESEMBLANCE DETERMINATION, AND TRANSMISSION	EMC Corporation
11807049	8010543	PROTECTING A FILE SYSTEM ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11807070	7752492	RESPONDING TO A FAILURE OF A STORAGE SYSTEM	EMC Corporation
11807133	8095804	STORING DELETED DATA IN A FILE SYSTEM SNAPSHOT	EMC Corporation
11807134	8205049	TRANSMITTING FILE SYSTEM ACCESS REQUESTS TO MULTIPLE FILE SYSTEMS	EMC Corporation
11807204	7827137	SEEDING REPLICATION	EMC Corporation

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11811273	8201156	AUTOMATIC GENERATION OF MESSAGE IDS	EMC Corporation
11811274	8732724	DELAYED RENDERING OF MESSAGES	EMC Corporation
11811363	8707333	MESSAGE ARGUMENT DESCRIPTORS	EMC Corporation
11811676	8477033	INVENTORY CONTROL	EMC Corporation
11818576	8626741	PROCESS FOR CATALOGING DATA OBJECTS BACKED UP FROM A CONTENT ADDRESSED STORAGE SYSTEM	EMC Corporation
11818577	8190834	PROCESS FOR CONTIGUOUSLY STREAMING DATA FROM A CONTENT ADDRESSED STORAGE SYSTEM	EMC Corporation
11819609	8918537	STORAGE ARRAY NETWORK PATH ANALYSIS SERVER FOR ENHANCED PATH SELECTION IN A HOST-BASED I/O MULTI-PATH SYSTEM	EMC Corporation
11819611	7937481	SYSTEM AND METHODS FOR ENTERPRISE PATH MANAGEMENT	EMC Corporation
11819612	8204980	STORAGE ARRAY NETWORK PATH IMPACT ANALYSIS SERVER FOR PATH SELECTION IN A HOST-BASED I/O MULTI-PATH SYSTEM	EMC Corporation
11820574	8082390	TECHNIQUES FOR REPRESENTING AND STORING RAID GROUP CONSISTENCY INFORMATION	EMC Corporation
11820737	7752389	TECHNIQUES FOR DETERMINING PHYSICAL DATA LAYOUT OF RAID DEVICES	EMC Corporation
11821008	7769032	TOPOLOGY SPLIT MANAGER USING GRAPH CONTRACTION	EMC Corporation
11821841	8082227	SESSION SENSITIVE DATA BACKUPS AND RESTORES	EMC Corporation
11823152	7949637	STORAGE MANAGEMENT FOR FINE GRAINED TIERED STORAGE WITH THIN PROVISIONING	EMC Corporation
11823154	7747750	METHOD FOR RESERVING RESOURCES IN A STORAGE AREA NETWORK WITH SELECTIVE CAPABILITIES	EMC Corporation
11823156	8775368	FINE GRAINED TIERED STORAGE WITH THIN PROVISIONING	EMC Corporation
11823157	7899909	METHOD FOR RESERVING RESOURCES IN A STORAGE AREA NETWORK BY RESERVING PORTIONS OF PROPERTIES OF THE RESOURCES	EMC Corporation
11823499	7865761	ACCESSING MULTIPLE NON-VOLATILE SEMICONDUCTOR MEMORY MODULES IN AN UNEVEN MANNER	EMC Corporation
11823619	8028110	NON-DISRUPTIVE DATA MIGRATION AMONG STORAGE DEVICES USING INTEGRATED VIRTUALIZATION ENGINE OF A STORAGE DEVICE	EMC Corporation
11823642	8112398	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR SELECTIVELY MARKING AND RETRIEVING DATA FROM AN EVENT LOG FILE	EMC Corporation
11823683	7856022	NON-DISRUPTIVE DATA MIGRATION WITH EXTERNAL VIRTUALIZATION ENGINE	EMC Corporation
11823930	7746844	METHOD AND APPARATUS FOR ANALYSIS OF VOIP NETWORK PERFORMANCE	EMC Corporation

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11823986	8818936	METHODS, SYSTEMS, AND COMPUTER PROGRAM PRODUCTS FOR PROCESSING READ REQUESTS RECEIVED DURING A PROTECTED RESTORE OPERATION	EMC Corporation
11824198	7783620	RELEVANCY SCORING USING QUERY STRUCTURE AND DATA STRUCTURE FOR FEDERATED SEARCH	EMC Corporation
11824238	8711840	METHOD AND APPARATUS FOR MANAGEMENT AND ANALYSIS OF SERVICES IN VOIP NETWORKS	EMC Corporation
11824239	7568051	FLEXIBLE UCB	EMC Corporation
11824254	8924352	AUTOMATED PRIORITY BACKUP AND ARCHIVE	EMC Corporation
11824304	7783630	TUNING OF RELEVANCY RANKING FOR FEDERATED SEARCH	EMC Corporation
11824414	7856563	MANAGING DISK DRIVE POWER STATES	EMC Corporation
11824430	8990527	DATA MIGRATION WITH SOURCE DEVICE REUSE	EMC Corporation
11824433	8205218	DATA STORAGE SYSTEM HAVING COMMON SOFTWARE ENVIRONMENT	EMC Corporation
11824434	8060750	SECURE SEED PROVISIONING	EMC Corporation
11824435	7634567	CONFIGURING DATA STORAGE FOR ELECTRONIC MAIL APPLICATION	EMC Corporation
11824485	8296534	TECHNIQUES FOR USING FLASH-BASED MEMORY	EMC Corporation
11824506	7950022	IN RECOVERY PROCESSING TECHNIQUES FOR USE WITH DEVICE DRIVERS IN	EMC Corporation
11824300	/930022	A COMMON SOFTWARE ENVIRONMENT	ENIC Corporation
11824542	7950025	COMMON SOFTWARE ENVIRONMENT	EMC Corporation
11824577	7793061	TECHNIQUES FOR USING FLASH-BASED MEMORY AS A WRITE CACHE AND A VAULT	EMC Corporation
11824578	7523231	APPLICATION AWARE STORAGE	EMC Corporation
11824592	8005861	CLUSTER STORAGE USING SUBSEGMENTING FOR EFFICIENT STORAGE	EMC Corporation
11829756	7783682	PROBABILISTIC SUMMARY DATA STRUCTURE BASED ENCODING FOR GARBAGE COLLECTION IN BACKUP SYSTEMS	EMC Corporation
11833012	9286595	SYSTEM AND METHOD FOR COLLECTING AND NORMALIZING ENTITLEMENT DATA WITHIN AN ENTERPRISE	EMC Corporation
11834904	8954522	HORIZONTAL SCALING THROUGH UPPER LEVEL PROTOCOL PRE-PROCESSING	EMC Corporation
11836735	8819344	SHARED STORAGE ACCESS LOAD BALANCING FOR A LARGE NUMBER OF HOSTS	EMC Corporation
11839453	7958166	SYSTEM AND METHOD FOR PROVIDING WRITE- ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
11839897	7603515	MIDPLANE-INDEPENDENT IMPLEMENTATIONS OF DATA STORAGE SYSTEM ENCLOSURES	EMC Corporation
11843000	8010698	NETWORK APPLICATION LAYER ROUTING	EMC Corporation
11843287	7487539	CROSS DOMAIN AUTHENTICATION AND SECURITY SERVICES USING PROXIES FOR HTTP ACCESS	EMC Corporation
11846704	8527454	DATA REPLICATION USING A SHARED RESOURCE	EMC Corporation
11851702	8176169	METHOD FOR NETWORK VISUALIZATION	EMC Corporation

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11854616	7930487	SYSTEM AND METHOD FOR PROVIDING ACCESS	EMC Corporation
		CONTROL TO RAW SHARED DEVICES	
11854784	8576875	SYSTEMS AND METHODS OF IMPROVING	EMC Corporation
		PERFORMANCE OF TRANSPORT PROTOCOLS IN A	
		MULTI-PATH ENVIRONMENT	
11855400	7574558	SECTOR-EDGE CACHE	EMC Corporation
11859100	8006111	INTELLIGENT FILE SYSTEM BASED POWER	EMC Corporation
		MANAGEMENT FOR SHARED STORAGE THAT	
		MIGRATES GROUPS OF FILES BASED ON	
		INACTIVITY THRESHOLD	
11861636	7698491	MODULAR PATCH PANEL WITH PLUGGABLE	EMC Corporation
		PERSONALITIES	
11862253	7684961	LIGHT PATH DIAGNOSTICS	EMC Corporation
11862318		[REDACTED]	EMC Corporation
11862427	7945640	METHODS AND APPARATUS FOR NETWORK	EMC Corporation
		PROVISIONING	
11862491	8447892	PCI-E EXTENDED REACH WITH RECEIVE DETECT	EMC Corporation
		CIRCUITRY	
11862512	8005999	DATA STORAGE SYSTEM WITH PCI-E EXTENDED	EMC Corporation
		REACH CAPABILITY	
11862582	7804793	SAS DIPLEX COMMUNICATIONS	EMC Corporation
11862589	7903683	FAULT TOLERANT DIPLEX COMMUNICATIONS	EMC Corporation
11862761	7445457	TECHNIQUES FOR CONNECTING MIDPLANE	EMC Corporation
		CONNECTORS THROUGH A MIDPLANE	
11862783	7921311	METHOD AND APPARATUS FOR MITIGATING	EMC Corporation
		CURRENT DRAIN IN A LOW-POWER HAND-HELD	
		DEVICE	
11862800	7722359	CONNECTION ASSEMBLY HAVING MIDPLANE	EMC Corporation
		WITH ENHANCED CONNECTION AND AIRFLOW	
110/2010	0000701	FEATURES	EN CO CO
11863018	8209701	TASK MANAGEMENT USING MULTIPLE	EMC Corporation
110/2042	0200702	PROCESSING THREADS	EMC C
11863042	8209702	TASK EXECUTION USING MULTIPLE POOLS OF	EMC Corporation
		PROCESSING THREADS, EACH POOL DEDICATED TO EXECUTE DIFFERENT TYPES OF SUB-TASKS	
11962202	9429610		EMC Composition
11863392 11863530	8438610 8156220	IDENTITY-BASED ADDRESS NORMALIZATION   DATA STORAGE SYSTEM	EMC Corporation EMC Corporation
11863550	7471512	STORAGE SYSTEM ASSEMBLY EMPLOYING	EMC Corporation
11003330	/4/1312	REPEATER AMPLIFIERS IN I/O EXPANSION	ENIC Corporation
		MODULE	
11863585	9134916	MANAGING CONTENT IN A DISTRIBUTED SYSTEM	EMC Corporation
11863745	8332613	METHODS AND SYSTEMS FOR MANAGING I/O	EMC Corporation
11003743	0332013	REQUESTS TO MINIMIZE DISRUPTION REQUIRED	Livic Corporation
		FOR DATA ENCAPSULATION AND DE-	
		ENCAPSULATION	
11863780	8387066	DEPENDENCY-BASED TASK MANAGEMENT	EMC Corporation
11863882	7809964	STORAGE SYSTEM ASSEMBLY WITH DISTRIBUTED	EMC Corporation
11000000	""	ENCLOSURE MANAGEMENT	
11863885	8621550	INFORMATION TECHNOLOGY RESOURCE	EMC Corporation
11000000	0021000	COMPLIANCE TEMPLATES	
11863896	7567398	DETECTION OF FLY HEIGHT CHANGE IN A DISK	EMC Corporation
	1	DRIVE	=::10 corporation

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Number	Number	Title	Owner
11863940	8024772	APPLICATION SERVICE POLICY COMPLIANCE SERVER	EMC Corporation
11864001	8059814	TECHNIQUES FOR CARRYING OUT SEE OR KEY DERIVATION	EMC Corporation
11864026	8819203	TECHNIQUES FOR PROVIDING AN APPLICATION SERVICE TO AN APPLICATION FROM AN APPLIANCE-STYLE APPLICATION SERVICES PLATFORM	EMC Corporation
11864040	8191084	TECHNIQUES FOR SUPPORTING APPLICATION OPERATION	EMC Corporation
11864054	8594335	KEY VERIFICATION SYSTEM AND METHOD	EMC Corporation
11864094	8589729	DATA PRESERVATION SYSTEM AND METHOD	EMC Corporation
11864115	8103801	MARKING AND FAULTING INPUT/OUTPUT PORTS OF AN ELECTRONICS SYSTEM	EMC Corporation
11864126	7822707	OBJECT SEARCHING AND MANAGEMENT INFORMATION VIEWING IN A STORAGE AREA NETWORK ENVIRONMENT	EMC Corporation
11864140	7934032	INTERFACE FOR ESTABLISHING OPERABILITY BETWEEN A PROCESSOR MODULE AND INPUT/OUTPUT (I/O) MODULES	EMC Corporation
11864457	8494977	IT POLICY VIOLATION VIEWS	EMC Corporation
11864583	8209506	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
11864596	8868720	DELEGATION OF DISCOVERY FUNCTIONS IN INFORMATION MANAGEMENT SYSTEM	EMC Corporation
11864605	8548964	DELEGATION OF DATA CLASSIFICATION USING COMMON LANGUAGE	EMC Corporation
11864756	8880797	DE-DUPLICATION IN A VIRTUALIZED SERVER ENVIRONMENT	EMC Corporation
11864760	9141658	DATA CLASSIFICATION AND MANAGEMENT FOR RISK MITIGATION	EMC Corporation
11864764	9323901	DATA CLASSIFICATION FOR DIGITAL RIGHTS MANAGEMENT	EMC Corporation
11864770		[REDACTED]	EMC Corporation
11864774	8522248	MONITORING DELEGATED OPERATIONS IN INFORMATION MANAGEMENT SYSTEMS	EMC Corporation
11864783	8719263	SELECTIVE PERSISTENCE OF METATDATA IN INFORMATION MANAGEMENT	EMC Corporation
11864943	8146155	CONTROLLING ACCESS TO CONTENT ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11866133	7885943	IT COMPLIANCE RULES	EMC Corporation
11866168	8024320	QUERY LANGUAGE	EMC Corporation
11867330	7620790	METHODS AND APPARATUS FOR INTERFACING TO A DATA STORAGE SYSTEM	EMC Corporation
11868882	8738669	METHOD AND APPARATUS FOR PROVIDING ACCESS TO DATA OBJECTS WITHIN ANOTHER DATA OBJECT	EMC Corporation
11878290	7774472	SYSTEM AND METHOD FOR CROSS- AUTHORITATIVE CONFIGURATION MANAGEMENT	EMC Corporation
11880325	7730180	RESOLVING MULTIPLE MASTER NODE CONFLICT IN A DDB	EMC Corporation

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Number	Number	Title	Owner
11880462	7743033	SYSTEM AND METHODS FOR PROVIDING A	EMC Corporation
		DISTRIBUTED FILE SYSTEM UTILIZING	
		METADATA TO TRACK INFORMATION ABOUT	
1100155	0011007	DATA STORED THROUGHOUT THE SYSTEM	77.60.0
11884776	8266295	SYSTEM AND METHOD FOR DETECTING AND	EMC Corporation
44006=46	0.1.0.0.0.0	MITIGATING DNS SPOOFING TROJANS	77.40.0
11886746	8122082	SYSTEM AND METHOD FOR DETECTING A PROXY	EMC Corporation
		BETWEEN A CLIENT AND SERVER	
11890306		[REDACTED]	EMC Corporation
11891237	8712966	BACKUP AND RECOVERY OF DISTRIBUTED	EMC Corporation
11091237	8/12900	STORAGE AREAS	ENIC Corporation
11894697	7966289	SYSTEMS AND METHODS FOR READING OBJECTS	EMC Corporation
11071077	7,000207	IN A FILE SYSTEM	Elvie Corporation
11894739	7949692	SYSTEMS AND METHODS FOR PORTALS INTO	EMC Corporation
1103 1703	1,3,13,03,2	SNAPSHOT DATA	
11894756	7882068	SYSTEMS AND METHODS FOR ADAPTIVE COPY ON	EMC Corporation
		WRITE	F
11897686	7702871	WRITE PACING	EMC Corporation
11900062	8584128	TECHNIQUES FOR ADJUSTING PRIORITIES	EMC Corporation
		ASSOCIATED WITH SERVICING REQUESTS	•
11901213	8832163	TECHNIQUES FOR DETERMINING LOGICAL DATA	EMC Corporation
		OBJECTS CORRESPONDING TO PHYSICAL	_
		STORAGE LOCATIONS	
11901335	8015327	TECHNIQUES FOR MONITORING AND MANAGING	EMC Corporation
		WAIT QUEUES	
11903869	7822939	DATA DE-DUPLICATION USING THIN	EMC Corporation
		PROVISIONING	
11904129	8433777	COMMUNICATION WITH MULTIPLE STORAGE	EMC Corporation
		PROCESSORS VIA DIRECT CONNECTIONS	
11904199	8819104	COMMUNICATION WITH MULTIPLE STORAGE	EMC Corporation
		PROCESSORS USING NETWORK	
11004000	7020522	INFRASTRUCTURE.	E) (C C
11904302	7930533	PXE BOOTING A STORAGE PROCESSOR FROM A	EMC Corporation
11004250	0775540	PEER STORAGE PROCESSOR	EMC Commontion
11904359	8775549	METHODS, SYSTEMS, AND COMPUTER PROGRAM   PRODUCTS FOR AUTOMATICALLY ADJUSTING A	EMC Corporation
		DATA REPLICATION RATE BASED ON A SPECIFIED	
		QUALITY OF SERVICE (QOS) LEVEL	
11904360	8190843	METHODS, SYSTEMS, AND COMPUTER PROGRAM	EMC Corporation
11904300	0190043	PRODUCTS FOR DYNAMICALLY ALLOCATING	Livic Corporation
		MEMORY AMONG A PLURALITY OF PROCESSES	
11904621	7778244	STORAGE SYSTEM MANAGEMENT WITH	EMC Corporation
11701021	7770211	DIPLEXING USING USB SIGNAL CONVERSION	Zivie corporation
11904624	8145610	DATA MODEL FOR SERVICE ARCHITECTURE	EMC Corporation
11904671	8060709	CONTROL OF STORAGE VOLUMES IN FILE	EMC Corporation
		ARCHIVING	
11904721	8244781	NETWORK ACCESSED STORAGE FILES SYSTEM	EMC Corporation
		QUERY/SET PROXY SERVICE FOR A STORAGE	
		VIRTUALIZATION SYSTEM	
11904756	8380950	SYSTEM AND METHOD FOR DYNAMIC STORAGE	EMC Corporation
		DEVICE RECONFIGURATION	•

Application	Registration		
Number	Number	Title	Owner
11904802	8380806	SYSTEM AND METHOD FOR ABSOLUTE PATH DISCOVERY BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11904832	7873851	POWERING DISK DRIVE SPINUP	EMC Corporation
11904868	8239645	MANAGING MIRRORING IN DATA STORAGE SYSTEM HAVING FAST WRITE DEVICE AND SLOW WRITE DEVICE	EMC Corporation
11904880	8819234	SUPPLYING DATA STORAGE SERVICES	EMC Corporation
11904885	8918603	STORAGE OF FILE ARCHIVING METADATA	EMC Corporation
11904889	7895519	TRACKING USE OF INTERFACE AND ONLINE ASSISTANCE	EMC Corporation
11904892	8326805	HIGH-AVAILABILITY FILE ARCHIVING	EMC Corporation
11904972	8341121	IMMINENT FAILURE PRIORITIZED BACKUP	EMC Corporation
11904975	8583601	IMMINENT FAILURE BACKUP	EMC Corporation
11906026	8650615	CROSS DOMAIN DELEGATION BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
11906035	7873791	METHODS AND SYSTEMS FOR INCORPORATING IMPROVED TAIL CUTTING IN A PREFETCH STREAM IN TBC MODE FOR DATA STORAGE HAVING A CACHE MEMORY	EMC Corporation
11906127	8601131	ACTIVE ELEMENT MANAGER	EMC Corporation
11906131	8302201	SECURITY AND LICENSING WITH APPLICATION AWARE STORAGE	EMC Corporation
11906134	8150877	ACTIVE ELEMENT MANAGEMENT AND ELECTRONIC COMMERCE	EMC Corporation
11906149	8161083	CREATING USER COMMUNITIES WITH ACTIVE ELEMENT MANAGER	EMC Corporation
11906160	8296414	TECHNIQUES FOR AUTOMATED APPLICATION DISCOVERY	EMC Corporation
11906565	8326969	METHOD AND APPARATUS FOR PROVIDING SCALABILITY IN RESOURCE MANAGEMENT AND ANALYSIS SYSTEM- THREE WAY SPLIT ARCHITECTURE	EMC Corporation
11924576	8903772	DIRECT OR INDIRECT MAPPING POLICY FOR DATA BLOCKS OF A FILE IN A FILE SYSTEM	EMC Corporation
11924744	8250633	TECHNIQUES FOR FLEXIBLE RESOURCE AUTHENTICATION	EMC Corporation
11925628	7613827	DISTRIBUTED TRAFFIC CONTROLLER FOR NETWORK DATA	EMC Corporation
11926784	8438617	USER AUTHENTICATION BASED ON VOUCHER CODES	EMC Corporation
11930738	8413221	METHODS AND APPARATUS FOR DELEGATED AUTHENTICATION	EMC Corporation
11933586	9282005	IT INFRASTRUCTURE POLICY BREACH INVESTIGATION INTERFACE	EMC Corporation
11933686	8135760	DETERMINING THE LINEAGE OF A CONTENT UNIT ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
11936572	7447926	DISK DRIVE INPUT SEQUENCING FOR STAGGERED DRIVE SPIN-UP	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
11938965	8665562	METHOD OF RELIABLE USAGE OF DYNAMIC FLY-	EMC Corporation
		HEIGHT CONTROL AT ENVIRONMENTAL	
		EXTREMES	
11939232	8495372	AUTHENTICATION METHODS AND APPARATUS	EMC Corporation
		USING PAIRING PROTOCOLS AND OTHER	
		TECHNIQUES	
11949204	8020203	TECHNIQUES FOR HIGH AVAILABILITY OF	EMC Corporation
		VIRTUAL PRIVATE NETWORKS (VPN'S)	77.60
11954399	8060710	NON-DISRUPTIVE MIGRATION USING DEVICE	EMC Corporation
		IDENTITY SPOOFING AND PASSIVE/ACTIVE ORS	
11959386	8244953	PULL SESSIONS SYSTEM AND METHOD FOR FASTER DATA	EMC Composition
11939380	8244933	RETRIEVAL FROM TAPE MEDIA	EMC Corporation
11960073	7516288	METHOD AND APPARATUS FOR COMPUTING FILE	EMC Corporation
119000/3	/310288	STORAGE ELEMENTS FOR BACKUP AND RESTORE	EMC Corporation
11960759	7711869	METHOD FOR COMMUNICATING PLURAL SIGNALS	EMC Corporation
11900/39	//11809	GENERATED AT A SOURCE TO A REMOTE	ENIC Corporation
		DESTINATION THROUGH A SINGLE WIRE	
11962499		[REDACTED]	EMC Corporation
11962521	8336089	METHOD AND APPARATUS FOR PROVIDING	EMC Corporation
11302021		AUTHENTICATION AND ENCRYPTION SERVICES	2.110 corporation
		BY A SOFTWARE AS A SERVICE PLATFORM	
11962545		[REDACTED]	EMC Corporation
11962687	8706800	CLIENT DEVICE SYSTEMS AND METHODS FOR	EMC Corporation
		PROVIDING SECURE ACCESS TO APPLICATION	1
		SERVICES AND ASSOCIATED CLIENT DATA	
		HOSTED BY AN INTERNET COUPLED PLATFORM	
11962802	8539169	MANAGING POWER CONSUMPTION OF A	EMC Corporation
		STORAGE SYSTEM	
11963086	8131919	TECHNIQUES FOR CONTROLLING STORAGE	EMC Corporation
		DEVICE USE BY PERFORMING A STORAGE DEVICE	
		LOCATION ASSESSMENT OPERATION BASED ON A	
110/2020	7040262	CURRENT STORAGE DEVICE IDENTIFIER	EN CO CO
11963929	7849263	TECHNIQUES FOR CONTROLLING STORAGE	EMC Corporation
110/2047	7573726	CAPACITY OF A DATA STORAGE SYSTEM	EMC Commention
11963947	/5/3/26	LATCH ASSEMBLY	EMC Corporation EMC Corporation
11964364 11964789	8005227	[REDACTED]  KEY INFORMATION CONSISTENCY CHECKING IN	EMC Corporation
11904/09	8003227	ENCRYPTING DATA STORAGE SYSTEM	ENIC Corporation
11965095	8954443	MULTI-PROTOCOL DATA OBJECT SCANNING BY A	EMC Corporation
11703073	0734443	STORAGE VIRTUALIZATION SYSTEM	Livic Corporation
11965244	8010810	TECHNIQUES FOR PROTECTING DATA USING AN	EMC Corporation
11703211	0010010	ELECTRONIC ENCRYPTION ENDPOINT DEVICE	Livie corporation
11965250	8190921	METHODOLOGY FOR VAULTING DATA	EMC Corporation
		ENCRYPTION KEYS WITH ENCRYPTED STORAGE	
11965253	8170213	METHODOLOGY FOR COORDINATING	EMC Corporation
		CENTRALIZED KEY MANAGEMENT AND	
		ENCRYPTION KEYS CACHED THROUGH PROXIED	
		ELEMENTS	
11965429	7612288	TECHNIQUES FOR ATTACHING A LABEL TO AN	EMC Corporation
		ELECTRONIC CABLE	
11965811	7705246	COMPACT DIFFERENTIAL SIGNAL VIA	EMC Corporation
		STRUCTURE	

Application Number	Registration Number	Title	Oumer:
Number 11965841	7783818	MODULARIZED INTERCONNECT BETWEEN ROOT	Owner EMC Corporation
11903841	//83818	COMPLEXES AND I/O MODULES	EMC Corporation
11965914	7822895	SCALABLE CPU (CENTRAL PROCESSING UNIT)	EMC Corporation
11703714	7022093	MODULES FOR ENABLING IN-PLACE UPGRADES	Livic Corporation
		OF ELECTRONICS SYSTEMS	
11966615	7962657	SELECTION OF A DATA PATH BASED ON	EMC Corporation
11700013	7702037	OPERATION TYPE	Livic corporation
11966645	8145614	SELECTION OF A DATA PATH BASED ON THE	EMC Corporation
11700015	0113011	LIKELIHOOD THAT REQUESTED INFORMATION IS	Zivic corporation
		IN A CACHE	
11966662	7688753	SELECTION OF A DATA PATH BASED ON ONE OR	EMC Corporation
		MORE PERFORMANCE CHARACTERISTICS OF A	
		COMPUTER SYSTEM	
11966733	7925627	SYSTEM AND METHOD FOR RECONCILING MULTI-	EMC Corporation
		PROTOCOL SCAN RESULTS BY A STORAGE	1
		VIRTUALIZATION SYSTEM	
11967471	8127307	METHODS AND APPARATUS FOR STORAGE	EMC Corporation
		VIRTUALIZATION SYSTEM HAVING SWITCH	
		LEVEL EVENT PROCESSING	
11967836	8301853	SYSTEM AND METHOD FOR ASYNCHRONOUSLY	EMC Corporation
		MIRRORING DATA	
11967856	7843866	SYSTEM AND METHOD FOR MIRRORING DATA	EMC Corporation
11967871	8825971	AGE-OUT SELECTION IN HASH CACHES	EMC Corporation
11967875	8832698	EVENT-DRIVEN STATE THREAD ARCHITECTURE	EMC Corporation
11967898	8099549	SYSTEM AND METHOD FOR ERASURE ENCODING	EMC Corporation
11967900	7774314	ACTIVE DIRECTORY CONTAINER RECOVERY	EMC Corporation
11967918	8099550	SYSTEM AND METHOD FOR SINGLE INSTANCE STORAGE	EMC Corporation
11967940	8099554	SYSTEM AND METHOD FOR FLASH-BASED DATA CACHING	EMC Corporation
11968029	8832711	USER INTERFACE FOR EVENT-DRIVEN STATE	EMC Corporation
		THREAD ARCHITECTURE	
11968040	7831787	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
11968045	8621240	USER-SPECIFIC HASH AUTHENTICATION	EMC Corporation
11968048	8190835	GLOBAL DE-DUPLICATION IN SHARED	EMC Corporation
		ARCHITECTURES	
11968050	7783604	DATA DE-DUPLICATION AND OFFSITE SAAS	EMC Corporation
		BACKUP AND ARCHIVING	
11968052	8135918	DATA DE-DUPLICATION FOR ISCSI	EMC Corporation
11968053	7788220	STORAGE OF DATA WITH COMPOSITE HASHES IN BACKUP SYSTEMS	EMC Corporation
11968057	7949630	STORAGE OF DATA ADDRESSES WITH HASHES IN BACKUP SYSTEMS	EMC Corporation
11968061	7797279	MERGING OF INCREMENTAL DATA STREAMS	EMC Corporation
		WITH PRIOR BACKED-UP DATA	
11970728	7984074	METHODS AND APPARATUS PROVIDING AN	EMC Corporation
		EXTENSIBLE MANAGEABLE ENTITY MODEL FOR	
		A NETWORK	
11972157	7818606	METHODS AND APPARATUS FOR SWITCH-	EMC Corporation
		INITIATED TRESPASS DECISION MAKING	
11977446	7836018	SIMULTANEOUSLY ACCESSING FILE OBJECTS	EMC Corporation
		THROUGH WEB SERVICES AND FILE SERVICES	

Application	Registration		
Number	Number	Title	Owner
11978243	9122397	EXPOSING STORAGE RESOURCES WITH DIFFERING CAPABILITIES	EMC Corporation
11980011	7478194	EFFICIENT MOUNTING AND DISMOUNTING OF STORAGE MEDIA	EMC Corporation
11981845	8024535	TECHNIQUES FOR PRODUCING A CONSISTENT COPY OF SOURCE DATA AT A TARGET LOCATION	EMC Corporation
11983774	7558926	CONTINUOUS DATA BACKUP USING DISTRIBUTED JOURNALING	EMC Corporation
11985519	7860828	SYSTEM AND METHOD FOR TRANSFERRING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
11985610		[REDACTED]	EMC Corporation
12/099598	9098432	SYSTEM AND METHOD FOR DATA DEDUPLICATION OF BACKUP IMAGES	EMC Corporation
12/336393	8190906	METHOD AND APPARATUS FOR TESTING AUTHENTICATION TOKENS	EMC Corporation
12/360872	9203620	SYSTEM, METHOD AND APPARATUS FOR SECURE USE OF CRYPTOGRAPHIC CREDENTIALS IN MOBILE DEVICES	EMC Corporation
12/483993	8250640	TRANSPARENT KERBOROS DELEGATION WITH A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12/494645	8856081	SINGLE RETENTION POLICY	EMC Corporation
12/569280	8498411	USING MULTIPLES ABOVE TWO WITH RUNNING TOTALS AND REFERENCE VALUES OTHER THAN 0 AND 2^ (WINDOW SIZE) IN ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION ACCELERATION TABLES	EMC Corporation
12/634116	8452989	PROVIDING SECURITY TO AN ELECTRONIC DEVICE	EMC Corporation
12/636612	9119076	SYSTEM AND METHOD FOR AUTHENTICATION USING A MOBILE COMMUNICATION DEVICE	EMC Corporation
12/892417	8499357	SIGNING A LIBRARY FILE TO VERIFY A CALLBACK FUNCTION	EMC Corporation
12/893594	8335771	STORAGE ARRAY SNAPSHOTS FOR LOGGED ACCESS REPLICATION IN A CONTINUOUS DATA PROTECTION SYSTEM	EMC Corporation
12001149	8387130	AUTHENTICATED SERVICE VIRTUALIZATION	EMC Corporation
12002431	8326794	ACTIVE ELEMENT MANAGEMENT AND SUPPORT	EMC Corporation
12002584	8321854	CLIENT WITH FLEXIBLE GRAMMAR-BASE SYNTAX	EMC Corporation
12002945	7860898	TECHNIQUES FOR NOTIFICATION IN A DATA STORAGE SYSTEM	EMC Corporation
12004167	7912995	MANAGING SAS TOPOLOGY	EMC Corporation
12004300	8667224	TECHNIQUES FOR DATA PREFETCHING	EMC Corporation
12004311	7861123	MANAGING LOOP INTERFACE FAILURE	EMC Corporation
12004391	9262146	SUPPLYING SOFTWARE VIA DATA STORAGE SYSTEM	EMC Corporation
12004735	8315986	RESTORE OPTIMIZATION	EMC Corporation
12004877	8418072	UI DATA MODEL ABSTRACTION	EMC Corporation
12004992	8583865	CACHING WITH FLASH-BASED MEMORY	EMC Corporation
12005011	8095938	MANAGING ALERT GENERATION	EMC Corporation
12005051	8255426	EFFICIENT STORAGE OF NON-SEARCHABLE ATTRIBUTES	EMC Corporation

Application Number	Registration Number	Title	Owner
12005062	8930938	MIGRATION TO A SERVICE-ORIENTED ARCHITECTURE	EMC Corporation
12005140	8171006	RETRIEVAL OF SEARCHABLE AND NON- SEARCHABLE ATTRIBUTES	EMC Corporation
12005142	8150887	IDENTIFIERS FOR NON-SEARCHABLE ATTRIBUTES	EMC Corporation
12005640	8555014	AUTOMATIC ACCESS MANAGEMENT OF CLIENTS TO A STORAGE SYSTEM	EMC Corporation
12005663	8028062	NON-DISRUPTIVE DATA MOBILITY USING VIRTUAL STORAGE AREA NETWORKS WITH SPLIT-PATH VIRTUALIZATION	EMC Corporation
12005679	7930476	APPLICATION AWARE STORAGE RESOURCE PROVISIONING	EMC Corporation
12005717	8082330	APPLICATION AWARE AUTOMATED STORAGE POOL PROVISIONING	EMC Corporation
12005787	7904652	APPLICATION AWARE USE OF ADDED DEVICES	EMC Corporation
12006127	7899996	FULL TRACK READ FOR ADAPTIVE PRE-FETCHING OF DATA	EMC Corporation
12008376	8321378	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
12011984	8156405	EFFICIENT REDUNDANT MEMORY UNIT ARRAY	EMC Corporation
12011989	8266430	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
12015073	7810034	BACKUP REPORTING FRAMEWORK GRAPHICAL USER INTERFACE	EMC Corporation
12020609	7913056	METHOD TO PERFORM PARALLEL DATA MIGRATION IN A CLUSTERED STORAGE ENVIRONMENT	EMC Corporation
12022265	8566829	COOPERATIVE MULTI-LEVEL SCHEDULER FOR VIRTUAL ENGINES	EMC Corporation
12022268	8990799	DIRECT MEMORY ACCESS THROUGH VIRTUAL SWITCH IN DEVICE DRIVER	EMC Corporation
12023931	9002777	SYSTEMS AND METHODS FOR HANDLING DATA	EMC Corporation
12027953	7707416	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
12030158		[REDACTED]	EMC Corporation
12034505	8667034	SYSTEM AND METHOD FOR PRESERVING SYMBOLIC LINKS BY A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12036523	8302161	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
12043728		[REDACTED]	EMC Corporation
12043780	8588425	ENCRYPTION KEY RECOVERY IN THE EVENT OF STORAGE MANAGEMENT FAILURE	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
12043863	8799681	REDUNDANT ARRAY OF ENCRYPTING DISKS	EMC Corporation
12043898	8498417	AUTOMATION OF COORDINATION OF ENCRYPTION KEYS IN A SAN BASED ENVIRONMENT WHERE AN ENCRYPTION ENGINE, DEVICE MANAGEMENT, AND KEY MANAGEMENT ARE NOT CO-LOCATED	EMC Corporation
12052907	7882386	SYSTEM AND METHOD FOR RECOVERING A LOGICAL VOLUME DURING FAILOVER OR REBOOT OF A FILE SERVER IN A DATA STORAGE ENVIRONMENT	EMC Corporation
12057298	7984324	SYSTEMS AND METHODS FOR MANAGING STALLED STORAGE DEVICES	EMC Corporation
12057302	7870345	SYSTEMS AND METHODS FOR MANAGING STALLED STORAGE DEVICES	EMC Corporation
12057303	7949636	SYSTEMS AND METHODS FOR A READ ONLY MODE FOR A PORTION OF A STORAGE SYSTEM	EMC Corporation
12057321	7953709	SYSTEMS AND METHODS FOR A READ ONLY MODE FOR A PORTION OF A STORAGE SYSTEM	EMC Corporation
12057675	8032557	MODEL DRIVEN COMPLIANCE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
12058240	8392370	MANAGING DATA ON DATA STORAGE SYSTEMS	EMC Corporation
12058834	8031634	SYSTEM AND METHOD FOR MANAGING A VIRTUAL DOMAIN ENVIRONMENT TO ENABLE ROOT CAUSE AND IMPACT ANALYSIS	EMC Corporation
12058854	8175987	METHOD AND APPARATUS FOR COMPUTING A CHANGE PLAN	EMC Corporation
12058966	8151048	MANAGING STORAGE POOL PROVISIONING	EMC Corporation
12058981	7873619	MANAGING METADATA	EMC Corporation
12059071	7890664	METHODS AND APPARATUS FOR NON-DISRUPTIVE UPGRADE BY REDIRECTING I/O OPERATIONS	EMC Corporation
12059127	8031722	TECHNIQUES FOR CONTROLLING A NETWORK SWITCH OF A DATA STORAGE SYSTEM	EMC Corporation
12059330	8131930	SYSTEM AND METHOD FOR IMPROVING CACHE EFFICIENCY	EMC Corporation
12059343	8713254	SYSTEM AND METHOD FOR IMPROVING CACHE EFFICIENCY	EMC Corporation
12059410	8275879	GENERALIZED VIRTUALIZER IO PATH MODEL AND GENERAL VIRTUAL TRANSFORMATION MODEL FOR STORAGE ASSETS	EMC Corporation
12059416	7836156	METHOD AND APPARATUS FOR ANALYZING NETWORK INFRASTRUCTURE	EMC Corporation
12059688	8095726	ASSOCIATING AN IDENTIFIER WITH A CONTENT UNIT	EMC Corporation
12059911	9002906	SYSTEM AND METHOD FOR HANDLING LARGE TRANSACTIONS IN A STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12060137	8847761	ANONYMOUS TRANSACTION TOKENS	EMC Corporation
12060152	7911346	INVENTORY CONTROL USING ANONYMOUS TRANSACTION TOKENS	EMC Corporation
12079234	7890459	NON-DISRUPTIVE MODIFICATION OF DATA IN- PLACE	EMC Corporation
12079436	8122209	DISKLESS STORAGE DEVICE	EMC Corporation

Application	Registration	Trai.	0
Number 12079476	Number	Title	Owner
	8589645	REMOTE READ FOR STORAGE DEVICES	EMC Corporation
12079546	8135929	CASCADED REMOTE DATA FACILITY SYSTEM HAVING DISKLESS INTERMEDIATE RDF SITE PROVIDING LOGICAL STORAGE DEVICE FUNCTIONALITY	EMC Corporation
12079648	8387075	COMMON SCHEDULING AND SYNCHRONIZATION PRIMITIVES	EMC Corporation
12079759	8359603	TECHNIQUES FOR INTER-USER-SPACE COMMUNICATION	EMC Corporation
12079822	8209704	TECHNIQUES FOR USER SPACE AND KERNEL SPACE COMMUNICATION	EMC Corporation
12079919	8429351	TECHNIQUES FOR DETERMINING AN AMOUNT OF DATA TO PREFETCH	EMC Corporation
12079939	7822731	TECHNIQUES FOR MANAGEMENT OF INFORMATION REGARDING A SEQUENTIAL STREAM	EMC Corporation
12080027	8335899	ACTIVE/ACTIVE REMOTE MIRRORING	EMC Corporation
12081540	8185488	SYSTEM AND METHOD FOR CORRELATING EVENTS IN A PLUGGABLE CORRELATION ARCHITECTURE	EMC Corporation
12082244	7962520	CLUSTER STORAGE USING DELTA COMPRESSION	EMC Corporation
12082247	8166012	CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
12089523	8311907	SYSTEM AND METHOD FOR DETECTING FRAUDULENT TRANSACTIONS	EMC Corporation
12098338		[REDACTED]	EMC Corporation
12098342	8805820	SYSTEMS AND METHODS FOR FACILITATING SEARCHES INVOLVING MULTIPLE INDICES	EMC Corporation
12100514	8886909	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIUM FOR ALLOCATING PORTIONS OF PHYSICAL STORAGE IN A STORAGE ARRAY BASED ON CURRENT OR ANTICIPATED UTILIZATION OF STORAGE ARRAY RESOURCES	EMC Corporation
12106228	7996511	ENTERPRISE-SCALABLE SCANNING USING GRID- BASED ARCHITECTURE WITH REMOTE AGENTS	EMC Corporation
12107326	7973607	RTC CIRCUIT WITH TIME VALUE ADJUSTMENT	EMC Corporation
12112407	8600941	SYSTEM AND METHOD FOR AUTOMATIC CONFIGURATION OF NETWORKED INFORMATION TECHNOLOGY ASSETS FOR A BACKUP, RECOVERY AND ARCHIVING APPLICATION	EMC Corporation
12113530	8301602	DETECTION OF INCONSISTENCIES IN A FILE SYSTEM	EMC Corporation
12113878	8230484	CONTROL OF RESOURCE ACCESS PRIVILEGES VIA AGENT AUTHENTICATION	EMC Corporation
12114245	8307210	METHOD AND APPARATUS FOR SECURE VALIDATION OF TOKENS	EMC Corporation
12115145	8381062	PROOF OF RETRIEVABILITY FOR ARCHIVED FILES	EMC Corporation
12115617	8407448	SHARED STORAGE I/O ELIMINATION THROUGH MAPPING CLIENT INTEGRATION INTO A HYPERVISOR	EMC Corporation
12119555		MANAGING COMPLEX DEPENDENCIES IN A FILE- BASED TEAM ENVIRONMENT	EMC Corporation
12121843	8301876	TECHNIQUES FOR SECURE NETWORK COMMUNICATION	EMC Corporation

Application	Registration	m.a.	
Number	Number	Title	Owner
12129605	8074289	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
12131544	7890795	AUTO-ADAPTING CACHE MEMORY SYSTEM AND MEMORY	EMC Corporation
12135979	7962779	SYSTEMS AND METHODS FOR A DISTRIBUTED FILE SYSTEM WITH DATA RECOVERY	EMC Corporation
12137814	8051378	GENERIC MECHANISM FOR REPORTING ON BACKUPS	EMC Corporation
12141289		[REDACTED]	EMC Corporation
12144711	9146734	HANDLING MANAGED OBJECT DATA	EMC Corporation
12145769	8255803	FACILITATING STORAGE POOL PROVISIONING	EMC Corporation
12146550	8589358	MECHANISMS TO SHARE ATTRIBUTES BETWEEN OBJECTS	EMC Corporation
12147513	7572147	LINE CORD FILTER	EMC Corporation
12163006		[REDACTED]	EMC Corporation
12164336	8151077	APPLICATION AWARE CACHE MANAGEMENT	EMC Corporation
12164407	9262039	DISPLAYING DATA STORAGE SYSTEM INFORMATION	EMC Corporation
12164595		[REDACTED]	EMC Corporation
12164738	9009098	METHODS AND APPARATUS FOR CREATING A CENTRALIZED DATA STORE	EMC Corporation
12164817	8615678	AUTO-ADAPTING MULTI-TIER CACHE	EMC Corporation
12164959	8443369	METHOD AND SYSTEM FOR DYNAMICALLY SELECTING A BEST RESOURCE FROM EACH RESOURCE COLLECTION BASED ON RESOURCES DEPENDENCIES, PRIOR SELECTIONS AND STATISTICS TO IMPLEMENT AN ALLOCATION POLICY	EMC Corporation
12165001	8719812	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR DYNAMICALLY MODIFYING AND UTILIZING A SOFTWARE PACKAGE DESCRIPTION FOR SOFTWARE INSTALLATION	EMC Corporation
12165032	8296530	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR OPTIMIZING THE NUMBER OF CLIENT WRITE REQUESTS TO VIRTUALLY PROVISIONED LOGICAL UNITS OF A PHYSICAL DATA STORAGE ARRAY	EMC Corporation
12165220	7988063	METHOD FOR CONTROLLING COOLING IN A DATA STORAGE SYSTEM	EMC Corporation
12165612		[REDACTED]	EMC Corporation
12176211	7849504	METHODS AND APPARATUS PROVIDING A CATEGORICAL APPROACH TO ASPECT-ORIENTED PROGRAMMING	EMC Corporation
12177976	8073922	SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
12184420	8571990	SYSTEM AND METHOD FOR EXPRESSING AND EVALUATING SIGNED REPUTATION ASSERTIONS	EMC Corporation
12186143	8229974	MECHANISMS TO SUPPORT FINE-GRAIN NAMESPACING	EMC Corporation
12186166	8341190	MECHANISMS TO SUPPORT MULTIPLE NAME SPACE AWARE PROJECTS	EMC Corporation
12188686	8031875	KEY DISTRIBUTION IN UNIDIRECTIONAL CHANNELS WITH APPLICATIONS TO RFID	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
12190071	8112586	PREDICTING AND OPTIMIZING I/O PERFORMANCE CHARACTERISTICS IN A MULTI-LEVEL CACHING SYSTEM	EMC Corporation
12193520	8688773	SYSTEM AND METHOD FOR DYNAMICALLY ENABLING AN APPLICATION FOR BUSINESS CONTINUITY	EMC Corporation
12198021	8316064	METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
12201957	8260792	SYSTEM AND METHOD FOR COMMITTING DATA OBJECTS TO BE IMMUTABLE	EMC Corporation
12214667	7840595	TECHNIQUES FOR DETERMINING AN IMPLEMENTED DATA PROTECTION POLICY	EMC Corporation
12215150	8533604	TECHNIQUES FOR USER INTERFACE SELECTION	EMC Corporation
12215430	8185795	SIDE CHANNEL FOR FORWARD ERROR CORRECTION USED WITH LONG-HAUL IP LINKS	EMC Corporation
12215432	8010738	TECHNIQUES FOR OBTAINING A SPECIFIED LIFETIME FOR A DATA STORAGE DEVICE	EMC Corporation
12215904	8752057	TECHNIQUES FOR SYNCHRONIZING PROCESSING OF AT LEAST TWO CODE THREADS	EMC Corporation
12215917		[REDACTED]	EMC Corporation
12215984	9170904	I/O FAULT INJECTION USING SIMULATED COMPUTING ENVIRONMENTS	EMC Corporation
12215985	8112451	USING INTENTIONAL CATEGORY ASSIGNMENT FOR A CONFIGURATION MANAGEMENT DATABASE	EMC Corporation
12217005	8291490	TENNANT LIFE CYCLE MANAGEMENT FOR A SOFTWARE AS A SERVICE PLATFORM	EMC Corporation
12217061	7856525	CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
12221210	8190948	HANDLING OUT OF ORDER I/O USING TEMPORAL RELATIONSHIPS OF TRANSMITTED DATA	EMC Corporation
12228171	8397027	METHODS AND SYSTEMS FOR MULTI-CACHING	EMC Corporation
12228647	8046551	TECHNIQUES FOR PROCESSING I/O REQUESTS	EMC Corporation
12231477	8707252	TECHNIQUES FOR AUTOMATIC GENERATION OF PARSING CODE	EMC Corporation
12233619	8375249	METHOD FOR TESTING BATTERY BACKUP UNITS	EMC Corporation
12236466	9152628	CREATING COPIES OF SPACE-REDUCED FILES IN A FILE SERVER HAVING A REDUNDANT DATA ELIMINATION STORE	EMC Corporation
12236997	7937453	SCALABLE GLOBAL NAMESPACE THROUGH REFERRAL REDIRECTION AT THE MAPPING LAYER	EMC Corporation
12238034	8255914	INFORMATION RETRIEVAL TECHNIQUES INVOLVING THE USE OF PRIORITIZED OBJECT REQUESTS	EMC Corporation
12238756	8327422	AUTHENTICATING A SERVER DEVICE USING DYNAMICALLY GENERATED REPRESENTATIONS	EMC Corporation
12238926	8413114	METHOD TO SIMPLIFY DEVELOPING SOFTWARE HAVING LOCALIZATION	EMC Corporation
12239178	8799571	AUTO-EXPANDING CACHE MEMORY SYSTEM AND METHOD	EMC Corporation
12239284	7883344	ELECTRICAL CONNECTOR	EMC Corporation

Application Number	Registration Number	Title	
12240076	8924876	FILE-DRIVEN DRAG & DROP	Owner EMC Corporation
12240100	8130554	SECURELY ERASING FLASH-BASED MEMORY	EMC Corporation
12240100	8250033	REPLICATION OF A DATA SET USING	EMC Corporation
12240000	8230033	DIFFERENTIAL SNAPSHOTS	ENIC Corporation
12241166	8756666	GENERATING AUTHENTICATION CODES	EMC Corporation
12241100	8504857	PROGRAMMABLE AVAILABILITY FOR A HIGH	EMC Corporation
12241200	8304837	AVAILABILITY SYSTEM	EMIC Corporation
12241417	8346735	CONTROLLING MULTI-STEP STORAGE	EMC Corporation
1224141/	0340733	MANAGEMENT OPERATIONS	ENIC Corporation
12241505	8549542	CORRELATING INFORMATION FROM MODELED	EMC Corporation
12241303	0347342	AND NON-MODELED DOMAINS	ENIC Corporation
12241531		[REDACTED]	EMC Corporation
12241578	7890794	HANDLING SAS TOPOLOGY PROBLEMS	EMC Corporation
12241658	8010741	METHODS AND APPARATUS FOR CONTROLLING	EMC Corporation
12241036	0010741	MIGRATION OF CONTENT	ENIC Corporation
12241708	8161316	MANAGING LOOP INTERFACE INSTABILITY	EMC Corporation
12241708	8117160	METHODS AND APPARATUS FOR CREATING POINT	EMC Corporation
12241/13	811/100	IN TIME COPIES IN A FILE SYSTEM USING	ENIC Corporation
		REFERENCE COUNTS	
12241743	8250035	METHODS AND APPARATUS FOR CREATING A	EMC Corporation
12241/43	8230033	BRANCH FILE IN A FILE SYSTEM	ENIC Corporation
12241783	8909875	METHODS AND APPARATUS FOR STORING A NEW	EMC Corporation
122+1703	0909073	VERSION OF AN OBJECT ON A CONTENT	Livic Corporation
		ADDRESSABLE STORAGE SYSTEM	
12241829	8473593	METHOD FOR DYNAMICALLY GENERATING	EMC Corporation
12241027	0473373	INFORMATION OBJECTS BASED ON A RESTFUL	Livic corporation
		SUBSCRIPTION REQUEST	
12241855	8667509	PROVIDING CONTEXT INFORMATION FOR EVENTS	EMC Corporation
12211000	0007207	TO AN EVENT HANDLING COMPONENT	2e corporation
12241893	8239880	ORCHESTRATING FLOW OF EVENT INFORMATION	EMC Corporation
		TO SEVERAL EVENT HANDLING COMPONENTS	
12241939	8763015	EFFICIENT MULTI-NODE SYSTEM FOR PROVIDING	EMC Corporation
		EVENT INFORMATION TO EVENT HANDLING	
		COMPONENTS	
12242030	8812455	EFFICIENT DATA BACKUP	EMC Corporation
12242070	8090689	EFFICIENT DATA RECOVERY	EMC Corporation
12242259	8990161	SYSTEM AND METHOD FOR SINGLE SEGMENT	EMC Corporation
		BACKUP	
12242390	8600937	SYSTEM AND METHOD FOR FAST VOLUME	EMC Corporation
		CLONING	
12242418	9244927	SYSTEM AND METHOD FOR RECORD LEVEL	EMC Corporation
		MULTIPLEXING OF BACKUP DATA TO STORAGE	
		MEDIA	
12242483	8077414	SYSTEM AND METHOD FOR ANALYZING	EMC Corporation
		MAGNETIC MEDIA SURFACES FOR THERMAL	
		ERASURES AND OTHER CHARACTERISTICS	
12242618	8086585	ACCESS CONTROL TO BLOCK STORAGE DEVICES	EMC Corporation
		FOR A SHARED DISK BASED FILE SYSTEM	
12242638	8261068	SYSTEMS AND METHODS FOR SELECTIVE	EMC Corporation
		ENCRYPTION OF OPERATING SYSTEM METADATA	
		FOR HOST-BASED ENCRYPTION OF DATA AT REST	
		ON A LOGICAL UNIT	

Application	Registration		
Number	Number	Title	Owner
12242690	8416954	SYSTEMS AND METHODS FOR ACCESSING STORAGE OR NETWORK BASED REPLICAS OF ENCRYPTED VOLUMES WITH NO ADDITIONAL KEY MANAGEMENT	EMC Corporation
12242694	8099572	EFFICIENT BACKUP AND RESTORE OF STORAGE OBJECTS IN A VERSION SET	EMC Corporation
12242725	8316196	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIA FOR IMPROVING SYNCHRONIZATION PERFORMANCE AFTER PARTIALLY COMPLETED WRITES	EMC Corporation
12242866	8347388	SYSTEM AND METHOD FOR ORCHESTRATING SERVICES	EMC Corporation
12242874		[REDACTED]	EMC Corporation
12248297	8707438	SYSTEM AND METHOD FOR PROVIDING STORAGE FOR ELECTRONIC RECORDS	EMC Corporation
12257710	8719233	GENERIC METHOD AND APPARATUS FOR DATABASE SANITIZING	EMC Corporation
12262316		[REDACTED]	EMC Corporation
12264125	7725672	SYSTEM AND METHOD FOR MANAGING DATA ASSOCIATED WITH COPYING AND RECOVERY PROCEDURES IN A DATA STORAGE ENVIRONMENT	EMC Corporation
12268112	8028009	INCREMENTAL GARBAGE COLLECTION OF DATA IN SECONDARY STORAGE	EMC Corporation
12268328	8275748	SEMANTIC DATA MIGRATION	EMC Corporation
12270447	8683325	INDEXED APPROACH FOR DELIVERING MULTIPLE VIEWS OF AN XML DOCUMENT FROM A SINGLE XSLT FILE	EMC Corporation
12286226	8117235	TECHNIQUES FOR BINDING RESOURCES FOR USE BY A CONSUMER TIER	EMC Corporation
12286296	8327324	MESSAGE LOGGING SYSTEM	EMC Corporation
12286374	8185505	TECHNIQUES FOR PROCESSING RECOVERY POINTS	EMC Corporation
12286427	8234380	SINGLE COMMUNICATION CONNECTION FOR MANAGING A SYSTEM WITH MULTIPLE SERVICE PROCESSORS	EMC Corporation
12286433	8555297	TECHNIQUES FOR PERFORMING A REMOTE PROCEDURE CALL USING REMOTE PROCEDURE CALL CONFIGURATION INFORMATION	EMC Corporation
12286434	8645375	CONTROLLING INFORMATION ABOUT DATA STORAGE SYSTEM RETURNED TO AN END USER	EMC Corporation
12286442	8112489	CLIENT PROCESSING IN RESPONSE TO MANAGED SYSTEM STATE CHANGES	EMC Corporation
12286454	7885276	ISOLATING NETWORK TRAFFIC IN MULTI- TENNANT VIRTUALIZATION ENVIRONMENTS	EMC Corporation
12286493	8271996	EVENT QUEUES	EMC Corporation
12290306	8151069	MULTIPROTECTION FOR SNAPSHOTS	EMC Corporation
12291989	8447740	STREAM LOCALITY DELTA COMPRESSION	EMC Corporation
12291997	8849772	DATA REPLICATION WITH DELTA COMPRESSION	EMC Corporation
12291998	8751462	DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
12315373	8140599	GARBAGE COLLECTION FOR MERGED COLLECTIONS	EMC Corporation

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Number	Number	Title	Owner
12315374	8126852	MERGED COLLECTIONS	EMC Corporation
12316816	9003043	TECHNIQUES FOR CLIENT AND SERVER	EMC Corporation
10217150	7012051	COMMUNICATION  TECHNIQUES FOR PORT VIRTUALIZATION	FMC Composition
12317158	7912051	TECHNIQUES FOR PORT VIRTUALIZATION	EMC Corporation
12317910	8335904	IDENTIFYING ACTIVE AND INACTIVE DATA IN STORAGE SYSTEMS	EMC Corporation
12319122	8566549	SYNCHRONIZING PERFORMANCE REQUIREMENTS ACROSS MULTIPLE STORAGE PLATFORMS	EMC Corporation
12324002	8478628	COMPONENT BASED RISK SYSTEM	EMC Corporation
12325438		METHOD AND APPARATUS PROVIDING A FRAMEWORK FOR SECURE INFORMATION LIFECYCLE	EMC Corporation
12333271	8095764	DYNAMIC APPLICATION AWARE STORAGE CONFIGURATION	EMC Corporation
12335883		[REDACTED]	EMC Corporation
12336381	8006842	PACKAGING FOR AUTHENTICATION TOKENS	EMC Corporation
12338766	8032261	COOLING SYSTEM WITH ADAPTIVE PROTOCOL COOLING UNIT	EMC Corporation
12339265	8176336	SOFTWARE TRUSTED COMPUTING BASE	EMC Corporation
12339528	8280930	OBTAINING CONFIGURATION INFORMATION FROM HOST DEVICES WHICH STORE DATA INTO AND LOAD DATA FROM A DATA STORAGE ARRAY	EMC Corporation
12340284	8560716	TIME AND BANDWIDTH EFFICIENT RECOVERIES OF SPACE REDUCED DATA	EMC Corporation
12340320	8725690	TIME AND BANDWIDTH EFFICIENT BACKUPS OF SPACE REDUCED DATA	EMC Corporation
12341017	9110790	MANAGING MEMORY IN DISPLAYING DATA STORAGE SYSTEM INFORMATION	EMC Corporation
12341023	8234648	MANAGING THREADS IN DISPLAYING DATA STORAGE SYSTEM INFORMATION	EMC Corporation
12341504		[REDACTED]	EMC Corporation
12343517	8374731	COOLING SYSTEM	EMC Corporation
12343531	7953109	SYSTEM FOR CONTROLLING OPTICAL TRANSCEIVER	EMC Corporation
12344107	8527465	SYSTEM AND METHOD FOR MODELING DATA CHANGE OVER TIME	EMC Corporation
12344117	9069797	SYSTEM AND METHOD FOR FILE SYSTEM SIMULATION	EMC Corporation
12345957	8255550	MULTI-PROTOCOL GLOBAL NAMESPACE MECHANISM FOR NETWORK ATTACHED STORAGE	EMC Corporation
12346412	8166314	SELECTIVE I/O TO LOGICAL UNIT WHEN ENCRYPTED, BUT KEY IS NOT AVAILABLE OR WHEN ENCRYPTION STATUS IS UNKNOWN	EMC Corporation
12347447	8200923	METHOD AND APPARATUS FOR BLOCK LEVEL DATA DE-DUPLICATION	EMC Corporation
12347933	8788462	MULTI-FACTOR PROBE TRIGGERS	EMC Corporation
12347936	8589354	PROBE BASED GROUP SELECTION	EMC Corporation
12348866	9213721	FILE SERVER SYSTEM HAVING TIERED STORAGE INCLUDING SOLID-STATE DRIVE PRIMARY STORAGE AND MAGNETIC DISK DRIVE SECONDARY STORAGE	EMC Corporation

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12349182	8515911	METHODS AND APPARATUS FOR MANAGING MULTIPLE POINT IN TIME COPIES IN A FILE	EMC Corporation
12352917	8572093	SYSTEM SYSTEM AND METHOD FOR PROVIDING A	EMC Corporation
12332917	83/2093	LICENSE DESCRIPTION SYNTAX IN A SOFTWARE DUE DILIGENCE SYSTEM	EMC Corporation
12357210	7751538	POLICY BASED INFORMATION LIFECYCLE MANAGEMENT	EMC Corporation
12378412	7912799	SMART CONTAINERS	EMC Corporation
12378819	8209283	SYSTEM AND METHOD FOR HIGHLY RELIABLE DATA REPLICATION	EMC Corporation
12381888	7984255	OPTIMIZING RECLAMATION OF DATA SPACE	EMC Corporation
12384210	8325724	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
12388658	8468347	SECURE NETWORK COMMUNICATIONS	EMC Corporation
12409377	8082379	SYSTEMS AND METHODS FOR MANAGING SEMANTIC LOCKS	EMC Corporation
12410971	8990911	SYSTEM AND METHOD FOR SINGLE SIGN-ON TO RESOURCES ACROSS A NETWORK	EMC Corporation
12410992	8418238	SYSTEM, METHOD, AND APPARATUS FOR MANAGING ACCESS TO RESOURCES ACROSS A NETWORK	EMC Corporation
12411017	8291404	UPDATING SYSTEM STATUS	EMC Corporation
12411561	8819362	MANAGING REPLICATION AND RESERVATIONS	EMC Corporation
12411802		[REDACTED]	EMC Corporation
12413806	8082337	SYSTEM FOR ASSESSMENT OF POLICY COMPLIANCE OF AN ARBITRARY INFORMATION TOPOLOGY	EMC Corporation
12414845	8631486	ADAPTIVE IDENTITY CLASSIFICATION	EMC Corporation
12415234	8929369	SYSTEM AND METHOD FOR STRIPING/MIRRORING DATA	EMC Corporation
12415447	8311960	INTERACTIVE SEMI-SUPERVISED MACHINE LEARNING FOR CLASSIFICATION	EMC Corporation
12415989	9195755	RELEVANCY RADAR	EMC Corporation
12416004	8688711	CUSTOMIZABLE RELEVANCY CRITERIA	EMC Corporation
12416019	8719275	COLOR CODED RADARS	EMC Corporation
12416139		[REDACTED]	EMC Corporation
12416144		[REDACTED]	EMC Corporation
12416145		[REDACTED]	EMC Corporation
12416147	8656057	OPPORTUNISTIC RESTORE	EMC Corporation
12455951	8762348	SEGMENT DEDUPLICATION SYSTEM WITH COMPRESSION OF SEGMENTS	EMC Corporation
12455953	8401181	SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION OF SEGMENTS	EMC Corporation
12455956	8731190	SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION AND COMPRESSION OF SEGMENTS	EMC Corporation
12456835	8484616	UNIVERSAL MODULE MODEL	EMC Corporation
12459194	8296511	METHOD AND SYSTEM OF PROVIDING OBJECT LOCATION METADATA COOKIES IN A FEDERATED CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
12459201	8635184	SYSTEM AND METHOD FOR PROVIDING LONG- TERM STORAGE FOR DATA	EMC Corporation

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12459411	8010505	EFFICIENT BACKUP DATA RETRIEVAL	EMC Corporation
12459467		[REDACTED]	EMC Corporation
12459473	8457018	MERKLE TREE REFERENCE COUNTS	EMC Corporation
12459474	8706959	VIRTUAL STORAGE MACHINE	EMC Corporation
12460677	9128953	ASYNCHRONOUS MULTI-NODE FILE SYSTEM	EMC Corporation
		COORDINATED REPLICATION	
12460766	8028138	REPLICATION OF DEDUPLICATED STORAGE	EMC Corporation
		SYSTEM	
12466265	7958095	METHODS AND APPARATUS FOR COLLECTING	EMC Corporation
		AND PROCESSING FILE SYSTEM DATA	
12473524		METHOD FOR DATA DISASTER RECOVERY	EMC Corporation
		ASSESSMENT AND PLANNING	
12484905	8054765	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		VARIABLE PROTECTION	
12488147	8527703	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
12488170	8452924	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
12490481		[REDACTED]	EMC Corporation
12490875	9148349	DYNAMIC GRAPHICAL DISPLAY OF COMPONENTS	EMC Corporation
		IN A DATA STORAGE SYSTEM	
12493139	8863287	COMMONALITY FACTORING PATTERN	EMC Corporation
		DETECTION	
12493144	8667591	COMMONALITY FACTORING REMEDIATION	EMC Corporation
12493148	8938806	PARTIAL PATTERN DETECTION WITH	EMC Corporation
		COMMONALITY FACTORING	
12493295	8352941	SCALABLE AND SECURE HIGH-LEVEL STORAGE	EMC Corporation
		ACCESS FOR CLOUD COMPUTING PLATFORMS	
12493541	8601531	SYSTEM AUTHORIZATION BASED UPON CONTENT	EMC Corporation
		SENSITIVITY	
12493876	8171046	CONVERTING CQL QUERY RESULTS INTO USER-	EMC Corporation
		CONTROLLABLE OBJECTS	
12493883	8131743	OBJECT SEARCHING IN DATA STORAGE SYSTEMS	EMC Corporation
12494115	8032498	DELEGATED REFERENCE COUNT BASE FILE	EMC Corporation
		VERSIONING	
12494407	8149841	SYSTEM AND METHOD FOR END-USER CUSTOM	EMC Corporation
		PARSING DEFINITIONS	
12494442	8245959	POWERED CARD AND METHOD OF DISPOSING OF	EMC Corporation
		THE SAME	
12494467	8407527	DIAGNOSING HARDWARE FAULTS IN A DATA	EMC Corporation
		STORAGE SYSTEM	
12494515	8281069	DISTRIBUTED DATA STORAGE SYSTEM USING	EMC Corporation
		LOCAL COPY OPERATIONS FOR RAID-1 VOLUMES	
12494622	9274941	FACILITATING DATA MIGRATION BETWEEN TIERS	EMC Corporation
12494688	8285967	METHOD FOR ON-DEMAND BLOCK MAP	EMC Corporation
		GENERATION FOR DIRECT MAPPED LUN	
12494912	8426733	CONDUIT MANAGEMENT DEVICE	EMC Corporation
12495189	8132073	DISTRIBUTED STORAGE SYSTEM WITH	EMC Corporation
		ENHANCED SECURITY	
12495215	8812452	CONTEXT-DRIVEN MODEL TRANSFORMATION	EMC Corporation
		FOR QUERY PROCESSING	

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12495296	8413164	PRESENTING AN INTERFACE TO A COMPUTER SYSTEM FOR USE IN CONDUCTING DIAGNOSTIC TESTS	EMC Corporation
12495447	8458483	TECHNIQUES FOR MESSAGE-PASSING USING SHARED MEMORY OF AN RF TAG	EMC Corporation
12495468	8539282	MANAGING QUALITY TESTING	EMC Corporation
12495473	9229850	MAPPING DATA STORAGE AND VIRTUAL MACHINES	EMC Corporation
12495491	8365247	IDENTIFYING WHETHER ELECTRONIC DATA UNDER TEST INCLUDES PARTICULAR INFORMATION FROM A DATABASE	EMC Corporation
12495698	8386409	SYSLOG MESSAGE ROUTING SYSTEMS AND METHODS	EMC Corporation
12500190	7941632	STORAGE VIRTUALIZATION SYSTEM	EMC Corporation
12533298	8627015	DATA PROCESSING SYSTEM USING CACHE- AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation
12544046	9256598	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR COPY-ON-DEMAND OPTIMIZATION FOR LARGE WRITES	EMC Corporation
12554752	8027984	SYSTEMS AND METHODS OF REVERSE LOOKUP	EMC Corporation
12561367	8856481	DATA PROCESSING SYSTEM HAVING HOST- CONTROLLED PROVISIONING OF DATA STORAGE RESOURCES	EMC Corporation
12562000	7739288	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
12566846	8122158	METHOD FOR IMPROVING IO PERFORMANCE OF HOST SYSTEMS USING EXTERNAL STORAGE SYSTEMS	EMC Corporation
12567031	8326882	ENVIRONMENT MANAGEMENT INTERFACE FOR MANAGEMENT OF A HETEROGENEOUS STORAGE ENVIRONMENT	EMC Corporation
12567988	8190584	UTILIZING RECURSIVE APPLICATION OF A REVERSIBLE TRANSFORM WHICH INVOLVES LEXICOGRAPHIC ORDERING	EMC Corporation
12568203	8214612	ENSURING CONSISTENCY OF REPLICATED VOLUMES	EMC Corporation
12568722	8510566	AUTHENTIC TIME-STAMPING FOR ARCHIVAL STORAGE	EMC Corporation
12568978	8462495	DISK DRIVE CARRIER AND DISK DRIVE ENCLOSURE COOLING SYSTEM	EMC Corporation
12569284	8345864	ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION WITH ON-DEMAND ACCELERATION TABLE GENERATION	EMC Corporation
12569683	8806123	EXPANDABLE DATA STORAGE SYSTEM	EMC Corporation
12569969		[REDACTED]	EMC Corporation
12570136	9170737	PROCESSING DATA STORAGE SYSTEM CONFIGURATION INFORMATION	EMC Corporation
12570526		[REDACTED]	EMC Corporation
12570580	8285302	SYSTEM AND METHOD FOR LOCATING DEVICES WITHIN A DATA CENTER	EMC Corporation

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Number	Number	Title	Owner
12570685	8776158	ASYNCHRONOUS SHIFTING WINDOWS CACHING FOR FORWARD AND BACKWARD VIDEO STREAMING	EMC Corporation
12570716	8473905	MANAGING USER INTERFACE CHARACTERISTICS IN DISPLAYING DATA STORAGE SYSTEMS INFORMATION	EMC Corporation
12570720	8527696	SYSTEM AND METHOD FOR OUT-OF-BAND CACHE COHERENCY	EMC Corporation
12570836		[REDACTED]	EMC Corporation
12571007	8190850	VIRTUAL BLOCK MAPPING FOR RELOCATING COMPRESSED AND/OR ENCRYPTED FILE DATA BLOCK BLOCKS	EMC Corporation
12571082		[REDACTED]	EMC Corporation
12571324	8209474	SYSTEM AND METHOD FOR SUPERBLOCK DATA WRITES	EMC Corporation
12571377	8676761	PREPARATION OF A SYSTEM IMAGE FOR RAPID RESTORE	EMC Corporation
12571380	8959061	RAPID RESTORE FROM A PREPARED SYSTEM IMAGE	EMC Corporation
12571384	9135258	REDUNDANT BACKUP ELIMINATION	EMC Corporation
12571423	8474038	METHODS AND APPARATUS RELATED TO MIGRATION OF CUSTOMER RESOURCES TO VIRTUAL RESOURCES WITHIN A DATA CENTER ENVIRONMENT	EMC Corporation
12571424	8701193	MALWARE DETECTION VIA SIGNATURE INDICES	EMC Corporation
12571428	8340933	METHOD AND SYSTEM FOR PERFORMING POWER SUPPLY SELF DIAGNOSTICS IN REDUNDANT POWER ARCHITECTURES	EMC Corporation
12571432	8655844	FILE VERSION TRACKING VIA SIGNATURE INDICES	EMC Corporation
12580799		[REDACTED]	EMC Corporation
12586097	8307271	FAST VERIFICATION OF DATA BLOCK CYCLIC REDUNDANCY CHECKS	EMC Corporation
12586765	7962672	TECHNIQUES FOR DATA STORAGE CONFIGURATION	EMC Corporation
12586766	8290906	INTELLIGENT RESOURCE SYNCHRONIZATION	EMC Corporation
12586837		[REDACTED]	EMC Corporation
12586845		[REDACTED]	EMC Corporation
12586925	8706960	TECHNIQUES FOR PERFORMING DATA MIGRATION	EMC Corporation
12586939	8627446	FEDERATING DATA BETWEEN GROUPS OF SERVERS	EMC Corporation
12592215	7925858	LINEAR SPACE ALLOCATION MECHANISMS IN DATA SPACE	EMC Corporation
12592988	8364858	NORMALIZING CAPACITY UTILIZATION WITHIN VIRTUAL STORAGE POOLS	EMC Corporation
12609681	8073821	METHOD AND APPARATUS FOR MANAGING AND ARCHIVING PERFORMANCE INFORMATION RELATING TO STORAGE SYSTEM	EMC Corporation
12619178	8078905	RESTORING CONFIGURATIONS OF DATA STORAGE SYSTEMS	EMC Corporation
12628473	8583885	ENERGY EFFICIENT SYNC AND ASYNC REPLICATION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
12629952	8782036	ASSOCIATIVE MEMORY BASED DESKTOP SEARCH TECHNOLOGY	EMC Corporation
12633395	8428252	USING MULTIPLES ABOVE TWO WITH RUNNING TOTALS IN ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION ACCELERATION TABLES	EMC Corporation
12633400	8411855	SIZE OPTIMIZATION FOR LARGE ELLIPTIC CURVE CRYPTOGRAPHY SCALAR MULTIPLICATION ACCELERATION TABLES	EMC Corporation
12633717	7987204	MULTI-EPOCH METHOD FOR SAVING AND EXPORTING FILE SYSTEM EVENTS	EMC Corporation
12633837	8296329	CONTROLLER WITH HEURISTIC BUNDLE OPTIMIZER FOR DATA CENTER MIGRATION OR OTHER TYPE OF TRANSITION	EMC Corporation
12634814	8327378	METHOD FOR GRACEFULLY STOPPING A MULTI- THREADED APPLICATION	EMC Corporation
12637063	8495153	DISTRIBUTION OF MESSAGES IN NODES CONNECTED BY A GRID ARCHITECTURE	EMC Corporation
12638067	9135261	SYSTEMS AND METHODS FOR FACILITATING DATA DISCOVERY	EMC Corporation
12638137	8959192	USER-CONTEXT MANAGEMENT	EMC Corporation
12638262	9046582	SYSTEM AND METHOD FOR TESTING A BATTERY	EMC Corporation
12638295	8593827	COMPRESSIBLE ENGAGEMENT ASSEMBLY	EMC Corporation
12638617	8551263	METHOD FOR REDUCING WHISKER GROWTH	EMC Corporation
12638673	8783333	COOLING SYSTEM	EMC Corporation
12639292	8849947	IT DISCOVERY OF VIRTUALIZED ENVIRONMENTS BY SCANNING VM FILES AND IMAGES	EMC Corporation
12639469	8549224	MIGRATION ANALYZER FOR HARDWARE-BASED STORAGE TIERING	EMC Corporation
12639668	8443157	DATA STORAGE SYSTEM HAVING ASSOCIATED SITUATIONAL ANALYSIS FRAMEWORK FOR AUTOMATIC RESPONSE TO MOVEMENT IN A STATE SPACE	EMC Corporation
12640254	8566483	MEASURING DATA ACCESS ACTIVITY	EMC Corporation
12640292	8380928	APPLYING DATA ACCESS ACTIVITY MEASUREMENTS	EMC Corporation
12640732	8311764	SYSTEM AND METHOD FOR APPROXIMATING AMBIENT TEMPERATURE	EMC Corporation
12642071	8140821	EFFICIENT READ/WRITE ALGORITHMS AND ASSOCIATED MAPPING FOR BLOCK-LEVEL DATA REDUCTION PROCESS	EMC Corporation
12642109	8156306	SYSTEMS AND METHODS FOR USING THIN PROVISIONING TO RECLAIM SPACE IDENTIFIED BY DATA REDUCTION PROCESSES	EMC Corporation
12643109	8606751	SYSTEM AND METHOD FOR BACKUP BY INODE NUMBER	EMC Corporation
12643199	8458780	PLUGGABLE LOGIN ARCHITECTURE AND DYNAMIC RESOURCE RECOGNITION	EMC Corporation
12644033	8749966	DATA STORAGE DRIVE CARRIER	EMC Corporation
12644195	8826033	DATA PROTECTION USING VIRTUAL-MACHINE- SPECIFIC STABLE SYSTEM VALUES	EMC Corporation
12644237	8326919	NETWORK ADDRESS TRANSLATION AUTO- DISCOVERY IN DATA STORAGE NETWORKS	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
12644849	9323758	EFFICIENT MIGRATION OF REPLICATED FILES	EMC Corporation
		FROM A FILE SERVER HAVING A FILE DE-	
		DUPLICATION FACILITY	
12644921	8327189	DIAGNOSING AN INCIDENT ON A COMPUTER	EMC Corporation
		SYSTEM USING A DIAGNOSTICS ANALYZER	
		DATABASE	
12645857	8555342	PROVIDING SECURE ACCESS TO A SET OF	EMC Corporation
		CREDENTIALS WITHIN A DATA SECURITY	
1001001	0.510.400	MECHANISM OF A DATA STORAGE SYSTEM	77.10.0
12646294	8510409	APPLICATION-SPECIFIC OUTBOUND SOURCE	EMC Corporation
10/1/155	0100072	ROUTING FROM A HOST IN A DATA NETWORK	EN CO C
12646457	8180973	SERVICING INTERRUPTS AND SCHEDULING CODE	EMC Corporation
		THREAD EXECUTION IN A MULTI-CPU NETWORK	
12647450	8271441	FILE SERVER	EMC Componentian
12647450	8074003	VIRTUALIZED CG HOST-BASED STORAGE CONTROLLER PROVIDING	EMC Corporation
1204/83/	80/4003	BLOCK DEVICES IN GEOGRAPHICALLY	EMC Corporation
		DISTRIBUTED STORAGE	
12647867	8429346	AUTOMATED DATA RELOCATION AMONG	EMC Corporation
12047607	0427340	STORAGE TIERS BASED ON STORAGE LOAD	Livic Corporation
12649113	8478936	SPIN DOWN OF STORAGE RESOURCES IN AN	EMC Corporation
12047113	0470230	OBJECT ADDRESSABLE STORAGE SYSTEM	Livic corporation
12649373	9213367	KIT FOR SHIPPING AN ELECTRICAL CABINET	EMC Corporation
12653107	8260749	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
12653162	8438342	AUTOMATED APPLICATION-BASED STORAGE	EMC Corporation
12033102	0430342	PROVISIONING	Livic Corporation
		The Historian C	
12653313	8751448	STATE-BASED DIRECTING OF SEGMENTS IN A	EMC Corporation
		MULTINODE DEDUPLICATED STORAGE SYSTEM	F F
12653505	8335820	TECHNIQUES FOR PERSISTENCE OF CONNECTIONS	EMC Corporation
12653790	8700669	TECHNIQUES FOR DATA STORAGE SYSTEMS	EMC Corporation
		MANAGEMENT	•
12653909	8028140	SAVE SET BUNDLING FOR STAGING	EMC Corporation
12653981	8307362	RESOURCE ALLOCATION IN A VIRTUALIZED	EMC Corporation
		ENVIRONMENT	_
12658561	8560786	EFFICIENT USE OF MEMORY AND ACCESSING OF	EMC Corporation
		STORED RECORDS	
12658635		[REDACTED]	EMC Corporation
12661142	8396873	INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
12661493	7937372	SNAPSHOT INDEXING	EMC Corporation
12661894	8352431	FINE-GRAIN POLICY-BASED SNAPSHOTS	EMC Corporation
12661911	8504787	TECHNIQUES FOR DETERMINING DATA	EMC Corporation
		PROTECTION STORAGE REQUIREMENTS	
12688018	8291183	ASSISTED MAINFRAME DATA DE-DUPLICATION	EMC Corporation
12695250	8762642	SYSTEM AND METHOD FOR SECURE AND	EMC Corporation
		RELIABLE MULTI-CLOUD DATA REPLICATION	
12700085	8285673	METHODS AND APPARATUS FOR PROCESSING	EMC Corporation
		PARTITIONED CHANGES	
12704285	9058334	PARALLEL FILE SYSTEM PROCESSING	EMC Corporation
12713553	8055861	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
		DELETION OF DATA	

Application	Registration		
Number	Number	Title	Owner
12716110	8181065	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		NONLINEAR JOURNALING	
12717840	8010493	SYSTEMS AND METHODS FOR A SNAPSHOT OF	EMC Corporation
		DATA	
12717869	8015156	SYSTEMS AND METHODS FOR A SNAPSHOT OF	EMC Corporation
		DATA	1
12728081	8706755	SYSTEM AND METHODS FOR PROVIDING A	EMC Corporation
		DISTRIBUTED FILE SYSTEM UTILIZING	
		METADATA TO TRACK INFORMATION ABOUT	
		DATA STORED THROUGHOUT THE SYSTEM	
12730275	8352661	DATA STORAGE SYSTEMS HAVING SEAMLESS	EMC Corporation
		SOFTWARE UPGRADES	
12730529		[REDACTED]	EMC Corporation
12731945	8959054	METHODS AND APPARATUS FOR OPTIMAL	EMC Corporation
		JOURNALING FOR CONTINUOUS DATA	1
		REPLICATION	
12732330	8627138	DATA PROTECTION SYSTEM AND METHOD	EMC Corporation
12748492	8560788	METHOD OF PERFORMING BACKUPS USING	EMC Corporation
		MULTIPLE STREAMS	1
12748493	8166348	METHOD OF DEBUGGING A SOFTWARE SYSTEM	EMC Corporation
12748538		[REDACTED]	EMC Corporation
12748566		[REDACTED]	EMC Corporation
12748619	8452980	DEFEATING REAL-TIME TROJAN LOGIN ATTACK	EMC Corporation
12. 10013	0.02300	WITH DELAYED INTERACTION WITH FRAUDSTER	2.770 corporation
12748690	8601552	PERSONAL IDENTIFICATION PAIRS	EMC Corporation
12750382	8370592	MULTI-MACHINE ATOMIC SEAMLESS MIGRATION	EMC Corporation
12750388	8301811	TECHNIQUES FOR PERFORMING ONLINE DATA	EMC Corporation
12730300	0501011	MIGRATION WHILE EFFECTIVELY MIGRATING	Elvic corporation
		SCSI RESERVATIONS BETWEEN SOURCE AND	
		TARGET ARRAYS	
12750391	8392753	AUTOMATIC FAILOVER DURING ONLINE DATA	EMC Corporation
12.00071	0072700	MIGRATION	
12750758	8412928	ONE-TIME PASSWORD AUTHENTICATION	EMC Corporation
12/00/00	0.12,20	EMPLOYING LOCAL TESTING OF CANDIDATE	21116 Corporation
		PASSWORDS FROM ONE-TIME PASSWORD SERVER	
12750919	8452816	MANAGING DATABASE ACCESS	EMC Corporation
12751008	8407720	INTER-PROCESS COMMUNICATION MANAGEMENT	EMC Corporation
12751010	8347219	OBJECT LEVEL DISPLAY BUILDING	EMC Corporation
12751057	8370389	TECHNIQUES FOR AUTHENTICATING USERS OF	EMC Corporation
12,0100,	0570505	MASSIVE MULTIPLAYER ONLINE ROLE PLAYING	2.776 corporation
		GAMES USING ADAPTIVE AUTHENTICATION	
12751058		[REDACTED]	EMC Corporation
12751093	8539124	STORAGE INTEGRATION PLUGIN FOR VIRTUAL	EMC Corporation
	322712.	SERVERS	
12751124	9317820	SYSTEM AND METHOD FOR CONFIGURING A	EMC Corporation
	1020	CLOUD COMPUTING SPACE	
12751155	8151021	UPGRADING SOFTWARE ON A CLUSTER OF	EMC Corporation
12/01100	3121021	COMPUTERIZED DEVICES	2c corporation
12751243		[REDACTED]	EMC Corporation
12751405	8762374	TASK DRIVEN CONTEXT-AWARE SEARCH	EMC Corporation
12751455	8478731	MANAGING COMPRESSION IN DATA STORAGE	EMC Corporation
14141TJJ	UT/U/JI		Livic Corporation

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Number	Number	Title	Owner
12751665	8407445	METHOD FOR TRIGGERING AND COORDINATING POOL STORAGE RECLAMATION	EMC Corporation
12751685	8924681	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR AN ADAPTIVE BLOCK ALLOCATION MECHANISM	EMC Corporation
12751707	8751740	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR PERFORMANCE OPTIMIZATION OF STORAGE ALLOCATION TO VIRTUAL LOGICAL UNITS	EMC Corporation
12751748	8103937	CAS COMMAND NETWORK REPLICATION	EMC Corporation
12751783	8380926	HANDLING SECTOR EDGES	EMC Corporation
12751799	8751715	SYSTEM AND METHOD FOR CONTROLLING DEVICE ACCESS	EMC Corporation
12751831	8086638	FILE HANDLE BANKING TO PROVIDE NON- DISRUPTIVE MIGRATION OF FILES	EMC Corporation
12751934	8510265	CONFIGURATION UTILITY FOR A DATA STORAGE SYSTEM USING A FILE MAPPING PROTOCOL FOR ACCESS TO DISTRIBUTED FILE SYSTEMS	EMC Corporation
12752031	8037345	DETERMINISTIC RECOVERY OF A FILE SYSTEM BUILT ON A THINLY PROVISIONED LOGICAL VOLUME HAVING REDUNDANT METADATA	EMC Corporation
12752052	8655966	MOBILE DEVICE DATA PROTECTION	EMC Corporation
12752059	9152650	MOBILE DEVICE DATA RECOVERY	EMC Corporation
12752064	8694597	MOBILE DEVICE GROUP-BASED DATA SHARING	EMC Corporation
12752066		[REDACTED]	EMC Corporation
12752068	8683005	CACHE-BASED MOBILE DEVICE NETWORK RESOURCE OPTIMIZATION	EMC Corporation
12752069	8694744	MOBILE DEVICE SNAPSHOT BACKUP	EMC Corporation
12752072		[REDACTED]	EMC Corporation
12761751	8549649	SYSTEMS AND METHODS FOR SENSITIVE DATA REMEDIATION	EMC Corporation
12762769	8024538	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
12775743	8028191	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
12780001	7958305	SYSTEM AND METHOD FOR MANAGING STORAGE NETWORKS AND PROVIDING VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
12787297	8112395	SYSTEM AND METHODS FOR PROVIDING A DISTRIBUTED FILE SYSTEM UTILIZING METADATA TO TRACK INFORMATION ABOUT DATA STORED THROUGHOUT THE SYSTEM	EMC Corporation
12789393	8005865	SYSTEMS AND METHODS FOR NOTIFYING LISTENERS OF EVENTS	EMC Corporation
12794492	7844617	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
12798034	8862832	TECHNIQUES FOR GLOBAL MEMORY MANAGEMENT AND REQUEST PROCESSING	EMC Corporation
12798035	8375174	TECHNIQUES FOR USE WITH MEMORY PARTITIONING AND MANAGEMENT	EMC Corporation
12798036		[REDACTED]	EMC Corporation
12798097	8433848	ANALYSIS TOOL FOR A MULTI-TIER STORAGE ENVIRONMENT	EMC Corporation

Application Number	Registration Number	Title	Owner
12798234	8725767	MULTI-DIMENSIONAL OBJECT MODEL FOR STORAGE MANAGEMENT	EMC Corporation
12798597		SYSTEM AND METHOD FOR SECURING TENANT DATA ON A LOCAL APPLIANCE PRIOR TO DELIVERY TO A SAAS DATA CENTER HOSTED APPLICATION SERVICE	EMC Corporation
12798730	8086255	DATA MESSAGE PROCESSING	EMC Corporation
12799513		[REDACTED]	EMC Corporation
12800399	9135016	SAFE OBJECT REPLICATION AND RESTORE IN A FEDERATION OF OBJECT STORAGE	EMC Corporation
12800448		[REDACTED]	EMC Corporation
12802072	8037013	COOPERATIVE LOCKING BETWEEN MULTIPLE INDEPENDENT OWNERS OF DATA SPACE	EMC Corporation
12803393	8396839	REPRESENTING DE-DUPLICATED FILE DATA	EMC Corporation
12803470		[REDACTED]	EMC Corporation
12803497	8812423	OBJECT QUALIFIERS FOR MULTI-DIMENSIONAL OBJECT MODEL	EMC Corporation
12803498	8281033	TECHNIQUES FOR PATH SELECTION	EMC Corporation
12803570	9003157	TECHNIQUES FOR DYNAMIC DATA STORAGE CONFIGURATION IN ACCORDANCE WITH AN ALLOCATION POLICY	EMC Corporation
12803571	8566553	TECHNIQUES FOR AUTOMATED EVALUATION AND MOVEMENT OF DATA BETWEEN STORAGE TIERS	EMC Corporation
12803592	8874726	AUTOMATED LOAD BALANCING	EMC Corporation
12803604	8321487	RECOVERY OF DIRECTORY INFORMATION	EMC Corporation
12804349	8489559	METHODS AND APPARATUS FOR CONVERSION OF CONTENT	EMC Corporation
12804877	8447923	WRITE INTERCEPTOR FOR TRACKING CHANGES TO A DISK IMAGE	EMC Corporation
12807943	8467281	TECHNIQUES FOR IDENTIFYING DEVICES HAVING SLOW RESPONSE TIMES	EMC Corporation
12818577	8402226	RATE PROPORTIONAL CACHE WRITE-BACK IN A STORAGE SYSTEM	EMC Corporation
12819767	8862560	COMPRESSION SYSTEM PAUSE AND AUTO- RESUME	EMC Corporation
12820829	8433914	MULTI-CHANNEL TRANSACTION SIGNING	EMC Corporation
12821418	8332687	SPLITTER USED IN A CONTINUOUS DATA PROTECTION ENVIRONMENT	EMC Corporation
12821695	8504684	CONTROL OF DATA STORAGE SYSTEM MANAGEMENT APPLICATION ACTIVATION	EMC Corporation
12822173	9330105	SYSTEMS, METHODS, AND COMPUTER READABLE MEDIA FOR LAZY COMPRESSION OF DATA INCOMING TO A DATA STORAGE ENTITY	EMC Corporation
12823636	8751827	APPARATUS FOR CONTROLLING EMBEDDED SECURITY ON A STORAGE PLATFORM	EMC Corporation
12824380	8327103	SCHEDULING DATA RELOCATION ACTIVITIES USING CONFIGURABLE FAIRNESS CRITERIA	EMC Corporation
12824816	8443163	METHODS, SYSTEMS AND COMPUTER READABLE MEDIUM FOR TIER-BASED DATA STORAGE RESOURCE ALLOCATION AND DATA RELOCATION IN A DATA STORAGE ARRAY	EMC Corporation

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12824966	8479046	SYSTEMS, METHODS, AND COMPUTER READABLE	EMC Corporation
		MEDIA FOR TRACKING POOL STORAGE SPACE	•
		RESERVATIONS	
12825907		[REDACTED]	EMC Corporation
12825930	9047106	MANAGING APPLICATION FEATURES	EMC Corporation
12826131	8407191	PRIORITY BASED DATA SCRUBBING ON A	EMC Corporation
		DEDUPLICATED DATA STORE	
12826185	9043533	SIZING VOLATILE MEMORY CACHE BASED ON	EMC Corporation
		FLASH-BASED CACHE USAGE	1
12826203	8456832	DATA STORAGE DRIVE CARRIER	EMC Corporation
12826385	9311002	SYSTEMS, METHODS, AND COMPUTER READABLE	EMC Corporation
		MEDIA FOR COMPRESSING DATA AT A	<b>1</b>
		VIRTUALLY PROVISIONED STORAGE ENTITY	
12826434	8473678	MANAGING MULTI-TIERED STORAGE POOL	EMC Corporation
		PROVISIONING	
12826466	8452965	SELF-IDENTIFICATION OF TOKENS	EMC Corporation
12826481	8601553	TECHNIQUES OF IMPOSING ACCESS CONTROL	EMC Corporation
		POLICIES	1
12826491	8655787	AUTOMATED DETECTION OF DEFINED INPUT	EMC Corporation
		VALUES AND TRANSFORMATION TO TOKENS	1
12826534		[REDACTED]	EMC Corporation
12826749	8429307	APPLICATION AWARE INTELLIGENT STORAGE	EMC Corporation
		SYSTEM	
12826833		[REDACTED]	EMC Corporation
12826935	8560837	AUTOMATICALLY ESTIMATING CLOCK OFFSET	EMC Corporation
12826994	8973021	METHOD AND SYSTEM OF FACILITATING JAVA	EMC Corporation
		COMMUNICATION	*
12827025	8713160	AUTOMATED TOP-DOWN MULTI-ABSTRACTION	EMC Corporation
		INFRASTRUCTURE PERFORMANCE ANALYTICS -	1
		NETWORK INFRASTRUCTURE-AS-A-SERVICE	
		PERSPECTIVE	
12827045	8627424	DEVICE BOUND OTP GENERATION	EMC Corporation
12827092	8381213	METHOD FOR DYNAMIC MANAGEMENT OF	EMC Corporation
		SYSTEM RESOURCES THROUGH APPLICATION	
		HINTS	
12827097	8984384	DISTRIBUTED STORAGE SYSTEM WITH EFFICIENT	EMC Corporation
		HANDLING OF FILE UPDATES	
12827400	8683495	SYNC POINT COORDINATION PROVIDING HIGH	EMC Corporation
		THROUGHPUT JOB PROCESSING ACROSS	
		DISTRIBUTED VIRTUAL INFRASTRUCTURE	
12828034	8595749	SYSTEM AND METHOD FOR CATALOGING DATA	EMC Corporation
12828111	8612680	DATA CACHING SYSTEM AND METHOD	EMC Corporation
12828198	9367561	PRIORITIZED BACKUP SEGMENTING	EMC Corporation
12828205	9235585	DYNAMIC PRIORITIZED RECOVERY	EMC Corporation
12828213		DATA ACCESS DURING DATA RECOVERY	EMC Corporation
12828218	8438420	POST ACCESS DATA PRESERVATION	EMC Corporation
12828279	9239860	AUGMENTING VIRTUAL DIRECTORIES	EMC Corporation
12828284	9244969	VIRTUAL DISK RECOVERY	EMC Corporation
12828609	7992038	FAILURE PROTECTION IN AN ENVIRONMENT	EMC Corporation
		INCLUDING VIRTUALIZATION OF NETWORKED	
		STORAGE RESOURCES	
12832658		[REDACTED]	EMC Corporation

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Number	Number	Title	Owner
12832904	8015216	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		POSSIBLE VALUE RANGES	
12834535	8244680	ACTIVE DIRECTORY CONTAINER RECOVERY	EMC Corporation
12834705	8131705	RELEVANCY SCORING USING QUERY STRUCTURE	EMC Corporation
		AND DATA STRUCTURE FOR FEDERATED SEARCH	
12834710	8131716	TUNING OF RELEVANCY RANKING FOR	EMC Corporation
		FEDERATED SEARCH	
12837439	8214334	SYSTEMS AND METHODS FOR DISTRIBUTED	EMC Corporation
		SYSTEM SCANNING	
12838167		[REDACTED]	EMC Corporation
12847559	9336111	SYSTEM AND METHOD FOR STORING DATA	EMC Corporation
12850239	8185554	STORAGE OF DATA WITH COMPOSITE HASHES IN	EMC Corporation
		BACKUP SYSTEMS	
12854641	8370899	DISPOSABLE BROWSER FOR COMMERCIAL	EMC Corporation
		BANKING	
12857703	8255477	SYSTEMS AND METHODS FOR IMPLEMENTING	EMC Corporation
		CONTENT SENSITIVE ROUTING OVER A WIDE	
		AREA NETWORK (WAN)	
12862060	8214400	SYSTEMS AND METHODS FOR MAINTAINING	EMC Corporation
		DISTRIBUTED DATA	•
12880307	8082465	AUTO-ADAPTING CACHE MEMORY SYSTEM AND	EMC Corporation
1200000.	0002.00	METHOD	2e corporation
12882081	8635423	METHODS AND APPARATUS FOR INTERFACING TO	EMC Corporation
12002001	0032123	A DATA STORAGE SYSTEM	Livie corporation
12882234	8693212	CHASSIS COVER HAVING OPTICAL OPEN-CLOSE	EMC Corporation
12002231	0075212	DETECTOR DETECTOR	Livie corporation
12884577	8667478	BACKWARD-COMPATIBILITY USING A PLUGIN	EMC Corporation
12001577	0007170	ARCHITECTURE	Livic corporation
12887402	8677052	SNAPSHOTTING OF A PERFORMANCE STORAGE	EMC Corporation
12007 102	0077022	SYSTEM IN A SYSTEM FOR PERFORMANCE	Livie corporation
		IMPROVEMENT OF A CAPACITY OPTIMIZED	
		STORAGE SYSTEM	
12887404	9141300	PERFORMANCE IMPROVEMENT OF A CAPACITY	EMC Corporation
12007 101	7111300	OPTIMIZED STORAGE SYSTEM USING A	Livie corporation
		PERFORMANCE SEGMENT STORAGE SYSTEM AND	
		A SEGMENT STORAGE SYSTEM	
12887414	8447726	PERFORMANCE IMPROVEMENT OF A CAPACITY	EMC Corporation
1200/414	0117720	OPTIMIZED STORAGE SYSTEM USING A	Livie corporation
		PERFORMANCE SEGMENT STORAGE SYSTEM	
		INCLUDING A DETERMINER	
12888943	8756370	NON-DISRUPTIVE DRIVE FIRMWARE UPGRADES	EMC Corporation
12889477	9292216	MANAGING POOL ALLOCATION	EMC Corporation
12890688	8527455	SEEDING REPLICATION	EMC Corporation
12892069	032/733	[REDACTED]	EMC Corporation
12892081	8327080	WRITE-BACK CACHE PROTECTION	EMC Corporation
12892333	8381027	DETERMINING ALTERNATE PATHS IN FAULTED	EMC Corporation
14074333	030102/	SYSTEMS	EMIC Corporation
12892812	8204871	EXTENDED FILE MAPPING CACHE FOR FAST	EMC Componetics
12892812	02048/1		EMC Corporation
12902024	9507606	INPUT-OUTPUT  MANACING SYSTEM BOLLING	EMC Company ties
12893034	8527626	MANAGING SYSTEM POLLING	EMC Corporation
12893347	8635707	MANAGING OBJECT ACCESS	EMC Corporation

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12893600	8694700	USING I/O TRACK INFORMATION FOR	EMC Corporation
		CONTINUOUS PUSH WITH SPLITTER FOR STORAGE	_
		DEVICE	
12893684	8499157	DEVICE-BASED PASSWORD MANAGEMENT	EMC Corporation
12893697	8984031	MANAGING DATA STORAGE FOR DATABASES	EMC Corporation
		BASED ON APPLICATION AWARENESS	
12893716	8219724	FLEXIBLY MANAGING I\O OPERATIONS BASED ON	EMC Corporation
		APPLICATION AWARENESS	_
12893854	8683153	ITERATING FOR DEDUPLICATION	EMC Corporation
12893865	8775388	SELECTING ITERATION SCHEMES FOR	EMC Corporation
		DEDUPLICATION	
12894267	8370862	COMMUNICATING BETWEEN SOFTWARE	EMC Corporation
		ENVIRONMENTS	_
12894282	8910144	MANAGING SOFTWARE ENVIRONMENT	EMC Corporation
		INSTALLATION	
12894406		[REDACTED]	EMC Corporation
12894502	8453232	VIRTUAL SMART CARD THROUGH A PC/SC	EMC Corporation
		INTERFACE	•
12894506	8751537	INTEGRATED AND UNIFIED ONLINE HELP	EMC Corporation
12894515	8799375	UNALTERABLE NOTIFICATION SERVICE	EMC Corporation
12894660	8756441	DATA CENTER ENERGY MANAGER FOR	EMC Corporation
		MONITORING POWER USAGE IN A DATA STORAGE	1
		ENVIRONMENT HAVING A POWER MONITOR AND	
		A MONITOR MODULE FOR CORRELATING	
		ASSOCIATIVE INFORMATION ASSOCIATED WITH	
		POWER CONSUMPTION	
12894763	9116905	SYSTEM AND METHOD FOR CATALOGING DATA	EMC Corporation
12895021	8683167	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	•
12895053	8595438	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	•
12895130	8312519	AGILE OTP GENERATION	EMC Corporation
12895174	8959173	NON-DISRUPTIVE LOAD-BALANCING OF VIRTUAL	EMC Corporation
		MACHINES BETWEEN DATA CENTERS	1
12895184	8725848	MULTIPATH DISTRIBUTION	EMC Corporation
12895198	8458509	MULTIPATH FAILOVER	EMC Corporation
12895219		[REDACTED]	EMC Corporation
12895232	9047128	EFFICIENT INTERFACE ADDITION	EMC Corporation
12895619	8356150	SYSTEMS AND METHODS FOR PROVIDING	EMC Corporation
		NONLINEAR JOURNALING	
12895667	7984253	ARCHITECTURE FOR VIRTUALIZATION OF	EMC Corporation
		NETWORKED STORAGE RESOURCES	1
12895827	9235593	TRANSMITTING FILESYSTEM CHANGES OVER A	EMC Corporation
		NETWORK BACKGROUND OF THE INVENTION	
12895836	8504870	OPTIMIZED RECOVERY	EMC Corporation
12895838	9195549	UNIFIED RECOVERY	EMC Corporation
12895840	8549350	MULTI-TIER RECOVERY	EMC Corporation
12895841	8484505	SELF RECOVERY	EMC Corporation
12907625	8618913	RADIO FREQUENCY INDENTIFICATION ENABLED	EMC Corporation
		MOBILE DEVICE	
12908379	8605590	SYSTEMS AND METHODS OF IMPROVING	EMC Corporation
12700017	1 0005570	PERFORMANCE OF TRANSPORT PROTOCOLS	21110 Corporation

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12908811		[REDACTED]	EMC Corporation
12909089	8739285	DIFFERENTIAL VIRUS SCAN	EMC Corporation
12910758	8527568	EFFICIENT COMPUTATION OF SKETCHES	EMC Corporation
12917180	8625464	SYSTEMS AND METHODS FOR PROVIDING A QUIESCING PROTOCOL	EMC Corporation
12917910	8095577	MANAGING METADATA	EMC Corporation
12924345	8924675	SELECTIVE MIGRATION OF PHYSICAL DATA	EMC Corporation
12924361	8868798	TECHNIQUES FOR MODELING DISK PERFORMANCE	EMC Corporation
12924388		[REDACTED]	EMC Corporation
12924396	8583838	TECHNIQUES FOR STATISTICS COLLECTION IN CONNECTION WITH DATA STORAGE PERFORMANCE.	EMC Corporation
12924430	8566546	TECHNIQUES FOR ENFORCING CAPACITY RESTRICTIONS OF AN ALLOCATION POLICY	EMC Corporation
12924474	9176677	VIRTUAL PROVISIONING SPACE RESERVATION	EMC Corporation
12924544	8707003	RATE CONTROL FOR ASYNCHRONOUS DATA REPLICATION	EMC Corporation
12924568	8479204	TECHNIQUES FOR DETERMINING TRANSACTION PROGRESS	EMC Corporation
12924571	8850453	TECHNIQUES FOR EVENT FILTERING	EMC Corporation
12924572	8316161	TECHNIQUES FOR INDICATING A PASSIVE PATH STATE FOR A DEVICE	EMC Corporation
12924588	8438315	TECHNIQUES FOR NON-DISRUPTIVE UPGRADE	EMC Corporation
12925040	8041684	TECHNIQUES FOR DETERMINING AN IMPLEMENTED DATA PROTECTION POLICY	EMC Corporation
12925709	8732364	TRANSFER OF DATA STORAGE DEVICE FEATURES	EMC Corporation
12928283	8250257	TECHNIQUES FOR BALANCING SYSTEM I/O LOAD	EMC Corporation
12928649	8595535	TECHNIQUES FOR MANAGING DATA STORAGE SYSTEMS USING ENERGY INFORMATION	EMC Corporation
12928653	8447729	TECHNIQUES FOR PERFORMING INDICATION MANAGEMENT	EMC Corporation
12928661	8239584	TECHNIQUES FOR AUTOMATED STORAGE MANAGEMENT	EMC Corporation
12930101	8935490	DISK ACCESS QUALITY OF SERVICE	EMC Corporation
12930102	8670453	ISOLATING NETWORK TRAFFIC IN MULTI- TENNANT VIRTUALIZATION ENVIRONMENTS	EMC Corporation
12930121	8578204	WITNESS FACILITY FOR DISTRIBUTED STORAGE SYSTEM	EMC Corporation
12930247		[REDACTED]	EMC Corporation
12930249	8682955	FULLY AUTOMATED CLOUD TIERING CONTROLLED BY AN ORCHESTRATION LAYER BASED ON DYNAMIC INFORMATION	EMC Corporation
12930251	8468180	PORTING STORAGE METADATA	EMC Corporation
12931386	8321921	METHOD AND APPARATUS FOR PROVIDING AUTHENTICATION AND ENCRYPTION SERVICES BY A SOFTWARE AS A SERVICE PLATFORM	EMC Corporation
12932080	9110693	VM MOBILITY OVER DISTANCE	EMC Corporation
12932827		[REDACTED]	EMC Corporation
12943042	8935560	SYSTEM AND METHOD OF FILE LOCKING WITHIN A NETWORK FILE SYSTEM FEDERATED NAMESPACE	EMC Corporation

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12945915	9104326	SCALABLE BLOCK DATA STORAGE USING CONTENT ADDRESSING	EMC Corporation
12946665	8060521	SYSTEMS AND METHODS OF DIRECTORY ENTRY ENCODINGS	EMC Corporation
12950996	8407265	HIERARCHICAL MAPPING OF FREE BLOCKS OF CYLINDER GROUPS OF FILE SYSTEMS BUILT ON SLICES OF STORAGE AND LINKING OF THE FREE BLOCKS	EMC Corporation
12955533	8527638	SYSTEM MANAGEMENT VIA SESSION INITIATION PROTOCOL	EMC Corporation
12959575	9009404	VIEWING COMPRESSION AND MIGRATION STATUS	EMC Corporation
12960793	8959249	COOPERATIVE CLOUD I/O SCHEDULER	EMC Corporation
12962819	8214406	BACKUP OF INCREMENTAL METADATA IN BLOCK BASED BACKUP SYSTEMS	EMC Corporation
12965748	8176013	SYSTEMS AND METHODS FOR ACCESSING AND UPDATING DISTRIBUTED DATA	EMC Corporation
12966284	8296855	PRIVILEGED ACCESS TO ENCRYPTED DATA	EMC Corporation
12966415	8700832	AUTOMATED ADDITION OF FILE BASED HARDWARE AND FILE BASED ACCESS SERVICES IN A DATA STORAGE SYSTEM	EMC Corporation
12967239	8934940	PROVIDING ENHANCED SECURITY FOR WIRELESS TELECOMMUNICATIONS DEVICES	EMC Corporation
12968854	8626484	LIGHT-WEIGHT AND FLEXIBLE FEATURE SIMULATOR	EMC Corporation
12969888	8850143	POINT IN TIME ACCESS IN A REPLICATION ENVIRONMENT WITH LUN RESIZING	EMC Corporation
12969893	8447782	DATA ACCESS LAYER HAVING A MAPPING MODULE FOR TRANSFORMATION OF DATA INTO COMMON INFORMATION MODEL COMPLIANT OBJECTS	EMC Corporation
12969903	8725691	DYNAMIC LUN RESIZING IN A REPLICATION ENVIRONMENT	EMC Corporation
12969920		[REDACTED]	EMC Corporation
12969944	8725692	REPLICATION OF XCOPY COMMAND	EMC Corporation
12970795	7971021	SYSTEMS AND METHODS FOR MANAGING STALLED STORAGE DEVICES	EMC Corporation
12971041	8874696	COMMON CACHE SERVICE	EMC Corporation
12971792	8516149	SYSTEM FOR OPERATING NFSV2 AND NFSV3 CLIENTS WITH FEDERATED NAMESPACE	EMC Corporation
12972260	8356013	SYSTEMS AND METHODS FOR A SNAPSHOT OF DATA	EMC Corporation
12973284		[REDACTED]	EMC Corporation
12973599		[REDACTED]	EMC Corporation
12974013		[REDACTED]	EMC Corporation
12974732	8528049	TECHNIQUES OF PROVIDING AUTHENTICATION FROM COMPUTER POINTER INTERACTIONS	EMC Corporation
12974756	8683452	DYNAMICALLY OBFUSCATED JAVASCRIPT	EMC Corporation
12974768		[REDACTED]	EMC Corporation
12975048	8126844	MULTI-THREAD REPLICATION ACROSS A NETWORK	EMC Corporation
12975474		[REDACTED]	EMC Corporation
12975716	9081771	ENCRYPTING IN DEDUPLICATION SYSTEMS	EMC Corporation

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12976229	8774530	AUTOMATED DIAGNOSTIC ANALYSIS OF IMAGE DATA	EMC Corporation
12976575	9306741	UPDATING KEYS FOR USE IN AUTHENTICATION	EMC Corporation
12976632	8539148	DEDUPLICATION EFFICIENCY	EMC Corporation
12977251	8706700	CREATING CONSISTENT SNAPSHOTS ACROSS SEVERAL STORAGE ARRAYS OR FILE SYSTEMS	EMC Corporation
12977295	8738681	HIERARCHICAL COOPERATIVE STORAGE SERVICES	EMC Corporation
12977604	9075668	METHOD, APPARATUS AND SYSTEM FOR INTEGRATING DYNAMIC RECOGNITION OF COMPLEX EVENTS WITH CASE-BASED PROCESSING	EMC Corporation
12977616		[REDACTED]	EMC Corporation
12977651	8495304	MULTI SOURCE WIRE DEDUPLICATION	EMC Corporation
12977680		[REDACTED]	EMC Corporation
12977789	8751828	SHARING ENCRYPTION-RELATED METADATA BETWEEN MULTIPLE LAYERS IN A STORAGE I/O STACK	EMC Corporation
12977906		[REDACTED]	EMC Corporation
12977962	8566637	ANALYZING DRIVE ERRORS IN DATA STORAGE SYSTEMS	EMC Corporation
12977971	8798262	PRESERVING LBA INFORMATION BETWEEN LAYERS OF A STORAGE I/O STACK FOR LBA- DEPENDENT ENCRYPTION	EMC Corporation
12978017	8726405	TECHNIQUES FOR PROVIDING SECURITY USING A MOBILE WIRELESS COMMUNICATIONS DEVICE HAVING DATA LOSS PREVENTION CIRCUITRY	EMC Corporation
12978055	8635447	MANAGING CERTIFICATES BETWEEN SOFTWARE ENVIRONMENTS	EMC Corporation
12978096	8782782	COMPUTER SYSTEM WITH RISK-BASED ASSESSMENT AND PROTECTION AGAINST HARMFUL USER ACTIVITY	EMC Corporation
12978332		[REDACTED]	EMC Corporation
12978887	8260974	TECHNIQUES FOR ACCELERATING THE PROCESSING OF ENCLOSURES IN SAS DISK STORAGE ARRAYS	EMC Corporation
12979402	7992713	DISK DRIVE PACKAGE	EMC Corporation
12979450	9037512	INFORMATION TECHNOLOGY RESOURCE ALLOCATION AND UTILIZATION TRACKING IN A CLOUD-BASED SYSTEM	EMC Corporation
12980421	8620882	TOKENIZATION OF MULTIPLE-FIELD RECORDS	EMC Corporation
12980567	8856954	AUTHENTICATING USING ORGANIZATION BASED INFORMATION	EMC Corporation
12980621	9323819	FACILITATING VALID DATA ENTRY	EMC Corporation
12980853		[REDACTED]	EMC Corporation
12980932	8683260	MANAGING OWNERSHIP OF LOGICAL VOLUMES	EMC Corporation
12980958		[REDACTED]	EMC Corporation
12981050	8484635	UNIFIED INSTALLATION FOR HETEROGENEOUS STORAGE SYSTEMS	EMC Corporation
12981072	8479276	MALWARE DETECTION USING RISK ANALYSIS BASED ON FILE SYSTEM AND NETWORK ACTIVITY	EMC Corporation

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12981766	9009426	METHODS, COMPUTER READABLE MEDIA, AND	EMC Corporation
		SYSTEMS FOR OPTIMIZING CACHE UTILIZATION	
12981772		[REDACTED]	EMC Corporation
12981803		[REDACTED]	EMC Corporation
12981978	8452900	DYNAMIC COMPRESSION OF AN I/O DATA BLOCK	EMC Corporation
12982139	8930738	BATTERY BACK UP SYSTEM	EMC Corporation
12982288		[REDACTED]	EMC Corporation
12982378	9104863	METHOD AND APPARATUS TO HARDEN A	EMC Corporation
		SOFTWARE EXECUTION IN RANDOM ACCESS	
		MEMORY	
12982724	8818966	CONTINUOUS FILE DEFRAGMENTATION DURING	EMC Corporation
		FILE OVER-WRITES	
12982993		[REDACTED]	EMC Corporation
12983151	8713364	UNIFIED RECOVERY	EMC Corporation
12983165	8782007	EFFICIENT DATA MOVEMENT	EMC Corporation
12983172	8799393	DYNAMIC DATA MOVEMENT	EMC Corporation
12983213	8458418	REPLICATION OF DEDUPLICATED DATA BETWEEN	EMC Corporation
		MULTI-CONTROLLER SYSTEMS	_
12983246	8799915	DECOMMISSIONING VIRTUAL APPLIANCES	EMC Corporation
12983249	8601472	INSTANTIATING VIRTUAL APPLIANCES	EMC Corporation
12983281	9280550	EFFICIENT STORAGE TIERING	EMC Corporation
12983282		[REDACTED]	EMC Corporation
12983285	8886901	POLICY BASED STORAGE TIERING	EMC Corporation
12989601	8589539	MULTIPEER	EMC Corporation
13/155306	9052830	TECHNIQUES FOR AUTOMATED EVALUATION	EMC Corporation
		AND MOVEMENT OF DATA BETWEEN STORAGE	_
		TIERS FOR THIN DEVICES	
13/249957	8788817	METHODS AND APPARATUS FOR SECURE AND	EMC Corporation
		RELIABLE TRANSMISSION OF MESSAGES OVER A	_
		SILENT ALARM CHANNEL	
13/323004	9047323	SYSTEM AND METHOD FOR REVIEWING ROLE	EMC Corporation
		DEFINITIONS	
13/404737	9118661	METHODS AND APPARATUS FOR	EMC Corporation
		AUTHENTICATING A USER USING MULTI-SERVER	
		ONE-TIME PASSCODE VERIFICATION	
13/436884	9064210	SEMANTICALLY-AWARE BEHAVIORAL SECURITY	EMC Corporation
		ANALYSIS SYSTEM FOR SECURITY INFORMATION	
		AND EVENT MANAGEMENT	
13/472999	8925053	INTERNET-ACCESSIBLE SERVICE FOR DYNAMIC	EMC Corporation
		AUTHENTICATION AND CONTINUOUS ASSERTION	
		OF TRUST LEVEL IN IDENTITIES	
13/537506	9092782	METHODS AND APPARATUS FOR RISK	EMC Corporation
		EVALUATION OF COMPROMISED CREDENTIALS	
13/537981	9160539	METHODS AND APPARATUS FOR SECURE,	EMC Corporation
		STEALTHY AND RELIABLE TRANSMISSION OF	
		ALERT MESSAGES FROM A SECURITY ALERTING	
10/50000	0001000	SYSTEM	77.40 ~
13/538048	9081898	AUTOMATIC CAPTURE OF MINIMAL PORTABLE	EMC Corporation
10/800100	00.550.50	EXECUTABLE BUG REPROS	T) (G ~ :
13/538102	8955069	EVENT-BASED BIOMETRIC AUTHENTICATION	EMC Corporation
		USING MOBILE DEVICE	

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13/600676	9292671	MULTI-SERVER AUTHENTICATION USING PERSONALIZED PROACTIVIZATION	EMC Corporation
13/630242	9213727	METHODS AND APPARATUS FOR OBTAINING DATABASE PERFORMANCE SNAPSHOTS	EMC Corporation
13/708343	9323909	SHARING A CRYPTOGRAPHIC DEVICE BY PARTITIONING CHALLENGE-RESPONSE SPACE	EMC Corporation
13/713306	9154481	DECRYPTION OF A PROTECTED RESOURCE ON A CRYPTOGRAPHIC DEVICE USING WIRELESS COMMUNICATION	EMC Corporation
13/724752	9098803	HYPOTHESES AGGREGATION IN DATA ANALYTICS	EMC Corporation
13/725726	9270786	SYSTEM AND METHOD FOR PROXYING TCP CONNECTIONS OVER A SCSI-BASED TRANSPORT	EMC Corporation
13/725860	9232000	METHOD AND SYSTEM FOR BALANCING LOAD ACROSS TARGET ENDPOINTS ON A SERVER AND INITIATOR ENDPOINTS ACCESSING THE SERVER	EMC Corporation
13/728271	9083515	FORWARD SECURE PSEUDORANDOM NUMBER GENERATION RESILIENT TO FORWARD CLOCK ATTACKS	EMC Corporation
13/730017	9280469	ACCELERATING SYNCHRONIZATION OF CERTAIN TYPES OF CACHED DATA	EMC Corporation
13/730112	9110695	REQUEST QUEUES FOR INTERACTIVE CLIENTS IN A SHARED FILE SYSTEM OF A PARALLEL COMPUTING SYSTEM	EMC Corporation
13/730192	9164949	SYSTEM AND METHOD FOR LUN AND CACHE MANAGEMENT	EMC Corporation
13/730343	8954728	GENERATION OF EXFILTRATION-RESILIENT CRYPTOGRAPHIC KEYS	EMC Corporation
13/731443	8904482	TECHNIQUES FOR SECURING A ONE-TIME PASSCODE WITH AN ALTERATION CODE	EMC Corporation
13/758698	8984536	HETEROGENEOUS DATA FROM MULTIPLE SOURCES	EMC Corporation
13/795025	9049226	DEFENDING AGAINST A CYBER ATTACK VIA ASSET OVERLAY MAPPING	EMC Corporation
13/795619	9171171	GENERATING A HEAT MAP TO IDENTIFY VULNERABLE DATA USERS WITHIN AN ORGANIZATION	EMC Corporation
13/799725	9195670	TRACKING WRITE OPERATIONS FOR INCREMENTAL BACKUPS OF DATA	EMC Corporation
13/803377	9348519	SYSTEM AND METHODS FOR OPTIMIZING MULTIPLE DATA STREAMS THROUGHPUT TO MAXIMIZE OVERALL THROUGHPUT OF A BACKUP APPLICATION	EMC Corporation
13/804663	9143318	USING A TOKEN CODE TO CONTROL ACCESS TO DATA AND APPLICATIONS IN A MOBILE PLATFORM	EMC Corporation
13/804663	9154304	USING A TOKEN CODE TO CONTROL ACCESS TO DATA AND APPLICATIONS IN A MOBILE PLATFORM	EMC Corporation
13/826924	9225717	EVENT-BASED DATA SIGNING VIA TIME-BASED ONE-TIME AUTHENTICATION PASSCODES	EMC Corporation
13/837063	9317419	SYSTEM AND METHOD FOR THIN PROVISIONING	EMC Corporation

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13/837259	9270655	CONFIGURABLE ONE-TIME AUTHENTICATION TOKENS WITH IMPROVED RESILIENCE TO ATTACKS	EMC Corporation
13/910380	9342795	ASSISTED LEARNING FOR DOCUMENT CLASSIFICATION	EMC Corporation
13/927559	9356919	AUTOMATED DISCOVERY OF KNOWLEDGE-BASED AUTHENTICATION COMPONENTS	EMC Corporation
13/931151	9160726	AUTHENTICATION SYSTEM WITH SELECTIVE AUTHENTICATION METHOD BASED ON RISK REASONING	EMC Corporation
13/931167	9118487	ASYMMETRIC ENCRYPTION SCHEME WITH EXPIRING REVOCABLE CERTIFICATES HAVING A PREDEFINED VALIDITY PERIOD	EMC Corporation
13/931188	9288049	CRYPTOGRAPHICALLY LINKING DATA AND AUTHENTICATION IDENTIFIERS WITHOUT EXPLICIT STORAGE OF LINKAGE	EMC Corporation
13/931453	9317224	QUANTIFYING UTILIZATION OF A DATA STORAGE SYSTEM BY A VIRTUAL STORAGE UNIT	EMC Corporation
13/931830	9130985	DATA DRIVEN DEVICE DETECTION	EMC Corporation
13006195	8195905	SYSTEMS AND METHODS OF QUOTA ACCOUNTING	EMC Corporation
13007498	8200632	SYSTEMS AND METHODS FOR ADAPTIVE COPY ON WRITE	EMC Corporation
13009586	8117270	METHOD AND APPARATUS FOR DEFINING MESSAGING IDENTITIES	EMC Corporation
13013279	8819386	MEMORY EFFICIENT USE OF DYNAMIC DATA STRUCTURES USED TO MANAGE SPARSELY ACCESSED DATA	EMC Corporation
13014668	9021583	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
13017158	8549595	COUNTING DISTINCT OCCURRENCES OF A FACT USING MOVING STATISTICS WINDOW	EMC Corporation
13022946	8805951	VIRTUAL MACHINES AND CLOUD STORAGE CACHING FOR CLOUD COMPUTING APPLICATIONS	EMC Corporation
13025032	8266084	SMART CONTAINERS	EMC Corporation
13025967	8346926	GRANTING ACCESS TO A CONTENT UNTI STORED ON AN OBJECT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
13030971	8069214	METHOD AND APPARATUS FOR MANAGING MESSAGING IDENTITIES	EMC Corporation
13035831	8380689	SYSTEMS AND METHODS FOR PROVIDING NONLINEAR JOURNALING	EMC Corporation
13036174	8479302	ACCESS CONTROL VIA ORGANIZATION CHARTS	EMC Corporation
13038280	8627479	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
13042548	8458289	METHODS AND APPARATUS FOR PROVIDING CONTENT	EMC Corporation
13044774		[REDACTED]	EMC Corporation
13050905	8352435	CONTINUOUS DATA REDUCTION FOR HIGHLY AVAILABLE SYNCHRONOUS MIRRORS	EMC Corporation
13051980		[REDACTED]	EMC Corporation

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13051986		MEMORY QUOTA	EMC Corporation
13051995	9104663	DYNAMIC ALLOCATION OF MEMORY FOR	EMC Corporation
		MEMORY INTENSIVE OPERATORS	
13065014	8380956	TECHNIQUES FOR STORING DATA TO DEVICE	EMC Corporation
		MIRRORS	
13065016	8713261	CACHING TECHNIQUES	EMC Corporation
13065549	8301812	TECHNIQUES FOR PERFORMING HOST PATH	EMC Corporation
		DETECTION VERIFICATION	
13065631	8380757	TECHNIQUES FOR PROVIDING A CONSOLIDATED	EMC Corporation
		SYSTEM CONFIGURATION VIEW USING	
		DATABASE CHANGE TRACKING AND	
		CONFIGURATION FILES	
13065735	8346788	TECHNIQUES FOR MAPPING DATA MODELS USING	EMC Corporation
		AN INTERMEDIATE PROCESSING LAYER	
13065738	8914404	TECHNIQUES FOR PERFORMING VIEW	EMC Corporation
		INDICATION MANAGEMENT	1
13065748	8910031	DIF-CRC BASED FAST HASHING	EMC Corporation
13065806	8843714	WRITE PACING SIMULATION TOOL	EMC Corporation
13065849	8898402	ASSIGNING STORAGE RESOURCES IN A	EMC Corporation
		VIRTUALIZATION ENVIRONMENT	_
13065851	8751739	DATA DEVICE SPARES	EMC Corporation
13069492	8655823	EVENT MANAGEMENT SYSTEM BASED ON	EMC Corporation
		MACHINE LOGIC	1
13069593	9292523	MANAGING DATA STORAGE	EMC Corporation
13069952	8601175	MANAGING ON-SITE ACCESS TO ECOSYSTEM	EMC Corporation
		FEATURES	
13070777	8499355	AUTHORIZATION SYSTEM HAVING A BLOOM	EMC Corporation
		FILTERED AUTHENTICATION LIST FOR FRAUD	1
		DETECTION	
13070780	8498995	OPTIMIZING DATA RETRIEVAL DURING EVENT	EMC Corporation
		DATA QUERY PROCESSING	1
13071926		[REDACTED]	EMC Corporation
13072458	8346728	SNAPSHOT INDEXING	EMC Corporation
13072463	9135122	DATA MOVER DISCOVERY OF OBJECT EXTENT	EMC Corporation
13073215	8996461	METHOD AND APPARATUS FOR REPLICATING THE	EMC Corporation
		PUNCH COMMAND	1
13073261	8601085	TECHNIQUES FOR PREFERRED PATH	EMC Corporation
		DETERMINATION	1
13073391		[REDACTED]	EMC Corporation
13073868	8538933	DEDUPLICATING RANGE OF DATA BLOCKS	EMC Corporation
13074164		[REDACTED]	EMC Corporation
			1
13074250	9069930	SECURITY INFORMATION AND EVENT	EMC Corporation
•		MANAGEMENT SYSTEM EMPLOYING SECURITY	
		BUSINESS OBJECTS AND WORKFLOWS	
13075073	8924355	CHECKPOINT RESTART	EMC Corporation
13075487	8977812	ITERATING IN PARALLEL FOR DEDUPLICATION	EMC Corporation
13075502	9390093	MANAGING DATA OBJECTS	EMC Corporation
13075602	,,,,,,,,	[REDACTED]	EMC Corporation
13075628	8572407	GPU ASSIST FOR STORAGE SYSTEMS	EMC Corporation

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13075639	9043793	VERIFICATION OF CONTROLS IN INFORMATION TECHNOLOGY INFRASTRUCTURE VIA	EMC Corporation
13075661	8442952	OBLIGATION ASSERTION RECOVERING IN DEDUPLICATION SYSTEMS	EMC Corporation
13075707	8442932		
	05//505	[REDACTED]	EMC Corporation
13075756	8566595	MANAGING SECURE COMMUNICATIONS WITH SOFTWARE ENVIRONMENTS	EMC Corporation
13075848	8346742	REMOTE VERIFICATION OF FILE PROTECTIONS OF CLOUD DATA STORAGE	EMC Corporation
13076010	8826041	IN-BAND DETECTION MECHANISM FOR	EMC Corporation
		DETECTING INTERMEDIATE LAYER IN A STORAGE I/O DRIVER STACK	•
13076056	8190784	IN-BAND TRANSPORT MECHANISM FOR	EMC Corporation
13070030	0150701	CARRYING COMMUNICATIONS AMONG	Livie corporation
		FUNCTIONAL COMPONENTS OF A STORAGE I/O	
		INTERFACT STACK	
13076490		[REDACTED]	EMC Corporation
13076534	8792862	PROVIDING ENHANCED SECURITY FOR WIRELESS	EMC Corporation
		TELECOMMUNICATIONS DEVICES	
13076594		[REDACTED]	EMC Corporation
13076619	8656455	MANAGING DATA LOSS PREVENTION POLICIES	EMC Corporation
13076747		[REDACTED]	EMC Corporation
13076869	8832812	METHODS AND APPARATUS FOR	EMC Corporation
		AUTHENTICATING A USER MULTIPLE TIMES	1
		DURING A SESSION	
13076911		[REDACTED]	EMC Corporation
13076925		[REDACTED]	EMC Corporation
13077076	8875244	METHODS AND APPARATUS FOR	EMC Corporation
		AUTHENTICATING A USER USING DYNAMIC	
		CLIENT-SIDE STORAGE VALUES	
13077103	8782174	UPLOADING AND DOWNLOADING UNSECURED	EMC Corporation
		FILES VIA A VIRTUAL MACHINE ENVIRONMENT	
13077153	8621649	PROVIDING A SECURITY-SENSITIVE	EMC Corporation
		ENVIRONMENT	
13077175	9354769	ELECTRONICALLY CONTROLLING COMMITMENT	EMC Corporation
		OF A CHANGE TO STORED	
13077213	8924966	CAPTURE/REVERT MODULE FOR COMPLEX	EMC Corporation
		ASSETS OF DISTRIBUTED INFORMATION	
		TECHNOLOGY INFRASTRUCTURE	
13077230	8694993	VIRTUALIZATION PLATFORM FOR SECURED	EMC Corporation
		COMMUNICATIONS BETWEEN A USER DEVICE	
		AND AN APPLICATION SERVER	77.60
13077246	8429362	JOURNAL BASED REPLICATION WITH A VIRTUAL	EMC Corporation
1205525		SERVICE LAYER	EN CO C
13077256		[REDACTED]	EMC Corporation
13077262	0062004	[REDACTED]	EMC Corporation
13077266	9063994	NETWORKED BASED REPLICATION OF	EMC Corporation
12077271	9726066	DISTRIBUTED VOLUMES	EMO C
13077271	8726066	JOURNAL BASED REPLICATION WITH ENHANCE	EMC Corporation
12077200		FAILOVER	EMO C
13077280	0460241	[REDACTED]	EMC Corporation
13077376	8468241	ADAPTIVE OPTIMIZATION ACROSSINFORMATION	EMC Corporation
		TECHNOLOGY INFRASTRUCTURE	

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13077429	8868845	DYNAMIC SINGLE/MULTI-READER, SINGLE-WRITER SPINLOCKS	EMC Corporation
13077553	9323671	MANAGING ENHANCED WRITE CACHING	EMC Corporation
13077615	8775775	DYNAMIC PREFETCH THROTTLING FOR MULTI- CONTROLLER SYSTEMS	EMC Corporation
13077679	8713282	LARGE SCALE DATA STORAGE SYSTEM WITH FAULT TOLERANCE	EMC Corporation
13077726	9026499	SYSTEM AND METHOD FOR RECOVERING FILE SYSTEMS BY RESTORING PARTITIONS	EMC Corporation
13077743		[REDACTED]	EMC Corporation
13077764		[REDACTED]	EMC Corporation
13077775		TIME-BASED DATA PARTITIONING	EMC Corporation
13077779		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
13077780		[REDACTED]	EMC Corporation
13077781		[REDACTED]	EMC Corporation
13077784		SYSTEM AND METHOD FOR VERIFYING	EMC Corporation
130///04		CONSISTENT POINTS IN FILE SYSTEMS	Livic Corporation
13077790		SYSTEM AND METHOD FOR MAINTAINING	EMC Corporation
13077790		CONSISTENT POINTS IN FILE SYSTEMS USING A	EMC Corporation
		PRIME DEPENDENCY LIST	
13077795	8832394	SYSTEM AND METHOD FOR MAINTAINING	EMC Comparation
130///95	8832394		EMC Corporation
12077020	0505416	CONSISTENT POINTS IN FILE SYSTEMS	EMC C
13077820	8595416	WEAR-LEVELING SYSTEM AND METHOD	EMC Corporation
13077837	8938569	BMC-BASED COMMUNICATION SYSTEM	EMC Corporation
13077844	8725923	BMC-BASED COMMUNICATION SYSTEM	EMC Corporation
13077860		[REDACTED]	EMC Corporation
13077863	8732342	I/O SCHEDULING SYSTEM AND METHOD	EMC Corporation
13077873	8639861	PSEUDO WRITING SYSTEM AND METHOD	EMC Corporation
13077935	8818954	CHANGE TRACKING	EMC Corporation
13077939	8938429	RESYNCHRONIZATION OF NONACTIVE AND ACTIVE SEGMENTS	EMC Corporation
13077942		[REDACTED]	EMC Corporation
13077961	9323581	SPACE INHERITANCE	EMC Corporation
13077965	8667140	DISTINGUISHING TENANTS IN A MULTI-TENANT CLOUD ENVIRONMENT	EMC Corporation
13079121	8140484	TECHNIQUES FOR DETERMINING AN IMPLEMENTED DATA PROTECTION POLICY	EMC Corporation
13079409	8140728	DATA PACKET ARBITRATION SYSTEM	EMC Corporation
13081009	8775356	QUERY ENHANCEMENT OF SEMANTIC WIKI FOR IMPROVED SEARCHING OF UNSTRUCTURED DATA	EMC Corporation
13085377	8825720	SCALING ASYNCHRONOUS RECLAMATION OF FREE SPACE IN DE-DUPLICATED MULTI- CONTROLLER STORAGE SYSTEMS	EMC Corporation
13086332	8145863	EFFICIENT DATA STORAGE USING TWO LEVEL DELTA RESEMBLANCE	EMC Corporation
13090166	8312006	CLUSTER STORAGE USING DELTA COMPRESSION	EMC Corporation
13096397	8705538	METHODS AND SYSTEMS FOR DYNAMIC DIVISION OF PATH CAPACITY	EMC Corporation
13100361	8397001	TECHNIQUES FOR DATA STORAGE CONFIGURATION	EMC Corporation

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13101959	8756684	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
13103644	8290947	FEDERATED SEARCH	EMC Corporation
13105500	8868980	MONITORING CIRCUIT	EMC Corporation
13105544	8536454	HOUSING SYSTEM FOR RECEPTACLES	EMC Corporation
13107769	8745003	SYNCHRONIZATION OF STORAGE USING COMPARISONS OF FINGERPRINTS OF BLOCKS	EMC Corporation
13107791	8782003	SYNCHRONIZATION OF STORAGE USING LOG FILES AND SNAPSHOTS	EMC Corporation
13111285	8296340	MANAGING FILE OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
13116913	8554809	CALCULATING QUOTA USAGE WITHOUT IMPACTING FILE SYSTEM SERVICES	EMC Corporation
13134728	8819374	TECHNIQUES FOR PERFORMING DATA MIGRATION	EMC Corporation
13134875	9009437	TECHNIQUES FOR SHARED DATA STORAGE PROVISIONING WITH THIN DEVICES	EMC Corporation
13135080	9223822	TECHNIQUES FOR PERFORMING INDICATION MANAGEMENT	EMC Corporation
13135156		[REDACTED]	EMC Corporation
13135261		[REDACTED]	EMC Corporation
13135265	9323655	LOCATION OF DATA AMONG STORAGE TIERS	EMC Corporation
13135266	9137336	DATA COMPRESSION TECHNIQUES	EMC Corporation
13135311	8601209	MAINTAINING DASD AND TAPE CONTINUOUS AVAILABILITY	EMC Corporation
13135315	8593918	MAINTAINING TAPE EMULATION CONSISTENCY	EMC Corporation
13136342	8726083	SYNCHRONIZED TAKING OF SNAPSHOT MEMORY IMAGES OF VIRTUAL MACHINES AND STORAGE SNAPSHOTS	EMC Corporation
13136359	8667490	ACTIVE/ACTIVE STORAGE AND VIRTUAL MACHINE MOBILITY OVER ASYNCHRONOUS DISTANCES	EMC Corporation
13136367	8689054	INCREASED DISTANCE OF VIRTUAL MACHINE MOBILITY OVER ASYNCHRONOUS DISTANCES	EMC Corporation
13136379	8726067	UTILIZING BOTH APPLICATION AND STORAGE NETWORKS FOR DISTRIBUTED STORAGE OVER ASYNCHRONOUS DISTANCES	EMC Corporation
13146342	8725789	METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
13152110	8234413	PARTITIONING A DATA STREAM USING EMBEDDED ANCHORS	EMC Corporation
13155273	8200721	SYSTEM AND METHOD FOR PROVIDING WRITE- ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
13155648	9075991	LOOTING DETECTION AND REMEDIATION	EMC Corporation
13155734		[REDACTED]	EMC Corporation
13158498	9383928	REPLICATION TECHNIQUES WITH CONTENT ADDRESSABLE STORAGE	EMC Corporation
13159780		[REDACTED]	EMC Corporation

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13161587	9229638	ADAPTIVE FLOW CONTROL FOR NETWORKED STORAGE	EMC Corporation
13161666	8903828	METHOD AND SYSTEM FOR CONFIGURING A MULTI-PATH INDEX	EMC Corporation
13161683		[REDACTED]	EMC Corporation
13163019		[REDACTED]	EMC Corporation
13166096	8856589	FAILURE PROTECTION IN AN ENVIRONMENT INCLUDING VIRTUALIZATION OF NETWORKED STORAGE RESOURCES	EMC Corporation
13166128	8972361	PROVIDING SYSTEM MANAGEMENT SERVICES	EMC Corporation
13168163	8850208	CERTIFICATE CROSSCHECKING BY MULTIPLE CERTIFICATE AUTHORITIES	EMC Corporation
13168182	8521691	SEAMLESS MIGRATION BETWEEN REPLICATION TECHNOLOGIES	EMC Corporation
13168299	8521694	LEVERAGING ARRAY SNAPSHOTS FOR IMMEDIATE CONTINUOUS DATA PROTECTION	EMC Corporation
13168329	8745327	METHODS, SYSTEMS, AND COMPUTER READABLE MEDIUM FOR CONTROLLING PRIORITIZATION OF TIERING AND SPIN DOWN FEATURES IN A DATA STORAGE SYSTEM	EMC Corporation
13168391	8805786	REPLICATING SELECTED SNAPSHOTS FROM ONE STORAGE ARRAY TO ANOTHER, WITH MINIMAL DATA TRANSMISSION	EMC Corporation
13168479	8745004	REVERTING AN OLD SNAPSHOT ON A PRODUCTION VOLUME WITHOUT A FULL SWEEP	EMC Corporation
13168593	8762662	METHOD AND APPARATUS FOR APPLICATION MIGRATION VALIDATION	EMC Corporation
13169167	8752172	PROCESSING EMAIL MESSAGES BASED ON AUTHENTICITY ANALYSIS	EMC Corporation
13169179	8856531	MESSAGE BUS KEY AGREEMENT SCHEME	EMC Corporation
13169272	8719522	VIRTUAL DESKTOP BACKUP AND RESTORE	EMC Corporation
13169668		[REDACTED]	EMC Corporation
13169679	8805796	DEDUPLICATING RANGE OF DATA BLOCKS	EMC Corporation
13170242	8924726	ROBUST MESSAGE ENCRYPTION	EMC Corporation
13170345	9235971	SERVICE WINDOW OPTIMIZED SYSTEM ALERT ENGINE	EMC Corporation
13170732		[REDACTED]	EMC Corporation
13171100		[REDACTED]	EMC Corporation
13171759	8813234	GRAPH-BASED APPROACH TO DETERRING PERSISTENT SECURITY THREATS	EMC Corporation
13171869	9020987	MANAGING UPDATING OF METADATA OF FILE SYSTEMS	EMC Corporation
13172074	9239908	MANAGING ORGANIZATION BASED SECURITY RISKS	EMC Corporation
13172106	9298493	MANAGING SYSTEM I/O LOAD	EMC Corporation
13172144	8447873	MANAGING OBJECT MODEL COMMUNICATIONS	EMC Corporation
13172157	8601108	CREDENTIAL AUTHENTICATION AND AUTHORIZATION IN A SERVER DEVICE	EMC Corporation
13172172		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13172517	8645654	SELECTING PHYSICAL STORAGE IN DATA	EMC Corporation
131/231/	0043034	STORAGE SYSTEMS	Livie corporation
13172610	9026737	ENHANCING MEMORY BUFFERING BY USING	EMC Corporation
15172010	3020737	SECONDARY STORAGE	2.vie corporation
13172687	8484356	SYSTEM AND METHOD FOR ALLOCATING A	EMC Corporation
15112001		STORAGE UNIT FOR BACKUP IN A STORAGE	21110 corporation
		SYSTEM WITH LOAD BALANCING	
13172692		[REDACTED]	EMC Corporation
13172979	8904531	DETECTING ADVANCED PERSISTENT THREATS	EMC Corporation
13172999	9282114	GENERATION OF ALERTS IN AN EVENT	EMC Corporation
		MANAGEMENT SYSTEM BASED UPON RISK	
13173056	9037548	DYNAMICALLY UPDATED DATA MANAGEMENT	EMC Corporation
		PROCESSING PLANS GENERATED OUTSIDE A	
		STORAGE ARRAY	
13173410		[REDACTED]	EMC Corporation
13173422		[REDACTED]	EMC Corporation
13173455		[REDACTED]	EMC Corporation
13173524	8832030	SHAREPOINT GRANULAR LEVEL RECOVERIES	EMC Corporation
13173553	8843450	WRITE CAPABLE EXCHANGE GRANULAR LEVEL	EMC Corporation
		RECOVERIES	
13173607	8650405	AUTHENTICATION USING DYNAMIC, CLIENT	EMC Corporation
		INFORMATION BASED PIN	
13173622	8938425	MANAGING LOGICAL VIEWS OF STORAGE	EMC Corporation
13173726	8601588	METHOD AND SYSTEM FOR DETECTION OF CLONE	EMC Corporation
		AUTHENTICATOR	1
13173741	8843781	MANAGING DRIVE ERROR INFORMATION IN DATA	EMC Corporation
		STORAGE SYSTEMS	1
13173874	8621237	PROTECTING AGAINST CRYPTOGRAPHIC KEY	EMC Corporation
		EXPOSURE IN SOURCE CODE	_
13173877	8505097	REFRESH-AND-ROTATION PROCESS FOR	EMC Corporation
		MINIMIZING RESOURCE VULNERABILITY TO	
		PERSISTENT SECURITY THREATS	
13174047		[REDACTED]	EMC Corporation
13174263		[REDACTED]	EMC Corporation
13174305		[REDACTED]	EMC Corporation
13174326		[REDACTED]	EMC Corporation
13174341	9015432	ESTABLISHING A MAPPING TO A VIRTUAL DISK	EMC Corporation
13174384	9003138	READ SIGNATURE COMMAND	EMC Corporation
13174402	8862546	VIRTUAL ACCESS ROLL	EMC Corporation
13174427		[REDACTED]	EMC Corporation
13174444	8380885	HANDLING ABORT COMMANDS IN REPLICATION	EMC Corporation
13174452	8706701	SCALABLE CLOUD FILE SYSTEM WITH EFFICIENT	EMC Corporation
		INTEGRITY CHECKS	
13174499	8595198	COMPRESSION FORECASTING FOR A	EMC Corporation
		DEDUPLICATING STORAGE SYSTEM	
13174504	8751463	CAPACITY FORECASTING FOR A DEDUPLICATING	EMC Corporation
		STORAGE SYSTEM	
13174639	8626991	MULTI-LUN SSD OPTIMIZATION SYSTEM AND	EMC Corporation
		METHOD	
13174666	8843443	EFFICIENT BACKUP OF VIRTUAL DATA	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13174675	8671075	CHANGE TRACKING INDICES IN VIRTUAL MACHINES	EMC Corporation
13174677	8849769	VIRTUAL MACHINE FILE LEVEL RECOVERY	EMC Corporation
13174681	8949829	VIRTUAL MACHINE DISASTER RECOVERY	EMC Corporation
13174740	8819077	DYNAMIC DATA STRUCTURES	EMC Corporation
13174751	8719305	OBJECT TYPE DEFINITIONS	EMC Corporation
13177968		[REDACTED]	EMC Corporation
13179164	8694554	CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
13180341	8800884	METHOD FOR CONTROLLING COOLING IN A DATA STORAGE SYSTEM	EMC Corporation
13181060	9106460	RUNNING DISPARITY COMPUTATION PREDICTOR	EMC Corporation
13181277	8707080	SIMPLE CIRCULAR ASYNCHRONOUS CLOCK DOMAIN CROSSING TECHNIQUE FOR DIGITAL DATA	EMC Corporation
13182669		SYSTEM AND METHOD FOR DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
13184430		SYSTEM AND METHOD FOR AUTOMATIC DETECTION OF ANOMALOUS RECURRENT BEHAVIOR	EMC Corporation
13192352	8271456	EFFICIENT BACKUP DATA RETRIEVAL	EMC Corporation
13192947	8751878	AUTOMATIC FAILOVER DURING ONLINE DATA	EMC Corporation
		MIGRATION	
13198812	8452773	MAPPING TERMS BETWEEN MULTIPLE TAXONOMIES	EMC Corporation
13200139	8868593	USER INTERFACE CONTENT VIEW SEARCHING	EMC Corporation
13200288	8621178	TECHNIQUES FOR DATA STORAGE ARRAY VIRTUALIZATION	EMC Corporation
13200569	8825964	ADAPTIVE INTEGRATION OF CLOUD DATA SERVICES WITH A DATA STORAGE SYSTEM	EMC Corporation
13200658	8880801	TECHNIQUES FOR RELIABILITY AND AVAILABILITY ASSESSMENT OF DATA STORAGE CONFIGURATIONS	EMC Corporation
13200662	8601025	TECHNIQUES USING A BIDIRECTIONAL GRAPH FOR REPORTING TO CLIENTS	EMC Corporation
13200675	8418192	TECHNIQUES USING AN API FOR ASPECT WEAVING	EMC Corporation
13200777		[REDACTED]	EMC Corporation
13206211	8375451	SECURITY FOR SCANNING OBJECTS	EMC Corporation
13209533	8176276	TECHNIQUES FOR PRODUCING A CONSISTENT COPY OF SOURCE DATA AT A TARGET LOCATION	EMC Corporation
13211047	8800023	REMOTE ACCESS ARCHITECTURE ENABLING A CLIENT TO PERFORM AN OPERATION	EMC Corporation
13213196		[REDACTED]	EMC Corporation
13214019	8554918	DATA MIGRATION WITH LOAD BALANCING AND OPTIMIZATION	EMC Corporation
13214988	8234475	SAVE SET BUNDLING FOR STAGING	EMC Corporation
13216013	8756249	METHOD AND APPARATUS FOR EFFICIENTLY	EMC Corporation
		SEARCHING DATA IN A STORAGE SYSTEM	

Application	Registration		
Number	Number	Title	Owner
13216020	8825626	METHOD AND SYSTEM FOR DETECTING UNWANTED CONTENT OF FILES	EMC Corporation
13216025	8195614	INCREMENTAL GARBAGE COLLECTION OF DATA IN SECONDARY STORAGE	EMC Corporation
13216066	8560525	QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
13216558	8176277	REPLICATION OF DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13217400	8656100	SYSTEM AND METHOD FOR MANAGING PROVISIONING OF STORAGE RESOURCES IN A NETWORK WITH VIRTUALIZATION OF RESOURCES IN SUCH A NETWORK	EMC Corporation
13220775	8689355	SECURE RECOVERY OF CREDENTIALS	EMC Corporation
13222036	8244777	MODEL DRIVEN COMPLIANCE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
13222057	8570903	SYSTEM AND METHOD FOR MANAGING A VIRTUAL DOMAIN ENVIRONMENT TO ENABLE ROOT CAUSE AND IMPACT ANALYSIS	EMC Corporation
13222321	8924665	VIRTUAL ORDERED WRITES TRANSFER LOG	EMC Corporation
13225224	8412688	DELEGATED REFERENCE COUNT BASE FILE VERSIONING	EMC Corporation
13225356	8713356	ERROR DETECTION AND RECOVERY TOOL FOR LOGICAL VOLUME MANAGEMENT IN A DATA STORAGE SYSTEM	EMC Corporation
13225912	8694724	MANAGING DATA STORAGE BY PROVISIONING CACHE AS A VIRTUAL DEVICE	EMC Corporation
13226546	8898112	WRITE SIGNATURE COMMAND	EMC Corporation
13226878	8564453	INDICATING ERRORS IN CONNECTION WITH DEVICES	EMC Corporation
13231695	8706679	COOPERATIVE LOCKING BETWEEN MULTIPLE INDEPENDENT OWNERS OF DATA SPACE	EMC Corporation
13233920	8972352	PROBE BASED BACKUP	EMC Corporation
13234435		[REDACTED]	EMC Corporation
13238426	8719497	USING DEVICE SPOOFING TO IMPROVE RECOVERY TIME IN A CONTINUOUS DATA PROTECTION ENVIRONMENT	EMC Corporation
13238646	8782633	UPGRADING FIRMWARE TO A POWER SUPPLY	EMC Corporation
13239863	8683568	USING PACKET INTERCEPTION TO INTEGRATE RISK-BASED USER AUTHENTICATION INTO ONLINE SERVICES	EMC Corporation
13240006		[REDACTED]	EMC Corporation
13240869	8689048	NON-LOGGING RESUMABLE DISTRIBUTED CLUSTER UPGRADE	EMC Corporation
13240923	8862606	EXECUTING CORRELATED AND MULTI-ROW SUBQUERIES IN A MPP DATABASE	EMC Corporation
13245926	8904524	DETECTION OF FAST FLUX NETWORKS	EMC Corporation
13245962	5,01221	[REDACTED]	EMC Corporation
13245966	9122546	RAPID PROCESSING OF EVENT NOTIFICATIONS	EMC Corporation
13246023	8701174	CONTROLLING ACCESS TO A PROTECTED RESOURCE USING VIRTUAL DESKTOP AND ONGOING AUTHENTICATION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13246025	8548459	REPLACING FIELD HARDWARD INVOLVING	EMC Corporation
		UTILIZATION OF A SMART PHONE	1
13246126		[REDACTED]	EMC Corporation
13246374		[REDACTED]	EMC Corporation
13246457	8677472	MULTI-POINT COLLECTION OF BEHAVIORAL	EMC Corporation
		DATA RELATING TO A VIRTUALIZED BROWSING	<b>1</b>
		SESSION WITH A SECURE SERVER	
13246535	8331546	ENHANCED SERVICES PROVIDED USING	EMC Corporation
		COMMUNICATION REDIRECTION AND	1
		PROCESSING	
13246937	8621586	USING BASELINE PROFILES IN ADAPTIVE	EMC Corporation
		AUTHENTICATION	1
13247034	8645681	TECHNIQUES FOR DISTRIBUTING SECURE	EMC Corporation
		COMMUNICATION SECRETS	1
13247167	9239916	USING SPATIAL DIVERSITY WITH SECRETS	EMC Corporation
13247181		[REDACTED]	EMC Corporation
13247205		[REDACTED]	EMC Corporation
13247364	8495251	HARDWARE METHOD FOR DETECTING TIMEOUT	EMC Corporation
		CONDITIONS IN A LARGE NUMBER OF DATA	
		CONNECTIONS	
13247505		[REDACTED]	EMC Corporation
13247623		[REDACTED]	EMC Corporation
13247753	9213717	MANAGING CONCURRENT I/OS IN FILE SYSTEMS	EMC Corporation
13247859	8661062	MANAGING ANALYSIS OF ACTIVITY DATA	EMC Corporation
13248068	8812899	MANAGING READ CACHING	EMC Corporation
13248127	0012077	[REDACTED]	EMC Corporation
13248178	9256381	MANAGING DEGRADED STORAGE ELEMENTS IN	EMC Corporation
13240170	7230301	DATA STORAGE SYSTEMS	Livic Corporation
13248219	9298636	MANAGING DATA STORAGE	EMC Corporation
13248223	9128943	METHOD AND SYSTEM FOR TRACKING RE-SIZING	EMC Corporation
13240223	7120743	AND RE-CREATION OF VOLUMES CREATED FOR	Livic corporation
		MAKING INCREMENTAL BACKUPS	
13248306	8949526	RESERVING STORAGE SPACE IN DATA STORAGE	EMC Corporation
132 10300	0717520	SYSTEMS	Livie corporation
		STOTEMES	
13248389	9135116	CLOUD ENABLED FILESYSTEMS	EMC Corporation
13210307	7133110	CHOOD ENTINEED THEIST STENIS	Livie corporation
13248408		[REDACTED]	EMC Corporation
13248477	8918621	BLOCK ADDRESS ISOLATION FOR FILE SYSTEMS	EMC Corporation
13248572	8739290	GENERATING ALERTS IN EVENT MANAGEMENT	EMC Corporation
13240372	0737270	SYSTEMS	Livic Corporation
13248573		[REDACTED]	EMC Corporation
13248589	9104500	LOCK-FREE JOB SCHEDULER FOR MULTI-	EMC Corporation
13270307	7104200	PROCESSOR SYSTEMS	Livic Corporation
13248752		[REDACTED]	EMC Corporation
13248918	8914595	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
13248926	8543609	SNAPSHOTS IN DEDUPLICATION  SNAPSHOTS IN DEDUPLICATION	EMC Corporation
13248939	8935498	SPLITTER BASED HOT MIGRATION	EMC Corporation
13248978	8806161	MIRRORING SPLITTER META DATA	EMC Corporation
13249908	8661068	MANAGING GLOBAL METADATA CACHES IN	EMC Corporation
13243000	3001008	DATA STORAGE SYSTEMS	Elvic Corporation
		DUIT PIONAGE PIPIEMP	1

Application Number	Registration Number	Title	Owner
13249170	8886995	FAULT TOLERANT STATE MACHINE FOR CONFIGURING SOFTWARE IN A DIGITAL COMPUTER	EMC Corporation
13249300	9037793	MANAGING DATA STORAGE	EMC Corporation
13249302	9081594	MANAGING DATA STORAGE SYSTEMS IN VIRTUAL SYSTEMS BASED ON STORAGE AWARENESS	EMC Corporation
13249323	8959287	MANAGING CACHES FOR REPORTING STORAGE SYSTEM INFORMATION	EMC Corporation
13249330	9361320	MODELING BIG DATA	EMC Corporation
13249335	9031992	ANALYZING BIG DATA	EMC Corporation
13249343	8886751	METHODS AND APPARATUS FOR A DATA DRIVEN SYSTEM IMPLEMENTATION USING MODEL COMPONENTS	EMC Corporation
13249365	8813026	METHODS AND APPARATUS FOR STORING INFORMATION FOR COMPONENTS OF A SYSTEM IN MODEL COMPONENT FILES TO PROVIDE A WORLD VIEW OF THE SYSTEM	EMC Corporation
13249370	9275063	REPLICATION OPTIMIZATED IO	EMC Corporation
13249372		[REDACTED]	EMC Corporation
13249422	9075642	CONTROLLING ACCESS TO RESOURCES USING INDEPENDENT AND NESTED HYPERVISORS IN A STORAGE SYSTEM ENVIRONMENT	EMC Corporation
13249424		[REDACTED]	EMC Corporation
13249453	9003019	METHODS AND SYSTEMS FOR UTILIZATION TRACKING AND NOTIFICATION OF CLOUD RESOURCES	EMC Corporation
13249481	8726337	COMPUTING WITH PRESENTATION LAYER FOR MULTIPLE VIRTUAL MACHINES	EMC Corporation
13249484	8683548	COMPUTING WITH POLICY ENGINE FOR MULTIPLE VIRTUAL MACHINES	EMC Corporation
13249506	8898351	DYNAMIC COMPRESSION OF AN I/O DATA BLOCK	EMC Corporation
13249559	9367452	SYSTEM AND METHOD FOR APPORTIONING STORAGE	EMC Corporation
13249585	9367453	SYSTEM AND METHOD FOR MIGRATING CACHE DATA	EMC Corporation
13249634		[REDACTED]	EMC Corporation
13249980	8627421	METHODS AND APPARATUS FOR AUTHENTICATING A USER BASED ON IMPLICIT USER MEMORY	EMC Corporation
13250225	8699713	KEY UPDATE WITH COMPROMISE DETECTION	EMC Corporation
13250256		[REDACTED]	EMC Corporation
13250303	8990162	METADATA GENERATION FOR INCREMENTAL BACKUP	EMC Corporation
13250310	8725869	CLASSIFYING SITUATIONS FOR SYSTEM MANAGEMENT	EMC Corporation
13250314	8984220	STORAGE PATH MANAGEMENT HOST VIEW	EMC Corporation
13250327	8713359	AUTONOMOUS PRIMARY-MIRROR SYNCHRONIZED RESET	EMC Corporation
13250507	8732282	MODEL FRAMEWORK TO FACILITATE ROBUST PROGRAMMING OF DISTRIBUTED WORKFLOWS	EMC Corporation
13250512	8520533	STORAGE PATH MANAGEMENT BUS VIEW	EMC Corporation
13250557	8849878	EFFICIENT DATA REHYDRATION	EMC Corporation

Application Number	Registration Number	Title	Owner
13250583	8751698	STORAGE PATH MANAGEMENT HOST AGENT	EMC Corporation
13250583	8898407	INCREMENTAL BLOCK BASED BACKUP	EMC Corporation
13250620	8769224	DISCOVERING NEW PHYSICAL MACHINES FOR	EMC Corporation
13230020	8/09224	PHYSICAL TO VIRTUAL CONVERSION	EMC Corporation
13250637	8738870	BLOCK BASED BACKUP	EMC Corporation
13250670	8949208	SYSTEM AND METHOD FOR BULK DATA	EMC Corporation
13230070	0949200	MOVEMENT BETWEEN STORAGE TIERS	ENIC Corporation
13250678		[REDACTED]	EMC Corporation
13250678	8943032	SYSTEM AND METHOD FOR DATA MIGRATION	EMC Corporation
13230004	0743032	USING HYBRID MODES	Livic corporation
13250692		[REDACTED]	EMC Corporation
13250732	9026496	EFFICIENT BUILDING OF RESTORE LIST	EMC Corporation
13250769	8730678	CABLE MANAGMENT APPARATUS	EMC Corporation
13230707	8730078	CABLE MANAGMENT ALTAKATOS	LIVIC Corporation
13251151	9037838	MULTIPROCESSOR MESSAGING SYSTEM	EMC Corporation
13251155	7037030	[REDACTED]	EMC Corporation
13251159	8814424	POWER MEASUREMENT TRANSDUCER	EMC Corporation
13251163	0014424	[REDACTED]	EMC Corporation
13251166	9069039	POWER MEASUREMENT TRANSDUCER	EMC Corporation
13251170	8814425	POWER MEASUREMENT TRANSDUCER	EMC Corporation
13231170	0014423	TOWER WILL SOREWEIVE TRANSDOCER	Livic corporation
13251184	9229951	KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
13251186	9311327	UPDATING KEY VALUE DATABASES FOR VIRTUAL	EMC Corporation
13231100	7311327	BACKUPS	Livic corporation
13251188	9158632	EFFICIENT FILE BROWSING USING KEY VALUE	EMC Corporation
15251100	7130032	DATABASES FOR VIRTUAL BACKUPS	Livie corporation
13251189	8849777	FILE DELETION DETECTION IN KEY VALUE	EMC Corporation
		DATABASES FOR VIRTUAL BACKUPS	
13275706		TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
13281574	8756695	ANALYSIS OF BINARY CODE	EMC Corporation
13282376	8903877	EXTENT OF DATA BLOCKS AS AN ALLOCATION	EMC Corporation
		UNIT IN A UNIX- BASED FILE SYSTEM	
13284075	8498968	METHOD AND APPARATUS FOR MANAGING AND	EMC Corporation
		ARCHIVING PERFORMANCE INFORMATION	_
		RELATING TO STORAGE SYSTEM	
13287866	8671414	ACCELERATING DATA INTENSIVE COMPUTING	EMC Corporation
		APPLICATIONS BY REDUCING OVERHEAD	
		ASSOCIATED WITH COMMUNICATION	
		PROTOCOLS	
13287901		[REDACTED]	EMC Corporation
13290838		[REDACTED]	EMC Corporation
13290858	9275059	GENOME BIG DATA INDEXING	EMC Corporation
13296334	8990495	SECURE DATA STORAGE IN RAID MEMORY	EMC Corporation
		DEVICES	
13297911	8793371	COMMON CONFIGURATION WAREHOUSE FOR A	EMC Corporation
		STORAGE SYSTEM	
13301323	8335890	ASSOCIATING AN IDENTIFIER WITH A CONTENT	EMC Corporation
		UNIT	
13301722	8417689	PROGRAMMING MODEL FOR TRANSPARENT	EMC Corporation
	1	PARALLELIZATION OF COMBINATORIAL	
		OPTIMIZATION	

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Number	Number	Title	Owner
13303069	8238953	DATA MESSAGE PROCESSING	EMC Corporation
13308193		[REDACTED]	EMC Corporation
13308262	8738857	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
13300202	0730027	PERFORMANCE	21.10 Corporation
13308305	9208098	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
13308345	8738858	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
13308366	8725939	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
13308378		[REDACTED]	EMC Corporation
13308402	0710060	[REDACTED]	EMC Corporation
13308877	8712962	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
13310486	8972353	SYSTEM AND METHOD OF ENHANCED BACKUP	EMC Corporation
12211500	0040560	AND RECOVERY CONFIGURATION	EMC Commontion
13311590	8949560	VALIDATING AN ABILITY TO ROLL BACK DATA TO AN EARLIER POINT IN TIME FOR DATA	EMC Corporation
		ASSOCIATED WITH A VIRTUAL STORE	
13313070	8478303	DETERMINING A CURRENT LOCATION OF A DATA	EMC Corporation
13313070	0470303	STORAGE SYSTEM	Livic corporation
13314849	8838849	LINK SHARING FOR MULTIPLE REPLICATION	EMC Corporation
15511015	0050017	MODES	21.10 Corporation
13315573	8971916	LOCATING A DATA STORAGE SYSTEM	EMC Corporation
13316946		SYSTEM AND METHOD FOR REVIEWING ROLE	EMC Corporation
		DEFINITIONS	•
13317792	8600943	PORTING REPLICATION RELATIONSHIPS	EMC Corporation
13324806	8732418	SHADOW REGISTRY	EMC Corporation
13325131	8752144	TARGETED BIOMETRIC CHALLENGES	EMC Corporation
13329072	9026505	STORING DIFFERENCES BETWEEN	EMC Corporation
		PRECOMPRESSED AND RECOMPRESSED DATA	
12220277	0.470700	FILES	EMO C
13329377	8478688	RAPID TRANSACTION PROCESSING	EMC Corporation
13329469	9158828	TECHNIQUES USING ASSOCIATED OBJECT PROPERTIES	EMC Corporation
13329685	8375385	TECHNIQUES FOR PARALLEL DRIVE UPGRADE	EMC Corporation
13329063	6373363	WHILE MAINTAINING HOST ACCESSIBILITY	Livic Corporation
13329725	8464101	CAS COMMAND NETWORK REPLICATION	EMC Corporation
13329758	8966211	TECHNIQUES FOR DYNAMIC BINDING OF DEVICE	EMC Corporation
10023700	0,00211	IDENTIFIERS TO DATA STORAGE DEVICES.	
13329954		[REDACTED]	EMC Corporation
13331010	9047017	TECHNIQUES FOR AUTOMATED EVALUATION	EMC Corporation
		AND MOVEMENT OF DATA BETWEEN STORAGE	•
		TIERS	
13331478	8930568	METHOD AND APPARATUS FOR ENABLING	EMC Corporation
		ACCESS TO STORAGE	
4.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0			 
13332132	9367397	RECOVERING DATA LOST IN DATA DE-	EMC Corporation
12222201	0050122	DUPLICATION SYSTEM	EMO C
13332291	8850133	USING DYNAMIC BLOCK SIZES IN DATA	EMC Corporation
13332474	8972678	TRANSFER OPERATIONS  EFFICIENT PACKUD DEDLICATION	EMC Corporation
133324/4	09/20/8	EFFICIENT BACKUP REPLICATION	ENIC Corporation

Application	Registration		
Number	Number	Title	Owner
13332563	9053027	TECHNIQUES FOR MAINTAINING AND RESTORING DIRTY CACHES ACROSS CPU RESETS	EMC Corporation
13332889		[REDACTED]	EMC Corporation
13332936	8631475	ORDERING INPUTS FOR ORDER DEPENDENT PROCESSING	EMC Corporation
13332953		[REDACTED]	EMC Corporation
13333233	8601544	COMPUTER SYSTEM EMPLOYING DUAL-BAND AUTHENTICATION USING FILE OPERATIONS BY TRUSTED AND UNTRUSTED MECHANISMS	EMC Corporation
13333307	8700678	DATA PROVENANCE IN COMPUTING INFRASTRUCTURE	EMC Corporation
13333887		[REDACTED]	EMC Corporation
13334479	8688927	CAPACITY FORECASTING FOR BACKUP STORAGE	EMC Corporation
13334499	9026752	EFFICIENTLY ESTIMATING COMPRESSION RATIO IN A DEDUPLICATING FILE SYSTEM	EMC Corporation
13334506	8903991	CLUSTERED COMPUTER SYSTEM USING ARP PROTOCOL TO IDENTIFY CONNECTIVITY ISSUES	EMC Corporation
13334636	8782465	MANAGING DRIVE PROBLEMS IN DATA STORAGE SYSTEMS BY TRACKING OVERALL RETRY TIME	EMC Corporation
13334665	8838858	MANAGING COMMAND LINE INTERFACE COMMANDS	EMC Corporation
13334702	9087322	ADAPTING SERVICE PROVIDER PRODUCTS FOR MULTI-TENANCY USING TENANT-SPECIFIC SERVICE COMPOSITION FUNCTIONS	EMC Corporation
13334709	9008303	METHODS AND APPARATUS FOR GENERATING FORWARD SECURE PSEUDORANDOM NUMBERS	EMC Corporation
13334723	8712963	METHOD AND APPARATUS FOR CONTENT-AWARE RESIZING OF DATA CHUNKS FOR REPLICATION	EMC Corporation
13334732	8639669	METHOD AND APPARATUS FOR DETERMINING OPTIMAL CHUNK SIZES OF A DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13334749	8782218	ACTIVITY STREAM BASED ALERT PROCESSING FOR INFORMATION TECHNOLOGY INFRASTRUCTURE	EMC Corporation
13334853	8688703	METADATA CACHE SUPPORTING MULTIPLE HETEROGENEOUS SYSTEMS	EMC Corporation
13334884	8898444	TECHNIQUES FOR PROVIDING A FIRST COMPUTER SYSTEM ACCESS TO STORAGE DEVICES INDIRECTLY THROUGH A SECOND COMPUTER SYSTEM	EMC Corporation
13335252	9367687	METHOD FOR MALWARE DETECTION USING DEEP INSPECTION AND DATA DISCOVERY AGENTS	EMC Corporation
13335265		[REDACTED]	EMC Corporation
13335298		[REDACTED]	EMC Corporation
13335316	8825919	PATH PERFORMANCE DATA COLLECTION	EMC Corporation
13335416	8914338	OUT-OF-CORE SIMILARITY MATCHING	EMC Corporation
13335459	9286303	UNIFIED CATALOG SERVICE	EMC Corporation
13335746	8631052	EFFICIENT CONTENT META-DATA COLLECTION AND TRACE GENERATION FROM DEDUPLICATED STORAGE	EMC Corporation
13335750	8667032	EFFICIENT CONTENT META-DATA COLLECTION AND TRACE GENERATION FROM DEDUPLICATED STORAGE	EMC Corporation

Application	Registration	and a	_
Number	Number	Title	Owner
13336043		[REDACTED]	EMC Corporation
13336056		[REDACTED]	EMC Corporation
13336236	8707050	INTEGRITY SELF-CHECK OF SECURE CODE WITHIN A VM ENVIRONMENT USING NATIVE VM CODE	EMC Corporation
13336380	8924668	METHOD AND APPARATUS FOR AN APPLICATION- AND OBJECT-LEVEL I/O SPLITTER	EMC Corporation
13336410	8966293	METHOD AND APPARATUS FOR ALLOCATION OF POWER CONSUMPTION OF A COMPUTER STORAGE SYSTEM TO ITS TENANTS	EMC Corporation
13336545	8839028	MANAGING DATA AVAILABILITY IN STORAGE SYSTEMS	EMC Corporation
13336570	8701199	ESTABLISHING A TRUSTED SESSION FROM A NON- WEB CLIENT USING ADAPTIVE AUTHENTICATION	EMC Corporation
13336573	8902045	AUTHENTICATION USING PULSE DATA	EMC Corporation
13336613	8838556	MANAGING DATA SETS BY REASONING OVER CAPTURED METADATA	EMC Corporation
13336704		[REDACTED]	EMC Corporation
13336849	8774410	SECRET SHARING IN CRYPTOGRAPHIC DEVICES VIA CONTROLLED RELEASE OF PLAINTEXT INFORMATION	EMC Corporation
13336894	9158804	METHOD AND SYSTEM FOR EFFICIENT FILE- BASED BACKUPS BY REVERSE MAPPING CHANGED SECTORS/BLOCKS ON AN NTFS VOLUME TO FILES	EMC Corporation
13336898		[REDACTED]	EMC Corporation
13337442	9154556	MANAGING ACCESS TO A LIMITED NUMBER OF COMPUTERIZED SESSIONS	EMC Corporation
13337605	8738813	METHOD AND APPARATUS FOR ROUND TRIP SYNCHRONOUS REPLICATION USING SCSI READS	EMC Corporation
13337651	8769336	METHOD AND APPARATUS FOR PREVENTING JOURNAL LOSS ON FAILOVER IN SYMMETRIC CONTINUOUS DATA PROTECTION REPLICATION	EMC Corporation
13337678	8996827	CREATING AND MAINTAINING CLONES IN CONTINUOUS DATA PROTECTION	EMC Corporation
13337817	9021271	INJECTING CODE DECRYPTED BY A HARDWARE DECRYPTION MODULE INTO JAVA APPLICATIONS	EMC Corporation
13338131	8578093	MANAGING INDICATIONS IN DATA STORAGE SYSTEMS	EMC Corporation
13338140		[REDACTED]	EMC Corporation
13338413	8528085	METHOD AND SYSTEM FOR PREVENTING DE- DUPLICATION SIDE-CHANNEL ATTACKS IN CLOUD STORAGE SYSTEMS	EMC Corporation
13338543	9164864	MINIMIZING FALSE NEGATIVE AND DUPLICATE	EMC Corporation
123300 13	710.001	HEALTH MONITORING ALERTS IN A DUAL MASTER SHARED NOTHING DATABASE APPLIANCE	Zine corporation
12220616		IDED A CTEDI	EMC Company
13338616		[REDACTED]	EMC Corporat

Application	Registration		
Number	Number	Title	Owner
13338619		[REDACTED]	EMC Corporation
13338719		[REDACTED]	EMC Corporation
13338788	8977826	EXTENT COMMANDS IN REPLICATION	EMC Corporation
13338808	9031913	FILE REPLICATION	EMC Corporation
13338864	8706683	KNOWLEDGE MANAGEMENT ACROSS	EMC Corporation
13330001	0700003	DISTRIBUTED ENTITY	Livie corporation
13338886	9361269	KNOWLEDGE MANAGEMENT ACROSS	EMC Corporation
		DISTRIBUTED ENTITY USING PREDICTIVE	1
		ANALYSIS	
13339289	8996490	MANAGING LOGICAL VIEWS OF DIRECTORIES	EMC Corporation
13339309	9135123	MANAGING GLOBAL DATA CACHES FOR FILE	EMC Corporation
		SYSTEM	1
13339570	8880027	AUTHENTICATING TO A COMPUTING DEVICE	EMC Corporation
		WITH A NEAR-FIELD COMMUNICATIONS CARD	1
13339585	9152818	TECHNIQUES FOR MANAGING CONSUMER	EMC Corporation
		AUTHENTICATION	
13339669	8799608	TECHNIQUES INVOLVING FLAKY PATH	EMC Corporation
		DETECTION	
13339693	8819307	IDENTIFICATION AND USE OF PREFERRED PATH	EMC Corporation
		GROUPS IN HOST COMPUTER BASED ON	1
		DIFFERENTIAL PERFORMANCE	
13339768	8799334	REMOTE VERIFICATION OF FILE PROTECTIONS	EMC Corporation
		FOR CLOUD DATA STORAGE	
13339780	9032160	CONTINUOUS DATA REPLICATION	EMC Corporation
13339857	8818951	DISTRIBUTED FILE SYSTEM HAVING SEPARATE	EMC Corporation
		DATA AND METADATA AND PROVIDING A	
		CONSISTENT SNAPSHOT THEREOF	
13340007	8832224	DATA TRACKING FOR PROVENANCE AND CHAIN	EMC Corporation
		OF CUSTODY GENERATION	
13340104	8996690	TIME-BASED ANALYSIS OF DATA STREAMS	EMC Corporation
13340768	8850575	GEOLOCATION ERROR TRACKING IN	EMC Corporation
		TRANSACTION PROCESSING	1
13340829		[REDACTED]	EMC Corporation
13340912	9330009	MANAGING DATA STORAGE	EMC Corporation
13340945		[REDACTED]	EMC Corporation
13340958	9128901	CONTINUOUS PROTECTION OF DATA AND	EMC Corporation
		STORAGE MANAGEMENT CONFIGURATION	
13341006		[REDACTED]	EMC Corporation
13341112		[REDACTED]	EMC Corporation
13341160	8752145	BIOMETRIC AUTHENTICATION WITH SMART	EMC Corporation
10011100	0.022.0	MOBILE DEVICE	
13341167	9367195	DISPLAYING CURRENT LOCATION OF	EMC Corporation
		COMPONENTS IN A DATA STORAGE SYSTEM	
13341174	8683592	ASSOCIATING NETWORK AND STORAGE	EMC Corporation
· ·		ACTIVITIES FOR FORENSIC ANALYSIS	
13341193	8904061	MANAGING STORAGE OPERATIONS IN A SERVER	EMC Corporation
		CACHE	r r
13341332	9104529	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
13341343	8452901	ORDERED KERNEL QUEUE FOR MULTIPATHING	EMC Corporation
		EVENTS	

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Number	Number	Title	Owner
13341345	8627012	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341348	8751757	ACQUISITION AND KERNEL MEMORY STORAGE OF I/O METRICS	EMC Corporation
13341354	8627275	TECHNIQUE FOR ACQUIRING DATA STORAGE METRICS	EMC Corporation
13341408	9009416	SYSTEM AND METHOD FOR MANAGING CACHE SYSTEM CONTENT DIRECTORIES	EMC Corporation
13341422	9053033	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341439	9235524	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13341463	8930947	SYSTEM AND METHOD FOR LIVE MIGRATION OF A VIRTUAL MACHINE WITH DEDICATED CACHE	EMC Corporation
13341663	8675672	HIERARCHICAL CLUSTER TREE OVERLAY NETWORK	EMC Corporation
13342008	9075754	MANAGING CACHE BACKUP AND RESTORE	EMC Corporation
13342009		[REDACTED]	EMC Corporation
13342010		[REDACTED]	EMC Corporation
13342011		[REDACTED]	EMC Corporation
13344536	8732141	PASSING INFORMATION BETWEEN SERVER AND CLIENT USING A DATA PACKAGE	EMC Corporation
13348508	8516022	AUTOMATICALLY COMMITTING FILES TO BE WRITE-ONCE-READ-MANY IN A FILE SYSTEM	EMC Corporation
13348558	8275808	IDENTIFIERS FOR NON-SEARCHABLE ATTRIBUTES	EMC Corporation
13349224	8489816	PREDICTING AND OPTIMIZING I/O PERFORMANCE CHARACTERISTICS IN A MULTI-LEVEL CACHING SYSTEM	EMC Corporation
13358859	8370311	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
13363237	8516309	METHOD OF DEBUGGING A SOFTWARE SYSTEM	EMC Corporation
13363893		[REDACTED]	EMC Corporation
13365768	9021264	METHOD AND SYSTEM FOR CLOUD BASED STORAGE	EMC Corporation
13370260	9009202	GARBAGE COLLECTION FOR MERGED COLLECTIONS	EMC Corporation
13371337	8738569	SYSTEMATIC VERIFICATION OF DATABASE METADATA UPGRADE	EMC Corporation
13398163	9032061	POLICY-BASED INTELLIGENT DATA PLACEMENT	EMC Corporation
13400992		[REDACTED]	EMC Corporation
13402324	8788913	SELECTION OF ERASURE CODE PARAMETERS FOR NO DATA REPAIR	EMC Corporation
13402329	8977660	MULTI-LEVEL DISTRIBUTED HASH TABLE FOR DATA STORAGE IN A HIERARCHICALLY ARRANGED NETWORK	EMC Corporation
13402331	9204103	TECHNIQUE FOR PARALLEL, DISTRIBUTED VIDEO PROCESSING	EMC Corporation

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13404129		HYPERVISOR VIRTUAL SERVER SYSTEM, HAS	EMC Corporation
		VIRTUAL DATA SERVICES APPLIANCE RECEIVING	
		INTERCEPTED INPUT/OUTPUT REQUESTS FROM	
		TAPPING DRIVER	
13404780	8984609	METHODS AND APPARATUS FOR EMBEDDING	EMC Corporation
		AUXILIARY INFORMATION IN ONE-TIME	
		PASSCODES	
13404839		[REDACTED]	EMC Corporation
13407980	8861527	NETWORK-ASSISTED ROUTING FOR TOPOLOGY-	EMC Corporation
		AWARE OVERLAY NETWORKS	
13409413		[REDACTED]	EMC Corporation
13411606	8365043	EFFICIENT REDUNDANT MEMORY UNIT ARRAY	EMC Corporation
13411936	8332612	SYSTEMS AND METHODS FOR USING THIN	EMC Corporation
		PROVISIONING TO RECLAIM SPACE IDENTIFIED	
		BY DATA REDUCTION PROCESSES	
13414896	8776086	AGENT MANAGEMENT FRAMEWORK	EMC Corporation
13418536	8892947	METHOD AND SYSTEM FOR AUTOMATION	EMC Corporation
		FRAMEWORK FOR MULTI-NODE ENVIRONMENTS	
13419647		[REDACTED]	EMC Corporation
13419651	9323789	AUTOMATED APPLICATION PROTECTION AND	EMC Corporation
		REUSE USING A WORKFLOW COMPONENT	
13419910	8880952	GENERIC AND EXTENSIBLE PROVIDER DEBUG	EMC Corporation
		INTERFACE	
13420633	8799705	DATA PROTECTION IN A RANDOM ACCESS DISK	EMC Corporation
		ARRAY	_
13421227	8799927	TECHNIQUES FOR USE WITH REPETITIVE EVENT	EMC Corporation
		OCCURRENCES	
13421759	8861193	HARD DRIVE CARRIER WITH VIBRATION	EMC Corporation
		ISOLATION	
13424542	8868505	SYSTEMS AND METHODS FOR PROTECTING DATA	EMC Corporation
		IN A NETWORK HOST ENVIRONMENT	_
13424589	9047018	METHOD AND SYSTEM FOR ZERO-COPY DISK IO	EMC Corporation
		USING SECTOR UNALIGNED BUFFERS	
13424955	8825848	ORDERING OF EVENT RECORDS IN AN	EMC Corporation
		ELECTRONIC SYSTEM FOR FORENSIC ANALYSIS	
13425528	9197522	NATIVE STORAGE DATA COLLECTION USING	EMC Corporation
		MULTIPLE DATA COLLECTION PLUG-INS	
		INSTALLED IN A COMPONENT SEPARATE FROM	
		DATA SOURCES OF ONE OR MORE STORAGE AREA	
		NETWORKS	
13427023		[REDACTED]	EMC Corporation
13427805		[REDACTED]	EMC Corporation
13428110	9122857	AUTHENTICATING A USER IN AN	EMC Corporation
		AUTHENTICATION SYSTEM	
13429498	9026492	MULTISITE REPLICATION WITH UNCOORDINATED	EMC Corporation
		CYCLE SWITCHING	
13429504	8732124	MULTISITE REPLICATION WITH COORDINATED	EMC Corporation
		CYCLE SWITCHING	
13429524	9195631	PROVIDING HISTORICAL DATA TO AN EVENT-	EMC Corporation
		BASED ANALYSIS ENGINE	
13429622	8972694	DYNAMIC STORAGE ALLOCATION WITH	EMC Corporation
		VIRTUALLY PROVISIONED DEVICES	

Application	Registration		
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13429669	8862837	TECHNIQUES FOR AUTOMATED DATA	EMC Corporation
		COMPRESSION AND DECOMPRESSION	
13429883		[REDACTED]	EMC Corporation
13429919	9026667	TECHNIQUES FOR RESOURCE VALIDATION	EMC Corporation
13430152	9128625	SYSTEMS AND METHODS FOR PHYSICAL MEMORY RESERVATION FOR USER-SPACE PROGRAMS	EMC Corporation
13431011		[REDACTED]	EMC Corporation
13431071	9335948	METHOD AND APPARATUS FOR ENABLING ACCESS TO TIERED SHARED STORAGE USING DYNAMIC TIER PARTITIONING	EMC Corporation
13431193	8699715	ON-DEMAND PROACTIVE EPOCH CONTROL FOR CRYPTOGRAPHIC DEVICES	EMC Corporation
13431214		[REDACTED]	EMC Corporation
13431224		[REDACTED]	EMC Corporation
13431231	9015231	DISTRIBUTED ANONYMIZED COMMUNICATIONS	EMC Corporation
13431264	8839043	MANAGING A PORT FAILOVER IN A DATA STORAGE SYSTEM	EMC Corporation
13431297		[REDACTED]	EMC Corporation
13431409	9218252	TECHNIQUES FOR PERFORMING DATA VALIDATION	EMC Corporation
13431501		[REDACTED]	EMC Corporation
13431621	8375015	RETRIEVAL OF SEARCHABLE AND NON- SEARCHABLE ATTRIBUTES	EMC Corporation
13432184		[REDACTED]	EMC Corporation
13432276	8583607	MANAGING DEDUPLICATION DENSITY	EMC Corporation
13432312	8712976	MANAGING DEDUPLICATION DENSITY	EMC Corporation
13432457	8739257	MANAGING AUTHENTICATION OF VIRTUAL CLIENTS	EMC Corporation
13432491	8832640	COMPONENT MAPPED SOFTWARE DEVELOPMENT WORKFLOW	EMC Corporation
13432522	9009352	TRANSFORMATION OF COMMON INFORMATION MODEL MESSAGES	EMC Corporation
13432543	9112870	PROCESSING DEVICE HAVING SESSION COMPONENT WITH INTEGRATED SUPPORT FOR MESSAGE QUEUING PROTOCOL	EMC Corporation
13432550	8700861	MANAGING A DYNAMIC LIST OF ENTRIES FOR CACHE PAGE CLEANING	EMC Corporation
13432577	8635465	COUNTER-BASED ENCRYPTION OF STORED DATA BLOCKS	EMC Corporation
13432686	9122564	EVALUATING A SYSTEM EVENT	EMC Corporation
13432732	9119539	PERFORMING AN AUTHENTICATION OPERATION DURING USER ACCESS TO A COMPUTERIZED RESOURCE	EMC Corporation
13433477	8775756	METHOD OF VERIFYING INTEGRITY OF DATA WRITTEN BY A MAINFRAME TO A VIRTUAL TAPE AND PROVIDING FEEDBACK OF ERRORS	EMC Corporation

Application Number	Registration Number	Title	Owner
13433602	8515904	PROVIDING FILE SYSTEM QUOTA SUPPORT FOR A FILE SYSTEM HAVING SEPARATED DATA AND	EMC Corporation
13433633	8880441	METADATA CLICK STREAM ANALYSIS FOR FRAUD	EMC Corporation
		DETECTION	
13433636	8943282	MANAGING SNAPSHOT IN CACHE-BASED STORAGE SYSTEMS	EMC Corporation
13433885	8682852	ASYMMETRIC ASYNCHRONOUS MIRRORING FOR HIGH AVAILABILITY	EMC Corporation
13433995		[REDACTED]	EMC Corporation
13434087		[REDACTED]	EMC Corporation
13434257	8925058	AUTHENTICATION INVOLVING AUTHENTICATION OPERATIONS WHICH CROSS REFERENCE AUTHENTICATION FACTORS	EMC Corporation
13434264	9100343	STORAGE DESCRIPTORS AND SERVICE CATALOGS IN A CLOUD ENVIRONMENT	EMC Corporation
13434272	8875263	CONTROLLING A SOFT TOKEN RUNNING WITHIN AN ELECTRONIC APPARATUS	EMC Corporation
13434280	8752146	PROVIDING AUTHENTICATION CODES WHICH INCLUDE TOKEN CODES AND BIOMETRIC FACTORS	EMC Corporation
13434348	9116915	INCREMENTAL SCAN	EMC Corporation
13434447	8600945	CONTINUOUS DATA REPLICATION	EMC Corporation
13434448	8615500	PARTIAL BLOCK ALLOCATION FOR FILE SYSTEM BLOCK COMPRESSION USING VIRTUAL BLOCK METADATA	EMC Corporation
13434517		[REDACTED]	EMC Corporation
13434543	8850144	ACTIVE REPLICATION SWITCH	EMC Corporation
13434620	9037818	ACTIVE REPLICATION SWITCH	EMC Corporation
13434983	9183595	USING LINK STRENGTH IN KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13434991	9131374	KNOWLEDGE-BASED AUTHENTICATION FOR RESTRICTING ACCESS TO MOBILE DEVICES	EMC Corporation
13434993	8776195	COMMON DATA FORMAT IN KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13435009		[REDACTED]	EMC Corporation
13435017	9170951	METHOD AND APPARATUS FOR EVENT/ALERT ENRICHMENT	EMC Corporation
13435049	8725878	METHOD AND APPARATUS FOR TOPOLOGY DRIVEN ZONING	EMC Corporation
13435104	8694781	TECHNIQUES FOR PROVIDING HARDWARE SECURITY MODULE OPERABILITY	EMC Corporation
13435146		[REDACTED]	EMC Corporation
13435183	8812542	ON-THE-FLY DETERMINING OF ALERT RELATIONSHIPS IN A DISTRIBUTED SYSTEM	EMC Corporation
13435206	9207877	DETECTION AND AVOIDANCE OF STALLED FILESYSTEMS TO PREVENT STALLING OF VIRTUAL TAPE DRIVES DURING TAPE MOUNTS	EMC Corporation
13435294	8997120	LIGHTWEIGHT COMMUNICATION CHANNEL FOR CONTROL OF DEVICE DRIVER COMPONENTS	EMC Corporation
13435307	9152550	STORAGE SYSTEM WITH DYNAMIC TRANSFER OF BLOCK FILE SYSTEM OWNERSHIP FOR LOAD BUILDING	EMC Corporation

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13435317	9158734	METHOD AND APPARATUS FOR ELASTIC PROVISIONING	EMC Corporation
13435328	8990520	GLOBAL MEMORY AS NON-VOLATILE RANDOM ACCESS MEMORY FOR GUEST OPERATING SYSTEMS	EMC Corporation
13435360	8838887	DRIVE PARTITIONING FOR AUTOMATED STORAGE TIERING	EMC Corporation
13435397		[REDACTED]	EMC Corporation
13435415	8838931	TECHNIQUES FOR AUTOMATED DISCOVERY AND PERFORMING STORAGE OPTIMIZATIONS ON A COMPONENT EXTERNAL TO A DATA STORAGE SYSTEM	EMC Corporation
13435462	8868797	TECHNIQUES FOR AUTOMATED DISCOVERY OF STORAGE DEVICES AND THEIR PERFORMANCE CHARACTERISTICS	EMC Corporation
13435480	9336340	EVALUATING MANAGEMENT OPERATIONS	EMC Corporation
13435519	9047169	RESIZING SNAPSHOT MOUNT POINTS	EMC Corporation
13435555	8793452	METHOD OF GUARANTEEING REPLICATION OF DATA WRITTEN BY A MAINFRAME TO A VIRTUAL TAPE	EMC Corporation
13435606	8819769	MANAGING USER ACCESS WITH MOBILE DEVICE POSTURE	EMC Corporation
13435611	8683570	SCHEDULING SOFT TOKEN DATA TRANSMISSION	EMC Corporation
13435616	8683563	SOFT TOKEN POSTURE ASSESSMENT	EMC Corporation
13435737	8996671	METHOD OF PROVIDING SERVICE-PROVIDER- SPECIFIC SUPPORT LINK DATA TO A CLIENT IN A STORAGE CONTEXT	EMC Corporation
13435832	9218138	RESTORING SNAPSHOTS TO CONSISTENCY GROUPS OF MOUNT POINTS	EMC Corporation
13435848	8752156	DETECTING SOFT TOKEN COPIES	EMC Corporation
13435907	8977825	TECHNIQUES FOR ABSTRACT PROFILE DEFINITION TO SUPPORT INFORMATION HIDING	EMC Corporation
13435917	9003129	TECHNIQUES FOR INTER-STORAGE-PROCESSOR CACHE COMMUNICATION USING TOKENS	EMC Corporation
13435951	8904496	AUTHENTICATING BASED ON A CURRENT LOCATION OF A COMMUNICATIONS DEVICE ASSOCIATED WITH AN ENTITY	EMC Corporation
13436020	8782795	SECURE TENANT ASSESSMENT OF INFORMATION TECHNOLOGY INFRASTRUCTURE	EMC Corporation
13436080	9009844	METHODS AND APPARATUS FOR KNOWLEDGE- BASED AUTHENTICATION USING HISTORICALLY- AWARE QUESTIONNAIRES	EMC Corporation
13436117	8850145	MANAGING CONSISTENCY GROUPS IN STORAGE SYSTEMS	EMC Corporation
13436125	9021553	METHODS AND APPARATUS FOR FRAUD DETECTION AND REMEDIATION IN KNOWLEDGE- BASED AUTHENTICATION	EMC Corporation
13436419	8838634	CUSTOM USER PARALLEL DATA IMPORT AND EXPORT	EMC Corporation
13436449	8738571	EXTENDED RECYCLE BIN	EMC Corporation

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Number	Number	Title	Owner
13436454	8719286	SYSTEM AND METHOD FOR BLOCK-BASED	EMC Corporation
		SUBTREE VIRTUAL MACHINE BACKUP	
13436460	8751515	SYSTEM AND METHOD FOR FILE-BASED VIRTUAL	EMC Corporation
		MACHINE INCREMENTAL BACKUP	
13436495		[REDACTED]	EMC Corporation
13436533		[REDACTED]	EMC Corporation
13436614	9158763	CATALOGING STORAGE ARRAYS	EMC Corporation
13436630		[REDACTED]	EMC Corporation
13436636	8782008	DYNAMIC PROXY SERVER ASSIGNMENT FOR	EMC Corporation
		VIRTUAL MACHINE BACKUP	
13436641		[REDACTED]	EMC Corporation
13436677		[REDACTED]	EMC Corporation
13436680		[REDACTED]	EMC Corporation
13436702	9152820	METHOD AND APPARATUS FOR COOKIE	EMC Corporation
		ANONYMIZATION AND REJECTION	
13436715		[REDACTED]	EMC Corporation
13436717	8898519	METHOD AND APPARATUS FOR AN	EMC Corporation
		ASYNCHRONOUS SPLITTER	
13436720	9081754	METHOD AND APPARATUS FOR CASCADED	EMC Corporation
		REPLICATION USING A MULTI-SPLITTER	
13436725	9189341	METHOD AND APPARATUS FOR MULTI-COPY	EMC Corporation
		REPLICATION USING A MULTI SPLITTER	
13436771	9021275	METHOD AND APPARATUS TO EXERCISE AND	EMC Corporation
		MANAGE A RELATED SET OF POWER MANAGED	
		STORAGE DEVICES	
13436778	8862923	METHOD AND APPARATUS TO DETERMINE AN	EMC Corporation
		IDLE STATE OF A DEVICE SET BASED ON	
		AVAILABILITY REQUIREMENTS CORRESPONDING	
10.000		TO THE DEVICE SET	
13436862	9063892	MANAGING RESTORE OPERATIONS USING DATA	EMC Corporation
4.1.4.400.7	2025	LESS WRITES	77.600
13436885	9026708	FIELD SERVICEABLE IT SYSTEM	EMC Corporation
13436894	8909886	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE UPON DETECTING A MIGRATION	
12426007	0066100	EVENT	EMC C
13436897	8966190	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
12426000	0014502	PERFORMANCE	EMC C
13436899	8914583	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
12426001		PERFORMANCE	EMC Componetion
13436901	9012202	[REDACTED]	EMC Corporation
13436902	8913392	LOCKING / INDICATION SYSTEM  SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
13436906	8886883	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
12426007	9790542	PERFORMANCE SYSTEM AND METHOD FOR CENERATING	EMC Composition
13436907	8780542	SYSTEM AND METHOD FOR GENERATING	EMC Corporation
12426000	9064209	ELECTRICITY FROM COMPONENT WASTE HEAT	EMC Composition
13436909	8964398	LOCKING/INDICATION SYSTEM  SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
13436911	8874799	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
12426014	001/100	PERFORMANCE  CARLE ROUTING SYSTEM	EMC Camarati
13436914	8816199	CABLE ROUTING SYSTEM	EMC Corporati

Application	Registration		
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13436915	8914584	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE UPON DETECTION OF A LUN	
		CONTROL EVENT	
13436918	8554954	SYSTEM AND METHOD FOR IMPROVING CACHE PERFORMANCE	EMC Corporation
13436919	8764468	ADAPTIVE CONNECTOR ASSEMBLY	EMC Corporation
13436920	8914585	SYSTEM AND METHOD FOR OBTAINING CONTROL	EMC Corporation
		OF A LOGICAL UNIT NUMBER	
13436936	9292793	ANALYZING DEVICE SIMILARITY	EMC Corporation
13436941	9015120	HEURISTIC FILE SELECTION FOR BACKUP	EMC Corporation
13436943	8756201	FILE TYPE DATABASES	EMC Corporation
13436945	8676764	FILE CLUSTER CREATION	EMC Corporation
13437784	8364917	REPLICATION OF DEDUPLICATED STORAGE	EMC Corporation
15 15 7 7 6 1	0301317	SYSTEM	2c corporation
13439063		[REDACTED]	EMC Corporation
13439293	9230129	SOFTWARE TRUSTED COMPUTING BASE	EMC Corporation
13440186	8600952	TECHNIQUES FOR PROCESSING RECOVERY	EMC Corporation
10.1.0100	0000002	POINTS	2.00 corporation
13443002	8782245	SYSTEM AND METHOD FOR MANAGING	EMC Corporation
		PROVISIONING OF STORAGE RESOURCES IN A	1
		NETWORK WITH VIRTUALIZATION OF RESOURCES	
		IN SUCH A NETWORK	
13443017	8769271	IDENTIFYING AND ENFORCING STRICT FILE	EMC Corporation
		CONFIDENTIALITY IN THE PRESENCE OF SYSTEM	1
		AND STORAGE ADMINISTRATORS IN A NAS	
		SYSTEM	
13444562	8924682	METHOD OF PROTECTING VIRTUAL TAPE DATA	EMC Corporation
		FROM ACCIDENTAL LOSS DUE TO OVERWRITING	
13444996	8300554	LAYERED APPROACH FOR REPRESENTING AND	EMC Corporation
		ANALYZING VIRTUAL PRIVATE NETWORK	
		SERVICES	
13447048	8478951	METHOD AND APPARATUS FOR BLOCK LEVEL	EMC Corporation
		DATA DE-DUPLICATION	
13448391	8938428	EFFICIENT INDEX PROCESSING	EMC Corporation
13451878	8751831	ACHIEVING STRONG CRYPTOGRAPHIC	EMC Corporation
		CORRELATION BETWEEN HIGHER LEVEL	
		SEMANTIC UNITS AND LOWER LEVEL	
		COMPONENTS IN A SECURE DATA STORAGE	
		SYSTEM	
13452491	8812612	VERSIONED COALESCER	EMC Corporation
13455044		[REDACTED]	EMC Corporation
13460285	8386521	SYSTEM FOR BACKING UP AND RESTORING DATA	EMC Corporation
13460295	8402063	RESTORING DATA BACKED UP IN A CONTENT	EMC Corporation
4.40.50		ADDRESSED STORAGE(CAS) SYSTEM	
13460711		[REDACTED]	EMC Corporation
13460722	9110792	SYSTEM AND METHOD FOR CACHE	EMC Corporation
		REPLACEMENT USING BLOOM FILTER	
40464011	04045=5	LOOKAHEAD APPROACH	77.60 ~
13461316	9104675	INODE TO PATHNAME SUPPORT WITH A HARD	EMC Corporation
10461607		LINK DATABASE	FIXOG
13461637		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13464017	8423726	GLOBAL DE-DUPLICATION IN SHARED ARCHITECTURES	EMC Corporation
13464337	8578128	VIRTUAL BLOCK MAPPING FOR RELOCATING COMPRESSED AND/OR ENCRYPTED FILE DATA BLOCK BLOCKS	EMC Corporation
13465275		[REDACTED]	EMC Corporation
13466775	8935493	PERFORMING DATA STORAGE OPTIMIZATIONS ACROSS MULTIPLE DATA STORAGE SYSTEMS	EMC Corporation
13470317	9141290	SNAPSHOT MECHANISM	EMC Corporation
13476072	8843789	STORAGE ARRAY NETWORK PATH IMPACT ANALYSIS SERVER FOR PATH SELECTION IN A HOST-BASED I/O MULTI-PATH SYSTEM	EMC Corporation
13476666	8549245	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
13477999	8554725	SYSTEM AND METHOD FOR HIGHLY RELIABLE DATA REPLICATION	EMC Corporation
13478903		[REDACTED]	EMC Corporation
13478969	9081611	SYSTEM FOR ITERATIVELY IDENTIFYING AVAILABLE NEXT HIGHER PRIORITY TRACKS WHEN IDENTIFIED TRACK MATCHING THE TASK'S NATIVE TRACK PRIORITY IS UNAVAILABLE	EMC Corporation
13485506	9128973	METHOD AND SYSTEM FOR TRACKING RE-SIZING AND RE-CREATION OF VOLUMES USING MODIFICATION TIME	EMC Corporation
13490752	8892835	INSERTION OF A VIRTUALIZATION LAYER INTO A REPLICATION ENVIRONMENT	EMC Corporation
13493394	8412858	TECHNIQUES FOR INDICATING A PASSIVE PATH STATE FOR A DEVICE	EMC Corporation
13493638		[REDACTED]	EMC Corporation
13495130		LOW LATENCY REPLICATION TECHNIQUES WITH CONTENT ADDRESSABLE STORAGE	EMC Corporation
13495795	9026740	PREFETCH DATA NEEDED IN THE NEAR FUTURE FOR DELTA COMPRESSION	EMC Corporation
13495831	8918390	PREFERENTIAL SELECTION OF CANDIDATES FOR DELTA COMPRESSION	EMC Corporation
13495856		[REDACTED]	EMC Corporation
13495859	9116902	PREFERENTIAL SELECTION OF CANDIDATES FOR DELTA COMPRESSION	EMC Corporation
13495868	8712978	PREFERENTIAL SELECTION OF CANDIDATES FOR DELTA COMPRESSION	EMC Corporation
13495881	9141301	METHOD FOR CLEANING A DELTA STORAGE SYSTEM	EMC Corporation
13495893	8972672	METHOD FOR CLEANING A DELTA STORAGE SYSTEM	EMC Corporation
13517829	9098525	CONCURRENT ACCESS TO DATA ON SHARED STORAGE THROUGH MULTIPLE ACCESS POINTS	EMC Corporation
13517864	8683099	LOAD BALANCING OF READ/WRITE ACCESSES ON A SINGLE HOST DEVICE	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13525492		[REDACTED]	EMC Corporation
13525816		[REDACTED]	EMC Corporation
13525919	8719590	SECURE PROCESSING IN MULTI-TENANT CLOUD	EMC Corporation
		INFRASTRUCTURE	
13527761		[REDACTED]	EMC Corporation
13528241		[REDACTED]	EMC Corporation
13529740	9342518	DECLADING DIRECTIVES IN A DATA STORE	EMC Composition
13530503	8874524	DECLARING DIRECTIVES IN A DATA STORE HANDLING COPY ON FIRST WRITE DATA FOR	EMC Corporation
13530503	88/4524		EMC Corporation
13530706	9213718	SNAPSHOT PURPOSES SYNCHRONIZED FILE MANAGEMENT ACROSS	EMC Companies
13330/06	9213/18	MULTIPLE DISPARATE ENDPOINTS	EMC Corporation
13530763	8850516	VIRTUAL PRIVATE CLOUD THAT PROVIDES	EMC Corporation
13330703	8830310	ENTERPRISE GRADE FUNCTIONALITY AND	ENIC Corporation
		COMPLIANCE	
13531847	9092143	DYNAMIC ASSIGNMENT OF TIME INTERVAL BINS	EMC Corporation
13532132	7072113	[REDACTED]	EMC Corporation
13532309	8752148	PROCESSORLESS TOKEN FOR PRODUCING A ONE-	EMC Corporation
13332307	0752110	TIME PASSWORD	Livie corporation
13532355	9112895	ANOMALY DETECTION SYSTEM FOR ENTERPRISE	EMC Corporation
13032300	3112032	NETWORK SECURITY	2e corporation
13532385	9038178	DETECTION OF MALWARE BEACONING	EMC Corporation
		ACTIVITIES	
13533311		[REDACTED]	EMC Corporation
13534042		[REDACTED]	EMC Corporation
13534135	8700899	FORWARD-SECURE KEY UNLOCKING FOR	EMC Corporation
		CRYPTOGRAPHIC DEVICES	
13534488		[REDACTED]	EMC Corporation
13534694	8978150	DATA RECOVERY SERVICE WITH AUTOMATED	EMC Corporation
		IDENTIFICATION AND RESPONSE TO	
		COMPROMISED USER CREDENTIALS	
13534873	9230066	ASSESSING RISK FOR THIRD-PARTY DATA	EMC Corporation
		COLLECTORS	
13534879	9281943	DEFENDING AGAINST FACTORING BY COLLISION	EMC Corporation
13534906	9141633	SPECIAL MARKERS TO OPTIMIZE ACCESS	EMC Corporation
		CONTROL LIST (ACL) DATA FOR DEDUPLICATION	
13534946		[REDACTED]	EMC Corporation
13534956	9218388	DECLARATIVE CLUSTER MANAGEMENT	EMC Corporation
13535003	0.4.5.00.5	[REDACTED]	EMC Corporation
13535018	9176902	DATA MIGRATION TECHNIQUES	EMC Corporation
13535417	8856928	PROTECTING ELECTRONIC ASSETS USING FALSE	EMC Corporation
10707706	0155101	PROFILES IN SOCIAL NETWORKS	TI (C C
13535529	9155194	MEMORY INTERCONNECT ARRANGEMENT	EMC Corporation
		HAVING HIGH DATA TRANSFER SPEED SIGNAL	
12525502	9747122	INTEGRITY  PRINTED CIRCUIT BOARD INJECTOR/EJECTOR	EMC Commonwell
13535593	8747132	PRINTED CIRCUIT BOARD INJECTOR/EJECTOR	EMC Corporation
12525(04		MECHANISM	EMC Ca
13535684		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13535696	9020802	WORLDWIDE DISTRIBUTED ARCHITECTURE MODEL AND MANAGEMENT	EMC Corporation
13535712	9280381	EXECUTION FRAMEWORK FOR A DISTRIBUTED FILE SYSTEM	EMC Corporation
13535731		[REDACTED]	EMC Corporation
13535740	8775861	NON-DISRUPTIVE STORAGE DEVICE MIGRATION IN FAILOVER CLUSTER ENVIRONMENT	EMC Corporation
13535744	9158843	ADDRESSING MECHANISM FOR DATA AT WORLD WIDE SCALE	EMC Corporation
13535752	8977787	MANAGEMENT OF PATH OPERATING MODE TRANSITIONS IN MULTIPATHING HOST COMPUTER	EMC Corporation
13535760		[REDACTED]	EMC Corporation
13535796	9361263	CO-LOCATED CLOUDS, VERTICALLY INTEGRATED CLOUDS, AND FEDERATED CLOUDS	EMC Corporation
13535808		[REDACTED]	EMC Corporation
13535814		[REDACTED]	EMC Corporation
13535821	9338218	DISTRIBUTED PLATFORM AS A SERVICE	EMC Corporation
13535834	9122878	SOFTWARE LICENSE MANAGEMENT WITH DRIFTING COMPONENT	EMC Corporation
13535851	9229656	MANAGING SETTINGS AND QUERIES IN HOST- BASED DATA MIGRATION	EMC Corporation
13535862	9003432	EFFICIENT MANAGEMENT OF KERNEL DRIVER PERFORMANCE DATA	EMC Corporation
13535918	8972340	MANAGING PROPERTIES COLLECTION	EMC Corporation
13535951		[REDACTED]	EMC Corporation
13535981	8966173	MANAGING ACCESSES TO STORAGE OBJECTS	EMC Corporation
13536099	9032399	MEASUREMENT OF INPUT/OUTPUT SCHEDULING CHARACTERISTICS IN DISTRIBUTED VIRTUAL INFRASTRUCTURE	EMC Corporation
13536191	8955066	KNOWLEDGE BASED AUTHENTICATION USING RECENT USER INTERNET ACTIVITY	EMC Corporation
13536355	8904525	TECHNIQUES FOR DETECTING MALWARE ON A MOBILE DEVICE	EMC Corporation
13536357	9268727	METHOD AND APPARATUS FOR COMMAND ABSTRACTION	EMC Corporation
13536364	8826264	NON-DISRUPTIVE UPGRADE OF APPLICATIONS	EMC Corporation
13536371	8782324	TECHNIQUES FOR MANAGING PLACEMENT OF EXTENTS BASED ON A HISTORY OF ACTIVE EXTENTS	EMC Corporation
13536375	8799601	TECHNIQUES FOR MANAGING DEDUPLICATION BASED ON RECENTLY WRITTEN EXTENTS	EMC Corporation
13536389	8954699	TECHNIQUES FOR IDENTIFYING IO HOT SPOTS USING RANGE-LOCK INFORMATION	EMC Corporation
13536422	8862948	METHOD AND APPARATUS FOR PROVIDING AT RISK INFORMATION IN A CLOUD COMPUTING SYSTEM HAVING REDUNDANCY	EMC Corporation
13536424	8832325	TRANSFER BETWEEN STORAGE DEVICES	EMC Corporation
13536425		[REDACTED]	EMC Corporation
13536474	8880821	DETERMINING WHETHER TO MIGRATE FROM A SOURCE STORAGE DEVICE TO A TARGET STORAGE DEVICE	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13536512	9298582	METHOD AND APPARATUS FOR PERFORMANCE	EMC Corporation
		DATA TRANSFORMATION IN A CLOUD	1
		COMPUTING SYSTEM	
13536519	9189495	REPLICATION AND RESTORATION	EMC Corporation
13536583	9207703	METHOD AND APPARATUS FOR CLIENT	EMC Corporation
		APPLICATION CUSTOMIZATION	1
13536705	8918493	METHODS AND APPARATUS FOR AUTOMATING	EMC Corporation
		SERVICE LIFECYCLE MANAGEMENT	1
13536726		[REDACTED]	EMC Corporation
13536901	9170602	CALIBRATING A HIGH-SPEED CLOCK SIGNAL	EMC Corporation
		GENERATED USING A PROCESSOR INTERNAL TO	
		THE ELECTRONIC AUTHENTICATION DEVICE	
		WITHOUT USING A CRYSTAL OSCILLATOR	
13537163		[REDACTED]	EMC Corporation
13537244	8782341	EMBEDDED ADVISORY FRAMEWORK FOR	EMC Corporation
		STORAGE CONFIGURATION MANAGEMENT	
13537251	8910281	IDENTIFYING MALWARE SOURCES USING	EMC Corporation
		PHISHING KIT TEMPLATES	
13537288	8924328	PREDICTIVE MODELS FOR CONFIGURATION	EMC Corporation
		MANAGEMENT OF DATA STORAGE SYSTEMS	
13537345	8959305	SPACE RECLAMATION WITH VIRTUALLY	EMC Corporation
		PROVISIONED DEVICES	
13537405	8972490	USER DISCOVERY IN SOCIALLY-AWARE DATA	EMC Corporation
		STORAGE SYSTEMS	
13537496	8935321	VIRTUALIZED ENVIRONMENT FOR MANAGING	EMC Corporation
		HETEROGENEOUS ENTERPRISE SOFTWARE	
		APPLICATIONS	
13537539	8959650	VALIDATING ASSOCIATION OF CLIENT DEVICES	EMC Corporation
		WITH SESSIONS	
13537578	9075755	OPTIMIZING DATA LESS WRITES FOR RESTORE	EMC Corporation
	224222	OPERATIONS	
13537594	8819803	VALIDATING ASSOCIATION OF CLIENT DEVICES	EMC Corporation
10.505.61.4		WITH AUTHENTICATED CLIENTS	EN CO CO
13537614	0055010	[REDACTED]	EMC Corporation
13537617	8855312	MOBILE TRUST BROKER	EMC Corporation
13537642		[REDACTED]	EMC Corporation
13537682		[REDACTED]	EMC Corporation
12527920		IDED A CTEDI	EMC Companyion
13537839	0021117	[REDACTED]	EMC Corporation
13537868	9021117	DYNAMICALLY SELECTABLE TRANSPORT OFR	EMC Corporation
12527000	995(257	KERNEL DRIVER MANAGEMENT	EMC Composition
13537889	8856257	SENDING ALERTS FROM CLOUD COMPUTING	EMC Corporation
12527004	0021255	SYSTEMS TECHNIQUES FOR MULTIPLE INDEPENDENT	EMC Compandia:
13537904	9021255	TECHNIQUES FOR MULTIPLE INDEPENDENT	EMC Corporation
13537910		VERIFICATIONS FOR DIGITAL CERTIFICATES	EMC Corporation
1333/910		[REDACTED]	ENIC Corporation
12527059	9956022		EMC Composition
13537958	8856923	SIMILARITY-BASED FRAUD DETECTION IN	EMC Corporation
		ADAPTIVE AUTHENTICATION SYSTEMS	

Application	Registration		
Number	Number	Title	Owner
13538056	8626967	VIRTUALIZATION OF A STORAGE PROCESSOR FOR PORT FAILOVER	EMC Corporation
13538104	9069682	ACCELERATING FILE SYSTEM RECOVERY BY STORING FILE SYSTEM METADATA ON FAST PERSISTENT STORAGE DURING FILE SYSTEM RECOVERY	EMC Corporation
13538111	8949656	PORT MATCHING FOR DATA STORAGE SYSTEM PORT FAILOVER	EMC Corporation
13538113	8904229	ONLINE RECOVERY OF A FILE SYSTEM EXPERIENCING FAILURE OF REDUNDANT LOGICAL STORAGE STORING A SINGLE POINT OF FAILURE	EMC Corporation
13538120	8875267	ACTIVE LEARNING-BASED FRAUD DETECTION IN ADAPTIVE AUTHENTICATION SYSTEMS	EMC Corporation
13538126	8924773	REDUCING FILE SYSTEM DATA UNAVAILABILITY WINDOW BY ADAPTING HIERARCHICAL RECOVERY FRAMEWORK	EMC Corporation
13538137	9223799	A LIGHTWEIGHT METADATA SHARING PROTOCOL FOR LOCATION TRANSPARENT FILE ACCESS	EMC Corporation
13538199	8909980	COORDINATING PROCESSING FOR REQUEST REDIRECTION	EMC Corporation
13538219	9141908	DYNAMIC INFORMATION ASSEMBLY FOR DESIGNATED PURPOSE BASED ON SUITABILITY REASONING OVER METADATA	EMC Corporation
13538245	8688878	DATA STORAGE SYSTEM MODELING	EMC Corporation
13538360	8904047	CLOUD CAPABLE STORAGE SYSTEM WITH HIGH PERFORMANCE NOSQL KEY-VALUE PAIR OPERATING ENVIRONMENT	EMC Corporation
13538365	8873836	CLUSTER-BASED CLASSIFICATION OF HIGH- RESOLUTION DATA	EMC Corporation
13538370		[REDACTED]	EMC Corporation
13538428		[REDACTED]	EMC Corporation
13538534	8954383	ANALYZING MAPPING OBJECTS OF FILE SYSTEMS	EMC Corporation
13538541		[REDACTED]	EMC Corporation
13538567	8782752	APPARATUS AND METHOD FOR MULTI-PLANE THRESHOLD SECURITY	EMC Corporation
13538754	8612382	RECOVERING FILES IN DATA STORAGE SYSTEMS	EMC Corporation
13538789	9223500	FILE CLONES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
13538913	9305153	USER AUTHENTICATION	EMC Corporation
13538921	8862642	ENDURANT CACHE	EMC Corporation
13538954	0400065	[REDACTED]	EMC Corporation
13538964	9183218	METHOD AND SYSTEM TO IMPROVE DEDUPLICATION OF STRUCTURED DATASETS USING HYBRID CHUNKING AND BLOCK HEADER REMOVAL	EMC Corporation
13538965	9020903	RECOVERING DUPLICATE BLOCKS IN FILE SYSTEMS	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
12520002	0104071	ALITOMATED END TO END CALLED PROCESS OF	EMO Commention
13538993	9104971	AUTOMATED END-TO-END SALES PROCESS OF	EMC Corporation
		STORAGE APPLIANCES OF STORAGE SYSTEMS USING PREDICTIVE MODELING	
13539005		[REDACTED]	EMC Corporation
13539003	9058326	RECOVERY AND FLUSH OF ENDURANT CACHE	EMC Corporation
13539082	9038326	RECOVERY AND FLOSH OF ENDORANT CACHE RECOVERING FILE SYSTEM BLOCKS OF FILE	EMC Corporation
13339084	9003227	SYSTEMS	
13539392	9178880	GATEWAY MEDIATED MOBILE DEVICE	EMC Corporation
12720206	0116011	AUTHENTICATION	EN CO CO
13539396	9116811	SYSTEM AND METHOD FOR CACHE	EMC Corporation
12520200	01.50.550	MANAGEMENT	TTV (C C
13539398	9158578	SYSTEM AND METHOD FOR MIGRATING VIRTUAL MACHINES	EMC Corporation
13539404	9047493	SYSTEM AND METHOD FOR PROTECTING	EMC Corporation
		CONTENT	
13539408	9116636	SYSTEM AND METHOD FOR ADJUSTING QOS	EMC Corporation
13539413	8924670	SYSTEM AND METHOD FOR PROTECTING	EMC Corporation
		CONTENT	
13539419	9378096	SYSTEM AND METHOD FOR CACHE	EMC Corporation
		MANAGEMENT	
13539420	9104330	SYSTEM AND METHOD FOR INTERLEAVING	EMC Corporation
		STORAGE	
13539423	9092461	SYSTEM AND METHOD FOR TIERING DATA	EMC Corporation
		STORAGE	
13539426		[REDACTED]	EMC Corporation
13539427		[REDACTED]	EMC Corporation
13539430	9135176	SYSTEM AND METHOD FOR THIN PROVISIONING	EMC Corporation
13539431	9026741	SYSTEM AND METHOD FOR WARMING CACHE	EMC Corporation
13539433	9152336	SYSTEM AND METHOD FOR LUN ADJUSTMENT	EMC Corporation
13539434		[REDACTED]	EMC Corporation
13539435	8671229	SYSTEM AND METHOD FOR MANAGING IO OPERATIONS	EMC Corporation
13539436		[REDACTED]	EMC Corporation
13539437		[REDACTED]	EMC Corporation
13539438	8930746	SYSTEM AND METHOD FOR LUN ADJUSTMENT	EMC Corporation
13549079	9100330	INTRODUCTION OF READ DELAY OR WRITE	EMC Corporation
13317077	7100330	DELAY IN SERVERS OF A GEOGRAPHICALLY	Elvie Corporation
		DISTRIBUTED DATA PROCESSING SYSTEM SO	
		THAT CLIENTS READ UP-TO-DATE DATA	
13550481		[REDACTED]	EMC Corporation
13556443		[REDACTED]	EMC Corporation
13557104	8595265	EFFICIENT STORAGE OF NON-SEARCHABLE	EMC Corporation
		ATTRIBUTES	
13558859		[REDACTED]	EMC Corporation
13558889	8972405	STORAGE RESOURCE MANAGEMENT	EMC Corporation
		INFORMATION MODELING IN A CLOUD	
13561340	8832498	PROCESSING ENVIRONMENT SCALABLE CODEBOOK CORRELATION FOR	EMC Corporation
13301340	0032490	CLOUD SCALE TOPOLOGY	Ewic Corporation

Application	Registration		
Number	Number	Title	Owner
13566178	9037596	SYSTEM AND METHOD FOR COMMITTING DATA	EMC Corporation
		OBJECTS TO BE IMMUTABLE	
13568909	8914328	BACKUP INFORMATION MANAGEMENT	EMC Corporation
13570827		[REDACTED]	EMC Corporation
13570912		[REDACTED]	EMC Corporation
13571666	8650395	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
13572543	8682827	SMART CONTAINERS	EMC Corporation
13584994		[REDACTED]	EMC Corporation
13586137	8832713	EVENT QUEUES	EMC Corporation
13586659	8527586	MULTI-PROTOCOL GLOBAL NAMESPACE MECHANISM FOR NETWORK ATTACHED STORAGE FOR NETWORK ATTACHED STORAGE	EMC Corporation
13591612	9152637	JUST-IN-TIME FORMATTING OF FILE SYSTEM METADATA	EMC Corporation
13595309	9330193	METHOD AND SYSTEM FOR DISPLAYING COMPONENTS IDENTIFIED BY GUIDE	EMC Corporation
13595727	8850425	METHOD AND SYSTEM FOR DISPLAYING CONFIGURATION TEST RESULTS BY LEVERAGED DATA PROTECTION SOFTWARE	EMC Corporation
13596088	8720089	ULTRA-THIN RETRACTABLE LABEL HOLDER FOR RACK-MOUNTED ELECTRICAL CHASSIS	EMC Corporation
13596180		[REDACTED]	EMC Corporation
13596227	9135120	CONSISTENCY GROUP MOVING	EMC Corporation
13596570		[REDACTED]	EMC Corporation
13597410		[REDACTED]	EMC Corporation
13597855		[REDACTED]	EMC Corporation
13598030		[REDACTED]	EMC Corporation
13598372		[REDACTED]	EMC Corporation
13598411		[REDACTED]	EMC Corporation
13599235		[REDACTED]	EMC Corporation
13599296		[REDACTED]	EMC Corporation
13599337	8977593	VIRTUALIZED CG	EMC Corporation
13599460		[REDACTED]	EMC Corporation
13599492		[REDACTED]	EMC Corporation
13600523	8838851	TECHNIQUES FOR PATH SELECTION	EMC Corporation
13600641	9230075	MULTI-SERVER AUTHENTICATION USING PROACTIVIZATION JOURNALING	EMC Corporation
13601885	9189408	SYSTEM AND METHOD OF OFFLINE ANNOTATION OF FUTURE ACCESSES FOR IMPROVING PERFORMANCE OF BACKUP STORAGE SYSTEM	EMC Corporation
13609398		[REDACTED]	EMC Corporation
13610058		[REDACTED]	EMC Corporation
13610118	9026765	PERFORMING WRITE OPERATIONS IN A MULTI- TIERED STORAGE ENVIRONMENT	EMC Corporation
13610214		[REDACTED]	EMC Corporation
13610474	9348569	METHOD AND SYSTEM FOR A CONFIGURABLE AUTOMATION FRAMEWORK	EMC Corporation
13610611	8667239	ASSISTED MAINFRAME DATA DE-DUPLICATION	EMC Corporation
13611267		[REDACTED]	EMC Corporation
13611287		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13611571	9078349	UNIVERSAL FILLER-BEZEL CLIP ASSEMBLY	EMC Corporation
13611868		[REDACTED]	EMC Corporation
13611919	8949953	BROKERING MULTIPLE AUTHENTICATIONS	EMC Corporation
		THROUGH A SINGLE PROXY	
13611941	9032490	TECHNIQUES FOR AUTHENTICATING A USER	EMC Corporation
		WITH HEIGHTENED SECURITY	
13612393	9128823	SYNTHETIC INCREMENTAL DATA GENERATION	EMC Corporation
		FOR BLOCK-BASED STORAGE	
13613067		[REDACTED]	EMC Corporation
13613387	8903853	FEDERATED SEARCH	EMC Corporation
13613750		[REDACTED]	EMC Corporation
13615839	8800027	AUTHENTICATION USING PRIVACY PROTECTED	EMC Corporation
		PERSONALLY IDENTIFIABLE INFORMATION	
13616741	8949669	ERROR DETECTION, CORRECTION AND TRIAGE OF	EMC Corporation
		A STORAGE ARRAY ERRORS	
13616934	8874966	STORAGE DEVICE ERROR SIMULATOR TOOL	EMC Corporation
13616978	8825653	CHARACTERIZING AND MODELING	EMC Corporation
		INCREMENTAL CHANGES WITH VIRTUAL	1
		SYNTHETIC WORKLOADS	
13617159	8769289	AUTHENTICATION OF A USER ACCESSING A	EMC Corporation
		PROTECTED RESOURCE USING MULTI-CHANNEL	1
		PROTOCOL	
13617182	8732688	UPDATING SYSTEM STATUS	EMC Corporation
13617862	9152706	ANONYMOUS IDENTIFICATION TOKENS	EMC Corporation
13618039	9052952	ADAPTIVE BACKUP MODEL FOR OPTIMIZING	EMC Corporation
		BACKUP PERFORMANCE	
13618209	9384051	ADAPTIVE POLICY GENERATING METHOD AND	EMC Corporation
		SYSTEM FOR PERFORMANCE OPTIMIZATION	
13618492		[REDACTED]	EMC Corporation
13618634	8713554	AUTOMATED HOTFIX HANDLING MODEL	EMC Corporation
13620085	9152352	FILEMARK CACHE TO CACHE FILEMARK	EMC Corporation
		METADATA FOR VIRTUAL TAPES	
13620394	8935470	PRUNING A FILEMARK CACHE USED TO CACHE	EMC Corporation
1502057.	0,001,0	FILEMARK METADATA FOR VIRTUAL TAPES	2e corporation
13622475	9262188	VIRTUAL ASSET MANAGEMENT IN DATA CENTER	EMC Corporation
13622543	8918372	CONTENT-AWARE DISTRIBUTED DEDUPLICATING	EMC Corporation
		STORAGE SYSTEM BASED ON CONSISTENT	
		HASHING	
13622553	9268784	CONTENT-AWARE DISTRIBUTED DEDUPLICATING	EMC Corporation
		STORAGE SYSTEM BASED ON LOCALITY-	
		SENSITIVE HASHING	
13623148	9009402	CONTENT ADDRESSABLE STORAGE IN LEGACY	EMC Corporation
		SYSTEMS	
13624013	9172584	METHOD AND SYSTEM FOR HIGH-AVAILABILITY	EMC Corporation
		CLUSTER DATA PROTECTION	
13624098	9081691	TECHNIQUES FOR CACHING DATA USING A	EMC Corporation
•		VOLATILE MEMORY CACHE AND SOLID STATE	
		DRIVE	
13624154	8751622	TECHNIQUES FOR AUTOMATED APPLICATION	EMC Corporation
		DISCOVERY	
13625182		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13625204	8990168	EFFICIENT CONFLICT RESOLUTION AMONG	EMC Corporation
		STATELESS PROCESSES	
13625292	8977898	CONCURRENT ACCESS TO DATA DURING REPLAY	EMC Corporation
		OF A TRANSACTION LOG	
13625418	9078129	KNOWLEDGE-BASED AUTHENTICATION FOR	EMC Corporation
		RESTRICTING ACCESS TO MOBILE DEVICES	
13625465		[REDACTED]	EMC Corporation
13625480	8850609	CONDITIONAL INTEGRATION OF A SATELLITE	EMC Corporation
		DEVICE INTO AN AUTHENTICATION PROCESS	
		INVOLVING A PRIMARY DEVICE	
13625497	8938805	DETECTION OF TAMPERING WITH SOFTWARE	EMC Corporation
		INSTALLED ON A PROCESSING DEVICE	
13625982	8782784	FRAMEWORK FOR IMPLEMENTING SECURITY	EMC Corporation
		INCIDENT AND EVENT MANAGEMENT IN AN	
10.00.00.4		ENTERPRISE CONTROL	T 10 0
13625994	0500010	[REDACTED]	EMC Corporation
13626092	8798242	VOICE-RELATED INFORMATION IN DATA	EMC Corporation
12/2/1/7		MANAGEMENT SYSTEMS	EMC C
13626167		[REDACTED]	EMC Corporation
13626182		[REDACTED]	EMC Corporation
13626198		[REDACTED]	EMC Corporation
10 (0 (0 10		IDED A CITED I	TD 10 0
13626240		[REDACTED]	EMC Corporation
13626247		[REDACTED]	EMC Corporation
13626266	8914895	MANAGING VERIFICATION OF INPUT DATA	EMC Corporation
13626272		[REDACTED]	EMC Corporation
13626299	9158729	CLIENT REQUEST PROCESSING USING PROTOCOL	EMC Corporation
10 (0 (000		ABSTRACTION	T 10 0
13626323	000000	[REDACTED]	EMC Corporation
13626422	8909887	SELECTIVE DEFRAGMENTATION BASED ON IO HOT SPOTS	EMC Corporation
13626741	8620973	CREATING POINT-IN-TIME COPIES OF FILE MAPS	EMC Corporation
		FOR MULTIPLE VERSIONS OF A PRODUCTION FILE	
		TO PRESERVE FILE MAP ALLOCATIONS FOR THE	
		PRODUCTION FILE	
13626757		[REDACTED]	EMC Corporation
			<u> </u>
13627189	8924647	DYNAMIC SELECTION OF DATA REPLACEMENT	EMC Corporation
		PROTOCOL FOR MULTI-LEVEL CACHE	
13627195	8938477	SIMULATING DATA STORAGE SYSTEM	EMC Corporation
		CONFIGURATION DATA	
13627224	8799655	MOBILE OFFLINE AUTHENTICATION USING ONE- TIME PASSCODES	EMC Corporation
13627423	8977662	STORING DATA OBJECTS FROM A FLAT	EMC Corporation
		NAMESPACE IN A HIERARCHICAL DIRECTORY	
		STRUCTURED FILE SYSTEM	
13627434	9020994	CLIENT-BASED MIGRATING OF DATA FROM	EMC Corporation
		CONTENT-ADDRESSED STORAGE TO FILE-BASED	
		STORAGE	

Application	Registration		
Number	Number	Title	Owner
13627594	8621121	DETECTING BOGUS IOS IN A MULTIPATHING DRIVER	EMC Corporation
13627671	9256473	METHOD AND SYSTEM FOR PROVISIONING A VIRTUAL COMPUTING ENVIRONMENT	EMC Corporation
13628085	9047225	DYNAMIC SELECTION OF DATA REPLACEMENT PROTOCOL FOR CACHE	EMC Corporation
13628259	9141505	ADAPTIVE FAILURE SURVIVABILITY IN A STORAGE SYSTEM	EMC Corporation
13628441	8965340	MOBILE DEVICE IDENTIFICATION BY DEVICE ELEMENT COLLECTION	EMC Corporation
13628479	9021478	PROVISIONING VIRTUAL MACHINES VIA CONTENT-CENTRIC NETWORK	EMC Corporation
13628589	9098617	DATA ANALYTICS LIFECYCLE AUTOMATION	EMC Corporation
13628624	8850537	SELF-TUNING KNOWLEDGE-BASED AUTHENTICATION	EMC Corporation
13628630		[REDACTED]	EMC Corporation
13628642	9202173	USING LINK ANALYSIS IN ADVERSARIAL KNOWLEDGE-BASED AUTHENTICATION MODEL	EMC Corporation
13628661		[REDACTED]	EMC Corporation
13628706	9053000	METHOD AND APPARATUS FOR EVENT CORRELATION BASED ON CAUSALITY EQUIVALENCE	EMC Corporation
13628732	9152775	QUESTION GENERATION IN KNOWLEDGE-BASED AUTHENTICATION FOR AN ENTERPRISE	EMC Corporation
13628746	9240986	MANAGING SECURITY AND WIRELESS SIGNAL DETECTION	EMC Corporation
13628757	8959195	CLOUD SERVICE LEVEL ATTESTATION	EMC Corporation
13628794		[REDACTED]	EMC Corporation
13628816		[REDACTED]	EMC Corporation
13628850		[REDACTED]	EMC Corporation
13628878	8966382	MANAGING PRODUCTION AND REPLICA COPIES DYNAMICALLY	EMC Corporation
13628918	8954381	DETERMINING DATA MOVEMENTS IN A MULTI- TIERED STORAGE ENVIRONMENT	EMC Corporation
13629017	8898507	METHODS AND APPARATUS FOR DISASTER TOLERANT CLUSTERS OF HYPERVISORS AS A VIRTUALIZED INFRASTRUCTURE SERVICE	EMC Corporation
13629375	8862818	HANDLING PARTIAL STRIPE WRITES IN LOG- STRUCTURED STORAGE SYSTEMS	EMC Corporation
13629573	8700578	SYSTEM AND METHOD FOR DETERMINING PHYSICAL STORAGE SPACE OF A DEDUPLICATED STORAGE SYSTEM	EMC Corporation
13629763		[REDACTED]	EMC Corporation
13629771	8990905	PROTECTED RESOURCE ACCESS CONTROL UTILIZING INTERMEDIATE VALUES OF A HASH CHAIN	EMC Corporation
13629794	8862645	MULTI-PATH FILE SYSTEM WITH BLOCK CACHEBETWEEN CLIENT AND STORAGE ARRAY	EMC Corporation
13629805	9202304	PATH PERFORMANCE MINI-CHARTS	EMC Corporation
13629821		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13629826		[REDACTED]	EMC Corporation
13629835	8972656	MANAGING ACCESSES TO ACTIVE-ACTIVE	EMC Corporation
		MAPPED LOGICAL VOLUMES	
13629880	8972657	MANAGING ACTIVE-ACTIVE MAPPED LOGICAL	EMC Corporation
		VOLUMES	
13629953	8874494	DYNAMIC SELECTION OF SPARE STORAGE	EMC Corporation
		ELEMENT TYPES IN ARRAY	
13629967	8996583	INTERACTIVE VISUAL DATA MINING FOR	EMC Corporation
		INCREASING CLASSIFICATION ACCURACY	
13630000		[REDACTED]	EMC Corporation
13630003	8875255	PREVENTING USER ENUMERATION BY AN	EMC Corporation
		AUTHENTICATION SERVER	
12/20010	0000 100	EFFICIENT EVERY E DAGED DE ENGEDEVOY	E) (C C
13630010	8880488	EFFICIENT EXTENT-BASED B-TREE INSERTION	EMC Corporation
13630079	9047352	CENTRALIZED SEARCHING IN A DATA STORAGE	EMC Corporation
13630093		ENVIRONMENT [REDACTED]	EMC Corporation
13030093		[REDACTED]	ENIC Corporation
13630167	9128854	SYSTEM AND METHOD FOR CACHE	EMC Corporation
13030107	7120054	MANAGEMENT	Livic corporation
13630169		[REDACTED]	EMC Corporation
13630214	8990615	SYSTEM AND METHOD FOR CACHE	EMC Corporation
13030214	0770013	MANAGEMENT	Livic corporation
13630220	9286219	SYSTEM AND METHOD FOR CACHE	EMC Corporation
13030220	7200217	MANAGEMENT	Ente corporation
13630229		[REDACTED]	EMC Corporation
13630266	9244955	METHODS AND APPARATUS FOR GENERATING A	EMC Corporation
		DATABASE LAYOUT	
13630271	9134262	MULTI-CHANNEL CONTAMINANT MEASUREMENT	EMC Corporation
		SYSTEM	
13630274	8862858	METHOD AND SYSTEM FOR FAST BLOCK	EMC Corporation
		STORAGE RECOVERY	
13630275	9305068	METHODS AND APPARATUS FOR DATABASE	EMC Corporation
		VIRTUALIZATION	
13630335	9154296	SECURE AND ANONYMOUS DISTRIBUTED	EMC Corporation
		AUTHENTICATION	
13630378	8918586	POLICY-BASED STORAGE OF OBJECT FRAGMENTS	EMC Corporation
		IN A MULTI-TIERED STORAGE SYSTEM	
13630388	8918844	DEVICE PRESENCE VALIDATION	EMC Corporation
13630408	8935474	POLICY-BASED STORAGE OF OBJECT FRAGMENTS	EMC Corporation
12/20/120		IN A MULTI-TIERED STORAGE SYSTEM	EMC Commention
13630420		[REDACTED]	EMC Corporation
13630442		[REDACTED]	EMC Corporation
13630442	8954880	USER INTERFACE HAVING USER-CUSTOMIZED	EMC Corporation
15030443	0724000	DEFAULT VALUES	LIVIC Corporation
13630455		[REDACTED]	EMC Corporation
13630495	8977814	INFORMATION LIFECYCLE MANAGEMENT FOR	EMC Corporation
13030773	07//014	BINDING CONTENT	Livic Corporation
		DINDING CONTENT	
13630574	9288077	CLUSTER FILE SYSTEM WITH SERVER BLOCK	EMC Corporation
10000071	1 2000 / /	CACHE	

Application	Registration		
Number	Number	Title	Owner
13630632		[REDACTED]	EMC Corporation
13630635	9372793	SYSTEM AND METHOD FOR PREDICTIVE CACHING	EMC Corporation
13630638		[REDACTED]	EMC Corporation
13630678		[REDACTED]	EMC Corporation
13630699	9135119	SYSTEM AND METHOD FOR DATA MANAGEMENT	EMC Corporation
13630746		[REDACTED]	EMC Corporation
13630849	8902043	MITIGATING CONFORMATIONAL BIAS IN AUTHENTICATION SYSTEMS	EMC Corporation
13630887	9043943	SELF-DESTRUCTING CONTENT	EMC Corporation
13630957		[REDACTED]	EMC Corporation
13631014	9116888	CUSTOMER CONTROLLED DATA PRIVACY PROTECTION IN PUBLIC CLOUD	EMC Corporation
13631039		[REDACTED]	EMC Corporation
13631047	9104995	SUBJECT AND AUDIENCE ORIENTED INSTANT COLLABORATIVE DEVELOPMENT	EMC Corporation
13631055		[REDACTED]	EMC Corporation
13631190		[REDACTED]	EMC Corporation
13631214		[REDACTED]	EMC Corporation
13631231	9201887	CLUSTER FILE SERVER PROXY SERVER FOR BACKUP AND RECOVERY	EMC Corporation
13631238		[REDACTED]	EMC Corporation
13631246		[REDACTED]	EMC Corporation
13631298		[REDACTED]	EMC Corporation
13631406	8856079	APPLICATION PROGRAMMING INTERFACE FOR EFFICIENT OBJECT INFORMATION GATHERING AND LISTING	EMC Corporation
13631633	8943356	POST BACKUP CATALOGS	EMC Corporation
13631637	0713330	[REDACTED]	EMC Corporation
13631678	8893269	IMPORT AUTHORITIES FOR BACKUP SYSTEM	EMC Corporation
13631690	0073207	[REDACTED]	EMC Corporation
13631701	9323759	MULTIPROCESS DIVIDED FILE SYSTEM BACKUP	EMC Corporation
13631723	9311330	METHOD AND SYSTEM FOR PERFORMING FULL BACKUP IN A FAILOVER CLUSTER	EMC Corporation
13631753		[REDACTED]	EMC Corporation
13631774	9110604	SYSTEM AND METHOD FOR FULL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
13631794	9104331	SYSTEM AND METHOD FOR INCREMENTAL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
13631897	9009444	SYSTEM AND METHOD FOR LUN MANAGEMENT	EMC Corporation
13631917	8862550	RELIABLE IN-PLACE BOOTSTRAP METADATA TRANSFORMATION IN A SHARED DATA STORE	EMC Corporation
13632014	8850546	PRIVACY-PRESERVING USER ATTRIBUTE RELEASE AND SESSION MANAGEMENT	EMC Corporation
13632055		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13632063	8934378	RESILIENT CACHE-BASED TOPOLOGY DETECTION OF A DYNAMIC CLUSTER	EMC Corporation
13632095		[REDACTED]	EMC Corporation
13632099		[REDACTED]	EMC Corporation
13632105		[REDACTED]	EMC Corporation
13649659	9207881	SYSTEM AND METHOD FOR OBJECT MANAGEMENT	EMC Corporation
13649902	8825667	METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
13663535	8566916	AGILE OTP GENERATION	EMC Corporation
13665881		[REDACTED]	EMC Corporation
13665884		[REDACTED]	EMC Corporation
13665885	9235535	METHOD AND APPARATUS FOR REDUCING OVERHEADS OF PRIMARY STORAGE BY TRANSFERRING MODIFIED DATA IN AN OUT-OF- ORDER MANNER	EMC Corporation
13666871	8837480	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
13668814	8442200	ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
13671774	9367569	RECOVERY OF DIRECTORY INFORMATION	EMC Corporation
13675965		[REDACTED]	EMC Corporation
13680733		[REDACTED]	EMC Corporation
13681517	9122688	NAMING SCHEME FOR DIFFERENT COMPUTER SYSTEMS	EMC Corporation
13681932	9311176	EVALUATING A SET OF STORAGE DEVICES AND PROVIDING RECOMMENDED ACTIVITIES	EMC Corporation
13684656	9323750	STORAGE ARRAY SNAPSHOTS FOR LOGGED ACCESS REPLICATION IN A CONTINUOUS DATA PROTECTION SYSTEM	EMC Corporation
13684953	8990533	CRASH CONSISTENCY	EMC Corporation
13685639		CORRELATIVE MONITORING, ANALYSIS, AND CONTROL OF MULTI-SERVICE, MULTI-NETWORK SYSTEMS	EMC Corporation
13688068	8949191	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
13690069		[REDACTED]	EMC Corporation
13690654		[REDACTED]	EMC Corporation
13693605	8997096	SCALABLE AND SECURE HIGH-LEVEL STORAGE ACCESS FOR CLOUD COMPUTING PLATFORMS	EMC Corporation
13706487	9275117	FAST DEPENDENCY MINING USING ACCESS PATTERNS IN A STORAGE SYSTEM	EMC Corporation
13707788		[REDACTED]	EMC Corporation
13708322	9015476	A CRYPTOGRAPHIC DEVICE OPERABLE IN A CHALLENGE-RESPONSE MODE	EMC Corporation

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13710111	9201739	METHOD AND SYSTEM FOR A DATABASE	EMC Corporation
		MANAGEMENT SYSTEM ADD-IN FOR THIRD	
		PARTY BACKUP AND RESTORE APPLICATIONS	
13710657	9229942	METHOD AND SYSTEM FOR HARD LINK	EMC Corporation
		HANDLING FOR INCREMENTAL FILE MIGRATION	
13710715		[REDACTED]	EMC Corporation
13710893	8843448	METHOD AND SYSTEM FOR RENAMED	EMC Corporation
		DIRECTORY HANDLING FOR INCREMENTAL FILE	
		MIGRATION	
13711859	9154480	CHALLENGE-RESPONSE AUTHENTICATION OF A	EMC Corporation
		CRYPTOGRAPHIC DEVICE	
13711877		[REDACTED]	EMC Corporation
13712193	9054945	CONFIGURING STORAGE ACCESS CONTROL	EMC Corporation
13713136		[REDACTED]	EMC Corporation
13713658	8874904	VIEW COMPUTATION AND TRANSMISSION FOR A	EMC Corporation
		SET OF KEYS REFRESHED OVER MULTIPLE	
		EPOCHS IN A CRYPTOGRAPHIC DEVICE	
13715222	8990453	ADAPTIVE AND OPTIMIZED FLOW CONTROL	EMC Corporation
		MECHANISM	
13715348	8924364	EFFICIENT MANAGEMENT OF FILE SYSTEM	EMC Corporation
		QUOTA TREES	
13715575	8935449	CUSTOMIZATION OF DATA PROCESSING	EMC Corporation
		EQUIPMENT WITH A REMOVABLE STORAGE	
		DEVICE	
13715659	9069482	METHOD AND SYSTEM FOR DYNAMIC SNAPSHOT	EMC Corporation
		BASED BACKUP AND RECOVERY OPERATIONS	
13715772		FILE SYSTEM QUIESCING DRIVER	EMC Corporation
13716305	9191386	AUTHENTICATION USING ONE-TIME PASSCODE	EMC Corporation
		AND PREDEFINED SWIPE PATTERN	
13716327	8806627	CONTENT RANDOMIZATION FOR THWARTING	EMC Corporation
		MALICIOUS SOFTWARE ATTACKS	
13716373	9098412	GUIDED PERFORMANCE TROUBLESHOOTING AND	EMC Corporation
		EXPLORATION	
13716589	9176972	IMPLIED M83 NAMES IN ALTERNATE NAME	EMC Corporation
		GENERATION IN DIRECTORIES SUPPORTING	
10515004		MULTIPLE NAMING PROTOCOLS	T7. 10. 0
13717004		[REDACTED]	EMC Corporation
13717929	2006446	[REDACTED]	EMC Corporation
13718171	8886316	AUTHENTICATION OF EXTERNAL DEVICES TO	EMC Corporation
		IMPLANTABLE MEDICAL DEVICES USING	
12710024	0062664	BIOMETRIC MEASUREMENTS	EMC C
13718824	9063664	METHOD AND SYSTEM FOR PROCESSING	EMC Corporation
		CHECKSUM OF A DATA STREAM TO OPTIMIZE	
10510005	0007006	DEDUPLICATION	EN CO C
13718827	9087086	METHOD AND SYSTEM FOR HANDLING OBJECT	EMC Corporation
		BOUNDARIES OF A DATA STREAM TO OPTIMIZE	
12710094	9722215	DEDUPLICATION  ENVIRONMENT OF A SCIENCATION AND SERVICE	EMC Comment:
13719084	8732215	ENVIRONMENT CLASSIFICATION AND SERVICE	EMC Corporation
12710547	0022012	ANALYSIS  VOICE AUTHENTICATION VIA TRUCTED DEVICE	EMC C
13719547	8832813	VOICE AUTHENTICATION VIA TRUSTED DEVICE	EMC Corporation
13720150		[REDACTED]	EMC Corporation
13720294		[REDACTED]	EMC Corporation
13720352		[REDACTED]	EMC Corporation

Application	Registration		
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13720404	8832790	FRAUD DETECTION IN ADAPTIVE	EMC Corporation
		AUTHENTICATION SYSTEMS	
13720428	8839449	ASSESSING RISK OF INFORMATION LEAKAGE	EMC Corporation
13720449		[REDACTED]	EMC Corporation
13720458	9176648	AUTHORING A VIRTUALIZED DATA CENTER	EMC Corporation
13720473		[REDACTED]	EMC Corporation
13720493		[REDACTED]	EMC Corporation
13720814	9165001	MULTI STREAM DEDUPLICATED BACKUP OF	EMC Corporation
		COLLABORATION SERVER DATA	
13721502	9348627	DISTRIBUTED DYNAMIC FEDERATION BETWEEN MULTI-CONNECTED VIRTUAL PLATFORM CLUSTERS	EMC Corporation
13721836	8949793	TEST BED DESIGN FROM CUSTOMER SYSTEM CONFIGURATIONS USING MACHINE LEARNING TECHNIQUES	EMC Corporation
13721844	9047299	RECLAIMING BLOCKS FROM A DIRECTORY	EMC Corporation
13722052		[REDACTED]	EMC Corporation
13722347	9135300	EFFICIENT SAMPLING WITH REPLACEMENT	EMC Corporation
13722425	9183201	POLICY BASED OVER SAMPLING WITH REPLACEMENT	EMC Corporation
13722747		[REDACTED]	EMC Corporation
13722780	9147168	DECISION TREE REPRESENTATION FOR BIG DATA	EMC Corporation
13722816		[REDACTED]	EMC Corporation
13722847	9122997	GENERATING ATTRIBUTE-CLASS-STATISTICS FOR DECISION TREES	EMC Corporation
13722864	8996436	DECISION TREE CLASSIFICATION FOR BIG DATA	EMC Corporation
13723088	9110898	METHOD AND APPARATUS FOR AUTOMATICALLY DETECTING REPLICATION PERFORMANCE DEGRADATION	EMC Corporation
13723110		[REDACTED]	EMC Corporation
13723134		[REDACTED]	EMC Corporation
13723931	9235606	SIMPLIFIED DATABASE/LOG BACKUP AND RESTORE	EMC Corporation
12725740	002(500	DECTODING MIDTHAL MACHINE DATA	EMC Communication
13725740	9026500	RESTORING VIRTUAL MACHINE DATA	EMC Corporation
13725845	0227057	[REDACTED]	EMC Corporation
13725854	9237057	SYSTEM AND METHOD FOR WORKLOAD BALANCING IN A FLEXIBLE MULTI-TIERED RESOURCE POOL	EMC Corporation
13726351	8914329	AUTOMATED TIME-BASED TESTING METHOD FOR DISTRIBUTED SYSTEM	EMC Corporation
13726805		[REDACTED]	EMC Corporation
13726912	8862541	N-SITE ASYNCHRONOUS REPLICATION	EMC Corporation

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13727738	9031994	DATABASE PARTITIONING FOR DATA	EMC Corporation
		PROCESSING SYSTEM	_
13727884		[REDACTED]	EMC Corporation
13728234	9361306	MANAGING CONCURRENT WRITE OPERATIONS TO	EMC Corporation
		A FILE SYSTEM TRANSACTION LOG	•
13728324		[REDACTED]	EMC Corporation
13728382	8990550	METHODS AND APPARATUS FOR SECURING	EMC Corporation
		COMMUNICATIONS BETWEEN A NODE AND A	_
		SERVER BASED ON HARDWARE METADATA	
		GATHERED BY AN IN-MEMORY PROCESS	
13728387		[REDACTED]	EMC Corporation
13728394	9262493	DATA ANALYTICS LIFECYCLE PROCESSES	EMC Corporation
13728421	9069594	BURST BUFFER APPLIANCE COMPRISING	EMC Corporation
		MULTIPLE VIRTUAL MACHINES	_
13728483		[REDACTED]	EMC Corporation
13728490		[REDACTED]	EMC Corporation
13729155		[REDACTED]	EMC Corporation
13729249		[REDACTED]	EMC Corporation
13729301	9361310	METHOD AND SYSTEM FOR NETWORK USER	EMC Corporation
		ACCESS IMPERSONATION FOR MULTI-THREADED	_
		BACKUP APPLICATIONS	
13729361	9361327	ROLLING BLOOM FILTER FOR DATA WITH	EMC Corporation
		RETENTION POLICY	_
13729391		[REDACTED]	EMC Corporation
13729545	8959388	MANAGING TLU RECOVERY USING PRE-	EMC Corporation
		ALLOCATED LUN SLICES	_
13729618		[REDACTED]	EMC Corporation
13729644	8949483	TECHNIQUES USING I/O CLASSIFICATIONS IN	EMC Corporation
		CONNECTION WITH DETERMINING DATA	_
		MOVEMENTS	
13729680	9354813	DATA STORAGE SYSTEM MODELING	EMC Corporation
13729701	8972637	GOVERNANCE OF STORAGE	EMC Corporation
13729780		[REDACTED]	EMC Corporation
13729996	8955076	EVENT-BASED BIOMETRIC AUTHENTICATION	EMC Corporation
		USING MOBILE DEVICE	
13730037		[REDACTED]	EMC Corporation
13730086	9311333	MANAGING FILES OF FILE SYSTEMS	EMC Corporation
13730091		[REDACTED]	EMC Corporation
13730129		[REDACTED]	EMC Corporation
13730261		[REDACTED]	EMC Corporation
13730307		[REDACTED]	EMC Corporation
13730401	8949661	FEDERATION OF INDICES	EMC Corporation
13730409		[REDACTED]	EMC Corporation
13730442		[REDACTED]	EMC Corporation
13730451	9286177	S-PARAMETER ANALYSIS TOOL	EMC Corporation
13730464		[REDACTED]	EMC Corporation
13730468	9043535	MINIMIZING APPLICATION RESPONSE TIME	EMC Corporation
13730496		[REDACTED]	EMC Corporation
13730586		[REDACTED]	EMC Corporation
13730635		[REDACTED]	EMC Corporation
13730675		[REDACTED]	EMC Corporation
13730783		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
13731182	9020977	MANAGING MULTIPROTOCOL DIRECTORIES	EMC Corporation
13731197	9201802	MANAGING READ/WRITE LOCKS FOR MULTIPLE	EMC Corporation
15/511//	3201002	CPU CORES FOR EFFICIENT ACCESS TO STORAGE	2. The corporation
		ARRAY RESOURCES	
13731271	9274817	STORAGE QUALITY-OF-SERVICE CONTROL IN	EMC Corporation
		DISTRIBUTED VIRTUAL INFRASTRUCTURE	1
13731274	9256700	PUBLIC SERVICE FOR EMULATION OF	EMC Corporation
		APPLICATION LOAD BASED ON SYNTHETIC DATA	
		GENERATION DERIVED FROM PRE-EXISTING	
		MODELS	
13731279	9355112	OPTIMIZING COMPRESSION BASED ON DATA	EMC Corporation
		ACTIVITY	
13731346	8817988	VARIABLE EPOCH SCHEDULER FOR PROACTIVE	EMC Corporation
10501075	0155105	CRYPTOGRAPHY SYSTEMS	En co o
13731367	9177127	CONFOUNDER GENERATION IN KNOWLEDGE-	EMC Corporation
12721415		BASED AUTHENTICATION FOR AN ENTERPRISE	EMC Companyion
13731415 13731430	9038134	[REDACTED] MANAGING PREDICTIONS IN DATA SECURITY	EMC Corporation
13/31430	9038134	SYSTEMS	EMC Corporation
13731455		[REDACTED]	EMC Corporation
13731456	9201803	SYSTEM AND METHOD FOR CACHING DATA	EMC Corporation
13731461	9201803	[REDACTED]	EMC Corporation
13731514	8978159	METHODS AND APPARATUS FOR MEDIATING	EMC Corporation
13/31314	07/0137	ACCESS TO DERIVATIVES OF SENSITIVE DATA	ENIC Corporation
13731520	9160102	MAGNETIC, SELF-RETRACTING, AUTO-ALIGNING	EMC Corporation
15751520	7100102	ELECTRICAL CONNECTOR	Livie corporation
13731536		[REDACTED]	EMC Corporation
13731547	9286465	METHOD AND APPARATUS FOR FEDERATED	EMC Corporation
		SINGLE SIGN ON USING AUTHENTICATION	1
		BROKER	
13731635	9378361	ANOMALY SENSOR FRAMEWORK FOR DETECTING	EMC Corporation
		ADVANCED PERSISTENT THREAT ATTACKS	
13731643	9124585	FRAMEWORK FOR MAPPING NETWORK	EMC Corporation
		ADDRESSES TO HOSTS IN A ENTERPRISE	
10001601		NETWORK	T) (0.0
13731654	00.500.55	[REDACTED]	EMC Corporation
13731707	9250955	MANAGING TASK APPROVAL	EMC Corporation
13731708	9146928	TECHNIQUES FOR STORING METADATA OF A	EMC Corporation
12721050	9007109	FILESYSTEM IN PERSISTENT MEMORY	EMC Companyion
13731858	8997198	TECHNIQUES FOR SECURING A CENTRALIZED METADATA DISTRIBUTED FILESYSTEM	EMC Corporation
13731883	8909967	TECHNIQUE FOR SECURE COMPUTATION	EMC Corporation
13731885	9152716	TECHNIQUES FOR VERIFYING SEARCH RESULTS	EMC Corporation
15/51005	7132/10	OVER A DISTRIBUTED COLLECTION	Livic corporation
13732119	9047309	DYNAMIC SNAPSHOT MOUNTING	EMC Corporation
13732188	701,007	[REDACTED]	EMC Corporation
13736782	8930336	RETRIEVAL OF SEARCHABLE AND NON-	EMC Corporation
		SEARCHABLE ATTRIBUTES	
13737295	8843917	TECHNIQUES FOR PARALLEL DRIVE UPGRADE	EMC Corporation
		WHILE MAINTAINING HOST ACCESSIBILITY	
13741644	9015121	UNIFIED VIRTUAL MACHINE AND DATA STORAGE	EMC Corporation
		SNAPSHOTS	<b>,</b>

Application Number	Registration Number	Title	Owner
13751307	9330048	BALANCING RESPONSE TIMES FOR SYNCHRONOUS I/O REQUESTS HAVING DIFFERENT PRIORITIES	EMC Corporation
13751611		[REDACTED]	EMC Corporation
13753239	9021303	MULTI-THREADED IN-MEMORY PROCESSING OF A TRANSACTION LOG FOR CONCURRENT ACCESS TO DATA DURING LOG REPLAY	EMC Corporation
13753839	8984363	PROOF OF RETRIEVABILITY FOR ARCHIVED FILES	EMC Corporation
13758101	8707308	METHOD FOR DYNAMIC MANAGEMENT OF SYSTEM RESOURCES THROUGH APPLICATION HINTS	EMC Corporation
13762650	8756238	INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
13763508		[REDACTED]	EMC Corporation
13763522	9317218	MEMORY EFFICIENT SANITIZATION OF A DEDUPLICATED STORAGE SYSTEM USING A PERFECT HASH FUNCTION	EMC Corporation
13764358	9069785	STREAM LOCALITY DELTA COMPRESSION	EMC Corporation
13764429	8782010	REPRESENTING DE-DUPLICATED FILE DATA	EMC Corporation
13768163	9092508	OVERSEEING DATA STORAGE EQUIPMENT POWER USAGE VIA LOCAL COLLECTION OF POWER CONSUMPTION DATA AND REMOTE EVALUATION AND REPORTING OF PERFORMANCE	EMC Corporation
13768630		[REDACTED]	EMC Corporation
13768679		[REDACTED]	EMC Corporation
13770139		[REDACTED]	EMC Corporation
13771268	9128736	COMMON SCHEDULING AND SYNCHRONIZATION PRIMITIVES	EMC Corporation
13777226	9330150	REGISTRATION AND UTILIZATION OF ARBITRARY DATA CONVERSION SCHEMES IN A SHARED DATA STORE	EMC Corporation
13778269	8966281	SYSTEMS AND METHODS FOR ACCESSING STORAGE OR NETWORK BASED REPLICAS OF ENCRYPTED VOLUMES WITH NO ADDITIONAL KEY MANAGEMENT	EMC Corporation
13779127		[REDACTED]	EMC Corporation
13779177		[REDACTED]	EMC Corporation
13781316	9185188	METHOD AND SYSTEM FOR DETERMINING OPTIMAL TIME PERIOD FOR DATA MOVEMENT FROM SOURCE STORAGE TO TARGET STORAGE	EMC Corporation
13781329	8909605	METHOD AND SYSTEM FOR ACCELERATING DATA MOVEMENT USING CHANGE INFORMATION CONCERNING DIFFERENCE BETWEEN CURRENT AND PREVIOUS DATA MOVEMENTS	EMC Corporation
12792/22		DECICION DEOCEDIDE EOD CUCTOVED 1001E	EMC C- ··································
13783622		DECISION PROCEDURE FOR CUSTOMER ISSUE RESOLUTION	EMC Corporation
13784000	9081752	REDUNDANT DISK ENCODING VIA ERASURE DECODING	EMC Corporation
13784060		[REDACTED]	EMC Corporation
13784513	9361302	UNIFORM LOGIC REPLICATION FOR DDFS	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13785625		[REDACTED]	EMC Corporation
13786100	9383936	PERCENT QUOTAS FOR DEDUPLICATION STORAGE	EMC Corporation
		APPLIANCE	
13786270	9235475	METADATA OPTIMIZATION FOR NETWORK	EMC Corporation
		REPLICATION USING REPRESENTATIVE OF METADATA BATCH	
13786277	9110964	METADATA DATCH METADATA OPTIMIZATION FOR NETWORK	EMC Corporation
13700277	7110704	REPLICATION USING DIFFERENTIAL ENCODING	Elvic corporation
13790341	9330151	DATABASE CHANGE DATA CAPTURE WITHIN A	EMC Corporation
		STORAGE ARRAY	-
13792679	9356961	PRIVACY SCORING FOR CLOUD SERVICES	EMC Corporation
13792992		[REDACTED]	EMC Corporation
13793087	0270640	[REDACTED]	EMC Corporation
13793327	9270649	SECURE SOFTWARE AUTHENTICATOR DATA TRANSFER BETWEEN PROCESSING DEVICES	EMC Corporation
13794029	9052969	PROGRAMMING MODEL FOR TRANSPARENT	EMC Corporation
15751025	7022707	PARALLELIZATION OF COMBINATORIAL	2.vic corporation
		OPTIMIZATION	
13794198		[REDACTED]	EMC Corporation
13794237	9218251	METHOD TO PERFORM DISASTER RECOVERY	EMC Corporation
	0.1.50.550	USING BLOCK DATA MOVEMENT	77.60
13795061	9152578	SECURING DATA REPLICATION, BACKUP AND	EMC Corporation
		MOBILITY IN CLOUD STORAGE	
13795512		[REDACTED]	EMC Corporation
13795801	9037858	DISTRIBUTED CRYPTOGRAPHY USING DISTINCT	EMC Corporation
		VALUE SETS EACH COMPRISING AT LEAST ONE	1
		OBSCURED SECRET VALUE	
13798225		[REDACTED]	EMC Corporation
13798237	8904050	TECHNIQUES FOR AUTOMATED DATA STORAGE	EMC Corporation
13798291		SYSTEM PORT INITIALIZATION [REDACTED]	EMC Corporation
13798395	8977830	CRASH CONSISTENCY	EMC Corporation
13798542	8977847	DISTRIBUTED CHALLENGE-RESPONSE	EMC Corporation
13770312	0577017	AUTHENTICATION	21/10 corporation
13798545	8924595	MIXED MODE SIMULATION	EMC Corporation
13798552	9128628	DYNAMIC REPLICATION MODE SWITCHING	EMC Corporation
13798988		[REDACTED]	EMC Corporation
13799197		[REDACTED]	EMC Corporation
13799197	8924935	PREDICTIVE MODEL OF AUTOMATED FIX	EMC Corporation
	332.335	HANDLING	
13799224	8989513	IDENTIFYING MARKERS ASSOCIATED WITH IT	EMC Corporation
		COMPONENTS IN AN IMAGE	-
13799325	9244623	PARALLEL DE-DUPLICATION OF DATA CHUNKS	EMC Corporation
		OF A SHARED DATA OBJECT USING A LOG-	
12700220	9378046	STRUCTURED FILE SYSTEM  MANIDIM ATING HADDWADE USING A LAVEDED	EMC Comparation
13799339	93/8040	MANIPULATING HARDWARE USING A LAYERED DEVICE DRIVER	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13799388		[REDACTED]	EMC Corporation
13799547		[REDACTED]	EMC Corporation
13799662		[REDACTED]	EMC Corporation
13799696		[REDACTED]	EMC Corporation
13799890		[REDACTED]	EMC Corporation
13800044		[REDACTED]	EMC Corporation
13800534	9231956	UTILIZING ENTITY-GENERIC RECORDS FOR	EMC Corporation
11000		DETERMINING ACCESS TO ASSETS	
13800708		[REDACTED]	EMC Corporation
13800732		[REDACTED]	EMC Corporation
13801103		[REDACTED]	EMC Corporation
13801178		[REDACTED]	EMC Corporation
13801603	9083510	GENERATION AND MANAGEMENT OF CRYPTO KEY FOR CLOUD DATA	EMC Corporation
13803134		[REDACTED]	EMC Corporation
13803554	9021307	VERIFYING APPLICATION DATA PROTECTION	EMC Corporation
13803567	9130753	AUTHENTICATION USING SECURITY DEVICE WITH	EMC Corporation
		ELECTRONIC INTERFACE	
13803840	9003106	CRASH CONSISTENCY	EMC Corporation
13803849		[REDACTED]	EMC Corporation
13804194	9361045	CONSTRUCTING VIRTUAL STORAGE NETWORKS	EMC Corporation
		FOR MULTIPLE TENANTS WITH QUALITY-OF-	
		SERVICE DELIVERY	
13804327	9367351	PROFILING INPUT/OUTPUT BEHAVIORAL	EMC Corporation
		CHARACTERISTICS IN DISTRIBUTED	
		INFRASTRUCTURE	
13804506	9367405	MANAGING SOFTWARE ERRORS IN STORAGE	EMC Corporation
		SYSTEMS	
13804596		[REDACTED]	EMC Corporation
13804703		[REDACTED]	EMC Corporation
13804717	9092451	GENOMIC APPLICATION DATA STORAGE	EMC Corporation
13804893	9165009	LIGHTWEIGHT APPLIANCE FOR CONTENT	EMC Corporation
		STORAGE	
13804962		[REDACTED]	EMC Corporation
13804996		[REDACTED]	EMC Corporation
13813825		RETRIEVEING DATA FROM DATA STORAGE	EMC Corporation
		SYSTEMS	
13826966		[REDACTED]	EMC Corporation
13827118		[REDACTED]	EMC Corporation
13827385		[REDACTED]	EMC Corporation
13827452		[REDACTED]	EMC Corporation
13827814		[REDACTED]	EMC Corporation
13827862	8996460	ACCESSING AN IMAGE IN A CONTINUOUS DATA	EMC Corporation
		PROTECTION USING DEDUPLICATION-BASED	
		STORAGE	
13827909	9383937	JOURNAL TIERING IN A CONTINUOUS DATA	EMC Corporation
		PROTECTION SYSTEM USING DEDUPLICATION-	
		BASED STORAGE	
13827959	9110914	CONTINUOUS DATA PROTECTION USING	EMC Corporation
		DEDUPLICATION-BASED STORAGE	
13827998	9325595	METHOD AND APPARATUS FOR IDENTIFYING	EMC Corporation
		AVAILABLE WORK	

Application Number         Registr Number           13828079         13828185         919567           13828266         13828294         13828322         928600           13829037         911906         13829293         911906           13829293         13830138         904918           13830138         13830184         923558           13832280         933191           13832331         904959           13832462         904959           13832468         917668           13832695         912268           13832705         914692           13833280         13833356           13833403         919540           13834360         928046           13834385         922986	Title  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [UNIFIED DATAPATH ARCHITECTURE  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [AUTHENTICATION  [REDACTED]  [AUTHENTICATED HIERARCHICAL SET  OPERATIONS AND APPLICATIONS  [REDACTED]  [RECOVERING PROVISIONING OF STORAGE IN  STORAGE SYSTEMS  [RECOVERING PERFORMANCE OF A FILE SYSTEM  POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE  SYSTEM CHECK  [REDACTED]	EMC Corporation
13828079         13828185         919567           13828266         13828294         13828322         928600           13829037         911906         13829293         13829293         13829374         904918           13830138         13830184         923558         13830421         13832280         933191           13832331         13832362         904959         904959         13832468         13832468         13832636         917668           13832695         912268         13832784         13833280         13833356           1383377         893068         13833356         919540           13834033         919540	[REDACTED]  SELECTIVE FRAGMENTATION REPAIR  [REDACTED]  [REDACTED]  UNIFIED DATAPATH ARCHITECTURE  NEAR FIELD COMMUNICATION BASED AUTHENTICATION  [REDACTED]  AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS  [REDACTED]  TRACKING FILES EXCLUDED FROM BACKUP  [REDACTED]  DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation
13828185         919567           13828266         13828294           13828322         928600           13829037         911906           13829293         13829374           13830138         904918           13830184         923558           13830421         933191           13832331         904959           13832412         904959           13832468         917668           13832695         912268           13832705         914692           13833280         1383356           13833356         919540           13834033         919540	SELECTIVE FRAGMENTATION REPAIR  [REDACTED]  [REDACTED]  [UNIFIED DATAPATH ARCHITECTURE  NEAR FIELD COMMUNICATION BASED AUTHENTICATION  [REDACTED]  AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS  [REDACTED]  TRACKING FILES EXCLUDED FROM BACKUP  [REDACTED]  DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation
13828266         13828294           13828322         928600           13829037         911906           13829293         13829374         904918           13830138         13830184         923558           13830421         13832280         933191           13832331         13832362         904959           13832412         13832468         13832636         917668           13832695         912268           13832784         13833280         13833356           13833517         893068           13833692         885640           13834033         919540           13834360         928046	[REDACTED] [REDACTED] [UNIFIED DATAPATH ARCHITECTURE  NEAR FIELD COMMUNICATION BASED AUTHENTICATION [REDACTED] AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS [REDACTED] TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13828294         13828322         928600           13829037         911906           13829293         13829374         904918           13830138         13830184         923558           13830421         933191           13832331         904959           13832468         917668           13832695         912268           13832784         13832784           13833356         914692           13833517         893068           13834033         919540           13834360         928046	[REDACTED]  UNIFIED DATAPATH ARCHITECTURE  NEAR FIELD COMMUNICATION BASED AUTHENTICATION  [REDACTED]  AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS  [REDACTED]  TRACKING FILES EXCLUDED FROM BACKUP  [REDACTED]  DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation
13828322         928600           13829037         911906           13829293         904918           13830138         904918           13830184         923558           13830421         933191           13832331         904959           13832468         917668           13832695         912268           13832784         918926           13833280         91833356           13833692         885640           13834033         919540           13834360         928046	UNIFIED DATAPATH ARCHITECTURE NEAR FIELD COMMUNICATION BASED AUTHENTICATION [REDACTED] AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS [REDACTED] TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13829037         911906           13829293         904918           13830138         904918           13830184         923558           13830421         933191           13832280         933191           13832331         904959           13832468         917668           13832636         917668           13832705         914692           13832784         13833280           1383356         91833356           13833692         885640           13834033         919540           13834360         928046	NEAR FIELD COMMUNICATION BASED AUTHENTICATION  [REDACTED] AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS  [REDACTED] TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13829293         13829374       904918         13830138       923558         13830184       923558         13830421       933191         13832331       904959         13832462       904959         13832468       917668         13832636       917668         13832705       914692         13832784       13833280         13833356       13833517         893068       13834033       919540         13834360       928046	AUTHENTICATION  [REDACTED]  AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS  [REDACTED]  TRACKING FILES EXCLUDED FROM BACKUP [REDACTED]  DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13829374         904918           13830138         923558           13830421         933191           13832280         933191           13832331         904959           13832468         917668           13832636         917668           13832705         914692           13832784         13833280           1383356         91833356           13833692         885640           13834033         919540           13834360         928046	AUTHENTICATED HIERARCHICAL SET OPERATIONS AND APPLICATIONS [REDACTED] TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13830138       923558         13830184       923558         13830421       933191         13832331       904959         13832462       904959         13832468       917668         13832636       917668         13832705       914692         13832784       13833280         1383356       1383356         13833692       885640         13834033       919540         13834360       928046	OPERATIONS AND APPLICATIONS  [REDACTED]  TRACKING FILES EXCLUDED FROM BACKUP  [REDACTED]  DATA-DRIVEN DETECTION OF SERVERS AND  CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM  REISSUING VIA KNOWLEDGE BASED  AUTHENTICATION  [REDACTED]  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN  STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM  POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE  SYSTEM CHECK  [REDACTED]	EMC Corporation
13830184         923558           13830421         933191           13832280         933191           13832331         904959           13832462         904959           13832468         917668           13832636         917668           13832705         914692           13832784         13833280           13833356         893068           13833692         885640           13834033         919540           13834360         928046	[REDACTED] TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13830184         923558           13830421         933191           13832280         933191           13832331         904959           13832462         904959           13832468         917668           13832636         917668           13832705         914692           13832784         13833280           1383356         893068           13833692         885640           13834033         919540           13834360         928046	TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13830421         13832280       933191         13832331       904959         13832462       904959         13832468       917668         13832636       917668         13832705       914692         13832784       13833280         13833356       893068         13833692       885640         13834033       919540         13834360       928046	TRACKING FILES EXCLUDED FROM BACKUP [REDACTED] DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS [REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation
13830421         13832280         933191           13832331         13832362         904959           13832412         13832468         917668           13832636         917668         912268           13832705         914692         13832784           13833280         13833356         913833356           13833692         885640         13834033         919540           13834360         928046	[REDACTED]  DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation
13832280         933191           13832331         904959           13832462         904959           13832412         13832468           13832636         917668           13832705         914692           13832784         13833280           13833356         893068           13833692         885640           13834033         919540           13834360         928046	DATA-DRIVEN DETECTION OF SERVERS AND CLIENTS  [REDACTED]  PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation
13832362       904959         13832412       13832468         13832636       917668         13832695       912268         13832705       914692         13833280       13833356         13833517       893068         13833692       885640         13834033       919540         13834360       928046	[REDACTED] PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation
13832362       904959         13832412       13832468         13832636       917668         13832695       912268         13832705       914692         13833280       13833356         13833517       893068         13833692       885640         13834033       919540         13834360       928046	PREVENTION OF FRAUD IN MOBILE SIM REISSUING VIA KNOWLEDGE BASED AUTHENTICATION [REDACTED] [REDACTED] MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation
13832412         13832468         13832636       917668         13832695       912268         13832705       914692         13832784       13833280         1383356       893068         13833692       885640         13834033       919540         13834360       928046	REISSUING VIA KNOWLEDGE BASED AUTHENTICATION  [REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation EMC Corporation EMC Corporation EMC Corporation EMC Corporation
13832468         13832636       917668         13832695       912268         13832705       914692         13832784       13833280         13833356       893068         13833692       885640         13834033       919540         13834360       928046	[REDACTED]  [REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation
13832468         13832636       917668         13832695       912268         13832705       914692         13832784       13833280         13833356       893068         13833692       885640         13834033       919540         13834360       928046	[REDACTED]  MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation  EMC Corporation  EMC Corporation  EMC Corporation
13832636       917668         13832695       912268         13832705       914692         13832784       13833280         13833356       893068         13833692       885640         13834033       919540         13834360       928046	MANAGING PROVISIONING OF STORAGE IN STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation  EMC Corporation  EMC Corporation
13832695       912268         13832705       914692         13832784       13833280         13833356       893068         13833692       885640         13834033       919540         13834360       928046	STORAGE SYSTEMS  RECOVERING PERFORMANCE OF A FILE SYSTEM POST-MIGRATION  ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK  [REDACTED]	EMC Corporation  EMC Corporation
13832705       914692         13832784       13833280         13833356       893068         13833692       885640         13834033       919540         13834360       928046	POST-MIGRATION ACCESSING A FILE SYSTEM DURING A FILE SYSTEM CHECK [REDACTED]	EMC Corporation  EMC Corporation
13832784       13833280       13833356       13833517     893068       13833692     885640       13834033     919540       13834360     928046	SYSTEM CHECK [REDACTED]	EMC Corporation
13833280         13833356         13833517       893068         13833692       885640         13834033       919540         13834360       928046		
13833356         13833517       893068         13833692       885640         13834033       919540         13834360       928046	ED TO A COTTO	EMC Corporation
13833517       893068         13833692       885640         13834033       919540         13834360       928046	[REDACTED]	
13833692     885640       13834033     919540       13834360     928046	[REDACTED]	EMC Corporation
13833692     885640       13834033     919540       13834360     928046		<u> </u>
13834033     919540       13834360     928046	SECURE DISTRIBUTED DEDUPLICATION IN ENCRYPTED DATA STORAGE	EMC Corporation
13834033     919540       13834360     928046		EMC Corporation
		EMC Corporation
13834385 922986	METADATA FLUSHING USING ADDITIVE INCREASE AND MULTIPLICITIVE DECREASE TO DETERMINE A NUMBER OF IO PROCESSES USED	EMC Corporation
	MANAGING METADATA SYNCHRONIZATION FOR REDUCING HOST SYSTEM LATENCY IN A STORAGE SYSTEM	EMC Corporation
13834465	[REDACTED]	EMC Corporation
13834695	[REDACTED]	EMC Corporation
13835929 908184	SYNCHRONOUS AND ASYMMETRIC	EMC Corporation
13835946	ASYNCHRONOUS ACTIVE-ACTIVE-ACTIVE DATA ACCESS	EMC Corporation
13835999 924499	ACCESS	EMC Corporation
13836008	ACCESS [REDACTED]	Livie corporation

Application Number	Registration Number	Title	Owner
13836095	9152339	SYNCHRONIZATION OF ASYMMETRIC ACTIVE-	EMC Corporation
10000000	, 10 2007	ACTIVE, ASYNCHRONOUSLY-PROTECTED	
		STORAGE	
13836185		[REDACTED]	EMC Corporation
13837053		[REDACTED]	EMC Corporation
13837086	9304999	VIRTUAL STORAGE PROCESSOR LOAD	EMC Corporation
		BALANCING	
13837675	9225700	PROXIMITY-BASED AUTHENTICATION	EMC Corporation
13837707	9201573	ADAPTIVE GUI PRE-FETCHING	EMC Corporation
13837751	9262424	TECHNIQUES FOR PERFORMING SLICE	EMC Corporation
		CONSISTENCY CHECKS	
13837825		[REDACTED]	EMC Corporation
13837869	8996837	PROVIDING MULTI-TENANCY WITHIN A DATA	EMC Corporation
		STORAGE APPARATUS	
13838498	9092290	PERFORMING A NON-DISRUPTIVE SOFTWARE	EMC Corporation
		UPGRADE ON PHYSICAL STORAGE PROCESSORS	
		HAVING ACCESS TO VIRTUAL STORAGE	
		PROCESSORS	
13838540		[REDACTED]	EMC Corporation
13838749		[REDACTED]	EMC Corporation
13838948	9075583	LAYOUT DESIGN FOR A MOBILE APPLICATION	EMC Corporation
		USING GOVERNANCE, RISK MANAGEMENT AND	
		COMPLIANCE RULES	
13838955		[REDACTED]	EMC Corporation
13839171	9171042	PARALLEL PROCESSING DATABASE TREE STRUCTURE	EMC Corporation
13839390		[REDACTED]	EMC Corporation
13839872		[REDACTED]	EMC Corporation
13840274	8972465	BURST BUFFER APPLIANCE WITH SMALL FILE	EMC Corporation
		AGGREGATION	
13840420		[REDACTED]	EMC Corporation
13840654	9032212	SELF-REFRESHING DISTRIBUTED CRYPTOGRAPHY	EMC Corporation
13840912		DATA ANALYTICS PLATFORM OVER PARALLEL	EMC Corporation
		DATABASES AND DISTRIBUTED FILE SYSTEMS	
13840948		[REDACTED]	EMC Corporation
13841234	9323760	INTELLIGENT SNAPSHOT BASED BACKUPS	EMC Corporation
13842710	9355104	INTELLIGENT PAIRING USING A LOOKUP	EMC Corporation
		DATABASE FOR SNAPSHOT BASED BACKUPS	1
13842816		[REDACTED]	EMC Corporation
13842955		[REDACTED]	EMC Corporation
13843067	9378224	ATHERECTOMY CATHETER WITH ALIGNED	EMC Corporation
		IMAGER	
13843109	9164691	INTELLIGENT CONFIGURATION FOR SNAPSHOT	EMC Corporation
	_	BASED BACKUPS	
13850727	8762583	APPLICATION AWARE INTELLIGENT STORAGE	EMC Corporation
		SYSTEM	
13852187		[REDACTED]	EMC Corporation
12952060		[DED A CTED]	EMC Componentia
13853060		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13853207	9071424	TOKEN-BASED KEY GENERATION	EMC Corporation
13853279	8978122	SECURE CROSS-TENANCY FEDERATION IN SOFTWARE-AS-A-SERVICE SYSTEM	EMC Corporation
13853284	9122697	UNIFIED DATA SERVICES FOR BLOCK AND FILE	EMC Corporation
12052201	0077007	OBJECTS	EMC C
13853291	8977896	MAINTAINING DATA INTEGRITY IN DATA MIGRATION OPERATIONS USING PER-MIGRATION	EMC Corporation
12072420		DEVICE ERROR FLAGS	T) (C C
13853438		[REDACTED]	EMC Corporation
13853479		[REDACTED]	EMC Corporation
13853508	9280555	UNIFIED DATA PROTECTION FOR BLOCK AND FILE OBJECTS	EMC Corporation
13853519		[REDACTED]	EMC Corporation
13853653	9306943	ACCESS POINT AUTHENTICATION SERVER COMBINATION	EMC Corporation
13853803		[REDACTED]	EMC Corporation
13853817		[REDACTED]	EMC Corporation
13853827		[REDACTED]	EMC Corporation
13854114		[REDACTED]	EMC Corporation
			1
13857396	9081704	TECHNIQUES FOR NON-DISRUPTIVE UPGRADE	EMC Corporation
13857454	9282053	TECHNIQUES FOR DYNAMIC RESOURCE PARTITIONING	EMC Corporation
13857548	9323682	NON-INTRUSIVE AUTOMATED STORAGE TIERING USING INFORMATION OF FRONT END STORAGE ACTIVITIES	EMC Corporation
13860397	8832491	POST ACCESS DATA PRESERVATION	EMC Corporation
13860405	8724788	ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
13862032	8880824	GLOBAL DE-DUPLICATION IN SHARED ARCHITECTURES	EMC Corporation
13863268	9361321	BACKEND CAPACITY REPORT FOR DE- DUPLICATED STORAGE SYSTEMS	EMC Corporation
		DOFEICATED STORAGE STSTEMS	
13865931	8880469	PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM USING A PERFORMANCE SEGMENT STORAGE SYSTEM INCLUDING A DETERMINER	EMC Corporation
13870262		[REDACTED]	EMC Corporation
13870328		[REDACTED]	EMC Corporation
13872660	8904063	ORDERED KERNEL QUEUE FOR MULTIPATHING EVENTS	EMC Corporation
13873365	9203616	MULTI-SERVER FAULT TOLERANT DATA STORE UPDATE	EMC Corporation
13873518	9092159	OBJECT CLASSIFICATION AND IDENTIFICATION FROM RAW DATA	EMC Corporation
13874796	8706967	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
13875490	9235516	TECHNIQUES USING CACHELESS READ AND	EMC Corporation
		DEFERRED CACHING	_
13886644		[REDACTED]	EMC Corporation
13886687		[REDACTED]	EMC Corporation
13886763		[REDACTED]	EMC Corporation
13886786		[REDACTED]	EMC Corporation
13886892	9223517	SCALABLE INDEX STORE	EMC Corporation
13886897	9128627	METHOD AND SYSTEM FOR VIRTUAL MACHINE	EMC Corporation
		BACKUP	
13886915		[REDACTED]	EMC Corporation
13889196		[REDACTED]	EMC Corporation
13889805	9122866	USER AUTHENTICATION	EMC Corporation
13889934	9047295	FILE SYSTEM QUIESCING	EMC Corporation
13891789	9063842	TECHNIQUE FOR INTEGRATING VTL TAPE POOLS	EMC Corporation
		WITH MTREE QUOTAS	
13891802	9009742	VTL ADAPTIVE COMMIT	EMC Corporation
13891808	9110599	THIN PROVISIONING OF VTL TAPE POOLS WITH	EMC Corporation
		MTREE LOGICAL QUOTAS	
13900150	9160526	SHARING ENCRYPTION-RELATED METADATA	EMC Corporation
		BETWEEN MULTIPLE LAYERS IN A STORAGE I/O	
		STACK	
13901648	9002904	HANDLING HIBERNATION OF A PROCESS ON A	EMC Corporation
		STORAGE DEVICE	
13903390		[REDACTED]	EMC Corporation
13904353		[REDACTED]	EMC Corporation
13904368		[REDACTED]	EMC Corporation
13905310	9336166	BURST BUFFER APPLIANCE WITH OPERATING	EMC Corporation
		SYSTEM BYPASS FUNCTIONALITY TO FACILITATE	
		REMOTE DIRECT MEMORY ACCESS	
13905486		[REDACTED]	EMC Corporation
13905600	9043890	DISTRIBUTED AUTHENTICATION AGAINST	EMC Corporation
		STORED USER IDENTIFIERS AND USER	
		TEMPLATES VIA PSEUDONYM ASSOCIATION	
13905679		[REDACTED]	EMC Corporation
13905716		[REDACTED]	EMC Corporation
13905746		[REDACTED]	EMC Corporation
13905806		[REDACTED]	EMC Corporation
13906200	9195826	A GRAPH-BASED METHOD TO DETECT MALWARE	EMC Corporation
		COMMAND-AND-CONTROL INFRASTRUCTURE	
13907315	8918562	HARDWARE METHOD FOR DETECTING TIMEOUT	EMC Corporation
		CONDITIONS IN A LARGE NUMBER OF DATA	
1200==66		CONNECTIONS	77.60.0
13907760		[REDACTED]	EMC Corporation
13908083		[REDACTED]	EMC Corporation
13909871		[REDACTED]	EMC Corporation
13909875	9367448	METHOD AND SYSTEM FOR DETERMINING DATA	EMC Corporation
		INTEGRITY FOR GARBAGE COLLECTION OF DATA	
		STORAGE SYSTEMS	

Application	Registration		
Number	Number	Title	Owner
13911455	9013732	USING FONT INFORMATION INSTALLED IN AN	EMC Corporation
		OPERATING SYSTEM TO INTERCEPT TEXT BEING	_
		PRINTED	
13912955		[REDACTED]	EMC Corporation
13914836		[REDACTED]	EMC Corporation
13914989	9165019	SELF RECOVERY	EMC Corporation
13915799		[REDACTED]	EMC Corporation
13916859		[REDACTED]	EMC Corporation
13917112	9379894	AUTHENTICATION USING CRYPTOGRAPHIC	EMC Corporation
		VALUE DERIVED FROM A SHARED SECRET OF A	1
		NEAR FIELD COMMUNICATION TAG	
13917999		[REDACTED]	EMC Corporation
13919346	9038175	PROVIDING AN AUTOMATIC ELECTRONIC FRAUD	EMC Corporation
		NETWORK DATA QUALITY FEEDBACK LOOP	
13920387		[REDACTED]	EMC Corporation
13920700		[REDACTED]	EMC Corporation
		<u>[</u> ]	
13921457		[REDACTED]	EMC Corporation
13922325		[REDACTED]	EMC Corporation
13923234	9043814	DISPATCHER FRAMEWORK TO PROVIDE INTER-	EMC Corporation
13,2323 .	7013011	APPLICATION COMMUNICATION	21.10 Corporation
13923242	8977891	OPTIMIZED RECOVERY	EMC Corporation
13923427	03 03 1	[REDACTED]	EMC Corporation
13923442	9158735	TECHNIQUES FOR GENERATING UNIQUE	EMC Corporation
13723112	7130733	IDENTIFIERS	Livie corporation
13923563		[REDACTED]	EMC Corporation
13923673		[REDACTED]	EMC Corporation
13923764		[REDACTED]	EMC Corporation
13923791		[REDACTED]	EMC Corporation
13923831		[REDACTED]	EMC Corporation
13923854		[REDACTED]	EMC Corporation
13924022	9171009	CLUSTER FILE SYSTEM COMPRISING STORAGE	EMC Corporation
13924022	<b>71</b> /1007	SERVER UNITS EACH HAVING A SCALE-OUT	Livie corporation
		NETWORK ATTACHED STORAGE CLUSTER	
13924348		[REDACTED]	EMC Corporation
13924772	9268647	BLOCK BASED INCREMENTAL BACKUP FROM	EMC Corporation
10,21,7,2	3200017	USER MODE	2e corporation
13924777	9171002	FILE BASED INCREMENTAL BLOCK BACKUP FROM	EMC Corporation
10,2,,,,	31.1002	USER MODE	
13925003		[REDACTED]	EMC Corporation
13925143	9189387	COMBINED MEMORY AND STORAGE TIERING	EMC Corporation
13925216	9026694	TECHNIQUES FOR WORKLOAD REDISTRIBUTION	EMC Corporation
13925289	9305161	PASSWORD HARDENING SYSTEM USING	EMC Corporation
10,2020,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	PASSWORD SHARES DISTRIBUTED ACROSS	
		MULTIPLE SERVERS	
13925518		[REDACTED]	EMC Corporation
13925985	9178834	INTERCONNECT FLOW CONTROL	EMC Corporation
13926094	9128629	THROTTLING TECHNIQUES FOR USE WITH DATA	EMC Corporation
10,200,1	, 12002)	RELOCATION	
13926130		[REDACTED]	EMC Corporation
13720130		[hannetan]	Livic Corporation
			i .

Application	Registration	mya.	
Number	Number	Title	Owner
13926899		[REDACTED]	EMC Corporation
13927187	9367573	METHODS AND APPARATUS FOR ARCHIVING	EMC Corporation
1372/10/	7307373	SYSTEM HAVING ENHANCED PROCESSING	Livic Corporation
		EFFICIENCY ENTRINEED TROCESSING	
13927341	9262217	COMPUTATION RESOURCE CYCLIC UTILIZATION	EMC Corporation
13927492	8838840	METHOD AND APPARATUS FOR RECOVERING	EMC Corporation
		FROM SLOW OR STUCK SCSI COMMANDS AT A	
		SCSI TARGET	
13927528	9235450	METHOD AND APPARATUS FOR REDUCING SLOW	EMC Corporation
		OR STUCK SCSI COMMANDS IN A MULTI-SERVICE	1
		ENVIRONMENT AT A SCSI TARGET	
13927681	9128855	FLASH CACHE PARTITIONING	EMC Corporation
13928610		[REDACTED]	EMC Corporation
13928706		[REDACTED]	EMC Corporation
13928784	9124570	PROVIDING AN ASSESSMENT OF	EMC Corporation
		AUTHENTICATION REQUESTS	
13928810	9235802	AUTOMATED DEFECT AND OPTIMIZATION	EMC Corporation
		DISCOVERY	
13928880	9210147	PROVIDING AN ASSESSMENT OF	EMC Corporation
		AUTHENTICATION REQUESTS	
13928907		[REDACTED]	EMC Corporation
13928937	9202167	AUTOMATED DEFECT IDENTIFICATION AND	EMC Corporation
		RESOLUTION	
13928966		[REDACTED]	EMC Corporation
13928972		[REDACTED]	EMC Corporation
13928976		[REDACTED]	EMC Corporation
13928985		[REDACTED]	EMC Corporation
13929019		[REDACTED]	EMC Corporation
13929027	9304699	MANAGING TOKEN STATES ACROSS MULTIPLE	EMC Corporation
		STORAGE PROCESSORS OF A DATA STORAGE	
13929038	9380114	ARRAY	EMC Composition
13929038	9380114	TECHNIQUES FOR PEER MESSAGING ACROSS MULTIPLE STORAGE PROCESSORS OF A DATA	EMC Corporation
		STORAGE ARRAY	
13929070	9244632	DATA STORAGE SYSTEM CONFIGURATION	EMC Corporation
13929516	7244032	[REDACTED]	EMC Corporation
13929558		[REDACTED]	EMC Corporation
13929580		[REDACTED]	EMC Corporation
13929621	9384151	UNIFIED SCSI TARGET MANAGEMENT FOR	EMC Corporation
15727021	7507151	MANAGING A CRASHED SERVICE DAEMON IN A	Livic Corporation
		DEDUPLICATION APPLIANCE	
13929626	9378180	UNIFIED SCSI TARGET MANAGEMENT FOR	EMC Corporation
		STARTING AND CONFIGURING A SERVICE	
		DAEMON IN A DEDUPLICATION APPLIANCE	
13929632	9378160	UNIFIED SCSI TARGET MANAGEMENT FOR	EMC Corporation
		SHUTTING DOWN AND DE-CONFIGURING A	
		SERVICE DAEMON IN A DEDUPLICATION	
		APPLIANCE	

Application	Registration		
Number	Number	Title	Owner
13929639	9390034	UNIFIED SCSI TARGET MANAGEMENT FOR	EMC Corporation
		PERFORMING A DELAYED SHUTTDOWN OF A	
		SERVICE DAEMON IN A DEDUPLICATION	
10000000		APPLIANCE	
13929664		[REDACTED]	EMC Corporation
13929755		[REDACTED]	EMC Corporation
13929879		[REDACTED]	EMC Corporation
13929887		[REDACTED]	EMC Corporation
13929892		[REDACTED]	EMC Corporation
13929999		[REDACTED]	EMC Corporation
13930010		[REDACTED]	EMC Corporation
13930104		METHOD AND SYSTEM FOR MANAGING VIRTUAL	EMC Corporation
		MACHINE DISKS	
13930164	9122589	DATA STORAGE SYSTEM WITH UNIFIED SYSTEM	EMC Corporation
		CACHE	
13930214	9280423	MOUNTING BLOCK LEVEL BACKUP IMAGES	EMC Corporation
13930286		[REDACTED]	EMC Corporation
13930373	8850455	METHOD AND SYSTEM FOR PARENT BACKUP	EMC Corporation
		APPLICATION MONITORING OF CHILDREN	
10000000	00.554.04	BACKUP APPLICATIONS	77.60.0
13930506	9355121	SEGREGATING DATA AND METADATA IN A FILE	EMC Corporation
10000001	0100710	SYSTEM	T. (C.C.
13930684	9122712	COMPRESSING CONTAINER FILES	EMC Corporation
13930819		[REDACTED]	EMC Corporation
13930820		[REDACTED]	EMC Corporation
13930884		[REDACTED]	EMC Corporation
13930896		[REDACTED]	EMC Corporation
13930977		[REDACTED]	EMC Corporation
13931044	0004602	[REDACTED]	EMC Corporation
13931083	8984602	PROTECTED RESOURCE ACCESS CONTROL	EMC Corporation
		UTILIZING CREDENTIALS BASED ON MESSAGE	
		AUTHENTICATION CODES AND HASH CHAIN	
12021005		VALUES	EMC Composition
13931095 13931164	9330029	[REDACTED] MULTIPLE CONNECTOR IO BOARD	EMC Corporation EMC Corporation
	9330029		
13931200 13931212		[REDACTED]	EMC Corporation
		[REDACTED]	EMC Corporation
13931259		[REDACTED]	EMC Corporation
13931422 13931458		[REDACTED]	EMC Corporation
		[REDACTED]	EMC Corporation
13931501		[REDACTED]	EMC Corporation
13931609	0256602	[REDACTED]	EMC Corporation
13931757	9256603	FILE SYSTEM OVER FULLY PROVISIONED	EMC Corporation
13931764	0256614	VOLUME FILE IN DIRECT MODE	EMC Componention
13931/04	9256614	FILE SYSTEM SNAPSHOTS OVER FULLY	EMC Corporation
12021760	0220802	PROVISIONED VOLUME FILE IN DIRECT MODE	EMC Company i - ::
13931769	9329803	FILE SYSTEM OVER THINLY PROVISIONED	EMC Corporation
12021772		VOLUME FILE IN MAPPED MODE	EMC Company
13931772	025((20	[REDACTED]	EMC Corporation
13931775	9256629	FILE SYSTEM SNAPSHOTS OVER THINLY	EMC Corporation
		PROVISIONED VOLUME FILE IN MAPPED MODE	<u> </u>

Application Number	Registration Number	Title	Owner
13931876	9324036	FRAMEWORK FOR CALCULATING GROUPED OPTIMIZATION ALGORITHMS WITHIN A DISTRIBUTED DATA STORE	EMC Corporation
13931879	9235813	A GENERAL FRAMEWORK FOR CROSS- VALIDATION OF MACHINE LEARNING ALGORITHMS USING SQL ON DISTRIBUTED SYSTEMS	EMC Corporation
13931940	9244869	ASYNCHRONOUS CHECKPOINTING WITH MESSAGE PASSING TO BURST BUFFERS	EMC Corporation
13931959		[REDACTED]	EMC Corporation
13931979	9280578	COMBINING TRANSACTIONS IN A METADATA TRANSACTION LOG	EMC Corporation
13931985		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
13931989		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
13931990	9384218	FORMAT IDENTIFICATION FOR FRAGMENTED IMAGE DATA	EMC Corporation
13931991		FORMAT IDENTIFICATION FOR FRAGMENTED IMAGE DATA	EMC Corporation
13931993		FORMAT IDENTIFICATION FOR FRAGMENTED IMAGE DATA	EMC Corporation
13932525	9137096	POLICY BASED NETWORK COMPLIANCE	EMC Corporation
13932668	9304581	PROGRAMMABLE AVAILABILITY FOR A HIGH AVAILABILITY STORAGE SYSTEM	EMC Corporation
13937566	8892507	PROVIDING FILE SYSTEM QUOTA SUPPORT FOR A FILE SYSTEM HAVING SEPARATED DATA AND METADATA	EMC Corporation
13947272	9002965	DISTRIBUTION OF MESSAGES IN NODES CONNECTED BY A GRID ARCHITECTURE	EMC Corporation
13956010	9208166	SEEDING REPLICATION	EMC Corporation
13956091	9189623	HISTORICAL BEHAVIOR BASELINE MODELING AND ANOMALY DETECTION IN MACHINE GENERATED END TO END EVENT LOG	EMC Corporation
13956217	9110910	COMMON BACKUP FORMAT AND LOG BASED VIRTUAL CONSTRUCTION	EMC Corporation
13956237		[REDACTED]	EMC Corporation
13957318		[REDACTED]	EMC Corporation
13959450	9348797	EFFICIENT COMPUTATION OF SKETCHES	EMC Corporation
13962449	9069481	AUTOMATED NON-DISRUPTIVE DATA ENCAPSULATION AND DE-ENCAPSULATION	EMC Corporation
13966009		[REDACTED]	EMC Corporation
13966065	9152545	READ-WRITE ACCESS IN A READ-ONLY ENVIRONMENT	EMC Corporation
13966163	9152342	READ-WRITE ACCESS IN A READ-ONLY ENVIRONMENT	EMC Corporation
13969191	8935497	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
13971740	9213494	DE-DUPLICATION IN A VIRTUALIZED STORAGE ENVIRONMENT	EMC Corporation
13972089	8819212	DELEGATION OF DATA CLASSIFICATION USING COMMON LANGUAGE	EMC Corporation

Application Number	Registration Number	Title	Owner
13975709	114111001	[REDACTED]	EMC Corporation
13978623	9141305	STORAGE RESOURCE USAGE ANALYSIS FOR	EMC Corporation
	7141303	CUSTOMIZED APPLICATION OPTIONS	Elvic Corporation
13983589	9153122	ENVIRONMENTAL ALERT FOR COMPUTER	EMC Corporation
15,0500	7100122	SYSTEMS	Zivie corporation
14/036498	9160744	INCREASING ENTROPY FOR PASSWORD AND KEY	EMC Corporation
		GENERATION ON A MOBILE DEVICE	
14/037626	9208162	GENERATING A SHORT HASH HANDLE	EMC Corporation
14/039242	9177160	KEY MANAGEMENT IN FULL DISK AND FILE-	EMC Corporation
		LEVEL ENCRYPTION	
14/039267	9177123	DETECTING ILLEGITIMATE CODE GENERATORS	EMC Corporation
14/042180	9363141	SYSTEM AND METHOD FOR PARTITIONING A	EMC Corporation
		NETWORK	
14/042273	9268625	SYSTEM AND METHOD FOR STORAGE	EMC Corporation
		MANAGEMENT	
14/042326	9372743	SYSTEM AND METHOD FOR STORAGE	EMC Corporation
		MANAGEMENT	
14/099163	9355235	VALIDATING A USER OF A VIRTUAL MACHINE	EMC Corporation
		FOR ADMINISTRATOR/ROOT ACCESS	
14/105490	9052832	SYSTEM AND METHOD FOR PROVIDING LONG-	EMC Corporation
1.1/10.550.6	00.580.50	TERM STORAGE FOR DATA	F) (C C
14/105706	9367260	DYNAMIC REPLICATION SYSTEM	EMC Corporation
14/137448	9372636	TIERED-STORAGE DESIGN	EMC Corporation
14/138563	9348703	IMAGE RECOVERY FROM VOLUME IMAGE FILES	EMC Corporation
14/138961	9231962	IDENTIFYING SUSPICIOUS USER LOGINS IN	EMC Corporation
14/139003	9049221	ENTERPRISE NETWORKS  DETECTING SUSPICIOUS WEB TRAFFIC FROM AN	EMC Corporation
14/139003	9049221	ENTERPRISE NETWORK	EMC Corporation
14/139019	9338187	MODELING USER WORKING TIME USING	EMC Corporation
14/13/01/	/5536167	AUTHENTICATION EVENTS WITHIN AN	Livic Corporation
		ENTERPRISE NETWORK	
14/172610	9164906	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
14/194342	9348831	PERSISTENT FILE SYSTEM OBJECTS FOR	EMC Corporation
		MANAGEMENT OF DATABASES	,
14/211846	9288042	SECURELY AND REDUNDANTLY STORING	EMC Corporation
		ENCRYPTION CREDENTIALS SYSTEM AND	
		METHOD	
14/218581	9372761	TIME BASED CHECKPOINT RESTART	EMC Corporation
14/230510		HETEROSCEDASTIC DATA COMPRESSION USING	EMC Corporation
4.49.49.5		ARIMA-GARCH MODEL ESTIMATION	77.60.0
14/236270	9354975	LOAD BALANCING ON DISKS IN RAID BASED ON	EMC Corporation
14/242507	0007045	LINEAR BLOCK CODES	EMO Comment
14/243507	8886845	I/O SCHEDULING SYSTEM AND METHOD	EMC Corporation
14/246427		METHOD AND APPARATUS FOR DATABASE	EMC Corporation
14/313143	9276338	SANITIZING COMPLIANT PIN, ELECTRICAL ASSEMBLY	EMC Corporation
17/313173	74/0336	INCLUDING THE COMPLIANT PIN AND METHOD	ENIC Corporation
		OF MANUFACTURING THE COMPLIANT PIN	
14/319417	9350545	RECOVERY MECHANISM FOR FAULT-TOLERANT	EMC Corporation
1 I/J1/T1/	7550575	SPLIT-SERVER PASSCODE VERIFICATION OF ONE-	Livic Corporation
		TIME AUTHENTICATION TOKENS	
14/329336		PATH SELECTION TO READ OR WRITE DATA	EMC Corporation

Application Number	Registration Number	Title	Owner
14/339794	9087115	MIRROR RESYNCHNRONIZATION OF FIXED PAGE LENGTH TABLES FOR BETTER REPAIR TIME TO HIGH AVAILABILITY IN DATABASES	EMC Corporation
14/495404		METHOD AND APPARATUS FOR FILE SYSTEM	EMC Corporation
14/530596		FLASH MODULE	EMC Corporation
14/749833	9209833	METHODS AND APPARATUS FOR RATIONAL COMPRESSION AND DECOMPRESSION OF NUMBERS	EMC Corporation
14/884560		SELECTIVE FRAGMENTATION REPAIR	EMC Corporation
14/923775	9337863	METHODS AND APPARATUS FOR RATIONAL COMPRESSION AND DECOMPRESSION OF NUMBERS	EMC Corporation
14/937680		GENERATION AND USE OF A MODIFIED PROTECTED FILE	EMC Corporation
14/963061		GENERAL FRAMEWORK FOR CROSS-VALIDATION OF MACHINE LEARNING ALGORITHMS USING SQL ON DISTRIBUTED SYSTEMS	EMC Corporation
14010955	8898357	STORAGE INTEGRATION PLUGIN FOR VIRTUAL SERVERS	EMC Corporation
14013465		[REDACTED]	EMC Corporation
14015445	8930626	CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
14015583	8769198	SYSTEM AND METHOD FOR OUT-OF-BAND CACHE COHERENCY	EMC Corporation
14018552		[REDACTED]	EMC Corporation
14019826	9195685	MULTI-TIER RECOVERY	EMC Corporation
14020291	8850460	TECHNIQUES FOR PERFORMING A REMOTE PROCEDURE CALL USING REMOTE PROCEDURE CALL CONFIGURATION INFORMATION	EMC Corporation
14020333	9069813	QUERY TRANSLATION FOR SEARCHING COMPLEX STRUCTURES OF OBJECTS	EMC Corporation
14021488		[REDACTED]	EMC Corporation
14023016	9354962	MEMORY DUMP FILE COLLECTION AND ANALYSIS USING ANALYSIS SERVER AND CLOUD KNOWLEDGE BASE	EMC Corporation
14024793	9311207	DATA STORAGE SYSTEM OPTIMIZATIONS IN A MULTI-TIERED ENVIRONMENT	EMC Corporation
14024965	9069479	SNAPSHOTS IN DEDUPLICATION	EMC Corporation
14025333	9275218	METHODS AND APPARATUS FOR VERIFICATION OF A USER AT A FIRST DEVICE BASED ON INPUT RECEIVED FROM A SECOND DEVICE	EMC Corporation
14025377		[REDACTED]	EMC Corporation
14025719	8799603	EFFICIENT USE OF MEMORY AND ACCESSING OF STORED RECORDS	EMC Corporation
14030044	9026760	TECHNIQUES FOR ENFORCING CAPACITY RESTRICTIONS OF AN ALLOCATION POLICY	EMC Corporation
14030470	9223792	AUGMENTING METADATA COLLECTION FOR STORED DATA ANALYTICS	EMC Corporation
14030476	9378047	EFFICIENT COMMUNICATION OF INTERRUPTS FROM KERNEL SPACE TO USER SPACE USING EVENT QUEUES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14030511	9298633	ADAPTIVE PREFECTH FOR PREDICTED WRITE REQUESTS	EMC Corporation
14031130	8966216	TECHNIQUES FOR AUTOMATED EVALUATION AND MOVEMENT OF DATA BETWEEN STORAGE TIERS	EMC Corporation
14031210		[REDACTED]	EMC Corporation
14031628	9043605	ONLINE AND OFFLINE VALIDATION OF TOKENCODES	EMC Corporation
14031833		[REDACTED]	EMC Corporation
14032547		[REDACTED]	EMC Corporation
14033811	9043592	COMMUNICATING TRUST MODELS TO RELYING PARTIES	EMC Corporation
14034027		[REDACTED]	EMC Corporation
14034229	9317547	METHOD AND SYSTEM FOR CHILDREN BACKUP APPLICATIONS COMMUNICATING TO PARENT BACKUP APPLICATIONS VIA APPLICATION PROGRAM INTERFACES	EMC Corporation
14034603	9348888	ITERATIVE FILTER EXPRESSION PROCESSING FOR FILTERING EMBEDDED DATA OBJECTS	EMC Corporation
14034810		[REDACTED]	EMC Corporation
14034893		[REDACTED]	EMC Corporation
14034981		[REDACTED]	EMC Corporation
14035034		DATA REDACTION SYSTEM	EMC Corporation
14035055		[REDACTED]	EMC Corporation
14035118		[REDACTED]	EMC Corporation
14035124		[REDACTED]	EMC Corporation
14035295		[REDACTED]	EMC Corporation
14035364		[REDACTED]	EMC Corporation
14035664	9256651	INHERITANCE OF PROPERTIES FILES WITH LOCALE CHAIN SUPPORT	EMC Corporation
14035768		[REDACTED]	EMC Corporation
14036177		[REDACTED]	EMC Corporation
14036177	9154496	PROACTED  PROACTIVATION METHODS AND APPARATUS FOR	EMC Corporation
		PASSWORD-HARDENING SYSTEMS	•
14036239	9230092	METHODS AND APPARATUS FOR OBSCURING A VALID PASSWORD IN A SET OF PASSWORDS IN A PASSWORD-HARDENING SYSTEM	EMC Corporation
14036330	9261925	OPTIMIZED SERVER DESIGN USING DENSE DIMM SPACING, WIDE HEATSINK, IMPROVED ROUTING CHANNELS, AND IMPROVED AIR DELIVERY TO REAR DEVICES	EMC Corporation
14036396		[REDACTED]	EMC Corporation
14036612	9235630	DATASET DISCOVERY IN DATA ANALYTICS	EMC Corporation
14036635	9098699	SMART TELEVISION DATA SHARING TO PROVIDE SECURITY	EMC Corporation
14037199	9229796	SYSTEM AND METHOD FOR DETERMINING DISK FAILURE INDICATOR TO PREDICT FUTURE DISK FAILURES	EMC Corporation
14037202	9189309	SYSTEM AND METHOD FOR PREDICTING SINGLE- DISK FAILURES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14037204	9141457	SYSTEM AND METHOD FOR PREDICTING MULTIPLE-DISK FAILURES	EMC Corporation
14037241		IDENTITY AND ACCESS MANAGEMENT	EMC Corporation
14037259	9189345	METHOD TO PERFORM INSTANT RESTORE OF PHYSICAL MACHINES	EMC Corporation
14037293	9317809	HIGHLY SCALABLE MEMORY-EFFICIENT PARALLEL LDA IN A SHARED-NOTHING MPP DATABASE	EMC Corporation
14037474		[REDACTED]	EMC Corporation
14037480		[REDACTED]	EMC Corporation
14037511	9037822	HIERARCHICAL VOLUME TREE	EMC Corporation
14037577	9378106	HASH-BASED REPLICATION	EMC Corporation
14037663	8909829	METHODS AND APPARATUS FOR STORAGE POOL SELECTION	EMC Corporation
14037786		[REDACTED]	EMC Corporation
14037978	9336232	NATIVE FILE ACCESS	EMC Corporation
14038024	8976636	TECHNIQUES FOR STORING DATA	EMC Corporation
14038312	9313091	ANALYTICS PLATFORM FOR AUTOMATED DIAGNOSIS, REMEDIATION, AND PROACTIVE SUPPORTABILITY	EMC Corporation
14038514	9202052	DYNAMIC GRAPH ANOMALY DETECTION FRAMEWORK AND SCALABLE SYSTEM ARCHITECTURE	EMC Corporation
14038563	9237143	USER AUTHENTICATION AVOIDING EXPOSURE OF INFORMATION ABOUT ENUMERABLE SYSTEM RESOURCES	EMC Corporation
14038625	9367557	SYSTEM AND METHOD FOR IMPROVING DATA COMPRESSION	EMC Corporation
14038628		[REDACTED]	EMC Corporation
14038632		[REDACTED]	EMC Corporation
14038635		[REDACTED]	EMC Corporation
14038637		[REDACTED]	EMC Corporation
14038665	9304914	DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038668	8935446	INDEXING ARCHITECTURE FOR DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038673	9390116	INSERTION AND EVICTION SCHEMES FOR DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038687	9189414	FILE INDEXING USING AN EXCLUSION LIST OF A DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038694	9336143	INDEXING A DEDUPLICATED CACHE SYSTEM BY INTEGRATING FINGERPRINTS OF UNDERLYING DEDUPLICATED STORAGE SYSTEM	EMC Corporation
14038699	9189402	METHOD FOR PACKAGING AND STORING CACHED DATA IN DEDUPLICATED CACHE SYSTEM OF A STORAGE SYSTEM	EMC Corporation
14038847		[REDACTED]	EMC Corporation
14038929	9240988	COMPUTER SYSTEM EMPLOYING DUAL-BAND AUTHENTICATION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14039019	9280453	METHOD AND SYSTEM FOR TEST AUTOMATION	EMC Corporation
		FRAMEWORK FOR BACKUP AND RECOVERY	
1.1020000		APPLICATIONS	T7 (C C
14039099		[REDACTED]	EMC Corporation
14039215		[REDACTED]	EMC Corporation
14039315		[REDACTED]	EMC Corporation
14039430		[REDACTED]	EMC Corporation
14039463		[REDACTED]	EMC Corporation
14039647		[REDACTED]	EMC Corporation
14039691	9147063	PASSCODE GENERATION UTILIZING SELECTED	EMC Corporation
		PERMUTATION TYPE APPLIED TO TOKENCODE	
		AND PERSONAL IDENTIFIER	
14039868	9355234	AUTHENTICATION INVOLVING SELECTION	EMC Corporation
		AMONG DIFFERENT BIOMETRIC METHODS	
		DYNAMICALLY	
14039881	9154516	DETECTING RISKY NETWORK COMMUNICATIONS	EMC Corporation
		BASED ON BEHAVIOR PROFILING	
14039891	9395923	METHOD AND SYSTEM FOR RECOVERING FROM	EMC Corporation
		EMBEDDED ERRORS FROM WRITING DATA TO	
		STREAMING MEDIA	
14039897		[REDACTED]	EMC Corporation
14039926		[REDACTED]	EMC Corporation
14039956	9262450	USING DISTINGUISHED NAMES AND RELATIVE	EMC Corporation
		DISTINGUISHED NAMES FOR MERGING DATA IN	
		AN XML SCHEMA	
14040052		[REDACTED]	EMC Corporation
14040209	9355480	UNIFORM DISTRIBUTION OF VISUAL COMPONENT	EMC Corporation
		WIDTHS	
14040226	9306961	VISUAL SECURITY WORKFLOW	EMC Corporation
14040248	9160742	LOCALIZED RISK ANALYTICS FOR USER	EMC Corporation
		AUTHENTICATION	
14040264		[REDACTED]	EMC Corporation
14040305	9350758	DISTRIBUTED DENIAL OF SERVICE (DDOS)	EMC Corporation
		HONEYPOTS	
14040307		[REDACTED]	EMC Corporation
14040350	9274872	SET-BASED BUGS DISCOVERY SYSTEM VIA SQL	EMC Corporation
		QUERY	
14040382		[REDACTED]	EMC Corporation
14040397	9092563	SYSTEM FOR DISCOVERING BUGS USING	EMC Corporation
		INTERVAL ALGEBRA QUERY LANGUAGE	
14040407	9225691	DEDUPLICATION OF ENCRYPTED DATASET ON	EMC Corporation
		DATADOMAIN BACKUP APPLIANCE	
14040802	9235632	REPLICATION SYNCHRONIZATION	EMC Corporation
14040921		[REDACTED]	EMC Corporation
14040939		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14041013	9275359	MECHANISM AND TECHNIQUES FOR DISCOVERY	EMC Corporation
14041013	9273339	AND PREDICTION OF LONG-TERM-HIGH LEVEL	ENIC Corporation
		NEARLY PERIODICAL BUSINESS PROCESSES FROM	
		LOW-LEVEL LOGS	
14041067		[REDACTED]	EMC Corporation
14041097	9305071	PROVIDING VIRTUAL STORAGE PROCESSOR (VSP)	EMC Corporation
1404107/	7505071	MOBILITY WITH INDUCED FILE SYSTEM FORMAT	Livic Corporation
		MIGRATION	
14041103		[REDACTED]	EMC Corporation
14041108		[REDACTED]	EMC Corporation
14041125	9332433	DISTRIBUTING ACCESS AND IDENTIFICATION	EMC Corporation
11011123	7552155	TOKENS IN A MOBILE ENVIRONMENT	Livic Corporation
14041150	9325499	MESSAGE ENCRYPTION AND DECRYPTION	EMC Corporation
11011120	3323133	UTILIZING LOW-ENTROPY KEYS	2.vic corporation
14041176	9378261	UNIFIED SYNCHRONOUS REPLICATION FOR	EMC Corporation
		BLOCK AND FILE OBJECTS	
14041191	9305009	SYNCHRONOUS REPLICATION OF VIRTUALIZED	EMC Corporation
		STORAGE PROCESSORS	
14041194		[REDACTED]	EMC Corporation
14041204	9378219	METRO-CLUSTER BASED ON SYNCHRONOUS	EMC Corporation
	30.10213	REPLICATION OF VIRTUALIZED STORAGE	
		PROCESSORS	
14041217	9152353	VERIFYING THE CONSISTENCY OF SLICE	EMC Corporation
	710200	ALLOCATION METADATA	
14041229		[REDACTED]	EMC Corporation
14041238	9330155	UNIFIED MANAGEMENT OF SYNC AND ASYNC	EMC Corporation
		REPLICATION FOR BLOCK AND FILE OBJECTS	
14041290	9177670	METHOD AND APPARATUS FOR FLASH CACHE	EMC Corporation
		MANAGEMENT	1
14041314		[REDACTED]	EMC Corporation
14041317		[REDACTED]	EMC Corporation
14041332	9244711	VIRTUAL MACHINE CAPACITY PLANNING	EMC Corporation
14041456		[REDACTED]	EMC Corporation
14041567		[REDACTED]	EMC Corporation
14041795		[REDACTED]	EMC Corporation
14041820		[REDACTED]	EMC Corporation
14041823	9201736	METHODS AND APPARATUS FOR RECOVERY OF	EMC Corporation
		COMPLEX ASSETS IN DISTRIBUTED INFORMATION	F
		PROCESSING SYSTEMS	
14041847		[REDACTED]	EMC Corporation
14041855		[REDACTED]	EMC Corporation
14041864		[REDACTED]	EMC Corporation
14041893		[REDACTED]	EMC Corporation
14041899		[REDACTED]	EMC Corporation
14041977		[REDACTED]	EMC Corporation
14041988		[REDACTED]	EMC Corporation
14042088		[REDACTED]	EMC Corporation
14042242		[REDACTED]	EMC Corporation
14042252		[REDACTED]	EMC Corporation
		<u>'</u>	,

Application	Registration	and a	
Number	Number	Title	Owner
14042304		[REDACTED]	EMC Corporation
14042369		[REDACTED]	EMC Corporation
14042396		[REDACTED]	EMC Corporation
14042411	9231357	MID-PLANE ASSEMBLY	EMC Corporation
14042470		[REDACTED]	EMC Corporation
14042488		[REDACTED]	EMC Corporation
14042491	9274874	AUTOMATED DEFECT DIAGNOSIS FROM MACHINE DIAGNOSTIC DATA	EMC Corporation
14042494		[REDACTED]	EMC Corporation
14042501		[REDACTED]	EMC Corporation
14042504	9357666	FIELD-SERVICEABLE IT DEVICE	EMC Corporation
14042511		[REDACTED]	EMC Corporation
14042535	9207726	IT DEVICE	EMC Corporation
14042551		[REDACTED]	EMC Corporation
14042645		[REDACTED]	EMC Corporation
14042688	9159115	PROCESSING VECTORIZED ELEMENTS	EMC Corporation
		ASSOCIATED WITH IT SYSTEM IMAGES	
14042703	9129386	PROCESSING IMAGE DATA ASSOCIATED WITH IT	EMC Corporation
		SYSTEM COMPONENTS	1
14042708		[REDACTED]	EMC Corporation
14048952	8819478	AUTO-ADAPTING MULTI-TIER CACHE	EMC Corporation
14051713		[REDACTED]	EMC Corporation
14055031		[REDACTED]	EMC Corporation
14056106	8856397	TECHNIQUES FOR STATISTICS COLLECTION IN CONNECTION WITH DATA STORAGE PERFORMANCE.	EMC Corporation
14058357	8942073	MAINTAINING TAPE EMULATION CONSISTENCY	EMC Corporation
14058389	8850538	AGILE OTP GENERATION	EMC Corporation
14058469	8880484	COMPRESSION FORECASTING FOR A	EMC Corporation
	0000404	DEDUPLICATING STORAGE SYSTEM	
14058511		METHOD AND APPARATUS FOR DIAGNOSIS AND RECOVERY OF SYSTEM PROBLEMS	EMC Corporation
14061532	8949282	EFFICIENT STORAGE OF NON-SEARCHABLE ATTRIBUTES	EMC Corporation
14063241		METHOD AND APPARATUS FOR PROVIDING CACHING SERVICE IN NETWORK INFRASTRUCTURE	EMC Corporation
14065675		[REDACTED]	EMC Corporation
14065688		[REDACTED]	EMC Corporation
14065812		[REDACTED]	EMC Corporation
14066252		INSTANTIATING VIRTUAL APPLIANCES	EMC Corporation
14068288		[REDACTED]	EMC Corporation
14073237	8923497	REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
14080290	9294474	VERIFICATION BASED ON INPUT COMPRISING CAPTURED IMAGES, CAPTURED AUDIO AND TRACKED EYE MOVEMENT	EMC Corporation

Application	Registration		
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14080306	9323911	USER VERIFICATION METHOD WITH DATA REMOVAL PROTECTION	EMC Corporation
14080327	9280645	LOCAL-REMOTE VERIFICATION	EMC Corporation
14080520		[REDACTED]	EMC Corporation
14083201		[REDACTED]	EMC Corporation
14083254		[REDACTED]	EMC Corporation
14083283		[REDACTED]	EMC Corporation
14084290	9043595	SELECTIVE SHREDDING IN A DEDUPLICATION SYSTEM	EMC Corporation
14085195	9037795	MANAGING DATA STORAGE BY PROVISIONING CACHE AS A VIRTUAL DEVICE	EMC Corporation
14085511		[REDACTED]	EMC Corporation
14089862	8973096	FRAUD DETECTION IN ADAPTIVE AUTHENTICATION SYSTEMS	EMC Corporation
14089909		METHOD AND APPARATUS FOR RECOGNIZING IMAGE CONTENT	EMC Corporation
14089931	8904146	TECHNIQUES FOR DATA STORAGE ARRAY VIRTUALIZATION	EMC Corporation
14090146		[REDACTED]	EMC Corporation
14090777	8898387	DATA CACHING SYSTEM AND METHOD	EMC Corporation
14090937		[REDACTED]	EMC Corporation
14091237		[REDACTED]	EMC Corporation
14091256		[REDACTED]	EMC Corporation
14091735		[REDACTED]	EMC Corporation
14092028		[REDACTED]	EMC Corporation
14092427	9292520	ADVANCED VIRTUAL SYNTHETIC FULL BACKUP SYNTHESIZED FROM PREVIOUS FULL-BACKUPS	EMC Corporation
14097759		[REDACTED]	EMC Corporation
14097826		[REDACTED]	EMC Corporation
14098213	8836548	METHOD AND SYSTEM FOR DATA COMPRESSION AT A STORAGE SYSTEM	EMC Corporation
14098269		[REDACTED]	EMC Corporation
14098271	9176675	FAST-ZEROING IN A FILE SYSTEM	EMC Corporation
14100466		APPARATUS AND METHOD FOR SEARCHING INFORMATION	EMC Corporation
14101091		[REDACTED]	EMC Corporation
14102043	9225529	ENCRYPTED VIRTUAL MACHINES IN A CLOUD	EMC Corporation
14102111		[REDACTED]	EMC Corporation
14102770		[REDACTED]	EMC Corporation
14104250		[REDACTED]	EMC Corporation
14104982		[REDACTED]	EMC Corporation
14105037		[REDACTED]	EMC Corporation
14105567		[REDACTED]	EMC Corporation
14105608		[REDACTED]	EMC Corporation
14107305	9128622	NETWORK VIRTUALIZATION-AWARE DATA STORAGE SYSTEM	EMC Corporation
14107921		[REDACTED]	EMC Corporation
14108002		[REDACTED]	EMC Corporation
14108021		[REDACTED]	EMC Corporation
14108032		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14108053		[REDACTED]	EMC Corporation
14108060		[REDACTED]	EMC Corporation
14108150		[REDACTED]	EMC Corporation
14108473		[REDACTED]	EMC Corporation
14108497	9009355	PROCESSING REQUESTS TO A DATA STORE	EMC Corporation
	9009333	DURING BACK UP	•
14108653		[REDACTED]	EMC Corporation
14108979		[REDACTED]	EMC Corporation
14109030		METHOD AND SYSTEM FOR DATA PROTECTION	EMC Corporation
14109381		[REDACTED]	EMC Corporation
14122396	9378460	PROVISIONING STORAGE RESOURCES BASED ON AN EXPERT SYSTEM	EMC Corporation
14122404	9304859	POLAR CODES FOR EFFICIENT ENCODING AND DECODING IN REDUNDANT DISK ARRAYS	EMC Corporation
14132308		[REDACTED]	EMC Corporation
14132669		[REDACTED]	EMC Corporation
14132715		METHOD AND APPARATUS FOR USER	
		AUTHENTICATION	EMC Corporation
14132730	9202035	USER AUTHENTICATION BASED ON BIOMETRIC HANDWRITING ASPECTS OF A HANDWRITTEN CODE	EMC Corporation
14132750		[REDACTED]	EMC Corporation
14132894		[REDACTED]	EMC Corporation
14132921		[REDACTED]	EMC Corporation
14132933		[REDACTED]	EMC Corporation
14133371		[REDACTED]	EMC Corporation
14133466		[REDACTED]	EMC Corporation
14133705	9258242	PATH SELECTION USING A SERVICE LEVEL OBJECTIVE	EMC Corporation
14133774		[REDACTED]	EMC Corporation
14133852		[REDACTED]	EMC Corporation
14133892		[REDACTED]	EMC Corporation
14133929		[REDACTED]	EMC Corporation
	9158630	TESTING INTEGRITY OF REPLICATED STORAGE	
14133945	9138030		EMC Corporation
14134521 14134746	9235715	[REDACTED] TECHNIQUES FOR INCREASING MOBILE DEVICE	EMC Corporation EMC Corporation
14124749		SECURITY	FMC Campanatia
14134748		[REDACTED]	EMC Corporation
14134773		[REDACTED]	EMC Corporation
14135029		[REDACTED]	EMC Corporation
14135046		[REDACTED]	EMC Corporation
14135385	9274907	DECOMMISSIONING OF VIRTUAL BACKUP APPLIANCES	EMC Corporation
14136177		[REDACTED]	EMC Corporation
1.130111			Zirie Corporation

Application	Registration		
Number	Number	Title	Owner
14136288	9317189	METHOD TO INPUT CONTENT IN A STRUCTURED MANNER WITH REAL-TIME ASSISTANCE AND VALIDATION	EMC Corporation
14136368		IDED A CTEDI	EMC Composition
14136871	9185100	[REDACTED] DEVICE PAIRING USING A CRYPTOGRAPHIC	EMC Corporation EMC Corporation
141308/1	9183100	COMMITMENT PROCESS INVOLVING MEASURED MOTION VALUES	EMC Corporation
14136964	9298847	LATE BOUND, TRANSACTIONAL CONFIGURATION SYSTEM AND METHODS	EMC Corporation
14137457		[REDACTED]	EMC Corporation
14137559	9317216	SMR AUTO-TIERING	EMC Corporation
14137575		[REDACTED]	EMC Corporation
14137754		[REDACTED]	EMC Corporation
14137759	9268640	LIMITING DATA LOSS ON PARITY RAID GROUPS	EMC Corporation
14137768		[REDACTED]	EMC Corporation
14137774	9244811	SYSTEM AND METHOD FOR SMART FRAMEWORK FOR NETWORK BACKUP SOFTWARE DEBUGGING	EMC Corporation
14137788		[REDACTED]	EMC Corporation
14137850		[REDACTED]	EMC Corporation
14138260	9223800	CLUSTER FILE SYSTEM PROVIDING OBJECT STORE AND FUNCTIONALITY FOR TRANSFORMATION OF METADATA FILES INTO OBJECTS	EMC Corporation
14138297		[REDACTED]	EMC Corporation
14138415		[REDACTED]	EMC Corporation
14138451		[REDACTED]	EMC Corporation
14138520		[REDACTED]	EMC Corporation
14138525		[REDACTED]	EMC Corporation
14138534		[REDACTED]	EMC Corporation
14138538	9348849	BACKUP CLIENT ZERO-MANAGEMENT	EMC Corporation
14138622	2340042	[REDACTED]	EMC Corporation
14138626	9305151	RISK-BASED AUTHENTICATION USING LOCKOUT STATES	EMC Corporation
14138756		[REDACTED]	EMC Corporation
14138848	9143504	SECURE COMMUNICATION INFRASTRUCTURE	EMC Corporation
14139011		[REDACTED]	EMC Corporation
14139036		[REDACTED]	EMC Corporation
14139105		[REDACTED]	EMC Corporation
14139572		[REDACTED]	EMC Corporation
14139688		[REDACTED]	EMC Corporation
14139760	9053236	AUTOMATED DIRECTORY SERVICES TEST SETUP UTILITY	EMC Corporation
14139927	9329805	HOST ORIENTED AUTOMATIC VERIFICATION OF BEST PRACTICES	EMC Corporation
14139931	8990463	TRANSFER OF DATA STORAGE DEVICE FEATURES	EMC Corporation
14139956		[REDACTED]	EMC Corporation
14140047		[REDACTED]	EMC Corporation
14140132		[REDACTED]	EMC Corporation
14140135		[REDACTED]	EMC Corporation
14140721	9201770	A/B TESTING OF INSTALLED GRAPHICAL USER INTERFACES	EMC Corporation

Title  METHOD AND APPARATUS FOR PROVIDING COMPUTING RESOURCES  [REDACTED]  [REDACTED]  MANAGING DATA DEDUPLICATION IN STORAGE SYSTEMS  DEFERRED DRIVE PROCESSING [REDACTED]  CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE [REDACTED]  PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS [REDACTED]	EMC Corporation  EMC Corporation
COMPUTING RESOURCES  [REDACTED]  [REDACTED]  MANAGING DATA DEDUPLICATION IN STORAGE SYSTEMS  DEFERRED DRIVE PROCESSING  [REDACTED]  CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE  [REDACTED]  PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]	EMC Corporation
[REDACTED]  MANAGING DATA DEDUPLICATION IN STORAGE SYSTEMS  DEFERRED DRIVE PROCESSING [REDACTED]  CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE [REDACTED]  PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation
MANAGING DATA DEDUPLICATION IN STORAGE SYSTEMS DEFERRED DRIVE PROCESSING [REDACTED] CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE [REDACTED] PSEUDO WRITING SYSTEM AND METHOD MANAGING RECOVERY OF FILE SYSTEMS [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation
SYSTEMS  DEFERRED DRIVE PROCESSING  [REDACTED]  CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE  [REDACTED]  PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]	EMC Corporation
[REDACTED]  CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE [REDACTED]  PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation
CLOUD BLACK BOX FOR CLOUD INFRASTRUCTURE [REDACTED] PSEUDO WRITING SYSTEM AND METHOD MANAGING RECOVERY OF FILE SYSTEMS [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation
INFRASTRUCTURE  [REDACTED]  PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]	EMC Corporation
PSEUDO WRITING SYSTEM AND METHOD  MANAGING RECOVERY OF FILE SYSTEMS  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]	EMC Corporation EMC Corporation EMC Corporation EMC Corporation EMC Corporation EMC Corporation
MANAGING RECOVERY OF FILE SYSTEMS  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]  [REDACTED]	EMC Corporation EMC Corporation EMC Corporation EMC Corporation EMC Corporation
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation EMC Corporation EMC Corporation EMC Corporation
[REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation EMC Corporation EMC Corporation
[REDACTED] [REDACTED] [REDACTED] [REDACTED]	EMC Corporation EMC Corporation
[REDACTED] [REDACTED] [REDACTED]	EMC Corporation EMC Corporation
[REDACTED] [REDACTED] [REDACTED]	EMC Corporation
[REDACTED] [REDACTED]	
[REDACTED]	T DIVIC COIDOIAHOIL
	EMC Corporation
	EMC Corporation
[REDACTED]	EMC Corporation
BINDING A DATA OBJECT TO A ROTATIONAL	EMC Corporation
HARD DRIVE	21.10 corporation
METHOD, SYSTEM, AND APPARATUS FOR SECURING A COMPUTER THROUGH DETECTION	EMC Corporation
OF USER PROXIMITY	
[REDACTED]	EMC Corporation
VIRTUAL FILE SYSTEM PROVIDING INTERFACE BETWEEN ANALYTICS PLATFORM AND PHYSICAL FILE SYSTEM	EMC Corporation
[REDACTED]	EMC Corporation
DIAGNOSIS OF STORAGE SYSTEM COMPONENT ISSUES VIA DATA ANALYTICS	EMC Corporation
[REDACTED]	EMC Corporation
[REDACTED]	EMC Corporation
	EMC Corporation
METHOD AND APPARATUS FOR CREATING A	EMC Corporation
	EMC Corporation
	EMC Corporation
	EMC Corporation
	Livic Corporation
MANAGING ADAPTIVE REBOOTS ON MULTIPLE	EMC Corporation
	SHORT HASH HANDLE HIGHLY CORRELATED WITH A GLOBALLY-UNIQUE HASH SIGNATURE [REDACTED] [REDACTED]

Application Number	Registration Number	Title	Owner
14144892	9350735	CONTEXT-BASED DYNAMIC INFORMATION RIGHTS MANAGEMENT	EMC Corporation
14144930		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
14144940	9332434	POLICY-BASED LOCATION COLLECTION FOR AUTHENTICATION	EMC Corporation
14144970		[REDACTED]	EMC Corporation
14145012		[REDACTED]	EMC Corporation
14145125		[REDACTED]	EMC Corporation
14145266	9213648	SYSTEM, APPARATUS, AND METHOD OF SECURELY ERASING CACHE	EMC Corporation
14145284	9286238	SYSTEM, APPARATUS, AND METHOD OF CACHE MANAGEMENT	EMC Corporation
14145302	9323669	SYSTEM, APPARATUS, AND METHOD OF INITIALIZING CACHE	EMC Corporation
14145313	9170942	SYSTEM, APPARATUS, AND METHOD OF AUTOMATIC DATA PADDING	EMC Corporation
14145327	9069783	ACTIVE-ACTIVE SCALE-OUT FOR UNIFIED DATA PATH ARCHITECTURE	EMC Corporation
14145351		[REDACTED]	EMC Corporation
14145859		[REDACTED]	EMC Corporation
14149609	9182917	STORAGE SYSTEM POLLING REDUCTION	EMC Corporation
14152126	9026696	USING I/O TRACK INFORMATION FOR	EMC Corporation
		CONTINUOUS PUSH WITH SPLITTER FOR STORAGE DEVICE	
14154407	8875134	ACTIVE/ACTIVE STORAGE AND VIRTUAL MACHINE MOBILITY OVER ASYNCHRONOUS DISTANCES	EMC Corporation
14155596		MOBILE PRODUCT AND SERVICE INFORMATION MANAGEMENT	EMC Corporation
14156678		[REDACTED]	EMC Corporation
14161910	9092145	SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
14162409	9244790	SYSTEM AND METHOD FOR PREDICTING FUTURE DISK FAILURES	EMC Corporation
14164612	9311001	METHOD AND APPARATUS FOR IMPLEMENTING HIGH-PERFORMANCE, SCALABLE DATA PROCESSING AND STORAGE SYSTEMS	EMC Corporation
14167314	9356626	DATA ENCODING FOR DATA STORAGE SYSTEM BASED ON GENERALIZED CONTATENATED CODES	EMC Corporation
14167389	9229811	FOLDED CODES FOR CORRECTION OF LATENT MEDIA ERRORS	EMC Corporation
14168478	9280416	SELECTION OF ERASURE CODE PARAMETERS FOR NO DATA REPAIR	EMC Corporation
14169013	8972320	SMART CONTAINERS	EMC Corporation
14169811		[REDACTED]	EMC Corporation
			•

Application Number	Registration Number	Title	Owner
14173105		COLLECTING DATA IN INTERNET OF THINGS	EMC Corporation
14174684		METADATA CACHE SUPPORTING MULTIPLE HETEROGENEOUS SYSTEMS	EMC Corporation
14175328	9063839	CAPACITY FORECASTING FOR BACKUP STORAGE	EMC Corporation
14177576		[REDACTED]	EMC Corporation
14183061		[REDACTED]	EMC Corporation
14189326		[REDACTED]	EMC Corporation
14189571	9183216	CLUSTER STORAGE USING SUBSEGMENTING FOR EFFICIENT STORAGE	EMC Corporation
14189707	9223679	LIGHTWEIGHT, NON-INTRUSIVE, AND FLEXIBLE APPARATUS TO OBTAIN SYSTEM AND PROCESS STATE	EMC Corporation
14190195	9256725	CREDENTIAL RECOVERY WITH THE ASSISTANCE OF TRUSTED ENTITIES	EMC Corporation
14193963	9354896	HYPERVISOR UTILIZATION TO REDUCE BOOTSTRAP TIME FOR DATA STORAGE SYSTEM	EMC Corporation
14196308		[REDACTED]	EMC Corporation
14197618	9383940	TECHNIQUES FOR PERFORMING DATA MIGRATION	EMC Corporation
14197638		METHOD AND APPARATUS FOR PARALLEL COMPUTING	EMC Corporation
14198019		DETERMINING CORRECTNESS OF AN APPLICATION	EMC Corporation
14200572		[REDACTED]	EMC Corporation
14200593		[REDACTED]	EMC Corporation
14200604	9304893	INTEGRATED SOFTWARE DEVELOPMENT AND TEST CASE MANAGEMENT SYSTEM	EMC Corporation
14202767	9323765	SCALABLE CLOUD FILE SYSTEM WITH EFFICIENT INTEGRITY CHECKS	EMC Corporation
14206378		[REDACTED]	EMC Corporation
14207078	9195851	OFFLOADING ENCRYPTION TO THE CLIENT	EMC Corporation
14208045		[REDACTED]	EMC Corporation
14209587		[REDACTED]	EMC Corporation
14211109		DATA MANAGEMENT IN A MULTI-TENANT DISTRIBUTIVE ENVIRONMENT	EMC Corporation
14211546		A METHOD AND APPARATUS FOR EFFICIENT DATA COPYING AND DATA MIGRATION	EMC Corporation
14211574		DATABASE SEARCH	EMC Corporation
14211736	9286230	SPARSE VOLUME MANAGEMENT CACHE MECHANISM	EMC Corporation
14217738		[REDACTED]	EMC Corporation
14218024		[REDACTED]	EMC Corporation
14220391		[REDACTED]	EMC Corporation
14221469		[REDACTED]	EMC Corporation
14221608	9094447	COMPUTER SECURITY APPLICATION CONFIGURATION STRUCTURE EMPLOYING INDEPENDENTLY SPECIFIED CONFIGURATION OBJECTS AND SEPARATE RESOLVER	EMC Corporation
14222200		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14222938		[REDACTED]	EMC Corporation
14222971		[REDACTED]	EMC Corporation
14223190		[REDACTED]	EMC Corporation
14223265		[REDACTED]	EMC Corporation
14224303		[REDACTED]	EMC Corporation
14225033	9311496	PRIVACY SCREEN-BASED SECURITY	EMC Corporation
14225036	7311470	[REDACTED]	EMC Corporation
14225069		[REDACTED]	EMC Corporation
14225089		[REDACTED]	EMC Corporation
14225104		[REDACTED]	EMC Corporation
14225188		[REDACTED]	EMC Corporation
14223100		[REDACTED]	Livic Corporation
14225697	9231955	MULTIPARTY AUTHORIZATION FOR	EMC Corporation
14223097	9231933	CONTROLLING RESOURCE ACCESS	Livic Corporation
14225959		[REDACTED]	EMC Corporation
14227051	9063661	AUTOMATED UPDATING OF PARAMETERS AND	EMC Corporation
14227031	3003001	METADATA IN A FEDERATED STORAGE	Livic Corporation
		ENVIRONMENT	
14227058		[REDACTED]	EMC Corporation
14227161	9268693	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
1422/101	7200073	PERFORMANCE	Livic corporation
14227202		[REDACTED]	EMC Corporation
14227208	9389800	SYNTHESIZING VIRTUAL MACHINE DISK	EMC Corporation
1422/200	9389800	BACKUPS	Livic Corporation
14227234		[REDACTED]	EMC Corporation
14227290	9348827	FILE-BASED SNAPSHOTS FOR BLOCK-BASED	EMC Corporation
1422/290	7540027	BACKUPS	Livic Corporation
14227388		[REDACTED]	EMC Corporation
14227766		[REDACTED]	EMC Corporation
14228559		[REDACTED]	EMC Corporation
14228647		[REDACTED]	EMC Corporation
14228754		[REDACTED]	EMC Corporation
14228945		[REDACTED]	EMC Corporation
14228971		[REDACTED]	EMC Corporation
14228982	9367398	BACKING UP JOURNAL DATA TO A MEMORY OF	EMC Corporation
11220702	7307370	ANOTHER NODE	Livie corporation
14229000		[REDACTED]	EMC Corporation
14229020		[REDACTED]	EMC Corporation
14229028		[REDACTED]	EMC Corporation
14229049		[REDACTED]	EMC Corporation
14229085		[REDACTED]	EMC Corporation
14229222		[REDACTED]	EMC Corporation
14229323	9330103	PRESERVING FILE HANDLES WHEN MOVING FILE	EMC Corporation
1.22,525		SYSTEM OPERATION BETWEEN STORAGE	
		PROCESSORS	
14229364		[REDACTED]	EMC Corporation
14229467	9189339	REPLICATION OF A VIRTUAL DISTRIBUTED	EMC Corporation
		VOLUME WITH VIRTUAL MACHINE	
		GRANULARITY	
14229491		[REDACTED]	EMC Corporation
14229536		[REDACTED]	EMC Corporation
14230118		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14230164		[REDACTED]	EMC Corporation
14230168		[REDACTED]	EMC Corporation
14230173		[REDACTED]	EMC Corporation
14230227	9286004	MANAGING I/O OPERATIONS IN MULTI-CORE	EMC Corporation
		SYSTEMS	_
14230359		[REDACTED]	EMC Corporation
14230405		[REDACTED]	EMC Corporation
14230414	9342465	ENCRYPTING DATA IN A FLASH-BASED	EMC Corporation
		CONTENTS-ADDRESSABLE BLOCK	1
14230425		[REDACTED]	EMC Corporation
14230545		[REDACTED]	EMC Corporation
14230551		[REDACTED]	EMC Corporation
14230583		[REDACTED]	EMC Corporation
14230589		[REDACTED]	EMC Corporation
14230596	9280427	STORAGE SYSTEM PERFORMANCE RECOVERY	EMC Corporation
11230270	7200127	AFTER STORAGE PROCESSOR FAILURE	2.vic corporation
14230598		[REDACTED]	EMC Corporation
14230644	9286226	STORAGE PROCESSOR HARDWARE UPGRADE IN A	EMC Corporation
11230011	7200220	STORAGE SYSTEM	Livie corporation
14230804	9110820	HYBRID DATA STORAGE SYSTEM IN AN HPC	EMC Corporation
14230004	7110020	EXASCALE ENVIRONMENT	Livic corporation
14230818		[REDACTED]	EMC Corporation
14230831		[REDACTED]	EMC Corporation
14230845		[REDACTED]	EMC Corporation
14230863		[REDACTED]	EMC Corporation
14230891		[REDACTED]	EMC Corporation
14230928		[REDACTED]	EMC Corporation
14230928		[REDACTED]	EMC Corporation
14231075		[REDACTED]	EMC Corporation
14231148	01/4/01	[REDACTED]	EMC Corporation
14231151	9164681	METHOD AND APPARATUS FOR DYNAMIC PATH-	EMC Corporation
		SELECTION FOR IMPROVING I/O PERFORMANCE IN VIRTUAL PROVISIONED STORAGE ARRAYS WITH	
14231162		DATA STRIPING  IREDACTEDI	EMC Composition
14231102		[REDACTED]	EMC Corporation
14221249		IDED A CTEDI	EMC Composition
14231248		[REDACTED]	EMC Corporation
14231293		[REDACTED]	EMC Corporation
14231381		[REDACTED]	EMC Corporation
14231384		[REDACTED]	EMC Corporation
14231391		[REDACTED]	EMC Corporation
14231704		[REDACTED]	EMC Corporation
14236230		OFFLOADING RAID UPDATE OPERATIONS TO DISK	EMC Corporation
		CONTROLLERS	
14236273	9379989	CONGESTION AVOIDANCE AND CONTROL FOR	EMC Corporation
		UPD BASED PROTOCOLS	
14236290	9232222	LOSSLESS COLOR IMAGE COMPRESSION	EMC Corporation
		ADAPTIVELY USING SPATIAL PREDICTION OR	
		INTER-COMPONENT PREDICTION	
14244777	9275251	SEGMENT DEDUPLICATION SYSTEM WITH	EMC Corporation
		ENCRYPTION AND COMPRESSION OF SEGMENTS	

Application	Registration		
Number	Number	Title	Owner
14245998		MODEL FRAMEWORK TO FACILITATE ROBUST	EMC Corporation
		PROGRAMMING OF DISTRIBUTED WORKFLOWS	
14249749		IDENTITY PROTOCOL TRANSLATION GATEWAY	EMC Corporation
14251153	9268696	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
14255221	9268711	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
14259068	9026494	SYNCHRONIZATION OF STORAGE USING	EMC Corporation
1.10 < 10.00		COMPARISONS OF FINGERPRINTS OF BLOCKS	EN CO CO
14264383		[REDACTED]	EMC Corporation
14267675		CAPACITY FORECASTING FOR A DEDUPLICATING	EMC Corporation
1.40.65500		STORAGE SYSTEM	EN CO CO
14267733		STATE-BASED DIRECTING OF SEGMENTS IN A	EMC Corporation
140/7700	0201040	MULTINODE DEDUPLICATED STORAGE SYSTEM	EMO Commonation
14267799	9201949	INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
14269758		SYSTEM AND METHOD FOR RESOURCE SHARING	EMC Corporation
14071046		ACROSS MULTI-CLOUD ARRAYS	EMO Commonation
14271246		SEGMENT DEDUPLICATION SYSTEM WITH	EMC Corporation
14000405		COMPRESSION OF SEGMENTS	EMO Commonation
14280425		SUBSEGMENTING FOR EFFICIENT STORAGE,	EMC Corporation
		RESEMBLANCE DETERMINATION, AND	
14281855	9256373	TRANSMISSION INVULNERABLE DATA MOVEMENT FOR FILE	EMC Composition
14281833	92303/3	SYSTEM UPGRADE	EMC Corporation
14282098		[REDACTED]	EMC Corporation
14282098		[REDACTED]	EMIC Corporation
14282318	9250823	ONLINE REPLACEMENT OF PHYSICAL STORAGE IN	EMC Corporation
11202310	3200023	A VIRTUAL STORAGE SYSTEM	2. Te corporation
14284298		[REDACTED]	EMC Corporation
14285229		[REDACTED]	EMC Corporation
14289065	9104436	COMPILER DIRECTIVES FOR MEMORY	EMC Corporation
		MANAGEMENT	
14289282	9128950	REPRESENTING DE-DUPLICATED FILE DATA	EMC Corporation
14290632		[REDACTED]	EMC Corporation
14290898	9189342	GENERIC PROCESS FOR DETERMINING CHILD TO	EMC Corporation
		PARENT INHERITANCE FOR FAST PROVISIONED	1
		OR LINKED CLONE VIRTUAL MACHINES	
14290928	9292327	OPTIMIZATION FOR INCREMENTAL BACKUP OF	EMC Corporation
		VMS	_
14291395		[REDACTED]	EMC Corporation
14291500		[REDACTED]	EMC Corporation
14292183		[REDACTED]	EMC Corporation
14292290		[REDACTED]	EMC Corporation
14292309	9367402	COEXISTENCE OF BLOCK BASED BACKUP (BBB)	EMC Corporation
		PRODUCTS	
14292714		[REDACTED]	EMC Corporation
14293977		[REDACTED]	EMC Corporation
14296501	9037816	REVERSING A COMMUNICATION PATH BETWEEN	EMC Corporation
		STORAGE DEVICES	
14297467		[REDACTED]	EMC Corporation
14297475		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14298443		[REDACTED]	EMC Corporation
14298621		[REDACTED]	EMC Corporation
14298680		[REDACTED]	EMC Corporation
14298698		[REDACTED]	EMC Corporation
14300524		[REDACTED]	EMC Corporation
14302552		[REDACTED]	EMC Corporation
14302558		[REDACTED]	EMC Corporation
14302570		[REDACTED]	EMC Corporation
14303402		[REDACTED]	EMC Corporation
14303418		[REDACTED]	EMC Corporation
14303427		[REDACTED]	EMC Corporation
14304616		[REDACTED]	EMC Corporation
14304623		[REDACTED]	EMC Corporation
14307710		[REDACTED]	EMC Corporation
14308590		[REDACTED]	EMC Corporation
14308599		[REDACTED]	EMC Corporation
14310148		[REDACTED]	EMC Corporation
14310150		[REDACTED]	EMC Corporation
14310178	9274718	MIGRATION IN REPLICATION SYSTEM	EMC Corporation
14310178	92/4/10	[REDACTED]	EMC Corporation
14310179			EMC Corporation
		[REDACTED]	
14310330		,	EMC Corporation
14310474		MEASURING PERFORMANCE OF STORAGE	EMC Corporation
14011157	0201600	SYSTEM  DECOMMERCIONING MEDITIAL ADDITIONS	EMO C
14311157	9201699	DECOMMISSIONING VIRTUAL APPLIANCES	EMC Corporation
14212004		INED A CITEDIA	EN (C) C
14313094		[REDACTED]	EMC Corporation
14313104		[REDACTED]	EMC Corporation
14314377		[REDACTED]	EMC Corporation
14314378		[REDACTED]	EMC Corporation
14314380		[REDACTED]	EMC Corporation
14314411		[REDACTED]	EMC Corporation
14314458		[REDACTED]	EMC Corporation
14314523		[REDACTED]	EMC Corporation
14315414		[REDACTED]	EMC Corporation
14315438		[REDACTED]	EMC Corporation
14315957		[REDACTED]	EMC Corporation
14317002		[REDACTED]	EMC Corporation
14317141		[REDACTED]	EMC Corporation
14317202		[REDACTED]	EMC Corporation
14317203		[REDACTED]	EMC Corporation
14317328		[REDACTED]	EMC Corporation
14317455		[REDACTED]	EMC Corporation
14318068	9282094	TRANSPARENT ADAPTIVE AUTHENTICATION AND	EMC Corporation
		TRANSACTION MONITORING	
14318805		APPLICATION AND INFORMATION MOVEMENT IN	EMC Corporation
		A CLOUD ENVIRONMENT	
14318831		CLOUDBOOK	EMC Corporation
14318856		[REDACTED]	EMC Corporation
14318939		[REDACTED]	EMC Corporation
14318987	9356968	MANAGING AUTHENTICATION USING COMMON	EMC Corporation
1 (210/0/	7550700	AUTHENTICATION FRAMEWORK CIRCUITRY	Livic Corporation

Application	Registration	mu.	
Number	Number	Title	Owner
14319040	9378136	TECHNIQUES FOR SELECTING WRITE ENDURANCE	EMC Corporation
		CLASSIFICATION OF FLASH STORAGE BASED ON	
14210054		READ-WRITE MIXTURE OF I/O WORKLOAD	EMC C
14319054	0240771	[REDACTED]	EMC Corporation
14319084	9348761	WEIGHTED-VALUE CONSISTENT HASHING FOR	EMC Corporation
14210112		BALANCING DEVICE WEAR	EN (C) C
14319113		[REDACTED]	EMC Corporation
14319117		[REDACTED]	EMC Corporation
14319124		[REDACTED]	EMC Corporation
14319128		[REDACTED]	EMC Corporation
14319175		[REDACTED]	EMC Corporation
14319183		[REDACTED]	EMC Corporation
14319205		[REDACTED]	EMC Corporation
14319213	9300661	METHOD, APPARATUS, AND COMPUTER	EMC Corporation
		PROGRAM PRODUCT FOR DETERMINING	
		WHETHER TO SUSPEND AUTHENTICATION BY AN	
		AUTHENTICATION DEVICE	
14319249		[REDACTED]	EMC Corporation
14319272		[REDACTED]	EMC Corporation
14319334		[REDACTED]	EMC Corporation
14319348		[REDACTED]	EMC Corporation
14319349		[REDACTED]	EMC Corporation
14319396		[REDACTED]	EMC Corporation
14319440		[REDACTED]	EMC Corporation
14319566		[REDACTED]	EMC Corporation
14319590	9092754	MOBILE SCANNING FOR INVENTORY	EMC Corporation
		MANAGEMENT	1
14319602		[REDACTED]	EMC Corporation
14319622		[REDACTED]	EMC Corporation
14319634		[REDACTED]	EMC Corporation
14319645		[REDACTED]	EMC Corporation
14319646		[REDACTED]	EMC Corporation
14319652		[REDACTED]	EMC Corporation
14319660		[REDACTED]	EMC Corporation
14319677	9225738	MARKOV BEHAVIOR SCORING	EMC Corporation
14319739	7220730	[REDACTED]	EMC Corporation
14319757		[REDACTED]	EMC Corporation
14319764		[REDACTED]	EMC Corporation
14319772		[REDACTED]	EMC Corporation
14319777		[REDACTED]	EMC Corporation
14319777	+	[REDACTED]	EMC Corporation
14319804		[REDACTED]	EMC Corporation
14317004	+	[KEDACTED]	ENIC Corporation
14210954		[DED A CTED]	EMC Company
14319854		[REDACTED]	EMC Corporation
14319889		SOFTWARE OVERLAYS FOR DISAGGREGATED	EMC Corporation
14210001		COMPONENTS	FN (C C
14319991		[REDACTED]	EMC Corporation
14319998		[REDACTED]	EMC Corporation
14320001		CONTENT FABRIC FOR A DISTRIBUTED FILE SYSTEM	EMC Corporation
14320069		DYNAMICALLY COMPOSED COMPUTE NODES	EMC Corporation
		COMPRISING DISAGGREGATED COMPONENTS	1

Application	Registration		
Number	Number	Title	Owner
14320216		[REDACTED]	EMC Corporation
14320230		[REDACTED]	EMC Corporation
14320265		[REDACTED]	EMC Corporation
14320311		[REDACTED]	EMC Corporation
14320321		[REDACTED]	EMC Corporation
14320476		[REDACTED]	EMC Corporation
14320551		[REDACTED]	EMC Corporation
14325516		[REDACTED]	EMC Corporation
14325690		[REDACTED]	EMC Corporation
14325977		[REDACTED]	EMC Corporation
14325980		[REDACTED]	EMC Corporation
14326082		[REDACTED]	EMC Corporation
14327699		[REDACTED]	EMC Corporation
14328930		[REDACTED]	EMC Corporation
14332434	9344501	COMMUNICATION WITH MULTIPLE STORAGE	EMC Corporation
14332434	7544501	PROCESSORS USING NETWORK	ENIC Corporation
		INFRASTRUCTURE.	
14332552		[REDACTED]	EMC Corporation
14334327		[REDACTED]	EMC Corporation
14335239		[REDACTED]	EMC Corporation
14338775	9235479	DISTRIBUTED FILE SYSTEM HAVING SEPARATE	EMC Corporation
14338//3	92334/9		EMC Corporation
		DATA AND METADATA AND PROVIDING A	
14339392	9025602	CONSISTENT SNAPSHOT THEREOF  DATA REDISTRIBUTION IN DATA REPLICATION	EMC Composition
14339392	9023602		EMC Corporation
14240250	0052265	SYSTEMS  METHOD AND SYSTEM FOR MONITORING DISK	EMC Commention
14340358	8953265	METHOD AND SYSTEM FOR MONITORING DISK	EMC Corporation
14241660		RELIABILITY WITH GLOBAL DISK SCRUBBING	EMO C
14341669		[REDACTED]	EMC Corporation
14347729		RESOURCE PROVISIONING BASED ON LOGICAL	EMC Corporation
1.42.00001		PROFILES AND OBJECTIVE FUNCTIONS	EN (C) C
14369091		FLEXIBLE LICENSING ARCHITECTURE	EMC Corporation
14369093		DYNAMIC MALICIOUS APPLICATION DETECTION	EMC Corporation
1111000		IN STORAGE SYSTEMS	T) (G G
14410295		[REDACTED]	EMC Corporation
14410299		[REDACTED]	EMC Corporation
14451665	9083734	INTEGRATED FORENSICS PLATFORM FOR	EMC Corporation
		ANALYZING IT RESOURCES CONSUMED TO	
		DERIVE OPERATIONAL AND ARCHITECTURAL	
		RECOMMENDATIONS	
14451795		[REDACTED]	EMC Corporation
14451839	9118663	AGILE OTP GENERATION	EMC Corporation
14454086		SYSTEM AND METHOD FOR SECURE MULTI-	EMC Corporation
		TENANCY IN AN OPERATING SYSTEM OF A	
		STORAGE SYSTEM	
14457240	9268658	FAILOVER TO BACKUP SITE IN CONNECTION WITH	EMC Corporation
		TRIANGULAR ASYNCHRONOUS REPLICATION	
14463402	9268778	EFFICIENT BACKUP OF VIRTUAL DATA	EMC Corporation
14466200		FILE DELETION DETECTION IN KEY VALUE	EMC Corporation
		DATABASES FOR VIRTUAL BACKUPS	
14466745		DATA REPLICATION WITH DELTA COMPRESSION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14466756		EFFICIENT DATA REHYDRATION	EMC Corporation
14466950		[REDACTED]	EMC Corporation
14468084	9336157	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	1
14471540		[REDACTED]	EMC Corporation
14472209	9367549	VIRTUAL PRIVATE CLOUD THAT PROVIDES	EMC Corporation
		ENTERPRISE GRADE FUNCTIONALITY AND	·
		COMPLIANCE	
14473243	9378149	METHOD AND SYSTEM FOR TRACKING	EMC Corporation
		MODIFICATION TIMES OF DATA IN A STORAGE	
		SYSTEM	
14473325		METHOD AND SYSTEM FOR GARBAGE	EMC Corporation
		COLLECTION IN A STORAGE SYSTEM BASED ON	
		LONGEVITY OF STORED DATA	
14474576		[REDACTED]	EMC Corporation
14474755	9262280	AGE-OUT SELECTION IN HASH CACHES	EMC Corporation
14475835		[REDACTED]	EMC Corporation
14477152	9361447	AUTHENTICATION BASED ON USER-SELECTED	EMC Corporation
		IMAGE OVERLAY EFFECTS	
14478677	9098204	SYSTEM AND METHOD FOR IMPROVING CACHE	EMC Corporation
		PERFORMANCE	
14483249	9372775	METHOD AND APPARATUS FOR PROVIDING AT	EMC Corporation
		RISK INFORMATION IN A CLOUD COMPUTING	
		SYSTEM HAVING REDUNDANCY	
14484861		SYSTEM AND METHOD FOR PREDICTING MEMORY	EMC Corporation
		PERFORMANCE	
14484945		[REDACTED]	EMC Corporation
14487159		[REDACTED]	EMC Corporation
14487520		[REDACTED]	EMC Corporation
14488000		[REDACTED]	EMC Corporation
14488072	9279754	METHOD AND APPARATUS FOR TESTING A CABLE	EMC Corporation
14488278	9141172	METHOD AND APPARATUS TO CONTROL AND	EMC Corporation
		MANAGE A POWER STATE IN A RELATED SET OF	
		STORAGE DEVICES	
14488377	9380076	ACCESS MANAGEMENT SYSTEM	EMC Corporation
14489004		TROUBLESHOOTING BASED ON LOG SIMILARITY	EMC Corporation
14489295		[REDACTED]	EMC Corporation
14489317		[REDACTED]	EMC Corporation
14489363		[REDACTED]	EMC Corporation
14490756		[REDACTED]	EMC Corporation
14491151		[REDACTED]	EMC Corporation
14491400		[REDACTED]	EMC Corporation
14492185	9007706	DISK SYNCHRONIZING	EMC Corporation
14492241		[REDACTED]	EMC Corporation
14492506		[REDACTED]	EMC Corporation
14493616		[REDACTED]	EMC Corporation
14494895		[REDACTED]	EMC Corporation
14494899	9304889	SUSPENDING DATA REPLICATION	EMC Corporation
14495379		REMOVING CACHED DATA	EMC Corporation
14496119		[REDACTED]	EMC Corporation
14496441		[REDACTED]	EMC Corporation
14496783		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14496795		[REDACTED]	EMC Corporation
14497224		[REDACTED]	EMC Corporation
14497737		[REDACTED]	EMC Corporation
14497811		[REDACTED]	EMC Corporation
14497814		[REDACTED]	EMC Corporation
14498093		[REDACTED]	EMC Corporation
14499429		[REDACTED]	EMC Corporation
14499499		[REDACTED]	EMC Corporation
14499551		[REDACTED]	EMC Corporation
14499569		[REDACTED]	EMC Corporation
14500032		[REDACTED]	EMC Corporation
14500050		[REDACTED]	EMC Corporation
14500135		[REDACTED]	EMC Corporation
14500247		[REDACTED]	EMC Corporation
14500471		[REDACTED]	EMC Corporation
14500485		[REDACTED]	EMC Corporation
14500524	9047229	SYSTEM AND METHOD FOR PROTECTING	EMC Corporation
11300321	0017229	CONTENT	Elvic corporation
14500595		[REDACTED]	EMC Corporation
14500872		[REDACTED]	EMC Corporation
14501096		[REDACTED]	EMC Corporation
14501104		[REDACTED]	EMC Corporation
14501112		[REDACTED]	EMC Corporation
14501112		[REDACTED]	EMC Corporation
14501325		[REDACTED]	EMC Corporation
14501407	9378200	AUTOMATED CONTENT INFERENCE SYSTEM FOR	EMC Corporation
14301407	9378200	UNSTRUCTURED TEXT DATA	ENIC Corporation
14501415		[REDACTED]	EMC Corporation
14501431		[REDACTED]	EMC Corporation
14501455		[REDACTED]	EMC Corporation
14501474		[REDACTED]	EMC Corporation
14501485		[REDACTED]	EMC Corporation
14501502		[REDACTED]	EMC Corporation
14501518		[REDACTED]	EMC Corporation
14501522		[REDACTED]	EMC Corporation
14501531		[REDACTED]	EMC Corporation
14501533		[REDACTED]	EMC Corporation
14501700		[REDACTED]	EMC Corporation
14501756		[REDACTED]	EMC Corporation
14501763		CLOUD CONSISTENCY TECHNOLOGY	EMC Corporation
14501806		[REDACTED]	EMC Corporation
14501808		LEVELING IO	
14501855		[REDACTED]	EMC Corporation
14501881		[REDACTED]	EMC Corporation
		-	EMC Corporation
14501891		[REDACTED]	EMC Corporation
14501892		[REDACTED]	EMC Corporation
14501904		[REDACTED]	EMC Corporation
14501911		[REDACTED]	EMC Corporation
14501917		METHOD AND SYSTEM FOR IMPROVING FLASH	EMC Corporation
		STORAGE UTILIZATION BY PREDICTING BAD M-	
14501010		PAGES	EMC Comments
14501919		[REDACTED]	EMC Corporation

Application Number	Registration Number	Title	Owner
14501928	***************************************	[REDACTED]	EMC Corporation
14501939		[REDACTED]	EMC Corporation
14501951		[REDACTED]	EMC Corporation
14501958		[REDACTED]	EMC Corporation
14501987		[REDACTED]	EMC Corporation
14502020		[REDACTED]	EMC Corporation
11002020		[REBITE 122]	21/16 Corporation
14502036		[REDACTED]	EMC Corporation
14502177	9367395	MANAGING DATA INCONSISTENCIES IN STORAGE SYSTEMS	EMC Corporation
14502244		[REDACTED]	EMC Corporation
17302277		[NEDACTED]	Livic Corporation
14502250		[REDACTED]	EMC Corporation
14502289		[REDACTED]	EMC Corporation
14502327		METHOD AND APPARATUS FOR COST-BASED LOAD BALANCING FOR PORT SELECTION	EMC Corporation
14502491		[REDACTED]	EMC Corporation
14502518		[REDACTED]	EMC Corporation
14502543		[REDACTED]	EMC Corporation
14502574		[REDACTED]	EMC Corporation
14502614		[REDACTED]	EMC Corporation
14503319		[REDACTED]	EMC Corporation
14503331		[REDACTED]	EMC Corporation
14507655		PERFORMANCE IMPROVEMENT OF A CAPACITY	EMC Corporation
		OPTIMIZED STORAGE SYSTEM INCLUDING A	
		DETERMINER	
14510363		[REDACTED]	EMC Corporation
14510737		[REDACTED]	EMC Corporation
14510750		[REDACTED]	EMC Corporation
14501007		IDED A CTED!	EMC C
14521086		[REDACTED]	EMC Corporation
14523466		[REDACTED]	EMC Corporation
14524188	00000	[REDACTED]	EMC Corporation
14529041	9390179	FEDERATED SEARCH	EMC Corporation
14530061	9325733	UNSUPERVISED AGGREGATION OF SECURITY RULES	EMC Corporation
14533437		[REDACTED]	EMC Corporation
14534416		[REDACTED]	EMC Corporation
14538089		[REDACTED]	EMC Corporation
14538494	9374920	LOCKING/INDICATION SYSTEM	EMC Corporation
14547386		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14551496	9118565	HARDWARE METHOD FOR DETECTING TIMEOUT	EMC Corporation
11001170	7110202	CONDITIONS IN A LARGE NUMBER OF DATA	21/10 corporation
		CONNECTIONS	
14554492		[REDACTED]	EMC Corporation
14557559	9332024	UTILIZING DIGITAL LINEAR RECURSIVE FILTERS	EMC Corporation
		TO ESTIMATE STATISTICS FOR ANOMALY	
		DETECTION	
14558619		[REDACTED]	EMC Corporation
14558620		[REDACTED]	EMC Corporation
14558624		[REDACTED]	EMC Corporation
14558626		[REDACTED]	EMC Corporation
14559031		[REDACTED]	EMC Corporation
14559036		[REDACTED]	EMC Corporation
14561640		[REDACTED]	EMC Corporation
14562229		[REDACTED]	EMC Corporation
14564420		[REDACTED]	EMC Corporation
14564971		[REDACTED]	EMC Corporation
14565739		[REDACTED]	EMC Corporation
14567669		[REDACTED]	EMC Corporation
14307007			Elvic Corporation
14568740		CONFIGURING A DATA CENTER	EMC Corporation
14569526		VIRTUAL MACHINE DISASTER RECOVERY	EMC Corporation
14307320		VIKTOAL MACHINE DISASTER RECOVERT	Livic Corporation
14572027		[REDACTED]	EMC Corporation
14572457		POST BACKUP CATALOGS	EMC Corporation
14572899		[REDACTED]	EMC Corporation
14573213		[REDACTED]	EMC Corporation
14573228		VIRTUALIZATION IN A STORAGE AREA NETWORK	EMC Corporation
14573320		[REDACTED]	EMC Corporation
14575056		[REDACTED]	EMC Corporation
14575079		[REDACTED]	EMC Corporation
14575080		[REDACTED]	EMC Corporation
14575295		[REDACTED]	EMC Corporation
14576040		[REDACTED]	EMC Corporation
14576060		[REDACTED]	EMC Corporation
14576193		[REDACTED]	EMC Corporation
14576450		[REDACTED]	EMC Corporation
14576887		[REDACTED]	EMC Corporation
14576899		[REDACTED]	EMC Corporation
14576921		METHOD AND SYSTEM TO SEARCH LOGS THAT	EMC Corporation
173/0741		CONTAIN A MASSIVE NUMBER OF ENTRIES	Livic Corporation
14576931		[REDACTED]	EMC Corporation
14576943		[REDACTED]	EMC Corporation
14576952		[REDACTED]	EMC Corporation
14577206		[REDACTED]	EMC Corporation
14577387		[REDACTED]	EMC Corporation
14577469		[REDACTED]	EMC Corporation
14578113			EMC Corporation
		[REDACTED]	EMC Corporation
14578151		[REDACTED]	<u> </u>
14578162		[REDACTED]	EMC Corporation
14578168	l	[REDACTED]	EMC Corporation

Application Number	Registration Number Title	Owner
14578172	[REDACTED]	EMC Corporation
14578310	[REDACTED]	EMC Corporation
14578411	[REDACTED]	EMC Corporation
14578582	[REDACTED]	EMC Corporation
14578663	[REDACTED]	EMC Corporation
14578902	[REDACTED]	EMC Corporation
14579195	[REDACTED]	EMC Corporation
14579193	[REDACTED]	EMC Corporation
14579288	[REDACTED]	EMC Corporation
	[REDACTED]	
14579949		EMC Corporation
14579996	USING VERSIONING TO BACK UP MULTIPLE VERSIONS OF A STORED OBJECT	EMC Corporation
14580304	[REDACTED]	EMC Corporation
14580531	[REDACTED]	EMC Corporation
14580865	[REDACTED]	EMC Corporation
14580956	[REDACTED]	EMC Corporation
14581201	[REDACTED]	EMC Corporation
14581224	[REDACTED] INCLUDING KERNEL OBJECT INFORMATION	EMC Corporation
14581392	USER DUMP	IN A EMC Corporation
14501200		EMC Composition
14581399	[REDACTED]	EMC Corporation
14581409	[REDACTED]	EMC Corporation
14581620	[REDACTED]	EMC Corporation
14581678	[REDACTED]	EMC Corporation
14581750	[REDACTED]	EMC Corporation
14581901	[REDACTED]	EMC Corporation
14581907	[REDACTED]	EMC Corporation
14582334	[REDACTED]	EMC Corporation
14583857	[REDACTED]	EMC Corporation
14584028	[REDACTED]	EMC Corporation
14584341	[REDACTED]	EMC Corporation
14584464	[REDACTED]	EMC Corporation
14585258	[REDACTED]	EMC Corporation
14585259	[REDACTED]	EMC Corporation
14585595	[REDACTED]	EMC Corporation
14585810	[REDACTED]	EMC Corporation
14585939	[REDACTED]	EMC Corporation
14585992	[REDACTED]	EMC Corporation
14586001	[REDACTED]	EMC Corporation
14586053	[REDACTED]	EMC Corporation
14586128	[REDACTED]	EMC Corporation
14586165	[REDACTED]	EMC Corporation
14586184	[REDACTED]	EMC Corporation
14586227	[REDACTED]	EMC Corporation
14586654	[REDACTED]	EMC Corporation
14587106		
	[REDACTED]	EMC Corporation
14587138	[REDACTED]	EMC Corporation
14587187 14587237	[REDACTED]	EMC Corporation
1/15X///////	[REDACTED]	EMC Corporation

Number         Number           14587371         14587654           14587654         14587871           14588308         14588446           145894011         14597501           14604689         14604690           14604675         14609839           14609889         14609902           14610191         14612681           1461957         1461966           14619274         14620631           14622593         9355275           14632036         9323459           14640444         14641201           14640444         14644799           14643206         14644482           146464422         14657286           14661636         14661636           14662372         14662372	Title	
14587654         14587871         14588308         14588446       9336092         14594011       14597501         14604689       14604690         14604675       14609839         14609889       14609902         14610191       14612681         14614011       14615608         1461957       14620631         14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         146404475       14644482         146464422       14646422         14657286       14661604         14661636       14661636	11116	Owner
14587871         14588308         14588446       9336092         14594011       14597501         14604689       9298759         14604675       14609839         14609889       14609902         14610191       9244618         14614011       14615608         14619157       14619274         14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         146444482       14644482         1464660638       14661604         14661636       14661636	[REDACTED]	EMC Corporation
14588308       9336092         1458446       9336092         14594011       14597501         14604689       14604690         14604690       9298759         14609839       14609889         14609902       14610191         14612681       9244618         146195608       14616465         14619157       14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         146444482       146444482         146464442       146464422         14657286       14661604         14661636       14661636	[REDACTED]	EMC Corporation
14588446       9336092         14594011       9336092         14597501       14604689         14604690       9298759         14609839       14609889         14609902       14610191         14615608       9244618         14619157       14619274         14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         146444475       146444482         14666638       146660638         14661604       14661636	[REDACTED]	EMC Corporation
14594011         14597501         14604689         14604690       9298759         14609839         14609889         14609902         14610191         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641799         14643206         14644475         146464422         14657286         14661604         14661636	[REDACTED]	EMC Corporation
14597501         14604689         14604690       9298759         14606675         14609889         14609902         14610191         14612681       9244618         14614011         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641799         14643206         14644482         146464422         14657286         14661604         14661636	SECURE DATA DEDUPLICATION	EMC Corporation
14597501         14604689         14604690       9298759         14606675         14609889         14609902         14610191         14612681       9244618         14614011         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641799         14643206         14644482         146464422         14657286         14661604         14661636	[REDACTED]	EMC Corporation
14604689         14604690       9298759         14606675       14609839         14609889       14609902         14610191       14612681       9244618         14614011       14615608         14619157       14619274         14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         14644799       14643206         14644482       146464422         14657286       14660638         14661604       14661636	[REDACTED]	EMC Corporation
14604690       9298759         14606675       14609839         14609889       14609902         14610191       9244618         14614011       14615608         14619157       14619274         14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         14644475       14644482         146466038       14661604         14661636       14661636	EFFICIENT BACKUP REPLICATION	EMC Corporation
14606675         14609839         14609889         14610191         14612681       9244618         14614011         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641799         146443206         14644482         14646422         14660638         14661604         14661636	SMART CONTAINERS	EMC Corporation
14609839         14609889         14609902         14610191         14612681       9244618         14614011         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641799         14643206         14644475         146464482         14660638         14661604         14661636	OPTIMIZED RECOVERY	EMC Corporation
14609889         14609902         14610191         14612681       9244618         14614011         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641799         146444475         14644482         14660638         14661604         14661636	[REDACTED]	EMC Corporation
14609902         14610191         14612681       9244618         14612681       9244618         14614011       14615608         1461957       14619274         14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         14641799       14643206         146444475       14644482         146464422       14666638         14661604       14661636	[REDACTED]	EMC Corporation
14610191         14612681       9244618         14612681       9244618         14614011       14615608         1461957       14619274         14629631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         14644799       14643206         146444482       146464422         14657286       14660638         14661604       14661636	[REDACTED]	EMC Corporation
14612681       9244618         14614011       14615608         14616465       14619157         14619274       14620631       9063910         14622593       9355275         14632036       9323459         14640444       14641201         14644799       14643206         14644482       146464422         14657286       14660638         14661604       14661636	[REDACTED]	EMC Corporation
14614011         14615608         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641201         1464475         14644482         14646422         14661604         14661636	TECHNIQUES FOR STORING DATA ON DISK	EMC Corporation
14615608         14616465         14619157         14619274         14620631       9063910         14622593         14632036         14636515       9323459         14640444         14641201         14643206         14644475         146464482         146660638         14661604         14661636	DRIVES PARTITIONED INTO TWO REGIONS	
14616465         14619157         14619274         14620631       9063910         14622593         14629573       9355275         14632036         14636515       9323459         14641201         14641799         14643206         14644475         146464482         14666638         14661604         14661636	[REDACTED]	EMC Corporation
14619157         14619274         14620631       9063910         14622593       9355275         14632036       9355275         14636515       9323459         14640444       14641201         14643206       14644475         14644482       146464422         14660638       14661604         14661636       14661636	[REDACTED]	EMC Corporation
14619274         14620631       9063910         14622593       9355275         14632036       9323459         14636515       9323459         14641799       14643206         146444475       14644482         14657286       14660638         14661604       14661636	EFFICIENT CONFLICT RESOLUTION AMONG STATELESS PROCESSES	EMC Corporation
14619274         14620631       9063910         14622593       9355275         14632036       9323459         14636515       9323459         14641799       14643206         146444475       14644482         146466638       14661604         14661636       14661636	[REDACTED]	EMC Corporation
14620631       9063910         14622593       9355275         14632036       9355275         14636515       9323459         14640444       14641201         14643206       14644475         14644482       146464422         14660638       14661604         14661636       14661636	[REDACTED]	EMC Corporation
14622593         14629573       9355275         14632036       9323459         14636515       9323459         14641201       14641201         14644799       14643206         146444475       146444482         14646422       14666638         14661604       14661636	DATA RECOVERY AFTER TRIPLE DISK FAILURE	EMC Corporation
14629573       9355275         14632036       9323459         14636515       9323459         14640444       14641201         14643206       14644475         146464482       14646422         14657286       14661604         14661636       14661636	METADATA GENERATION FOR INCREMENTAL	EMC Corporation
14632036       14636515     9323459       14640444     14641201       14641799     14643206       14644475     14644482       146466638     14661604       14661636     14661636	BACKUP	
14636515 9323459  14640444 14641201  14641799 14643206 14644475 14644482 14646422 14657286 14660638 14661604 14661636	HETEROGENEOUS DATA FROM MULTIPLE SOURCES	EMC Corporation
14640444 14641201 14641799 14643206 14644475 14644482 14646422 14657286 14660638 14661604 14661636	[REDACTED]	EMC Corporation
14640444 14641201 14641799 14643206 14644475 14644482 14646422 14657286 14660638 14661604 14661636		
14641201 14641799 14643206 14644475 14644482 14646422 14657286 14660638 14661604 14661636	TECHNIQUES FOR DYNAMIC DATA STORAGE CONFIGURATION IN ACCORDANCE WITH AN ALLOCATION POLICY	EMC Corporation
14641201 14641799 14643206 14644475 14644482 14646422 14657286 14660638 14661604 14661636	[REDACTED]	EMC Corporation
14643206 14644475 14644482 14646422 14657286 14660638 14661604 14661636	MULTIPROCESSOR SYSTEM WITH INDEPENDENT DIRECT ACCESS TO BULK SOLID STATE MEMORY RESOURCES	EMC Corporation
14644475 14644482 14646422 14657286 14660638 14661604 14661636	[REDACTED]	EMC Corporation
14644482 14646422 14657286 14660638 14661604 14661636	[REDACTED]	EMC Corporation
14644482 14646422 14657286 14660638 14661604 14661636	[REDACTED]	EMC Corporation
14646422       14657286       14660638       14661604       14661636	[REDACTED]	EMC Corporation
14657286 14660638 14661604 14661636	[REDACTED]	EMC Corporation
14660638 14661604 14661636	[REDACTED]	EMC Corporation
14661604 14661636	[REDACTED]	EMC Corporation
14661636	[REDACTED]	EMC Corporation
	[REDACTED]	EMC Corporation
I	[REDACTED]	EMC Corporation
14662377	[REDACTED]	EMC Corporation
14662385	[REDACTED]	EMC Corporation
14662887	[REDACTED]	EMC Corporation
14664618	[REDACTED]	EMC Corporation

Application Number	Registration Number Title	Owner
14665110	REDACTED	Owner EMC Corporation
	[REDACTED]	EMC Corporation
14665276		EMC Corporation
14666176	[REDACTED]	EMC Corporation
14666653	[REDACTED]	EMC Corporation
14666980	[REDACTED]	EMC Corporation
14667268	[REDACTED]	EMC Corporation
14667853	[REDACTED]	EMC Corporation
14668818	[REDACTED]	EMC Corporation
14669223	[REDACTED]	EMC Corporation
14669377	[REDACTED]	EMC Corporation
14669437	RELOCATING DATA BETWEEN STORAGE ARRAYS	EMC Corporation
14669444	SCALE-OUT STORAGE IN A VIRTUALIZED	EMC Corporation
	STORAGE SYSTEM	
14669534	[REDACTED]	EMC Corporation
14669554	[REDACTED]	EMC Corporation
14669896	POWER MANAGEMENT	EMC Corporation
14669900	FACILITATING MANAGEMENT OF RESOURCES	EMC Corporation
14670544	[REDACTED]	EMC Corporation
14670593	[REDACTED]	EMC Corporation
14670718	[REDACTED]	EMC Corporation
14670810	[REDACTED]	EMC Corporation
14670901	[REDACTED]	EMC Corporation
14670909	[REDACTED]	EMC Corporation
14670976	[REDACTED]	EMC Corporation
14671017	[REDACTED]	EMC Corporation
14671024	[REDACTED]	EMC Corporation
140/1024	[ICDACIED]	Livic Corporation
14671318	[REDACTED]	EMC Corporation
14671513	[REDACTED]	EMC Corporation
14671578	[REDACTED]	EMC Corporation
14671654	[REDACTED]	EMC Corporation
14671670	[REDACTED]	EMC Corporation
14671675	[REDACTED]	EMC Corporation
14671740	[REDACTED]	EMC Corporation
14671948	[REDACTED]	EMC Corporation
14672347	[REDACTED]	EMC Corporation
14672410	[REDACTED]	EMC Corporation
14672526	[REDACTED]	EMC Corporation
14672560	[REDACTED]	EMC Corporation
	[REDACTED]	
14672577		EMC Corporation
14672640	[REDACTED]	EMC Corporation
14672652	[REDACTED]	EMC Corporation
14672741	[REDACTED]	EMC Corporation
14672841	[REDACTED]	EMC Corporation
14672849	[REDACTED]	EMC Corporation
14672889	DYNAMIC STORAGE TIERING	EMC Corporation
14672913	ACCESSING DATA	EMC Corporation
14672921	MONITORING HEALTH CONDITION OF A HARD DISK	EMC Corporation
14672983	[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14673017		[REDACTED]	EMC Corporation
14673052		[REDACTED]	EMC Corporation
14673071		[REDACTED]	EMC Corporation
14673073		[REDACTED]	EMC Corporation
14673103		[REDACTED]	EMC Corporation
14673284		[REDACTED]	EMC Corporation
14673310		[REDACTED]	EMC Corporation
14673317		[REDACTED]	EMC Corporation
14673382		[REDACTED]	EMC Corporation
14673415		[REDACTED]	EMC Corporation
14673441		[REDACTED]	EMC Corporation
14673464		[REDACTED]	EMC Corporation
14673503		[REDACTED]	EMC Corporation
14673531		[REDACTED]	EMC Corporation
14673594		[REDACTED]	EMC Corporation
14673618		[REDACTED]	EMC Corporation
14673662		[REDACTED]	EMC Corporation
14673686		[REDACTED]	EMC Corporation
14673706		[REDACTED]	EMC Corporation
14673715		[REDACTED]	EMC Corporation
14673913		[REDACTED]	EMC Corporation
14673963		[REDACTED]	EMC Corporation
14673980		[REDACTED]	EMC Corporation
14673983		[REDACTED]	EMC Corporation
14673998		[REDACTED]	EMC Corporation
14674018		[REDACTED]	EMC Corporation
14674066		[REDACTED]	EMC Corporation
14674078		[REDACTED]	EMC Corporation
14674087		[REDACTED]	EMC Corporation
14674121		[REDACTED]	EMC Corporation
14674128		[REDACTED]	EMC Corporation
14674131		[REDACTED]	EMC Corporation
14674134		[REDACTED]	EMC Corporation
14674153		[REDACTED]	EMC Corporation
14674233		[REDACTED]	EMC Corporation
14674241		[REDACTED]	EMC Corporation
14674265		[REDACTED]	EMC Corporation
14674308		[REDACTED]	EMC Corporation
14674314		[REDACTED]	EMC Corporation
14674324		[REDACTED]	EMC Corporation
14674347		[REDACTED]	EMC Corporation
14674358		[REDACTED]	EMC Corporation
14674382		[REDACTED]	EMC Corporation
14674389		[REDACTED]	EMC Corporation
14674420		[REDACTED]	EMC Corporation
14674438		[REDACTED]	EMC Corporation
14674450	9378052	GRANTING RANGELOCKS ACCORDING TO	EMC Corporation
		THREAD ARRIVAL TIME	
14674485		[REDACTED]	EMC Corporation
14674522		[REDACTED]	EMC Corporation
14674556		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14674566		[REDACTED]	EMC Corporation
14674608		[REDACTED]	EMC Corporation
14674617		[REDACTED]	EMC Corporation
14674647		[REDACTED]	EMC Corporation
14674667		[REDACTED]	EMC Corporation
14674708		[REDACTED]	EMC Corporation
14674732		[REDACTED]	EMC Corporation
14674738		[REDACTED]	EMC Corporation
14674797		[REDACTED]	EMC Corporation
14674816		[REDACTED]	EMC Corporation
14674877		[REDACTED]	EMC Corporation
14674896		[REDACTED]	EMC Corporation
14674905		[REDACTED]	EMC Corporation
14674911		[REDACTED]	EMC Corporation
14674956		[REDACTED]	EMC Corporation
14675131		[REDACTED]	EMC Corporation
14675169		[REDACTED]	EMC Corporation
14675177		[REDACTED]	EMC Corporation
14675216		[REDACTED]	EMC Corporation
14675396		[REDACTED]	EMC Corporation
14675405		[REDACTED]	EMC Corporation
14675425		[REDACTED]	EMC Corporation
14675439		[REDACTED]	EMC Corporation
14675440		[REDACTED]	EMC Corporation
14676673	0000100	[REDACTED]	EMC Corporation
14677212	9390100	STORING DIFFERENCES BETWEEN	EMC Corporation
		PRECOMPRESSED AND RECOMPRESSED DATA	
		FILES	
14677231		SYNCHRONIZATION OF STORAGE USING	EMC Corporation
		COMPARISONS OF FINGERPRINTS OF BLOCKS	
14677795		EFFICIENT BUILDING OF RESTORE LIST	EMC Corporation
14677822		EFFICIENTLY ESTIMATING COMPRESSION RATIO	EMC Corporation
		IN A DEDUPLICATING FILE SYSTEM	
14686400		[REDACTED]	EMC Corporation
14686438		[REDACTED]	EMC Corporation
14686468		[REDACTED]	EMC Corporation
14686650		[REDACTED]	EMC Corporation
14686668		[REDACTED]	EMC Corporation
14686701		[REDACTED]	EMC Corporation
14689735		[REDACTED]	EMC Corporation
14690771	9369479	DETECTION OF MALWARE BEACONING	EMC Corporation
		ACTIVITIES	
14692905		[REDACTED]	EMC Corporation
14694924	9350549	SELECTIVE SHREDDING IN A DEDUPLICATION	EMC Corporation
		SYSTEM	
14695500		SELF-DESTRUCTING CONTENT	EMC Corporation
14696708		METHOD AND SYSTEM FOR SECURING DATA	EMC Corporation
14697116	9304841	DISPATCHER FRAMEWORK TO PROVIDE INTER-	EMC Corporation
		APPLICATION COMMUNICATION	
14698047		[REDACTED]	EMC Corporation

Application	Registration	TEAL	
Number	Number	Title	Owner
14699594		[REDACTED]	EMC Corporation
14704774		SYSTEM AND METHOD FOR PROVIDING	EMC Corporation
14/04//4		LONG-TERM STORAGE FOR DATA	Ewic Corporation
14705086		[REDACTED]	EMC Corporation
14706068		[REDACTED]	EMC Corporation
14706104	9235481	CONTINUOUS DATA REPLICATION	EMC Corporation
14707587	7232101	[REDACTED]	EMC Corporation
14709894		[REDACTED]	EMC Corporation
14710768	9306942	AGILE OTP GENERATION	EMC Corporation
14714726	9251051	CAPACITY FORECASTING FOR BACKUP STORAGE	EMC Corporation
14719594		QUERY TRANSLATION FOR SEARCHING COMPLEX	EMC Corporation
14717374		STRUCTURES OF OBJECTS	Livic Corporation
14721229		[REDACTED]	EMC Corporation
14721587		[REDACTED]	EMC Corporation
14723196		STREAM LOCALITY DELTA COMPRESSION	EMC Corporation
14723943		[REDACTED]	EMC Corporation
14727988		[REDACTED]	EMC Corporation
14728787		[REDACTED]	EMC Corporation
14729714		[REDACTED]	EMC Corporation
14731015		[REDACTED]	EMC Corporation
14734037		[REDACTED]	EMC Corporation
14734339		SUBJECT AND AUDIENCE ORIENTED INSTANT	EMC Corporation
		COLLABORATIVE DEVELOPMENT	1
14737286		[REDACTED]	EMC Corporation
14737841		[REDACTED]	EMC Corporation
14737859		[REDACTED]	EMC Corporation
14739881		[REDACTED]	EMC Corporation
14741627		[REDACTED]	EMC Corporation
14741928		[REDACTED]	EMC Corporation
14742183		[REDACTED]	EMC Corporation
14742228		[REDACTED]	EMC Corporation
14743152		[REDACTED]	EMC Corporation
14743242		[REDACTED]	EMC Corporation
14743306		[REDACTED]	EMC Corporation
14743339		[REDACTED]	EMC Corporation
14743358		[REDACTED]	EMC Corporation
14743370		[REDACTED]	EMC Corporation
14743453		[REDACTED]	EMC Corporation
14744217		[REDACTED]	EMC Corporation
14744268		[REDACTED]	EMC Corporation
14744565		[REDACTED]	EMC Corporation
14744617		[REDACTED]	EMC Corporation
14744886		[REDACTED]	EMC Corporation
14744921		[REDACTED]	EMC Corporation
14745376		[REDACTED]	EMC Corporation
14745669		[REDACTED]	EMC Corporation
14746510		SYSTEM FOR DISCOVERING BUGS USING	EMC Corporation
		INTERVAL ALGEBRA QUERY LANGUAGE	

Application	Registration	
Number	Number Title	Owner
14746546	SNAPSHOTTING OF A PERFORMANCE STORAGE	EMC Corporation
	SYSTEM IN A SYSTEM FOR PERFORMANCE	
	IMPROVEMENT OF A CAPACITY OPTIMIZED	
	STORAGE SYSTEM	
14747119	[REDACTED]	EMC Corporation
14747347	GENOMIC APPLICATION DATA STORAGE	EMC Corporation
14748503	[REDACTED]	EMC Corporation
14748556	[REDACTED]	EMC Corporation
14748671	OBJECT CLASSIFICATION AND IDENTIFICATION	EMC Corporation
	FROM RAW DATA	
14748709	[REDACTED]	EMC Corporation
14748751	[REDACTED]	EMC Corporation
14749794	[REDACTED]	EMC Corporation
14749818	[REDACTED]	EMC Corporation
14749958	[REDACTED]	EMC Corporation
14750044	[REDACTED]	EMC Corporation
14750048	[REDACTED]	EMC Corporation
14750441	[REDACTED]	EMC Corporation
14751427	[REDACTED]	EMC Corporation
14751652	[REDACTED]	EMC Corporation
14751699	[REDACTED]	EMC Corporation
14751702	[REDACTED]	EMC Corporation
14751861	[REDACTED]	EMC Corporation
14751980	[REDACTED]	EMC Corporation
14752012	[REDACTED]	EMC Corporation
14752018	[REDACTED]	EMC Corporation
14752059	[REDACTED]	EMC Corporation
14752106	[REDACTED]	EMC Corporation
14752141	[REDACTED]	EMC Corporation
14752153	[REDACTED]	EMC Corporation
14752351	[REDACTED]	EMC Corporation
14752371	[REDACTED]	EMC Corporation
14752382	[REDACTED]	EMC Corporation
14752397	[REDACTED]	EMC Corporation
14752404	[REDACTED]	EMC Corporation
14752484	[REDACTED]	EMC Corporation
14752519	[REDACTED]	EMC Corporation
14752530	[REDACTED]	EMC Corporation
14752614	[REDACTED]	EMC Corporation
14752616	[REDACTED]	EMC Corporation
14752717	[REDACTED]	EMC Corporation
14752766	[REDACTED]	EMC Corporation
14752788	[REDACTED]	EMC Corporation
14753217	[REDACTED]	EMC Corporation  EMC Corporation
14753375	[REDACTED]	
		EMC Corporation
14753389	[REDACTED]	EMC Corporation
14753421	[REDACTED]	EMC Corporation
14753430	[REDACTED]	EMC Corporation
14753450	[REDACTED]	EMC Corporation
14753452	[REDACTED]	EMC Corporation
14753463	[REDACTED]	EMC Corporation
14753476	[REDACTED]	EMC Corporation

Application	Registration	
Number	Number Title	Owner
14753510	[REDACTED]	EMC Corporation
14753561	[REDACTED]	EMC Corporation
14753758	[REDACTED]	EMC Corporation
14753831	[REDACTED]	EMC Corporation
14753930	[REDACTED]	EMC Corporation
14754065	[REDACTED]	EMC Corporation
14754094	[REDACTED]	EMC Corporation
14754819	[REDACTED]	EMC Corporation
14754838	[REDACTED]	EMC Corporation
14754865	[REDACTED]	EMC Corporation
11/01000	[REDITETES]	Zivie corporation
14754961	[REDACTED]	EMC Corporation
11/01/01	[TEBTIC TEB]	Zivie corporation
14755001	[REDACTED]	EMC Corporation
14755012	[REDACTED]	EMC Corporation
14755066	[REDACTED]	EMC Corporation
14755114	[REDACTED]	EMC Corporation
14755130	[REDACTED]	EMC Corporation
14755142	[REDACTED]	EMC Corporation
14755164	[REDACTED]	EMC Corporation
14755210	[REDACTED]	EMC Corporation
14755248	[REDACTED]	EMC Corporation
14755258		EMC Corporation
	[REDACTED]	
14755292	[REDACTED]	EMC Corporation
14755298	[REDACTED]	EMC Corporation
14755311	[REDACTED]	EMC Corporation
14755331	[REDACTED]	EMC Corporation
14755384	[REDACTED]	EMC Corporation
14755499	[REDACTED]	EMC Corporation
14755517	[REDACTED]	EMC Corporation
14755630	[REDACTED]	EMC Corporation
14755667	[REDACTED]	EMC Corporation
14755678	[REDACTED]	EMC Corporation
14755706	[REDACTED]	EMC Corporation
14755711	[REDACTED]	EMC Corporation
14755744	[REDACTED]	EMC Corporation
14755761	[REDACTED]	EMC Corporation
14755789	[REDACTED]	EMC Corporation
14755808	[REDACTED]	EMC Corporation
14755849	[REDACTED]	EMC Corporation
14755855	[REDACTED]	EMC Corporation
		•
14755914	[REDACTED]	EMC Corporation
14755937	[REDACTED]	EMC Corporation
14757999	[REDACTED]	EMC Corporation
14767387	[REDACTED]	EMC Corporation
14771703	[REDACTED]	EMC Corporation
14771743	MANAGING PROVISIONING OF STORAGE	EMC Corporation
	RESOURCES	
14788071	[REDACTED]	EMC Corporation
14788079	[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14788103		[REDACTED]	EMC Corporation
14788106		[REDACTED]	EMC Corporation
14788129		[REDACTED]	EMC Corporation
14788142		[REDACTED]	EMC Corporation
14788184		[REDACTED]	EMC Corporation
14788281		[REDACTED]	EMC Corporation
14788323		[REDACTED]	EMC Corporation
14788346		[REDACTED]	EMC Corporation
14788362		[REDACTED]	EMC Corporation
14788381		[REDACTED]	EMC Corporation
14788412		[REDACTED]	EMC Corporation
14788533		[REDACTED]	EMC Corporation
14788543		[REDACTED]	EMC Corporation
14788597		[REDACTED]	EMC Corporation
14788598		[REDACTED]	EMC Corporation
14788732		[REDACTED]	EMC Corporation
14788755		[REDACTED]	EMC Corporation
14788775		[REDACTED]	EMC Corporation
14789659		[REDACTED]	EMC Corporation
14789757		DATA MOVER DISCOVERY OF OBJECT EXTENT	EMC Corporation
14793583		AUTOMATED END-TO-END SALES PROCESS OF	EMC Corporation
		STORAGE APPLIANCES OF STORAGE SYSTEMS	
		USING PREDICTIVE MODELING	
14794708		ANOMALY DETECTION SYSTEM FOR ENTERPRISE	EMC Corporation
		NETWORK SECURITY	
14797058		[REDACTED]	EMC Corporation
14801720		CUSTOMER CONTROLLED DATA PRIVACY	EMC Corporation
		PROTECTION IN PUBLIC CLOUD	1
14808238		[REDACTED]	EMC Corporation
14808369		[REDACTED]	EMC Corporation
14814235		[REDACTED]	EMC Corporation
14814474		[REDACTED]	EMC Corporation
14819333		ASYNCHRONOUS MULTI-NODE FILESYSTEM	EMC Corporation
		COORDINATED REPLICATION	
14819920		[REDACTED]	EMC Corporation
14820026		[REDACTED]	EMC Corporation
			•
14825724		[REDACTED]	EMC Corporation
14825845		PERFORMANCE IMPROVEMENT OF A CAPACITY	EMC Corporation
		OPTIMIZED STORAGE SYSTEM USING A	
		PERFORMANCE SEGMENT STORAGE SYSTEM AND	
		A SEGMENT STORAGE SYSTEM	
14828851		[REDACTED]	EMC Corporation
14829478		[REDACTED]	EMC Corporation
14831138		[REDACTED]	EMC Corporation
14836761		[REDACTED]	EMC Corporation
14838940		[REDACTED]	EMC Corporation
14840476		[REDACTED]	EMC Corporation
14840573		[REDACTED]	EMC Corporation
14840685		[REDACTED]	EMC Corporation

Application	Registration	
Number	Number Title	Owner
14842720	EFFICIENT FILE BROWSING USING KEY VALUE	EMC Corporation
14042/20	DATABASES FOR VIRTUAL BACKUPS	Livic Corporation
14847583	[REDACTED]	EMC Corporation
14849938	[REDACTED]	EMC Corporation
14850195	[REDACTED]	EMC Corporation
14850308	[REDACTED]	EMC Corporation
14850814	PARALLEL PROCESSING DATABASE TREE	EMC Corporation
	STRUCTURE	_
14853437	[REDACTED]	EMC Corporation
14854299	[REDACTED]	EMC Corporation
14854420	[REDACTED]	EMC Corporation
14856952	[REDACTED]	EMC Corporation
14857894	[REDACTED]	EMC Corporation
14858002	[REDACTED]	EMC Corporation
14858027	FILE BASED INCREMENTAL BLOCK BACKUP FROM	EMC Corporation
	USER MODE	
14858376	[REDACTED]	EMC Corporation
14859152	MULTI STREAM DEDUPLICATED BACKUP OF	EMC Corporation
1.10.50.550	COLLABORATION SERVER DATA	
14859550	[REDACTED]	EMC Corporation
14859559	[REDACTED]	EMC Corporation
14860935	[REDACTED]	EMC Corporation
14861080	[REDACTED]	EMC Corporation
14861488 14861624	[REDACTED]	EMC Corporation EMC Corporation
14861858	[REDACTED]	EMC Corporation
14862491	[REDACTED]	EMC Corporation
14862655	[REDACTED]	EMC Corporation
14862855	[REDACTED]	EMC Corporation
14863196	GENERATING A QR CODE	EMC Corporation
14863318	[REDACTED]	EMC Corporation
14863608	[REDACTED]	EMC Corporation
14863783	[REDACTED]	EMC Corporation
14863885	[REDACTED]	EMC Corporation
14863958	[REDACTED]	EMC Corporation
14864399	[REDACTED]	EMC Corporation
14864425	[REDACTED]	EMC Corporation
14865333	[REDACTED]	EMC Corporation
14865392	[REDACTED]	EMC Corporation
14866139	[REDACTED]	EMC Corporation
14866270	[REDACTED]	EMC Corporation
14867153	DETERMINING FAILURE LOCATION IN A STORAGE	EMC Corporation
	SYSTEM	
14867158	PERFORMANCE OF DE-CLUSTERED DISK ARRAY	EMC Corporation
14867166	METHOD AND APPARATUS FOR ACCELERATING	EMC Corporation
	DATA RECONSTRUCTION FOR A DISK ARRAY	
14867389	[REDACTED]	EMC Corporation
14867820	[REDACTED]	EMC Corporation

Application	Registration	
Number	Number Title	Owner
14868142	[REDACTED]	EMC Corporation
14868499	[REDACTED]	EMC Corporation
14868512	[REDACTED]	EMC Corporation
14868567	[REDACTED]	EMC Corporation
14868577	[REDACTED]	EMC Corporation
14868596	[REDACTED]	EMC Corporation
14868618	[REDACTED]	EMC Corporation
14868675	[REDACTED]	EMC Corporation
14868676	[REDACTED]	EMC Corporation
14868687	[REDACTED]	EMC Corporation
14868693	[REDACTED]	EMC Corporation
14868694	[REDACTED]	EMC Corporation
14869195	[REDACTED]	EMC Corporation
14869354	[REDACTED]	EMC Corporation
14869431	[REDACTED]	EMC Corporation
14869461	[REDACTED]	EMC Corporation
14869777	[REDACTED]	EMC Corporation
14869787	[REDACTED]	EMC Corporation
14869960	[REDACTED]	EMC Corporation
14870053	[REDACTED]	EMC Corporation
14870088	[REDACTED]	EMC Corporation
14870093	[REDACTED]	EMC Corporation
14870116	[REDACTED]	EMC Corporation
14870128	[REDACTED]	EMC Corporation
14870147	[REDACTED]	EMC Corporation
14870151	[REDACTED]	EMC Corporation
14870159		
14870165	[REDACTED]	EMC Corporation
	[REDACTED]	EMC Corporation
14870167	[REDACTED]	EMC Corporation
14870190	[REDACTED]	EMC Corporation
14870218	[REDACTED]	EMC Corporation
14870308	[REDACTED]	EMC Corporation
14870336	[REDACTED]	EMC Corporation
14870350	[REDACTED]	EMC Corporation
14870407	[REDACTED]	EMC Corporation
14870423	[REDACTED]	EMC Corporation
14870462	[REDACTED]	EMC Corporation
14870475	[REDACTED]	EMC Corporation
14870492	[REDACTED]	EMC Corporation
14870506	[REDACTED]	EMC Corporation
14870514	[REDACTED]	EMC Corporation
14870529	[REDACTED]	EMC Corporation
14870537	[REDACTED]	EMC Corporation
14870556	[REDACTED]	EMC Corporation
14870565	[REDACTED]	EMC Corporation
14870595	[REDACTED]	EMC Corporation
14870660	[REDACTED]	EMC Corporation
14870668	[REDACTED]	EMC Corporation
14870709	[REDACTED]	EMC Corporation
14870717	[REDACTED]	EMC Corporation
14870718	[REDACTED]	EMC Corporation

Application	Registration		_
Number	Number	Title	Owner
14870898		[REDACTED]	EMC Corporation
14870899		[REDACTED]	EMC Corporation
14870942		[REDACTED]	EMC Corporation
14870984		[REDACTED]	EMC Corporation
14871051		[REDACTED]	EMC Corporation
14871109		[REDACTED]	EMC Corporation
14871114		[REDACTED]	EMC Corporation
14871160		[REDACTED]	EMC Corporation
14871161		[REDACTED]	EMC Corporation
14871179		[REDACTED]	EMC Corporation
14871213		[REDACTED]	EMC Corporation
14871231		[REDACTED]	EMC Corporation
14871242		[REDACTED]	EMC Corporation
14871321		INTERCONNECT FLOW CONTROL	EMC Corporation
14871324		[REDACTED]	EMC Corporation
14871344		[REDACTED]	EMC Corporation
14871467		[REDACTED]	EMC Corporation
14871529		[REDACTED]	EMC Corporation
14871530		[REDACTED]	EMC Corporation
14871592		[REDACTED]	EMC Corporation
14871698		[REDACTED]	EMC Corporation
14871749		[REDACTED]	EMC Corporation
14871751		[REDACTED]	
			EMC Corporation
14871760		[REDACTED]	EMC Corporation
14871803		[REDACTED]	EMC Corporation
14871909		[REDACTED]	EMC Corporation
14872075		[REDACTED]	EMC Corporation
14872135		[REDACTED]	EMC Corporation
14872218		[REDACTED]	EMC Corporation
14872233		[REDACTED]	EMC Corporation
14872346		[REDACTED]	EMC Corporation
14872395		[REDACTED]	EMC Corporation
14872515		[REDACTED]	EMC Corporation
14874020	9361592	AUTOMATED DEFECT AND OPTIMIZATION DISCOVERY	EMC Corporation
14874911		[REDACTED]	EMC Corporation
14875546	9389964	READ-WRITE ACCESS IN A READ-ONLY	EMC Corporation
		ENVIRONMENT	
14878921		CLUSTER STORAGE USING SUBSEGMENTING FOR	EMC Corporation
14001055		EFFICIENT STORAGE	EMOG
14881055		UPDATING KEY VALUE DATABASES FOR VIRTUAL BACKUPS	EMC Corporation
14882931		ENABLING NON-VOLATILE RANDOM ACCESS TO DATA	EMC Corporation
14883082		PROCESSING AN INPUT/ OUTPUT OPERATION REQUEST	EMC Corporation
14883112		DISK DATA MANAGEMENT	EMC Corporation
14883138		DATA CACHE AND METHOD FOR DATA CACHING	EMC Corporation
14884501		ASSIGNING LOCK RESOURCES TO OBJECTS	EMC Corporation
14902100		[REDACTED]	EMC Corporation

Application	Registration	
Number	Number Title	Owner
14919039	CLUSTER FILE SERVER PROXY SERVER FOR	EMC Corporation
	BACKUP AND RECOVERY	_
14921515	[REDACTED]	EMC Corporation
14924550	DYNAMIC GRAPH ANOMALY DETECTION	EMC Corporation
	FRAMEWORK AND SCALABLE SYSTEM	
	ARCHITECTURE	
14924636	[REDACTED]	EMC Corporation
14928986	[REDACTED]	EMC Corporation
14929788	[REDACTED]	EMC Corporation
14020602	CANAGAN ON HALL BY LOVE OF A COURT A COURT	El (C C
14938692	SYNCHRONIZED FILE MANAGEMENT ACROSS	EMC Corporation
14020572	MULTIPLE DISPARATE ENDPOINTS	EMO Commention
14939562	[REDACTED]	EMC Corporation
14940450	[REDACTED] DECLARATIVE CLUSTER MANAGEMENT	EMC Corporation
14941184	DECLARATIVE CLUSTER MANAGEMENT	EMC Corporation
14949063	[REDACTED]	EMC Corporation
14952140	[REDACTED]	EMC Corporation
14952505	[REDACTED]	EMC Corporation
14954043	[REDACTED]	EMC Corporation
14954620	[REDACTED]	EMC Corporation
14754020	[REDACTED]	ENIC Corporation
14958469	[REDACTED]	EMC Corporation
14960244	TRANSMITTING FILESYSTEM CHANGES OVER A	EMC Corporation
11,700211	NETWORK	2.00 corporation
14960267	DYNAMIC PRIORITIZED RECOVERY	EMC Corporation
14961763	[REDACTED]	EMC Corporation
14961764	[REDACTED]	EMC Corporation
14962052	[REDACTED]	EMC Corporation
14963079	TRACKING FILES EXCLUDED FROM BACKUP	EMC Corporation
14964498	[REDACTED]	EMC Corporation
14966569	[REDACTED]	EMC Corporation
14966613	[REDACTED]	EMC Corporation
14966637	[REDACTED]	EMC Corporation
14967555	[REDACTED]	EMC Corporation
14968251	[REDACTED]	EMC Corporation
14968360	COMPUTING AND OBTAINING FAULT RELATED	EMC Corporation
	INFORMATION	
14968399	SOFTWARE TESTING	EMC Corporation
14968416	[REDACTED]	EMC Corporation
14968421	[REDACTED]	EMC Corporation
14968431	[REDACTED]	EMC Corporation
14968434	CONTROLLING SHARING OF RESOURCE AMONG A	EMC Corporation
14069745	PLURALITY OF NODES	EMC C
14968745	VIRTUAL MACHINE CAPACITY PLANNING	EMC Corporation
14968773	SYSTEM AND METHOD FOR SMART FRAMEWORK	EMC Corporation
14969801	FOR NETWORK BACKUP SOFTWARE DEBUGGING	EMC Composition
14909001	[REDACTED]	EMC Corporation
14970903	[REDACTED]	EMC Corporation
11710703	[ [ICD/ICIDD]	Livic Corporation

Application	Registration		
Number	Number	Title	Owner
14970976	rannoci	PROVIDING ACCESS TO RESOURCES	EMC Corporation
14970978		PROCESSING TRANSACTIONS IN A	EMC Corporation
147/07/0		SYNCHRONIZED REPLICATION SYSTEM	Livic Corporation
14971006		QUALITY OF SERVICE SETTING	EMC Corporation
14971010		MANAGING A PERIPHERAL COMPONENT	EMC Corporation
11,571,010		INTERFACE EXPRESS DEVICE HOTPLUG	Zivic corporation
14971036		ANALYZING USER BEHAVIORS	EMC Corporation
14971043		REUSING STORAGE BLOCKS OF A FILE SYSTEM	EMC Corporation
14971076		QUOTA BASED RESOURCE MANAGEMENT	EMC Corporation
14971107		MANAGEMENT OF STORAGE DEVICES	EMC Corporation
14971112		[REDACTED]	EMC Corporation
14971137		PROVIDING STORAGE SERVICE TO TENANT IN	EMC Corporation
		CLOUD STORAGE ENVIRONMENT	
14971220		[REDACTED]	EMC Corporation
14971249		[REDACTED]	EMC Corporation
14971770		[REDACTED]	EMC Corporation
14971808		[REDACTED]	EMC Corporation
14971935		[REDACTED]	EMC Corporation
14972377		[REDACTED]	EMC Corporation
14972613		[REDACTED]	EMC Corporation
14973160		AUTOMATICALLY TESTING FIRMWARE	EMC Corporation
14973204		[REDACTED]	EMC Corporation
14973245		[REDACTED]	EMC Corporation
14973258		[REDACTED]	EMC Corporation
14973281		[REDACTED]	EMC Corporation
14973412		SMART MULTIMEDIA PROCESSING	EMC Corporation
14973950		[REDACTED]	EMC Corporation
14974177		[REDACTED]	EMC Corporation
14974231		[REDACTED]	EMC Corporation
14974286		[REDACTED]	EMC Corporation
14974364		[REDACTED]	EMC Corporation
14974419		[REDACTED]	EMC Corporation
14974454		[REDACTED]	EMC Corporation
14974462		[REDACTED]	EMC Corporation
14974613		[REDACTED]	EMC Corporation
14974982		[REDACTED]	EMC Corporation
14974989		[REDACTED]	EMC Corporation
14975072		[REDACTED]	EMC Corporation
14975296		[REDACTED]	EMC Corporation
14975317		[REDACTED]	EMC Corporation
14975445		[REDACTED]	EMC Corporation
14976156		[REDACTED]	EMC Corporation
14976168		[REDACTED]	EMC Corporation
14976325		[REDACTED]	EMC Corporation
14976332		[REDACTED]	EMC Corporation
14976499		[REDACTED]	EMC Corporation
14976532		[REDACTED]	EMC Corporation
14976719		[REDACTED]	EMC Corporation
14976727		[REDACTED]	EMC Corporation
14977042		[REDACTED]	EMC Corporation
14977221		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14977960		[REDACTED]	EMC Corporation
14978351		[REDACTED]	EMC Corporation
14978378		[REDACTED]	EMC Corporation
14978424		[REDACTED]	EMC Corporation
14978444		[REDACTED]	EMC Corporation
14978480		[REDACTED]	EMC Corporation
14978520		[REDACTED]	EMC Corporation
14979218		[REDACTED]	EMC Corporation
14979453		[REDACTED]	EMC Corporation
14979484		[REDACTED]	EMC Corporation
14979727		TEXT COMPRESSION AND DECOMPRESSION	EMC Corporation
14979750		PERFORMING CROSS-LAYER ORCHESTRATION OF	EMC Corporation
		RESOURCES IN DATA CENTER HAVING MULTI-	
		LAYER ARCHITECTURE	
14979890		[REDACTED]	EMC Corporation
14979897		[REDACTED]	EMC Corporation
14979913		[REDACTED]	EMC Corporation
14980023		[REDACTED]	EMC Corporation
14980032		[REDACTED]	EMC Corporation
14980037		[REDACTED]	EMC Corporation
14980039		[REDACTED]	EMC Corporation
14980101		[REDACTED]	EMC Corporation
14980252		[REDACTED]	EMC Corporation
14980479		[REDACTED]	EMC Corporation
14980490		[REDACTED]	EMC Corporation
14980501		[REDACTED]	EMC Corporation
14980510		[REDACTED]	EMC Corporation
14980676		[REDACTED]	EMC Corporation
14980889		[REDACTED]	EMC Corporation
14980928		[REDACTED]	EMC Corporation
14980944		[REDACTED]	EMC Corporation
14981560		[REDACTED]	EMC Corporation
14981671		[REDACTED]	EMC Corporation
14981686		[REDACTED]	EMC Corporation
14981692		[REDACTED]	EMC Corporation
14981695		[REDACTED]	
14981698		[REDACTED]	EMC Corporation EMC Corporation
14982007		[REDACTED]	EMC Corporation
14982012		[REDACTED]	EMC Corporation
14982020		[REDACTED]	EMC Corporation
14982026		[REDACTED]	EMC Corporation
14982063		[REDACTED]	EMC Corporation
14982341		[REDACTED]	EMC Corporation
14982351		[REDACTED]	EMC Corporation
14982355		[REDACTED]	EMC Corporation
14982597		[REDACTED]	EMC Corporation
14982625		[REDACTED]	EMC Corporation
14982639		[REDACTED]	EMC Corporation
14982776		[REDACTED]	EMC Corporation
14982798		[REDACTED]	EMC Corporation
14982951		[REDACTED]	EMC Corporation
14982963		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14982971		[REDACTED]	EMC Corporation
14982976		[REDACTED]	EMC Corporation
14983039		[REDACTED]	EMC Corporation
14983203		[REDACTED]	EMC Corporation
14983269		[REDACTED]	EMC Corporation
14983319		[REDACTED]	EMC Corporation
14983631		[REDACTED]	EMC Corporation
14983666		[REDACTED]	EMC Corporation
14983699		[REDACTED]	EMC Corporation
14983866		FAILURE RECOVERY IN A STORAGE DEVICE	EMC Corporation
14983914		[REDACTED]	EMC Corporation
14983920		[REDACTED]	EMC Corporation
14983932		[REDACTED]	EMC Corporation
14983943		[REDACTED]	EMC Corporation
14983952		[REDACTED]	EMC Corporation
14983958		[REDACTED]	EMC Corporation
14983966		[REDACTED]	EMC Corporation
14983971		[REDACTED]	EMC Corporation
14983981		[REDACTED]	EMC Corporation
14983991		[REDACTED]	EMC Corporation
14984004		[REDACTED]	EMC Corporation
14984060		[REDACTED]	EMC Corporation
14984063		[REDACTED]	EMC Corporation
14984137		[REDACTED]	EMC Corporation
14984163		[REDACTED]	EMC Corporation
14984185		[REDACTED]	EMC Corporation
14984192		PASSIVE SAN DISCOVERY	EMC Corporation
14984219			
		[REDACTED]	EMC Corporation
14984224		[REDACTED]	EMC Corporation
14984279		[REDACTED]	EMC Corporation
14984296		[REDACTED]	EMC Corporation
14984301		[REDACTED]	EMC Corporation
14984312		[REDACTED]	EMC Corporation
14984317		[REDACTED]	EMC Corporation
14984324		[REDACTED]	EMC Corporation
14984334		[REDACTED]	EMC Corporation
14984376		[REDACTED]	EMC Corporation
14984502		RECOGNIZING HARD DISK MOVEMENT	EMC Corporation
14984579		MONITORING TARGET OBJECT BY MULTIPLE	EMC Corporation
		CAMERAS	
14984737		[REDACTED]	EMC Corporation
14984749		[REDACTED]	EMC Corporation
14984824		[REDACTED]	EMC Corporation
14984864		[REDACTED]	EMC Corporation
14985518		[REDACTED]	EMC Corporation
14985612		[REDACTED]	EMC Corporation
14985656		[REDACTED]	EMC Corporation
14985706		[REDACTED]	EMC Corporation
14985735		[REDACTED]	EMC Corporation
14985749		[REDACTED]	EMC Corporation
14985769		[REDACTED]	EMC Corporation
14986066		[REDACTED]	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
14986276		[REDACTED]	EMC Corporation
14986309		[REDACTED]	EMC Corporation
14992099		[REDACTED]	EMC Corporation
14994734		EFFICIENT BACKUP OF VIRTUAL DATA	EMC Corporation
14997980		AUTOMATED DEFECT DIAGNOSIS FROM MACHINE DIAGNOSTIC DATA	EMC Corporation
14998102		[REDACTED]	EMC Corporation
14998112		[REDACTED]	EMC Corporation
14998139		[REDACTED]	EMC Corporation
14998374		[REDACTED]	EMC Corporation
15000709		BLOCK BASED INCREMENTAL BACKUP FROM USER MODE	EMC Corporation
15001784		[REDACTED]	EMC Corporation
15001789		[REDACTED]	EMC Corporation
15004800		SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION AND COMPRESSION OF SEGMENTS	EMC Corporation
15005810		[REDACTED]	EMC Corporation
15005817		[REDACTED]	EMC Corporation
15007087		EFFICIENT STORAGE TIERING	EMC Corporation
15042022		[REDACTED]	EMC Corporation
15056072		IDED A CITED!	EMC Commention
15056072		[REDACTED]	EMC Corporation
15056115		[REDACTED]	EMC Corporation
15056439		[REDACTED]	EMC Corporation
15057631		[REDACTED]	EMC Corporation
15057849		[REDACTED]	EMC Corporation
15059011		[REDACTED]	EMC Corporation
15064183		PRIVACY SCREEN-BASED SECURITY	EMC Corporation
15064314		[REDACTED]	EMC Corporation
15064829		[REDACTED]	EMC Corporation
15065353		[REDACTED]	EMC Corporation
15066221		[REDACTED]	EMC Corporation
15066235		[REDACTED]	EMC Corporation
15066291		[REDACTED]	EMC Corporation
15067489		ASSURED FEDERATED RECORDS MANAGEMENT	EMC Corporation
15067564		[REDACTED]	EMC Corporation
15069283		[REDACTED]	EMC Corporation
15070450		[REDACTED]	EMC Corporation
15071009		METHOD TO INPUT CONTENT IN A STRUCTURED MANNER WITH REAL-TIME ASSISTANCE AND VALIDATION	EMC Corporation
15071311		[REDACTED]	EMC Corporation
15071862		[REDACTED]	EMC Corporation
15072981		[REDACTED]	EMC Corporation
15073944		[REDACTED]	EMC Corporation
15074037		[REDACTED]	EMC Corporation
15074063		FRAMEWORK FOR CALCULATING GROUPED	EMC Corporation
130/4003		OPTIMIZATION ALGORITHMS WITHIN A DISTRIBUTED DATA STORE	ENIC Corporation

Application	Registration	
Number	Number Title	Owner
15075038	[REDACTED]	EMC Corporation
15075887	[REDACTED]	EMC Corporation
15076034	[REDACTED]	EMC Corporation
15076224	[REDACTED]	EMC Corporation
15076775	[REDACTED]	EMC Corporation
15076946	[REDACTED]	EMC Corporation
15077179	[REDACTED]	EMC Corporation
15077183	[REDACTED]	EMC Corporation
15077184	[REDACTED]	EMC Corporation
15077372	[REDACTED]	EMC Corporation
15078375	[REDACTED]	EMC Corporation
15078672	[REDACTED]	EMC Corporation
15078688	[REDACTED]	EMC Corporation
15079197	[REDACTED]	EMC Corporation
15079208	[REDACTED]	EMC Corporation
15079219	[REDACTED]	EMC Corporation
15079228	[REDACTED]	EMC Corporation
15079896	[REDACTED]	EMC Corporation
15080437	[REDACTED]	EMC Corporation
15080448	[REDACTED]	EMC Corporation
15080483	[REDACTED]	EMC Corporation
15080490	[REDACTED]	EMC Corporation
15080495	[REDACTED]	EMC Corporation
15080499	[REDACTED]	EMC Corporation
15080543	[REDACTED]	EMC Corporation
15080554	[REDACTED]	EMC Corporation
15081137	[REDACTED]	EMC Corporation
15081470	[REDACTED]	EMC Corporation
15081531	[REDACTED]	EMC Corporation
15082670	[REDACTED]	EMC Corporation
15082679	[REDACTED]	EMC Corporation
15083324	[REDACTED]	EMC Corporation
15083600	[REDACTED]	EMC Corporation
15085000	[REDACTED]	Elvic Corporation
15083662	[REDACTED]	EMC Corporation
15083685		
15083687	[REDACTED]	EMC Corporation EMC Corporation
15083873		
	[REDACTED]	EMC Corporation
15083911	[REDACTED]	EMC Corporation
15083956	[REDACTED]	EMC Corporation
15083958	[REDACTED]	EMC Corporation
15084208	[REDACTED]	EMC Corporation
15084234	[REDACTED]	EMC Corporation
15084242	[REDACTED]	EMC Corporation
15084285	[REDACTED]	EMC Corporation
15084324	[REDACTED]	EMC Corporation
15084346	[REDACTED]	EMC Corporation
15084398	[REDACTED]	EMC Corporation
15084529	[REDACTED]	EMC Corporation
15084559	[REDACTED]	EMC Corporation
15084604	[REDACTED]	EMC Corporation
15084672	[REDACTED]	EMC Corporation

Application	Registration	
Number	Number Title	Owner
15084739	[REDACTED]	EMC Corporation
15084790	[REDACTED]	EMC Corporation
15084810	[REDACTED]	EMC Corporation
15084819	[REDACTED]	EMC Corporation
15084996	[REDACTED]	EMC Corporation
15085123	[REDACTED]	EMC Corporation
15085142	[REDACTED]	EMC Corporation
15085148	[REDACTED]	EMC Corporation
15085168	[REDACTED]	EMC Corporation
15085172	[REDACTED]	EMC Corporation
15085173	[REDACTED]	EMC Corporation
15085181	[REDACTED]	EMC Corporation
15085188	[REDACTED]	EMC Corporation
15085234	[REDACTED]	EMC Corporation
15085276	[REDACTED]	EMC Corporation
15085282	[REDACTED]	EMC Corporation
15085292	[REDACTED]	EMC Corporation
15085876	[REDACTED]	EMC Corporation
15085908	[REDACTED]	EMC Corporation
15085937	[REDACTED]	EMC Corporation
15085964	[REDACTED]	EMC Corporation
15086276	[REDACTED]	EMC Corporation
15086390	[REDACTED]	EMC Corporation
15086429	[REDACTED]	EMC Corporation
15086439	[REDACTED]	EMC Corporation
15086503	[REDACTED]	EMC Corporation
15086508	[REDACTED]	EMC Corporation
15086514	[REDACTED]	EMC Corporation
15086519	[REDACTED]	EMC Corporation
15086547	[REDACTED]	EMC Corporation
15086565	[REDACTED]	EMC Corporation
15086581	[REDACTED]	EMC Corporation
15086593	[REDACTED]	EMC Corporation
15086629	[REDACTED]	EMC Corporation
15086632	[REDACTED]	EMC Corporation
		EMC Corporation
15086644	[REDACTED]	
15086647	[REDACTED]	EMC Corporation
15086747	[REDACTED]	EMC Corporation
15086758	[REDACTED]	EMC Corporation
15086780	[REDACTED]	EMC Corporation
15086807	[REDACTED]	EMC Corporation
15086839	[REDACTED]	EMC Corporation
15086859	[REDACTED]	EMC Corporation
15086877	[REDACTED]	EMC Corporation
15086946	[REDACTED]	EMC Corporation
15086966	[REDACTED]	EMC Corporation
15086979	[REDACTED]	EMC Corporation
15086989	[REDACTED]	EMC Corporation
15087000	[REDACTED]	EMC Corporation
15087067	[REDACTED]	EMC Corporation
15087188	[REDACTED]	EMC Corporation
15087792	[REDACTED]	EMC Corporation

Application	Registration	
Number	Number Title	Owner
15087806	[REDACTED]	EMC Corporation
15087817	[REDACTED]	EMC Corporation
15088029	[REDACTED]	EMC Corporation
15092250	[REDACTED]	EMC Corporation
15095920	[REDACTED]	EMC Corporation
15095953	[REDACTED]	EMC Corporation
15096622	[REDACTED]	EMC Corporation
15096646	[REDACTED]	EMC Corporation
15096683	[REDACTED]	EMC Corporation
15096883	[REDACTED]	EMC Corporation
15096978	[REDACTED]	EMC Corporation
15097589	[REDACTED]	EMC Corporation
15097598	[REDACTED]	EMC Corporation
15097978	[REDACTED]	EMC Corporation
15098845	[REDACTED]	EMC Corporation
15135817	[REDACTED]	EMC Corporation
15136190	[REDACTED]	EMC Corporation
15136327	[REDACTED]	EMC Corporation
15136425	[REDACTED]	EMC Corporation
15136574	[REDACTED]	EMC Corporation
15138807	[REDACTED]	EMC Corporation
15139881	[REDACTED]	EMC Corporation
15143941	[REDACTED]	EMC Corporation
15143941	[REDACTED]	EMC Corporation
15155475	[REDACTED]	EMC Corporation
15165437	[REDACTED]	EMC Corporation
15165437		
15167222	[REDACTED]	EMC Corporation
	[REDACTED]	EMC Corporation
15168642	[REDACTED]	EMC Corporation
15174175	[REDACTED]	EMC Corporation
15175630	[REDACTED]	EMC Corporation
15176656	[REDACTED]	EMC Corporation
15180406	[REDACTED]	EMC Corporation
15180438	[REDACTED]	EMC Corporation
15181347	[REDACTED]	EMC Corporation
15188006	[REDACTED]	EMC Corporation
15190056	[REDACTED]	EMC Corporation
15190448	[REDACTED]	EMC Corporation
15190518	[REDACTED]	EMC Corporation
15191039	[REDACTED]	EMC Corporation
15191324	[REDACTED]	EMC Corporation
15191361	[REDACTED]	EMC Corporation
15191766	[REDACTED]	EMC Corporation
15192212	[REDACTED]	EMC Corporation
15192352	[REDACTED]	EMC Corporation
15193611	[REDACTED]	EMC Corporation
15194019	[REDACTED]	EMC Corporation
15194173	[REDACTED]	EMC Corporation
15194189	[REDACTED]	EMC Corporation
15194327	[REDACTED]	EMC Corporation
15194890	[REDACTED]	EMC Corporation
15195854	[REDACTED]	EMC Corporation

	Table 1	۱ ۸
Number		Owner
		EMC Corporation
	[REDACTED]	EMC Corporation
D501011	DISK CARTRIDGE	EMC Corporation
D462987	BOOK COVER WITH HANDLES	EMC Corporation
D486494	FRONT PANEL FOR ELECTRONIC CABINET	EMC Corporation
	(DESIGN)	
D496050	FRONT PANEL FOR ELECTRONIC CABINET	EMC Corporation
	(DESIGN)	_
D516929	AUTHENTICATION DEVICE	EMC Corporation
D511983	SECURITY DEVICE	EMC Corporation
D513007	FRONT PANEL FOR AN ELECTRONIC CABINET	EMC Corporation
D517440		EMC Corporation
		EMC Corporation
		EMC Corporation
		EMC Corporation
D743399		EMC Corporation
3 / 18833		EMC Corporation
	,	EMC Corporation
		EMC Corporation
		EMC Corporation
		EMC Corporation
DE5602120		EMC Corporation
RE3092129		Elvic Corporation
		EMC Corporation
		Elvic Corporation
		EMC Composition
		EMC Corporation
		EMC Corporation
		EMC Corporation
		EMC Companyis:
	COMPONENTS VIA DATA ANALYTICS	EMC Corporation
	D462987 D486494 D496050 D516929 D511983	REDACTED    OBSIGN    D462987 BOOK COVER WITH HANDLES  D486494 FRONT PANEL FOR ELECTRONIC CABINET (DESIGN)  D496050 FRONT PANEL FOR ELECTRONIC CABINET (DESIGN)  D516929 AUTHENTICATION DEVICE  D511983 SECURITY DEVICE  D513007 FRONT PANEL FOR AN ELECTRONIC CABINET D517440 SECURITY DEVICE  D534448 AUTHENTICATION DEVICE  D570851 FRONT PANEL FOR AN ELECTRONIC CABINET D748661 DISPLAY SCREEN WITH GRAPHICAL USER INTERFACE     REDACTED    REDACTED

Application Number	Registration Number	Title	Owner
9396071		SYSTEM AND METHOD FOR PRESENTING VIRTUAL MACHINE (VM) BACKUP INFORMATION FROM MULTIPLE BACKUP SERVERS	EMC Corporation
9396207		FINE GRAINED TIERED STORAGE WITH THIN PROVISIONING	EMC Corporation
9396243		HASH-BASED REPLICATION USING SHORT HASH HANDLE AND IDENTITY BIT	EMC Corporation
9396341		DATA ENCRYPTION IN A DE-DUPLICATING STORAGE IN A MULTI-TENANT ENVIRONMENT	EMC Corporation
9396349		METHOD AND APPARATUS FOR SHARING DATA FROM A SECURED ENVIRONMENT	EMC Corporation
9397992		AUTHENTICATION USING COLOR-SHAPE PAIRINGS	EMC Corporation
9398005		MANAGING SEED PROVISIONING	EMC Corporation
9398016		CACHE-FREE AND LOCK-FREE HANDLING OF SECURITY INFORMATION FOR MULTIPLE DISTRIBUTED OBJECTS IN PROTECTION STORAGE SYSTEMS	EMC Corporation
9398092		FEDERATED RESTORE OF CLUSTER SHARED VOLUMES	EMC Corporation
9398720		CHASSIS WITH AIRFLOW AND THERMAL MANAGEMENT	EMC Corporation
9400610		METHOD FOR CLEANING A DELTA STORAGE SYSTEM	EMC Corporation
9400611		DATA MIGRATION IN CLUSTER ENVIRONMENT USING HOST COPY AND CHANGED BLOCK TRACKING	EMC Corporation
9400613		INTELLIGENT PAIRING FOR SNAPSHOT BASED BACKUPS	EMC Corporation
9400741		RECLAIMING SPACE FROM FILE SYSTEM HOSTING MANY PRIMARY STORAGE OBJECTS AND THEIR SNAPSHOTS	EMC Corporation
9400792		FILE SYSTEM INLINE FINE GRAINED TIERING	EMC Corporation
9401838		NETWORK EVENT CAPTURE AND RETENTION SYSTEM	EMC Corporation
9401905		TRANSFERRING SOFT TOKEN AUTHENTICATION CAPABILITIES TO A NEW DEVICE	EMC Corporation
9405583		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND PIECEWISE OBJECTIVE FUNCTIONS	EMC Corporation
9407759		TELEPHONIC COMMUNICATION REDIRECTION AND COMPLIANCE PROCESSING	EMC Corporation
9413825		MANAGING FILE OBJECTS IN A DATA STORAGE SYSTEM	EMC Corporation
9413856		DETECTING TIME ZONES USING HISTORICAL DATE SAMPLING	EMC Corporation
09261906	6148414	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
09374640	6182161	METHOD AND APPARATUS FOR BUILDING SOFTWARE NETS USING AN ARRAY STRUCTURE	EMC Corporation

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Number	Number	Title	Owner
09399581	6385674	SYSTEMS AND METHODS FOR DYNAMIC ALIGNMENT OF ASSOCIATED PORTIONS OF A CODE WORD FROM A PLURALITY OF ASYNCHRONOUS SOURCES	EMC Corporation
09428157	6321294	METHOD AND APPARATUS FOR CONVERTING BETWEEN LOGICAL AND PHYSICAL MEMORY SPACE IN A RAID SYSTEM	EMC Corporation
09578530	6389559	CONTROLLER FAIL-OVER WITHOUT DEVICE BRING-UP	EMC Corporation
09578830	6351831	STORAGE NETWORK CABLING VERIFICATION SYSTEM	EMC Corporation
09657258	6912668	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
09718647	6732290	RECOVERY SYSTEM FOR RAID WRITE	EMC Corporation
09777139	7062648	SYSTEM AND METHOD FOR REDUNDANT ARRAY NETWORK STORAGE	EMC Corporation
09777149	6810398	SYSTEM AND METHOD FOR UNORCHESTRATED DETERMINATION OF DATA SEQUENCES USING STICKY BYTE FACTORING TO DETERMINE BREAKPOINTS IN DIGITAL SEQUENCES	EMC Corporation
09777150	6704730	HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
09781920	7194504	SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION AND TRANSCRIPTION TECHNIQUES	EMC Corporation
09782613	6826711	SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
09815824	7299290	METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA INFORMATION ON DEMAND OVER WIDE AREA NETWORKS	EMC Corporation
10006929	7266706	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
10046070	6857059	STORAGE VIRTUALIZATION SYSTEM AND METHODS	EMC Corporatio
10198728	7404206	NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
10302716	7194656	SYSTEMS AND METHODS FOR IMPLEMENTING CONTENT SENSITIVE ROUTING OVER A WIDE AREA NETWORK (WAN)	EMC Corporation
11031628	7577817	STORAGE VIRTUALIZATION SYSTEM AND METHODS	EMC Corporation
11082178	7246260	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
11177924	7975018	SYSTEMS AND METHODS FOR PROVIDING DISTRIBUTED CACHE COHERENCE	EMC Corporation
11261943	7783716	SYSTEMS AND METHODS FOR IMPLEMENTING CONTENT SENSITIVE ROUTING OVER A WIDE AREA NETWORK (WAN)	EMC Corporation
11486754	7475207	MAINTAINING WRITE ORDER FIDELITY ON A MULTI-WRITER SYSTEM	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
12899315	9031993	CUSTOMIZABLE LIBRARY FOR INFORMATION	EMC Corporation
		TECHNOLOGY DESIGN AND MANAGEMENT USING	
		EXPERT KNOWLEDGE BASE	
12899435	8880682	INTEGRATED FORENSICS PLATFORM FOR	EMC Corporation
		ANALYZING IT RESOURCES CONSUMED TO	
		DERIVE OPERATIONAL AND ARCHITECTURAL	
13727677	9063861	RECOMMENDATIONS HOST BASED HINTS	EMC Corporation
13926218	9146878	STORAGE RECOVERY FROM TOTAL CACHE LOSS	EMC Corporation
13720210	7140070	USING JOURNAL-BASED REPLICATION	Livic corporation
14496262	9026729	DATA RECOVERY AFTER TRIPLE DISK FAILURE	EMC Corporation
13720003	8994514	EVENT INDICATOR CREATION USING FIRST AND	EMC Corporation
		SECOND SETS OF VALUES	1
14042142	9131624	RACK-MOUNTABLE IT DEVICE	EMC Corporation
13/536384	8949255	METHODS AND APPARATUS FOR CAPTURE AND	EMC Corporation
		STORAGE OF SEMANTIC INFORMATION WITH	
		SUB-FILES IN A PARALLEL COMPUTING SYSTEM	
13536289	9298733	STORING FILES IN A PARALLEL COMPUTING	EMC Corporation
		SYSTEM BASED ON USER OR APPLICATION	
1252(215	0925(52	SPECIFICATION  SMALL FILE ACCRECATION DIA DADALLEI	EMC Commonation
13536315	8825652	SMALL FILE AGGREGATION IN A PARALLEL COMPUTING SYSTEM	EMC Corporation
13536331	9087075	STORING FILES IN A PARALLEL COMPUTING	EMC Corporation
15550551	908/0/3	SYSTEM USING LIST-BASED INDEX TO IDENTIFY	ENIC Corporation
		REPLICA FILES	
13536358	9165014	METHODS AND APPARATUS FOR MULTI-	EMC Corporation
	310001.	RESOLUTION REPLICATION OF FILES IN A	
		PARALLEL COMPUTING SYSTEM USING	
		SEMANTIC INFORMATION	
13536369	8868576	STORING FILES IN A PARALLEL COMPUTING	EMC Corporation
		SYSTEM BASED ON USER-SPECIFIED PARSER	
12 (5 (0.00	0206261	FUNCTION ADDRESS OF A DATE OF THE AND A SECOND ASSESSMENT OF THE ADDRESS ASSESSMENT OF	El (C C
13676000	9286261	ARCHITECTURE AND METHOD FOR A BURST	EMC Corporation
13676019	9158540	BUFFER USING FLASH TECHNOLOGY  METHOD AND APPARATUS FOR OFFLOADING	EMC Corporation
130/0019	9138340	COMPUTE RESOURCES TO A FLASH CO-	ENIC Corporation
		PROCESSING APPLIANCE	
14143771	9245048	PARALLEL SORT WITH A RANGED, PARTITIONED	EMC Corporation
111.07.11	32.00.0	KEY-VALUE STORE IN A HIGH PERFORMANCE	
		COMPUTING ENVIRONMENT	
11193729	7920050	PROXY DEVICE FOR ENHANCED PRIVACY IN AN	EMC Corporation
		RFID SYSTEM	
13/730058	9317521	CLOUD OBJECT STORE FOR CHECKPOINTS OF	EMC Corporation
		HIGH PERFORMANCE COMPUTING APPLICATIONS	
10151155	000000	USING DECOUPLING MIDDLEWARE	77.40.0
13174177	9009385	CO-RESIDENCY DETECTION IN A CLOUD-BASED	EMC Corporation
12226602	8689282	SYSTEM SECURITY DOLLOV ENEOD CEMENT ED AMEWORK	EMC Composition
13336692	8089282	SECURITY POLICY ENFORCEMENT FRAMEWORK FOR CLOUD-BASED INFORMATION PROCESSING	EMC Corporation
		SYSTEMS	
13/730097	9069778	CLOUD OBJECT STORE FOR ARCHIVE STORAGE OF	EMC Corporation
25,150071		HIGH PERFORMANCE COMPUTING DATA USING	2c corporation
	1	DECOUPLING MIDDLEWARE	I

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13073461	8732702	FILE SYSTEM FOR STORAGE AREA NETWORK	EMC Corporation
13731663	9128739	DETERMINING INSTANCES TO MAINTAIN ON AT LEAST ONE CLOUD RESPONSIVE TO AN EVALUATION OF PERFORMANCE CHARACTERISTICS	EMC Corporation
13/731663	9128739	DETERMINING INSTANCES TO MAINTAIN ON AT LEAST ONE CLOUD RESPONSIVE TO AN EVALUATION OF PERFORMANCE CHARACTERISTICS	EMC Corporation
000189063	000189063	SECURITY DEVICE	EMC Corporation
000189071	000189071	AUTHENTICATION DEVICE	EMC Corporation
000316609	0100316609	SECURITY DEVICE	EMC Corporation
0306153.8	2383450	SYSTEM AND METHOD FOR HEIRARCHICAL DATA STORAGE	EMC Corporation
1695CHE2015		FAILOVER IN A SAN ENVIRONMENT	EMC Corporation
2000-321951	3712932	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE SYSTEM	EMC Corporation
2001929	2001929	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
2002750	2002750	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
200410098531.5		METHOD AND APPARATUS FOR DATA RETENTION IN A STORAGE SYSTEM	EMC Corporation
2030438	2030438	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
2056235	2056235	ON-LINE RESTORATION OF REDUNDANCY INFORMATION IN A REDUNDANT ARRAY SYSTEM	EMC Corporation
2058734	2058734	Storage Device Array Architecture with Copyback Cache	EMC Corporation
2091993	2091993	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
2148105	2148105	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
2172075	2172075	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
2182791	2182791	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
2223933	2223933	Method for managing globally distributed software components	EMC Corporation
2226189	2226189	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
2226360	2226360	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
28304186	2109004	APPARATUS AND METHOD FOR SYNCHRONIZING SEPARATE TIME OPERATOR	EMC Corporation
3-338882	3071017	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
395488	1167971	EXTERNAL MICROCIDE OPERATION IN A MULTI- LEVEL MICROPROCESSOR	EMC Corporation

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Number	Number	Title	Owner
401467		ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
401513	1180002	Magnetic Disk Drive Having a Movable Drive Motor	EMC Corporation
403453	1174768	DIGITAL DATA PROCESSING SYSTEM-FHP	EMC Corporation
403454	1174766	DIGITAL DATA PROCESSING SYSTEM- FHP	EMC Corporation
403455	1174767	DIGITAL COMPUTER SYSTEM HAVING UNIQUE	EMC Corporation
		MEANS OF REFERRING TO OPERANDS AND ABILITY TO EXECUTE A PLURALITY OF INTERNAL LANGUAGES	
403456	1179063	DATA PROCESSING SYSTEM HAVING A MEMORY USING OBJECT-BASED INFORMATION AND A PROTECTION SCHEME FOR DETERMINING ACCESS RIGHTS TO SUCH INFORMATION	EMC Corporation
403457	1173172	DATA PROCESSING SYSTEM USING OBJECT-BASED INFORMATION AND A PROTECTION SCHEME FOR DETERMINING ACCESS RIGHTS TO SUCH INFORMATION AND USING MULTILEVEL MICROCODE TECHNIQUES	EMC Corporation
404845	1180449	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
406715	1173177	APPARATUS AND METHOD FOR SIMULTANEOUSLY DISPLAY OF CHARACTERS OF VARIABLE SIZE	EMC Corporation
406721	1189645	APPARATUS AND METHOD FOR SIMULTANEOUS DISPLAY OF CHARACTERS OF VARIABLE SIZE AND DENSITY	EMC Corporation
410514	1188284	Flexible Magnetic Disk Drive Using a Rigid Cartridge	EMC Corporation
42734/97	696346	Method and system for integrating additional functionality into a login system	EMC Corporation
439800	1204218	DIGITAL DATA PROCESSING SYSTEM HAVING DUAL-PURPOSE SCRATCHPAD AND ADDRESS TRANSLATION MEMORY	EMC Corporation
4452989	630635	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
4-504448	3129732	Storage Device Array Architecture with Copyback Cache	EMC Corporation
453646	1178714	DIGITAL DATA PROCESSING SYSTEM-FHP	EMC Corporation
459145	1207915	DATA PROCESSING SYSTEM HAVING DUAL PROCESSORS	EMC Corporation
467561	1200317	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
488882	1246257	SYSTEM FOR GENERATING DISPLAY DATA	EMC Corporation
505280/1997	3279319	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
5114761989	3021503	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
514515/91	3156083	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
519325/1996	2868315	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation

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Number	Number	Title	Owner
523998	1270957	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
54578/94	673393	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
62704	62704	DATA PROCESSING SYSTEM	EMC Corporation
63879	63879	EXTERNAL MICROCIDE OPERATION IN A MULTI- LEVEL MICROPROCESSOR	EMC Corporation
65123	65123	DATA PROCESSING SYSTEM USING OBJECT- BASED INFORMATION AND A PROTECTION SCHEME FOR DETERMINING ACCESS RIGHTS TO SUCH INFORMATION AND USING MULTILEVEL MICROCODE TECHNIQUES	EMC Corporation
6568686	587087	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
69806914.5	69806914.5	AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
700894/1993	137406	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
704437/1996	256594	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
75541	75541	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV	EMC Corporation
75542	75542	DPS HAVING A UNIQUE MEMORY SYSTEM (EAGLE)	EMC Corporation
75543	75543	EAGLE DATA PROCESSING SYSTEM	EMC Corporation
75544	75544	DPS HAVING UNIQUE INSTRUCTION RESPONSIVE MEANS	EMC Corporation
80 14929	2 486 291	MANAGEMENT OF MASS MEMORY	EMC Corporation
81300560.0	35334	MICROECLIPSE DATA PROCESSING SYSTEM	EMC Corporation
81305587.8	P3176135.6	EXTERNAL MICROCIDE OPERATION IN A MULTI- LEVEL MICROPROCESSOR	EMC Corporation
81305587.8	057788	EXTERNAL MICROCIDE OPERATION IN A MULTI- LEVEL MICROPROCESSOR	EMC Corporation
81305587.8	0057788	EXTERNAL MICROCIDE OPERATION IN A MULTI- LEVEL MICROPROCESSOR	EMC Corporation
82302080.5	0064826	ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
82302080.5	0064826	ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
82302998.8	0067667	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
82302998.8	0067667	FIXED POINT AND FLOATING POINT COMPUTATION UNITS USING COMMONLY SHARED CONTROL FIELDS	EMC Corporation
83200684.5	97977	DATA PROCESSING SYSTEM "ALPHA" MICROECLIPSE	EMC Corporation
84200987.0	0137525	ARITHMETIC UNIT FOR USE IN DATA PROCESSING SYSTEMS	EMC Corporation
84200987.0	0137525	ARITHMETIC UNIT FOR USE IN DATA PROCESSING	EMC Corporation

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Number	Number	Title	Owner
		SYSTEMS	
84200991.2	0137526	ARITHMETIC UNIT FOR USE IN A DATA	EMC Corporation
		PROCESSING SYSTEM FOR COMPUTING	
		EXPONENT RESULTS AND DETECTING OVERFLOW	
0.42000001.2	010770	AND UNDERFLOW CONDITIONS THEREOF	Er (C C
84200991.2	0137526	ARITHMETIC UNIT FOR USE IN A DATA	EMC Corporation
		PROCESSING SYSTEM FOR COMPUTING EXPONENT RESULTS AND DETECTING OVERFLOW	
		AND UNDERFLOW CONDITIONS THEREOF	
84201482.1	0150522	DATA PROCESSING SYSTEM	EMC Corporation
84201482.1	150522	HIERACHIAL MEMORY RING PROTECTION	EMC Corporation
84201482.1	130322	SYSTEM USING COMPARISIONS OF REQUESTED	EMIC Corporation
		AND PREV	
84310/91	660939	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
85 17645	2 590 700	DISC INTERFACE LOGIC	EMC Corporation
8-505969			
8-505969	2941947	COMPUTER METHOD AND APPARATUS FOR	EMC Corporation
	161120	ASYNCHRONOUS ORDERED OPERATIONS	
85200462.1	164138	MICROECLIPSE DATA PROCESSING SYSTEM	EMC Corporation
85304505.2	0173429	DATA PROCESSING SYSTEM WITH UNIFIED I/O	EMC Corporation
		CONTROL AND ADAPTED FOR DISPLAY OF	
0.500.150.5.0	0.1.50.100	GRAPHICS	77.60.0
85304505.2	0173429	DATA PROCESSING SYSTEM WITH UNIFIED I/O	EMC Corporation
		CONTROL AND ADAPTED FOR DISPLAY OF	
9/102/05	2182226	GRAPHICS  DISTRIBUTED SWITCHING A DOLLITECTURE	EMC Companyion
8619369.5		DISTRIBUTED SWITCHING ARCHITECTURE	EMC Corporation
86309239.1	E71754	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
00309239.1	0234100	GENERATION OF SEPARATE, FREE RUNNING, TIME	EMIC Corporation
		DEPENDENT EQUIPMENT	
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
00307237.1	0231100	GENERATION OF SEPARATE, FREE RUNNING, TIME	Livie corporation
		DEPENDENT EQUIPMENT	
86309239.1	P3683481.5	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		GENERATION OF SEPARATE, FREE RUNNING, TIME	
		DEPENDENT EQUIPMENT	
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		THE GENERATION OF SEPARATE, FREE-RUNNING,	•
		TIME-DEPENDENT CODES	
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		GENERATION OF SEPARATE, FREE RUNNING, TIME	
		DEPENDENT EQUIPMENT	
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		GENERATION OF SEPARATE, FREE RUNNING, TIME	
0.0000000	0004100	DEPENDENT EQUIPMENT	Th to o
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		GENERATION OF SEPARATE, FREE RUNNING, TIME	
0/200220.1	0224100	DEPENDENT EQUIPMENT	EMC C
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
		GENERATION OF SEPARATE, FREE RUNNING, TIME	
		DEPENDENT EQUIPMENT	<u> </u>

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86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
86309239.1	0234100	METHOD AND APPARATUS FOR SYNCHRONIZING GENERATION OF SEPARATE, FREE RUNNING, TIME DEPENDENT EQUIPMENT	EMC Corporation
87108428	108847	Head-Gimble Protection for a Disk Drive	EMC Corporation
89311715.0	68926436T2	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89311715.0	0369707	ARRAYED DISK DRIVE SYSTEM AND METHOD	EMC Corporation
89912316.0	68928316.4	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
89912316.0	0441840	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
89912316.0	0441840	SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF REMOTE COMPUTERS	EMC Corporation
90005180	RE5692129	MANAGING APPLICATION PROGRAMS IN A COMPUTER NETWORK BY USING A DATABASE OF APPLICATION OBJECTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
90313205.8	0438877	METHOD AND SYSTEM FOR REDUCING MEMORY REQUIREMENTS	EMC Corporation
91310909.6	69129444	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91310909.6	0492808	On-Line Restoration of Redundancy Information in a Redundant Array System	EMC Corporation
91312104.2	69126416.3	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91312104.2	0493984	Storage Device Array Architecture with Copyback Cache	EMC Corporation
91908123.2	69128284.6	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation

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91908123.2	0532514	FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
91915106.8	0550457	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
93.1062	302986	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
93005211.24	2108621	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
931276	101432	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
9792058-1	42285	METHOD AND APPARATUS FOR SECURE	EMC Corporation
		IDENTIFICATION AND VERIFICATION	-
98912005.0	0972240	AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
98912005.0	0972240	AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
AT(EP)90916922. 9	AT(EP)04978 89	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
AU1992495	AU681500	METHOD AND APPARATUS FOR UTILIZING A TOKEN FOR RESOURCE ACCESS	EMC Corporation
AU2004239738	AU20042397 38	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
AU2004272083	AU20042720 83	SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
AU2004300140	AU20043001 40	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
AU2005283167	AU20052831 67	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
AU2011209673	AU20112096 73	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
AU2011223767	AU20112237 67	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
AU5627898	AU739898	METHOD OF AND APPARATUS FOR PROVIDING SECURE DISTRIBUTED DIRECTORY SERVICES AND PUBLIC KEY INFRASTRUCTURE	EMC Corporation
AU6720890	AU642362	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
AU7981691	AU649190	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
BE(EP)90916922. 9	BE(EP)04978 89	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
BE(EP)91910198.	BE(EP)54998 4	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
BR102014010490 9		HETEROSCEDASTIC DATA COMPRESSION USING ARIMA-GARCH MODEL ESTIMATION	EMC Corporation
BR112012018643 4		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation

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BR112012022088 8		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
CA2072150	CA2072150	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
CA2094026	CA2094026	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION\$METHODE ET APPAREIL D'IDENTIFICATION DE PERSONNES	EMC Corporation
CA2183629	CA2183629	METHOD AND APPARATUS FOR UTILIZING A TOKEN FOR RESOURCE ACCESS	EMC Corporation
CA2223941	CA2223941	RESERVED CYLINDER FOR SCSI DEVICE WRITE- BACK CACHE	EMC Corporation
CA2316355	CA2316355	System And Method For Monitoring Quality Of Service Over Network	EMC Corporation
CA2318908	CA2318908	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
CA2363726	CA2363726	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
CA2454203	CA2454203	NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
CA2549092	CA2549092	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
CA2642145	CA2642145	SYSTEMS AND METHODS FOR OBTAINING ULTRA- HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
CA2698210	CA2698210	SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
CA2751180		SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
CA2759612		METHOD AND SYSTEM FOR SECURING DATA	EMC Corporation
CA2766731		METHOD AND SYSTEM FOR CLOUD BASED STORAGE	EMC Corporation
CA2787933		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
CA2791566		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
CA2808516		SYSTEM AND METHOD FOR DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
CH(EP)90916922 .9	CH(EP)0497 889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
CH(EP)91910198 .1	CH(EP)0555 219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
CH83200684.5	CH0097977	DATA PROCESSING SYSTEM "ALPHA" MICROECLIPSE	EMC Corporation
CN 201610141381.4		METHOD AND APPARATUS FOR DATA STORAGE BASED ON APPLICATION OPTIMIZATION	EMC Corporation
CN00804532.1	CN00804532.	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation

Application Number	Registration Number	Title	Owner
CN01820889.4	CN	RESTORATION OF DATA BETWEEN PRIMARY AND	EMC Corporation
	ZL01820889.	BACKUP SYSTEMS	
	4		
CN01821116.X	ZL01821116.	METHOD AND APPARATUS FOR BACKING UP AND	EMC Corporation
	X	RESTORING COMPUTER DATA	
CN01821130.5	CN	METHOD OF IMPROVING THE AVAILABILITY OF	EMC Corporation
C1101021150.5	ZL01821130	COMPUTER CLUSTERING SYSTEMS THROUGH THE	Zivie corporation
	2201021130	USE OF A NETWORK MEDIUM LINK STATE	
CN02804805.9	CN	METHOD FOR COMPUTING UNIQUE INDEX OF	EMC Corporation
	ZL02804805.	ELECTRONIC MAIL MESSAGE TO EFFECT	
	9	DUPLICATION OF STORAGE	
CN02806662.6	ZL02806662.	NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation
	6		
CN02809378.X	CN ZL	SELECTION OF A RESOURCE IN A DISTRIBUTED	EMC Corporation
	02809378.X	COMPUTER SYSTEM	1
CN02812792.7	CN	MIRRORING NETWORK DATA TO ESTABLISH	EMC Corporation
	ZL02812792.	VIRTUAL STORAGE AREA NETWORK	
	7		
CN02816665.5	ZL02816665.	SYSTEM AND METHODS FOR PROVIDING	EMC Corporation
	5	METADATA FOR TRACKING OF INFORMATION ON	
		A DISTRIBUTED FILE SYSTEM OF STORAGE	
		DEVICES	
CN02818424.6	ZL02818424.	EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
	6		
CN02818844.6	ZL02818844.	SHARING OBJECTS BETWEEN COMPUTER	EMC Corporation
	6	SYSTEMS	
CN02818848.9		EFFICIENT SEARCH FOR MIGRATION AND PURGE	EMC Corporation
		CANDIDATES	
CN02823706.4	CN02823706.	PRESERVING A SNAPSHOT OF SELECTED DATA OF	EMC Corporation
	4	A MASS STORAGE SYSTEM	
CN03800377.5	CN363382	COPY-ON WRITE SNAPSHOT FOR VIRTUAL	EMC Corporation
		STORAGE DEVICE	
CN03800378.3	CN03800378.	VIRTUAL STORAGE DEVICES	EMC Corporation
	3		
CN03801721.0	CN03801721.	DYNAMIC RDF GROUPS	EMC Corporation
	0		
CN200380100380	ZL20038010	SYSTEMS AND METHODS FOR RESTRIPING FILES	EMC Corporation
.6	0380.6	IN A DISTRIBUTED FILE SYSTEM	
CN200410098532	CN20041009	METHODS AND APPARATUS FOR GENERATING A	EMC Corporation
.X	8532.X	CONTENT ADDRESS TO INDICATE DATA UNITS	
		WRITTEN TO A STORAGE SYSTEM PROXIMATE IN	
		TIME	
CN200480008082	CN20048000	VIRTUAL ORDERED WRITES	EMC Corporation
.9	8082.9		ED (C) C
CN200480030360		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC	EMC Corporation
.0		KEY GENERATIONS	FNOC
CN200480030394		SYSTEM AND METHOD FOR RISK BASED	EMC Corporation
.X	71.20040002	AUTHENTICATION  SYSTEM AND METHOD PROVIDING	EMOG
CN200480033059	ZL20048003	SYSTEM AND METHOD PROVIDING	EMC Corporation
.5 CN200480028020	3059.5	DISCONNECTED AUTHENTICATION	EMC C-
CN200480038039	CN443505	METHOD FOR TRANSFERRING DATA	EMC Corporation
.7			

Application Number	Registration	Title	Owner
Number	Number		Owner
CN200510089040	CN479193	METHODS AND APPARATUS FOR ACCESSING	EMC Corporation
.9		CONTENT IN A VIRTUAL POOL ON A CONTENT	
		ADDRESSABLE STORAGE SYSTEM	
CN200510107957	CN436890	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
.7			
CN200580031384	ZL20058003	STORING DATA REPLICAS REMOTELY	EMC Corporation
.2	1384.2		
CN200580033052	ZL20058003	INDEX PROCESSING	EMC Corporation
.8	3052.8		
CN200580033141	ZL20058003	FILE INDEX PROCESSING	EMC Corporation
.2	3141.2		
CN200580035170		CONFIGURING, MONITORING AND/OR MANAGING	EMC Corporation
.2		RESOURCE GROUPS INCLUDING A VIRTUAL	
		MACHINE	
CN200580044663	ZL20058004	BACKUP INFORMATION MANAGEMENT	EMC Corporation
.2	4663.2	DIVISOL IN ORGANITON WITH MODIVIDIN	Livic Corporation
CN200580046178	ZL20058004	CONTENT ADDRESSED STORAGE DEVICE AND	EMC Corporation
	6178.9		ENIC Corporation
.9		METHOD FOR STORING DATA THEREIN	
CN200580046233	ZL20058004	IMPLEMENTING APPLICATION SPECIFIC	EMC Corporation
.4	6233.4	MANAGEMENT POLICIES ON A CONTENT	
		ADDRESSED STORAGE DEVICE	
CN200580048139	CN10120866	SYSTEMS AND METHODS FOR DYNAMIC DATA	EMC Corporation
.2	8B	BACKUP	_
CN200580048140	CN10057346	SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
.5	2C		
CN200680002191	CN20068000	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
.9	2191.9	DELETION OF DATA	2e corporation
CN200680002192	ZL20068000	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
.3	2192.3	DELETION OF DATA	Elvic Corporation
CN200680003967	CN1153416	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
.9	CN1133410	CHECKI OHVI AND CONSISTENCI MARKERS	Elvic Corporation
CN200680005222	ZL20068000	METHOD OF DICTRIBUTING DEBUTATIVE CEEDS	FMC Composition
		METHOD OF DISTRIBUTING DERIVATIVE SEEDS	EMC Corporation
.6	5222.6	(AMENDED)	TD 10 0
CN200680012117	ZL20068001	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
.5	2117.5		
CN200680023506	ZL20068002	REDIRECTING AND MIRRORING OF TELEPHONIC	EMC Corporation
.8	3506.8	COMMUNICATIONS	
CN200680029860	ZL20068002	INFORMATION PROTECTION METHOD AND	EMC Corporation
.1	9860.1	SYSTEM	
CN200680030146	ZL20068003	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
.4	0146.4		
CN200680031467	CN10125348	CREATION OF A SINGLE CLIENT SNAPSHOT USING	EMC Corporation
.6	4B	A CLIENT UTILITY	
CN200680047701	CN848333	CONTINUOUS BACKUP	EMC Corporation
.4		- -	
CN200710089364	ZL20071008	SYSTEM AND METHOD OF INDEXING UNIQUE	EMC Corporation
.1	9364.1	ELECTRONIC MAIL MESSAGES AND USES OF THE	
• •	7501.1	SAME	
CN200780009902	ZL20078009	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
		HIGH EFFICIENCT FORTABLE ARCHIVE	EMC Corporation
X	902.X	A COECCINO DATA CTODA CE DESTOEC	EMC C '
CN200780011007	CN1178990	ACCESSING DATA STORAGE DEVICES	EMC Corporation
.1			

Application	Registration		_
Number	Number	Title	Owner
CN200780016456 .5	CN1360387	METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
CN200780016805 .3	CN10144926 9B	AUTOMATED PRIORITY RESTORES	EMC Corporation
CN200780021765 .1	ZL20078002 1765.1	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
CN200810173557 .X	CN10151527 3B	SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
CN200810189560 .0	ZL20081018 9560.0	AUTHENTICATED SERVICE VIRTUALIZATION	EMC Corporation
CN200880012226 .6	ZL20088001 2226.6	SEEDING REPLICATION	EMC Corporation
CN200880017055 .6	ZL20088001 7055.6	AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
CN200880019270 .X	ZL20088001 9270.X	CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
CN200880100725 .0	ZL20088010 0725.0	SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
CN200880103418 .8	ZL20088010 3418.8	SYSTEM AND METHOD FOR PROVIDING WRITE- ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
CN200880105823	ZL20088010 5823.3	DE-DUPLICATION IN VIRTUALIZED SERVER AND VIRTUALIZED STORAGE ENVIRONMENTS	EMC Corporation
CN200880113184 .5	ZL20088011 3184.5	POLICY BASED FILE MANAGEMENT	EMC Corporation
CN200980133628 .6	ZL20098013 3628.6	METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
CN200980145334 .5	ZL20098014 5334.5	DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
CN201010255371 .6		SYSTEM AND METHOD OF FILE LOCKING WITHIN A NETWORK FILE SYSTEM FEDERATED NAMESPACE	EMC Corporation
CN201010297739 .5		MONITORING CIRCUIT	EMC Corporation
CN201010508441 .4		PROVIDING SECURITY MECHANISMS FOR VIRTUAL MACHINE IMAGES	EMC Corporation
CN201010601491 .7	ZL20101060 14917	APPARATUSES AND METHODS FOR INFORMATION TECHNOLOGY RESOURCE ALLOCATION AND USAGE TRACKING IN CLOUD SYSTEMS	EMC Corporation
CN201010601493 .6	ZL20101060 14936	METHOD AND DEVICE FOR HARDENING A SOFTWARE EXECUTION IN RANDOM ACCESS STORAGE DEVICE	EMC Corporation
CN201010603127 .4	ZL20101060 3127	STORAGE SPACE RECLAIMING METHOD ON WINDOWS PLATFORM FOR VIRTUAL PROVISIONING	EMC Corporation
CN201010603144 .8	ZL20101060 31448	METHOD TO ROBUSTLY ELECT THE MASTER USING SHARED-DISK QUORUM DEVICES IN A CLUSTER WITH DYNAMIC NUMBER OF NODES AND UNCERTAIN CONNECTIVITY	EMC Corporation
CN201010612937 .6	ZL20101061 2937.6	HOUSING SYSTEM FOR RECEPTACLES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
CN201080015183	CN10243956	DATA REDISTRIBUTION IN DATA REPLICATION	EMC Corporation
.4	0A	SYSTEMS	
CN201080028493		SYSTEM AND METHOD FOR PROVIDING LONG-	EMC Corporation
.X		TERM STORAGE FOR DATA	
CN201080036014		SEGMENT DEDUPLICATION SYSTEM WITH	EMC Corporation
.9		ENCRYPTION OF SEGMENTS	
CN201080042904		SNAPSHOTTING OF A PERFORMANCESTORAGE	EMC Corporation
.0		SYSTEM IN A SYSTEM FOR PERFORMANCE	
		IMPROVEMENT OF A CAPACITY OPTIMIZED	
		STORAGE SYSTEM	
CN201080063921		SYSTEMS AND METHODS FOR FACILITATING	EMC Corporation
.2		DATA DISCOVERY	
CN201110069907	ZL20111006	FILE SYSTEM FOR STORAGE AREA NETWORK	EMC Corporation
.X	9907.X		
CN201110166629		METHOD AND APPARATUS TO CONSTRUCT A	EMC Corporation
.X		SECURE COMPUTING ENVIRONMENT FROM	
		TRUSTED BOOTABLE STORAGE	
CN201110289091	ZL20111028	IMPROVE CACHE COHERENCE THROUGH	EMC Corporation
.1	90911	DELEGATION AND REFERRAL IN CLUSTER FILE	
		SYSTEM	
CN201110322410	ZL20111032	IMPLEMENTING APPLICATION SPECIFIC	EMC Corporation
.4	2410.4	MANAGEMENT POLICIES ON A CONTENT	
		ADDRESSED STORAGE DEVICE	
CN201110429998		METHOD AND APPARATUS FOR REALTIME DATA	EMC Corporation
.3		PROCESSING	
CN201110430012		METHOD AND APPARATUS FOR INDICATING	EMC Corporation
.4		ALIVENESS OF NODES IN CLUSTER	
CN201110456748		APPARATUS AND METHOD FOR MANAGING DATA	EMC Corporation
.9		BACKUP JOBS	_
CN201110456770	ZL20111045	METHOD AND APPARATUS FOR OVER-	EMC Corporation
.3	67703	TEMPERATURE PROTECTION OF DEVICES	
CN201180013029		INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
.8			
CN201180041638		DATA ACCESS DURING DATA RECOVERY	EMC Corporation
.4			
CN201180046629		OPTIMIZED RECOVERY	EMC Corporation
.4			
CN201180046759		TRANSMITTING FILESYSTEM CHANGES OVER A	EMC Corporation
.8		NETWORK	
CN201180063279		EFFICIENT STORAGE TIERING	EMC Corporation
.2			
CN201210102386		CONVENIENT EVALUATION AND COMPARISON	EMC Corporation
.8		PLATFORM FOR DATABASE PARTITIONING	
		SCHEMES	
CN201210103120	ZL20121010	HYPERVISOR COORDINATED VIRTUAL CLUSTER	EMC Corporation
.5	31205	SNAPSHOT	
CN201210103128		METHOD AND APPARATUS FOR SAVING	EMC Corporation
.1		SNAPSHOT IN A FILESYSTEM	
CN201210103131		METHOD, DEVICE AND COMPUTER PROGRAM FOR	EMC Corporation
.3		ACCELERATING SPEED OF BRING SNAPSHOT	
		SERVICE BACK ONLINE	

Application Number	Registration Number	Title	Owner
.8		SOFTWARE SYSTEM	
CN201210169887 .8	ZL20121016 9887.8	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
CN201210206505 .4		CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
CN201210236447 .X		METHOD AND SYSTEM FOR RECLAIMING STORAGE SPACE	EMC Corporation
CN201210299545 .8	CN10299954 3	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
CN201210366772 .8		INTERACTIVE VISUAL DATA MINING FOR INCREASING CLASSIFICATION ACCURACY	EMC Corporation
CN201210375612 .X		METHOD AND SYSTEM FOR MANAGING VIRTUAL MACHINE DISKS	EMC Corporation
CN201210387802 .3		METHOD AND SYSTEM FOR DATABASE PARTITIONING	EMC Corporation
CN201210403383 .8	ZL20121040 3383.8	TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
CN201210417663 .4		METHODS AND APPARATUSES FOR DIAGNOSING AND REMEDIATION OF FAULTS IN SYSTEMS	EMC Corporation
CN201210422261 .3	ZL20121042 2261.3	AUTOMATED PRIORITY RESTORES AND ASSOCIATED DEVICES/COMPUTER PROGRAM PRODUCTS	EMC Corporation
CN201210439999 .0		ANALYSIS SYSTEM FOR INTELLIGENT CUSTOMER SERVICE BASED ON COMMON SEQUENCE PATTERN	EMC Corporation
CN201210440761 .X		METHOD AND APPARATUS OF PROVIDING CACHING SERVICE IN NETWORK ARCHITECTURES	EMC Corporation
CN201210519142 .X		METHOD AND APPARATUS FOR IDENTIFYING IMAGE CONTENT	EMC Corporation
CN201210571064 .8		APPARATUS AND METHOD FOR SEARCHING INFORMATION	EMC Corporation
CN201210595674 .1		SYSTEM AND METHOD FOR OPTIMIZING VIRTUAL DATA CENTER PROVISIONING WITH DOMAIN-KNOWLEDGE	EMC Corporation
CN201210595746 .2		VPN AUTHENTICATION METHOD BASED ON QR CODE	EMC Corporation
CN201210595747 .7		METHOD AND SYSTEM FOR DATA PROTECTION	EMC Corporation
CN201210596218 .9		METHOD AND APPARATUS FOR MANAGING MEMORY SPACE	EMC Corporation
CN201210596219 .3		METHOD, SYSTEM AND APPARATUS FOR SAFELY OPERATING COMPUTER	EMC Corporation
CN201280024354 .9		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
CN201280025403 .0		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
CN201280025415		TIME-BASED DATA PARTITIONING	EMC Corporation
CN201280062095 .9		EFFICIENT BACKUP REPLICATION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
CN201310060863		METHOD, APPARATUS AND SYSTEM FOR COLLECTING DATA IN INTERNET OF THINGS	EMC Corporation
CN201310078391 .4		METHOD AND APPARATUS FOR PARALLEL COMPUTING	EMC Corporation
CN201310086342 .5		METHOD AND SYSTEM FOR DETERMINING CORRECTNESS OF AN APPLICATION	EMC Corporation
CN201310095686		METHOD AND APPARATUS FOR DATA COPY	EMC Corporation
CN201310095687		METHOD AND APPARATUS FOR DATA MANAGEMENT IN MULTI-TENANT DISTRIBUTIVE ENVIRONMENT	EMC Corporation
CN201310095688		METHOD AND APPARATUS FOR DATABASE SEARCH	EMC Corporation
CN201310262708 .X		METHOD AND APPARATUS FOR DOCUMENT RECOMMENDATION	EMC Corporation
CN201310272835 .8		DATA TRANSFER METHOD AND APPARTUS	EMC Corporation
CN201310272881		APPARATUS AND METHOD FOR MEASURING PERFORMANCE OF A STORAGE SYSTEM	EMC Corporation
CN201310338314 .8		METHOD AND SYSTEM FOR PROFILE MANAGEMENT AND ACCESS CONTROL IN HETEROGENEOUS CONVERGENT COMMUNICATION NETWORKS	EMC Corporation
CN201310441156 .9		METHOD AND APPARATUS FOR TROUBLESHOOTING BASED ON LOG SIMILARITY	EMC Corporation
CN201310453061 .9		HIDDEN FAULT DETECTION CIRCUIT AND METHOD FOR DETECTING HIDDEN FAULT WITH HIDDEN FAULT DETECTION CIRCUIT	EMC Corporation
CN201310466038 .3		METHOD AND DEVICE FOR REMOVING CACHE DATA	EMC Corporation
CN201310466056 .1		METHOD AND APPARATUS FOR FILE SYSTEM	EMC Corporation
CN201310724704 .9		METHOD AND APPARATUS FOR CONFIGURING A DATA CENTER	EMC Corporation
CN201310724705 .3		METHOD AND APPARATUS FOR FAULT HANDLING	EMC Corporation
CN201310724717 .6		DATA COPY AVOIDANCE ACROSS A STORAGE	EMC Corporation
CN201310737050 .3		METHOD AND APPARATUS FOR OPINION DATA MANAGEMENT	EMC Corporation
CN201310750589 .2		METHOD AND APPARATUS FOR MANAGING NETWORK ATTACHED STORAGE	EMC Corporation
CN201310750628 .9		METHOD AND APPARATUS FOR MANAGING MEMORY	EMC Corporation
CN201310750662 .6		AN APPARATUS AND METHOD FOR A NETWORK STORAGE NODE, A NETWORK STORAGE NODE USING THE SAME, AND A NETWORK STORAGE SYSTEM	EMC Corporation
CN201310755993 .9		INCLUDING KERNEL OBJECT INFORMATION IN A USER DUMP	EMC Corporation

Application Number	Registration Number	Title	Owner
CN201310755994	Mumber	METHOD AND SYSTEM FOR PROVIDING VIRTUAL	EMC Corporation
.3		STORAGE POOLS TO TARGET APPLICATIONS	_
CN201310755995 .8		STORAGE DEVICE AND METHOD THEREFOR	EMC Corporation
CN201310756036 .8		METHOD AND APPARATUS FOR DATA MINING	EMC Corporation
CN201310756039 .1		APPARATUS AND METHOD FOR FACILITATING ACCESS TO DATA IN DISTRIBUTED STORAGE SYSTEMS	EMC Corporation
CN201310756078 .1		METHOD AND APPARATUS FOR MANAGING RESOURCE ALLOCATION IN HIERARCHICAL QUOTA SYSTEMS	EMC Corporation
CN201380010077 .0		SYSTEMS AND METHODS INVOLVING VIRTUAL MACHINE HOST ISOLATION OVER A NETWORK	EMC Corporation
CN201380050816 .9		SYSTEM AND METHOD FOR FULL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
CN201380054172 .0		FORMAT IDENTIFICATION FOR FRAGMENTED BYTE ALIGNED INTEGER IMAGE DATA	EMC Corporation
CN201380054188 .1		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
CN201410135582 .4		METHOD AND APPARATUS FOR AUTOMATICALLY RELOCATING DATA BETWEEN STORAGE ARRAYS	EMC Corporation
CN201410135607		APPARATUS, METHOD AND SYSTEM FOR MANAGING POWER	EMC Corporation
CN201410135626 .3		APPARATUS AND METHOD FOR FACILITATING MANAGING OF RESOURCES	EMC Corporation
CN201410135651 .1		METHOD AND APPARATUS OF STORAGE EXPANSION IN VIRTUAL STORAGE SYSTEM	EMC Corporation
CN201410135722 .8		METHOD AND APPARATUS FOR ACCESS DATA	EMC Corporation
CN201410135820 .1		METHOD AND APPARATUS FOR MONITORING THE HEALTH CONDITION OF A HARD DISK	EMC Corporation
CN201410136587 .9		METHOD AND APPARATUS FOR DYNAMIC STORAGE TIERING	EMC Corporation
CN201410407394 .2		SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
CN201410520353 .4		METHOD AND SYSTEM FOR GENERATING TWO- DIMENSIONAL CODE	EMC Corporation
CN201410527596 .0		METHOD AND APPARATUS FOR DETERMINING A FAILURE POSITION IN A STORAGE SYSTEM	EMC Corporation
CN201410527635		METHOD AND APPARATUS FOR ACCELERATING DATA RECONSTRUCTION FOR A DISK ARRAY	EMC Corporation
CN201410527708		METHOD AND APPARATUS FOR IMPROVING PERFORMANCE OF A DECLUSTERED DISK ARRAY	EMC Corporation
CN201410562076		METHOD AND APPARATUS FOR ENABLING NON- VOLATILE RANDOM ACCESS OF DATA	EMC Corporation
CN201410562464 .1		METHOD AND APPARATUS FOR PROCESSING INPUT/OUTPUT OPERATION REQUEST	EMC Corporation
CN201410562465		DATA CACHE DEVICE AND METHOD FOR DATA	EMC Corporation

.6 CN201410562531 .X CN201410573345 .6	Number	Title	Owner
CN201410562531 .X CN201410573345 .6			
.X CN201410573345 .6		CACHING	
CN201410573345 .6		METHOD AND APPARATUS FOR DISK DATA	EMC Corporation
.6		MANAGEMENT	
l		METHOD AND APPARATUS FOR ASSIGNING LOCK	EMC Corporation
		RESOURCE FOR OBJECTS	T) (C C
CN201410813707		COMPUTING DEVICE AND METHOD FOR	EMC Corporation
.4		OBTAINING FAULT RELATED INFORMATION	
CN201410813708		METHOD AND APPARATUS FOR MANAGING	EMC Corporation
.9		RESOURCES BASED ON QUOTA	
CN201410813709		METHOD AND APPARATUS FOR MANAGEMENT OF	EMC Corporation
.3		STORAGE DEVICES	
CN201410813967		METHOD AND SYSTEM FOR AUTOMATICALLY	EMC Corporation
.1		TESTING FIRMWARE	77.40.0
CN201410813970		SYSTEM AND METHOD FOR MANAGING HOTPLUG	EMC Corporation
.3		OF PERIPHERAL COMPONENT INTERCONNECT DEVICE	
CN201410854536		METHOD AND COMPUTING DEVICE FOR	EMC Corporation
.X		SOFTWARE TEST	LIVIC COrporation
CN201480006056		DATA ANALYTICS PLATFORM OVER PARALLEL	EMC Corporation
.6		DATABASES AND DISTRIBUTED FILE SYSTEMS	2e corporation
CN201480071862		PARALLEL ON-PREMISES AND CLOUD-BASED	EMC Corporation
1		AUTHENTICATION	Livic corporation
CN201510003757		METHOD AND APPARATUS FOR ANALYZING USER	EMC Corporation
.0		BEHAVIOR	
CN201510003758		METHOD AND APPARATUS FOR MONITORING A	EMC Corporation
.5		TARGET OBJECT BY A PLURALITY OF CAMERAS	1
CN201510003759		METHOD AND APPARATUS FOR TEXT	EMC Corporation
.X		COMPRESSION AND DECOMPRESSION	1
CN201510004540		METHOD AND SYSTEM FOR HARD DISK	EMC Corporation
.1		MOVEMENT RECOGNITION	
CN201510004571		METHOD AND APPARATUS FOR IMPROVING	EMC Corporation
.7		SETTING OF QUALITY OF SERVICE	
CN201510004776		METHOD AND APPARATUS FOR REUSING	EMC Corporation
.5		STORAGE BLOCKS OF A FILE SYSTEM	1
CN201510004778		METHOD AND APPARATUS FOR PROCESSING	EMC Corporation
.4		TRANSACTIONS IN A SYNCHRONIZED	
		REPLICATION SYSTEM	
CN201510004779		METHOD AND SYSTEM FOR PROVIDING ACCESS	EMC Corporation
.9		TO RESOURCES	
CN201510004780		METHOD AND APPARATUS FOR CONTROLLING	EMC Corporation
.1		SHARING OF RESOURCES AMONG A PLURALITY	
CN1201510004026		OF NODES	EMOO
CN201510004936		METHOD AND APPARATUS FOR CROSS-LAYER	EMC Corporation
.6		ORCHESTRATION OF RESOURCES AND MULTI- LAYER ARCHITECTURE DATACENTER	
CN201510004937		METHOD AND APPARATUS FOR PROVIDING	EMC Corporation
.0		STORAGE SERVICE TO A TENANT IN A CLOUD	Livic Corporation
		STORAGE ENVIRONMENT	
CN201510004939		A METHOD FOR PROCESSING INTELLIGENT RICH-	EMC Corporation
.X		MEDIA AND SYSTEM THEREOF	
CN201510004940		METHOD AND APPARATUS FOR FAILURE	EMC Corporation

Application Number	Registration Number	Title	Owner
.2		RECOVERY IN STORAGE DEVICE	
CN201510035650 .4		METHOD AND SYSTEM FOR SERVICE-AWARE PARITY PLACEMENT IN A STORAGE SYSTEM	EMC Corporation
CN201510035668 .4		METHOD AND SYSTEM FOR SERVICE-AWARE DATA PLACEMENT IN A STORAGE SYSTEM	EMC Corporation
CN201510178736 2		METHOD AND APPARATUS FOR FAILING BACK BLOCK OBJECTS IN BATCH	EMC Corporation
CN201510178760 6		METHOD AND SYSTEM FOR PROVIDING SECURE ACCESS TO DATA IN MOBILE DEVICES	EMC Corporation
CN201510181573 3		METHOD, COALESCING CONFIGURATION ENGINE, COALESCING CONFIGURATION TOOL, AND FILE SYSTEM FOR STORAGE SYSTEM	EMC Corporation
CN201510181882 0		METHOD AND SYSTEM FOR DETECTING AND HANDLING ERRORS IN BUS FABRIC	EMC Corporation
CN201510184287 2		METHOD AND APPARATUS FOR SCALING OUT STORAGE DEVICES AND SCALED-OUT STORAGE DEVICES	EMC Corporation
CN201510184340 9		METHOD AND APPARATUS OF CONSTRUCTING SCALABLE STORAGE DEVICES, AND SCALED STORAGE DEVICES	EMC Corporation
CN201510184385		METHOD AND APPARATUS FOR EXTENDING CACHE OF STORAGE SYSTEM	EMC Corporation
CN201510184593		METHOD AND APPARATUS FOR IMPLEMENTING MULTIPLE CONTENT MANAGEMENT SERVICES OPERATIONS	EMC Corporation
CN201510184900 0		DATA STORAGE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
CN201510185150 9		METHODS AND APPARATUSES FOR CONTENT RESOURCE MANAGEMENT	EMC Corporation
CN201510185152 8		APPARATUS AND METHOD FOR TESTING STORAGE NETWORK	EMC Corporation
CN201510338000 .7		MIGRATING PRIVATE INFRASTRUCTURE SERVICES TO A CLOUD	EMC Corporation
CN201510342013 .1		SOFTWARE OVERLAYS FOR DISAGGREGATED COMPONENTS	EMC Corporation
CN201510353440 .X		METHOD AND DEVICE FOR MANAGING STORAGE ARRAY CONFIGURATION	EMC Corporation
CN201510353628 .4		CONTENT FABRIC FOR A DISTRIBUTED FILE SYSTEM	EMC Corporation
CN201510358868		CLOUDBOOK	EMC Corporation
CN201510358888 .0		DETERMINING SERVER LOCATION IN A DATA CENTER	EMC Corporation
CN201510358972 .2		APPLICATION AND INFORMATION MOVEMENT IN A CLOUD ENVIRONMENT	EMC Corporation
CN201510359095 .0		METHOD AND APPARATUS FOR DETECTING UNRESPONSIVENESS OF A PROCESS	EMC Corporation
CN201510359347 .X		DYNAMICALLY COMPOSED COMPUTE NODES COMPRISING DISAGGREGATED COMPONENTS	EMC Corporation
CN201510360058 .1		METHOD AND APPARATUS FOR SOT-SWITCH IN STORAGE SYSTEM	EMC Corporation

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CN201510363519		CACHE DATA PROCESSING METHOD AND	EMC Corporation
0.0		APPARATUS	
CN201510363535		VNX2 DRIVE MOVEMENT MANAGEMENT	EMC Corporation
.X		MECHANISM WITH PORTABLE DRIVE	
CN201510363636		DETERMINING THE PHYSICAL LOCATION OF A	EMC Corporation
.7		DEVICE	
CN201510364946		A DIGITAL DYNAMIC TESTING MODLE	EMC Corporation
.0			
CN201510364956		METHOD AND APPARATUS OF AUTOMATIC	EMC Corporation
.4		ASSIGNMENT OF A DUMP	
CN201510477813		SYSTEM AND METHOD FOR SECURE MULTI-	EMC Corporation
.4		TENANCY IN DATADOMAIN OPERATING SYSTEM	
		(DDOS), A PURPOSE BUILT BACKUP APPLIANCE	
CN201510564036		(PBBA) OPERATING SYSTEM LEVELING IO	EMC Corporation
7		LEVELING IO	ENIC Corporation
CN201510564838		METHOD AND APPARATUS FOR COST-BASED	EMC Corporation
.8		LOAD BALANCING FOR PORT SELECTION	Livic corporation
CN201510573799		REMOTE POWER MANAGEMENT DEVICES AND	EMC Corporation
8		MANAGEMENT METHODS	ENIC Corporation
CN201510587474		METHOD AND APPARATUS FOR ENSURING DATA	EMC Corporation
.5		CONSISTENCY	Livie corporation
CN201510589748		METHOD AND APPARATUS OF LOG STORAGE	EMC Corporation
.4		OPTIMIZATION	
CN201510590352		METHOD AND APPARATUS FOR WHITE-BOX	EMC Corporation
.1		TESTING	_
CN201510590780		CLOUD CONSISTENCY TECHNOLOGY	EMC Corporation
.4			
CN201510591086		SERVER MANAGEMENT METHOD AND	EMC Corporation
.4		MANAGEMENT SYSTEM	
CN201510592027		METHOD AND APPARATUS FOR OPERATING	EMC Corporation
.9		SHINGLED MAGNETIC RECORDING DEVICE	
CN201510595959		METHOD AND APPARATUS FOR SELECTING AN	EMC Corporation
9		INCREMENTAL BACKUP APPROACH	
CN201510604922		INCREMENTAL BACKUP METHOD AND	EMC Corporation
.8		APPARATUS	
CN201510608751		METHOD AND APPARATUS FOR DATA STORAGE	EMC Corporation
.6 CN201510609728		SYSTEM  METHOD AND ADDADATHS FOR REDUCING CACHE	EMC Componentis
.9		METHOD AND APPARATUS FOR REDUCING CACHE DEVICE ONLINE	EMC Corporation
.9 CN201510612283		A LOCATING METHOD AND A LOCATING DEVICE	EMC Corporation
.X		A LOCATING METHOD AND A LOCATING DEVICE	Livic Corporation
CN201510614150		METHOD AND APPARATUS FOR PROCESSING A	EMC Corporation
.6		MEDIA TYPE IN REST SOFTWARE ARCHITECTURE	
CN201510614231		METHOD AND APPARATUS FOR DETERMINING A	EMC Corporation
.6		PHYSICAL LOCATION OF A DEVICE	Livic Corporation
CN201510618564		METHOD AND APPARATUS FOR LOCKING FILE IN	EMC Corporation
.6		METHOD AND APPARATOS FOR LOCKING FILE IN MEMORY	Livic Corporation
CN201510622273		METHOD AND DEVICE FOR CHECKING FALSE	EMC Corporation
.4		SHARING IN DATA BLOCK DELETION	Livic Corporation
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CN201510622302 .7		METHOD AND DEVICE FOR FINGERPRINT BASED STATUS DETECTION IN A DISTRIBUTED PROCESSING SYSTEM	EMC Corporation
CN201510622723 .X		A METHOD AND DEVICE FOR RETRIEVING TEST CASE BASED ON CODE COVERAGE	EMC Corporation
CN201510622808 .8		STORAGE METHOD AND DEVICE FOR SSD DRIVES	EMC Corporation
CN201510623730 .1		USING A FLAG TO SELECTIVELY PERMIT CONFIGURATION CHANGES TO A DATA STORAGE OBJECT HAVING AN ACTIVATED FEATURE	EMC Corporation
CN201510624888 .0		METHOD AND APPARATUS FOR REDUNDANT ARRAYS OF INDEPENDENT DISKS	EMC Corporation
CN201510628051		APPARATUS FOR DATA STORAGE DEVICE AND METHOD THEREOF	EMC Corporation
CN201510640198 .4		MEMORY CENTRIC DATABASE ARCHITECTURE	EMC Corporation
CN201510642171		CONVERTING COMPLEX STRUCTURE OBJECTS INTO FLATTENED DATA	EMC Corporation
CN201510663235		METHOD AND APPARATUS FOR RECLAIMING MEMORY BLOCKS IN SNAPSHOT STORAGE SPACE	EMC Corporation
CN201510664336		METHOD AND APPARATUS FOR PRESENTING STATUS OF STORAGE CLUSTER	EMC Corporation
CN201510847327		METHOD AND APPARATUS FOR SIMULATING SLOW STORAGE DISK	EMC Corporation
CN201510882689 .X		METHODS AND APPARATUS FOR RATIONAL COMPRESSION AND DECOMPRESSION OF NUMBERS	EMC Corporation
CN201510929192 .9		METHOD AND APPARATUS FOR PROVIDING ACCESS OF CONTENT RESOURCES	EMC Corporation
CN201510975001 .2		METHOD AND APPARATUS FOR PATH SELECTION OF STORAGE SYSTEMS	EMC Corporation
CN201510981602 .4		METHOD AND APPARATUS FOR CONTROLLING READING DATA FROM STORAGE SYSTEMS	EMC Corporation
CN201510982223 .7		METHOD AND DEVICE FOR DETERMINING CAUSES OF PERFORMANCE DEGRADATION FOR STORAGE SYSTEMS	EMC Corporation
CN201510983346 .2		METHOD AND APPARATUS FOR MULTI-LEVEL DATA PROTECTION IN STORAGE SYSTEMS	EMC Corporation
CN201510994736 .X		IMPROVING BACKUP PERFORMANCE USING DATA ALLOCATION OPTIMIZATION	EMC Corporation
CN201511000869 .7		DE-DUPLICATING DISTRIBUTED FILE SYSTEM USING CLOUD-BASED OBJECT STORE	EMC Corporation
CN201511001195		METHOD AND DEVICE FOR DISTRIBUTED DATA PROCESSING	EMC Corporation
CN201511001586		METHOD AND APPARATUR FOR SUPPLYING POWER TO A PROCESSOR	EMC Corporation
CN201511016976		METHOD AND APPARATUS FOR DETERMINING DOCUMENT SET SIMILAR TO TARGET DOCUMENT AMONG MULTIPLE DOCUMENTS	EMC Corporation
CN201511017523 .8		METHOD AND APPARATUS FOR FACILITATING STORAGE SYSTEM RECOVERY AND RELEVANT	EMC Corporation

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Muniper	Number	STORAGE SYSTEM	Owner
		S1 51 1 1 5 1 5 1 5 1 5 1 5 1 5 1 5 1 5	
CN201511017541		APPARATUS AND METHOD FOR DATA	EMC Corporation
.6		PROCESSING	_
CN201511017667		METHOD AND APPARATUS FOR STORAGE SYSTEM	EMC Corporation
.3 CN201511018824		METHOD AND APPARATUS FOR COMPUTING	EMC Corporation
.2		DEVICE	Elvic Corporation
CN201511019081		DISK DRIVE SIMULATION METHOD AND	EMC Corporation
.0		APPARATUS	_
CN201511019083		METHOD AND APPARATUS FOR CONTROLLING	EMC Corporation
.X		READING AND WRITING DISK ARRAYS	
CN201511020927		METHOD AND APPARATUS FOR MANAGING DATA	EMC Corporation
.2 CN201511021163		ACCESS METHOD AND APPARATUS FOR FACILITATING	EMC Corporation
.9		WEAR LEVELING OF SSD	ENIC Corporation
CN201511021242		METHOD AND DEVICE FOR CACHE ARRAY	EMC Corporation
.X		EXPANSION	_
CN201511021593		METHOD AND APPARATUS FOR OPERATING	EMC Corporation
.0		HYBRID STORAGE DEVICE	EMC C
CN201511021598		METHOD AND DEVICE FOR RECOVERING DATA REPLICATION BETWEEN STORAGE DEVICES	EMC Corporation
CN201511023162		METHOD AND DEVICE FOR DATA REPLICATION	EMC Corporation
.8		METHOD AND DEVICE FOR DATA REPLICATION	EMIC Corporation
CN201511030883		METHOD AND DEVICE FOR CHARGING A	EMC Corporation
.1		BATTERY PACK	_
CN201511030884		BACKUP COMMUNICATION METHOD AND	EMC Corporation
.6 CN201511031818		APPARATUS  METHOD AND APPARATUS FOR CLOUD SYSTEM	EMC Corporation
.0		METHOD AND APPARATOS FOR CLOUD STSTEM	ENIC Corporation
CN201511036301		RESOLVING WRITE PRESSURE USING EXISTING	EMC Corporation
0.		BACKUP APPLIANCE AS ADDITIONAL PRIMARY	
		STORAGE	
CN201610103823		METHOD AND APPARATUS FOR ENSURING	EMC Corporation
.6		RELIABILITY OF A MAPPED REDUNDANT ARRAY OF INDEPENDENT DISKS	
CN201610105872		METHOD AND APPARATUS FOR DATA	EMC Corporation
.3		PROCESSING	-
CN201610134634		DATA MOVEMENT AMONG DISTRIBUTED DATA	EMC Corporation
.5 CN201610126991		CENTERS  METHOD AND ADDADATHS FOR CONTROLLING A	EMC Company
CN201610136881 .9		METHOD AND APPARATUS FOR CONTROLLING A NETWORK NODE	EMC Corporation
CN201610141383		METHOD AND APPARATUS FOR VIDEO	EMC Corporation
.3		SURVEILLANCE	_
CN201610141843		METHOD AND APPARATUS FOR DATA MOVING OF	EMC Corporation
.2 CN201610144505		STORAGE DEVICES	EMO C-
CN201610144505		METHOD AND APPARATUS FOR DATA STORAGE SERVICE	EMC Corporation
CN201610148027		METHOD AND APPARATUS FOR MANAGING	EMC Corporation
.4		FAILURE OF DEVICE	
CN201610148028		METHOD AND DEVICE FOR DATA BACKUP	EMC Corporation
.9			

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CN201610148041 .4		RACK-MOUNTED SERVER	EMC Corporation
CN201610149678 .5		METHOD AND DEVICE OF POSITIONING	EMC Corporation
CN201610150685		METHOD AND APPARATUS FOR STORAGE SYSTEM	EMC Corporation
CN201610151098 .X		METHOD AND APPARATUS FOR CLASSIFYING FAILURE	EMC Corporation
CN201610151489 .1		EVALUATION FOR REBUILDING PERFORMANCE OF REDUNDANT ARRAY OF INDEPENDENT DISKS	EMC Corporation
CN201610154088		STORAGE MANAGEMENT METHOD AND STORAGE DEVICE	EMC Corporation
CN201610154141 .8		DEVICE AND METHOD FOR TESTING CONDITION OF A BATTERY	EMC Corporation
CN201610154144		METHOD AND APPARATUS OF STORAGE MANAGEMENT	EMC Corporation
CN201610154618		METHOD AND APPARATUS FOR PROCESSING OBJECTS TO BE SEARCHED	EMC Corporation
CN201610158006		METHOD AND DEVICE FOR SEARCHING CHARACTER STRING	EMC Corporation
CN201610159112 .0		CONVERGING OF DATA MANAGEMENT AND DATA ANALYTICS	EMC Corporation
CN201610159266 .X		METHOD AND DEVICE FOR HANDLING ERRORS IN STORAGE SYSTEM	EMC Corporation
CN201610162002 .X		METHOD AND APPARATUS FOR STORING DATA	EMC Corporation
CN201610162005		METHOD AND APPARATUS FOR REBUILDING REDUNDANT ARRAY OF INDEPENDENT DISKS	EMC Corporation
CN201610162398 .8		METHOD AND APPARATUS FOR DELIVERING SOFTWARE SOLUTIONS	EMC Corporation
CN201610162636 .5		METHOD, DEVICE, AND COMPUTER PROGRAM PRODUCT FOR TESTING CODE	EMC Corporation
CN201610162663		HARD DISK ASSEMBLY, CHASSIS ASSEMBLY, AND SERVER DEVICE	EMC Corporation
CN201610162742		FULL TEXT SEARCH BASED ON CATEGORIZING	EMC Corporation
CN201610180426 .9		VIRTUAL POINT IN TIME ACCESS BETWEEN SNAPSHOTS	EMC Corporation
CN201610184567 .8		METHOD AND SYSTEM FOR MALWARE DETECTION IN VIRTUAL MACHINES	EMC Corporation
CN20161019113.		CREATING REPLICAS AT USER-DEFINED POINTS IN TIME	EMC Corporation
CN201610204131		METHOD AND SYSTEM FOR SYNCHRONIZING AN INDEX OF DATA BLOCKS STORED IN A STORAGE SYSTEM USING A SHARED STORAGE MODULE	EMC Corporation
CN201610204618 .9		CONSISTENT TRANSITION FROM ASYNCHRONOUS TO SYNCHRONOUS REPLICATION IN HASH-BASED STORAGE SYSTEMS	EMC Corporation
CN201610214445		SECURITY DETECTION	EMC Corporation
CN201610228110 .2		METHOD AND SYSTEM FOR PROVIDING ACCESS OF A STORAGE SYSTEM USING A SHARED	EMC Corporation

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	STORAGE MODULE AS A TRANSPORT MECHANISM	
CN201610262843	REMOTE ACCESS TESTING SYSTEM AND METHOD	EMC Corporation
CN201610417408	METHODS AND APPARATUS FOR MANAGING A STORAGE SYSTEM	EMC Corporation
CN201610417576 .7	STORAGE DEVICE AND METHOD FOR SUPPLYING POWER TO STORAGE DEVICE	EMC Corporation
CN201610417578	METHOD AND DEVICE FOR POWER SUPPLY TO PROCESSOR	EMC Corporation
CN201610421617 .X	METHOD AND DEVICE FOR DATA BACKUP	EMC Corporation
CN201610422872 .6	ROD FOR USE IN RACK AND HOLDING DEVICE FOR USE IN COOPERATION WITH RACK	EMC Corporation
CN201610428405	METHOD AND SYSTEM FOR MANAGING MEMORY IN STORAGE DEVICE	EMC Corporation
CN201610429398 .X	METHOD AND DEVICE FOR REPRODUCING I/O FOR STORAGE SYSTEM	EMC Corporation
CN201610431451 .X	METHOD AND SYSTEM FOR MANAGING STORAGE DEVICE	EMC Corporation
CN201610431589 .X	METHOD AND SYSTEM FOR MANAGING MEMORY IN STORAGE DEVICE	EMC Corporation
CN201610431737 .8	METHOD FOR FILTERING DOCUMENTS AND ELECTRONIC DEVICE	EMC Corporation
CN201610431738 .2	I/O CARD FOR STORAGE DEVICE AND STORAGE DEVICE	EMC Corporation
CN201610440621 .0	GOVERNED PLACEMENT OF DATA ANALYTIC RESULTS	EMC Corporation
CN201610451127 .4	A METHOD, SYSTEM, AND COMPUTER PROGRAM PRODUCT FOR FAULT PROCESSING	EMC Corporation
CN201610452126	METHOD AND APPARATUS FOR VIRTUAL MACHINE	EMC Corporation
CN201610453751	DATA PROCESSING METHOD AND DEVICE	EMC Corporation
CN201610454208 .X	METHOD AND DEVICE FOR PROCESSING A MULTI- LANGUAGE TEXT	EMC Corporation
CN201610454286 .X	METHOD AND APPARATUS FOR SELECTING RAID LEVEL FOR MAPPED RAID	EMC Corporation
CN201610454287	METHOD AND DEVICE FOR COMPRESSING METADATA FOR FILE SYSTEM	EMC Corporation
CN201610454607 .6	METHOD AND APPARATUS FOR ADJUSTING THROUGHPUT OF STORAGE DEVICE	EMC Corporation
CN201610454617 .X	METHOD AND DEVICE OF STORAGE MANAGEMENT	EMC Corporation
CN201610454623	METHOD AND DEVICE FOR MANAGING INPUT/OUTPUT (I/O) OF STORAGE DEVICE	EMC Corporation
CN201610454922	METHOD AND DEVICE FOR FAILOVER	EMC Corporation
CN201610457468	METHOD AND DEVICE OF MANAGING A DOCUMENT INDEX	EMC Corporation
CN201610459022	METHOD AND SYSTEM FOR MANAGING STORAGE	EMC Corporation

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.3	1 MILLIOCI	SYSTEM	Owner
CN201610459148		RESOURCE ORCHESTRATION METHOD AND DEVICE USING OBJECT-ORIENTED LANGUAGE	EMC Corporation
CN201610459336 3		TRUST OVERLAYS FOR DISAGGREGATED INFRASTRUCTURES	EMC Corporation
CN201610459343 .3		METHOD AND SYSTEM FOR MANAGING STORAGE SYSTEM	EMC Corporation
CN201610459374 .9		DATA ANALYSIS IN A STORAGE SYSTEM	EMC Corporation
CN201610459979 .8		METHOD AND SYSTEM FOR LOCKING STORAGE AREA IN STORAGE SYSTEM	EMC Corporation
CN201610461042 .4		METHOD AND SYSTEM FOR TRANSMITTING MESSAGE IN STORAGE SYSTEM	EMC Corporation
CN201610461439 .3		DISTRIBUTED WORK FLOW USING DATABASE REPLICATION	EMC Corporation
CN201610471278 .6		DATA STORAGE SYSTEM HAVING SEGREGATED CONTROL PLANE AND/OR SEGREGATED DATA PLANE ARCHITECTURE	EMC Corporation
CN201610471525 .2		COMPUTING ERASURE METADATA AND DATA LAYOUT PRIOR TO STORAGE USING A PROCESSING PLATFORM	EMC Corporation
CN201610489109 .5		DYNAMIC RESILIENCE IN FLASH ACCELERATION TIERS	EMC Corporation
CN201610496812 .9		DELEGATED MEDIA TRANSLATION LAYER IN A STORAGE APPLIANCE	EMC Corporation
CN201610619574 .6		DETERMINING PHYSICAL LOCATION OF ELECTRONIC DEVICE	EMC Corporation
DE(EDV1)19960 636330	DE(EDV1)69 636330D	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
DE(EDV1)60224 598.2	DE(EP)60224 598.2-08	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
DE(EDV1)84201 482.1	DE(EDV1)31 77097.5	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV	EMC Corporation
DE(EDV1)84201 484.7	DE(EDV1)31 77242	DATA PROCESSING SYSTEM HAVING A UNIQUE ADDRESS TRANSLATION UNIT	EMC Corporation
DE(EP)00307999.	DE60048191.	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
DE(EP)00311737.	DE(EP)60047 398.8	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL- OVER MECHANISM	EMC Corporation
DE(EP)00911736.	DE(EP)60034 327.8	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
DE(EP)00948778.	DE(EP)60028 778.5	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
DE(EP)00959718. 8	DE60041002.	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
DE(EP)01102501.		CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
DE(EP)02024812.	DE(EP)60239 179.2-08	DYNAMIC RDF	EMC Corporation

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Number	Number	Title	Owner
DE(EP)02795496. 5	DE(EP)60242 766.5	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
DE(EP)02795657.	DE(EP)14617 20	DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
DE(EP)03783599.	DE(EP)60344 333.8	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
DE(EP)04002583.	DE(EP)60049 269.9	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
DE(EP)04010899. 5	DE(EP)60200 4005785.1	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
DE(EP)04104115.	DE(EP)60200 4003874.1	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
DE(EP)04106294. 4	DE(EP)60200 4010056.0	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
DE(EP)04753325.	DE60200402 2660.2	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
DE(EP)04760929.	DE(EP)60200 4012996.8	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
DE(EP)04801039.	DE(EP)60200 4039379.5	DATA STORAGE SYSTEM	EMC Corporation
DE(EP)04810425.	DE60200404 2006.9	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
DE(EP)04813591.	DE60200402 2589.4-08	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING	EMC Corporation
DE(EP)04813604.	DE(EP)60200 4043766.2	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
DE(EP)05101066. 8	DE(EP)60200 500026.1	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
DE(EP)05106967.	DE(EP)60200 5016867.2	PRIVILEGED NETWORK ROUTING	EMC Corporation
		METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
DE(EP)05854600.	DE(EP)18289 20	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
DE(EP)06115645.	DE(EP)60200 6012250.0	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
DE(EP)06123514.	DE(EP)60200 6040590.1	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation
DE(EP)06718171.	DE(EP)60200 6037099.7	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
DE(EP)06718172.	DE(EP)60200 6037100.4	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
DE(EP)06735936.	DE(EP)60200 6032381.6	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
DE(EP)07103070.	DE(EP)60200 7029596.3	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation

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DE(EP)07117897.	DE(EP)60200	MULTIPLE SECURITY ACCESS MECHANISMS FOR	EMC Corporation
4	7028054.0	A SINGLE IDENTIFIER	Livie corporation
DE(EP)07755303.	DE60200703	EFFICIENT DATA STORAGE USING RESEMBLANCE	EMC Corporation
0	9243.8	OF DATA SEGMENTS	Livie corporation
DE(EP)07757004.	3 <b>2</b> 13.0	SYSTEMS AND METHODS FOR OBTAINING ULTRA-	EMC Corporation
$\begin{bmatrix} 2L(21)67787661. \\ 2 \end{bmatrix}$		HIGH DATA AVAILABILITY AND GEOGRAPHIC	2.vic corporation
		DISASTER TOLERANCE	
DE(EP)08102532.	DE(EP)60200	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
$\begin{bmatrix} 2 \\ 2 \end{bmatrix}$	8000602.6		
DE(EP)08163057.	DE(EP)60200	KEY DISTRIBUTION	EMC Corporation
6	5026343.8		1
DE(EP)10161223.	DE(EP)60201	SYSLOG MESSAGE ROUTING SYSTEMS AND	EMC Corporation
2	0001909.8	METHODS	1
DE(EP)19969306	DE(EP)69622	SYSTEM FOR MIGRATING DATA BY SELECTING A	EMC Corporation
09.1	253	FIRST OR SECOND TRANSFER MEANS BASED ON	
		THE STATUS OF A DATA ELEMENT MAP	
DE(EP)19996007	DE(EP)69907	ACCESS TO CONTENT ADDRESSABLE DATA OVER	EMC Corporation
631	6311	A NETWORK	
DE(EP)20006031	DE(EP)60031	METHOD FOR TRANSMITTING FIBRE-CHANNEL	EMC Corporation
499	499	AND NON-FIBRE CHANNEL SIGNALS THROUGH	
		COMMON CABLE	
DE(EP)60016371	DE(EP)60016	METHOD AND APPARATUS FOR MAINTAINING	EMC Corporation
	371	CONSISTENCY OF DATA STORED IN A GROUP OF	
		MIRRORING DEVICES	
DE(EP)60018803.	DE(EP)12449	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
5-08	66	INFORMATION RELATED TO STORAGE ACTIVITIES	
		OF DATA STORAGE SYSTEMS	
DE(EP)60022196	DE(EP)60022	DATA STORAGE SYSTEM	EMC Corporation
DE (ED) (0200401	196	DATEA GEODAGE GYGTEN	EMC C
DE(EP)60200401	DE(EP)60200	DATA STORAGE SYSTEM	EMC Corporation
2987.9	4012987.9	METHODS AND ADDADATHS FOR DISDEASING	EMO C
DE(EP)60200504 7587.7	DE(EP)15690	METHODS AND APPARATUS FOR INCREASING	EMC Corporation
DE(EP)60200602	85 DE(EP)19157	DATA STORAGE CAPACITY  DATA OBJECT SEARCH AND RETRIEVAL	EMC Comparation
66.8	08	DATA ODJECT SEARCH AND RETRIEVAL	EMC Corporation
DE(EP)60200704	DE(EP)19262	CONTROL OF COMMUNICATION PORTS OF	EMC Corporation
4632.5	59	COMPUTING DEVICES USING POLICY-BASED	ENIC Corporation
1032.3		DECISIONS	
DE(EP)60200801	DE(EP)20459	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
2601.3	97	DELITITE DINGLE INDICEO NORMALIEMITON	2.77C Corporation
DE(EP)60201102	DE(EP)26224	OPTIMIZED RECOVERY	EMC Corporation
3507.9	56		
DE(EP)60203773.	DE(EP)60203	HIERARCHICAL APPROACH TO IDENTIFYING	EMC Corporation
5-08	773	CHANGING DEVICE CHARACTERISTICS	Sorporation
DE(EP)60212922.	DE(EP)60212	REVERSING A COMMUNICATION PATH BETWEEN	EMC Corporation
2-08	922 T2	STORAGE DEVICES	Livic corporation
DE(EP)60247854.	DE(EP)15072	HIERARCHICAL APPROACH TO IDENTIFYING	EMC Corporation
5	07	CHANGING DEVICE CHARACTERISTICS	2.1.10 Corporation
DE(EP)60302027.	DE(EP)60302	ENRICHED TREE FOR A CONTENT DISTRIBUTION	EMC Corporation
DE(EP)60302027.	027.5	NETWORK	Livic Corporation
DE(EP)69727083	DE(EP)69727	DATA VALIDATION SYSTEM FOR A GROUP OF	EMC Corporation
	083	DATA STORAGE DISKS	Livic Corporation
	005	DITTI DI OTCIOLI DIDINO	I

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DE(EP)69800808 1-08	DE(EP)69800 808	RELIABLE ARRAY OF DISTRIBUTED COMPUTING NODES	EMC Corporation
DE(EP)69831944	DE(EP)69831 944	APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
DE(EP)69919404	DE(EP)69919 404	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
DE(EP)69927258	DE(EP)69927 258	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
DE(EP)69930307. 9-08	DE(EP)69930 307	DATA STORAGE SYSTEM	EMC Corporation
DE(EP)87401108.	DE(EP)37737 41.4	COMMUT 16	EMC Corporation
DE(EP)90311828.	DE(EP)04834 21	NETWORK COMMUNICATION SYSTEM	EMC Corporation
DE(EP)90916922.	DE(EP)69024 367.7	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
DE(EP)91910198.	DE(EP)69133 047608	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
DE(EP)93301620.	DE(EP)69318 600.3	ON-LINE MODULE REPLACEMENT IN A MULTLIPLE MODULE DATA PROCESSING SYSTEM	EMC Corporation
DE(EP)93301685.	DE(EP)69323 225.0	HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
DE(EP)93301686.	DE(EP)69320 388.9	IMPROVEMENTS FOR HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
DE(EP)93925165.	DE(EP)69326 775.5	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
DE(EP)94901649.	DE(EP)69322 415.00	INRUSH CURRENT LIMITER	EMC Corporation
DE(EP)94914223.	DE(EP)06954 43	REMOTE DATA MIRRORING	EMC Corporation
DE(EP)95920589.	DE(EP)69523 588.5	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
DE(EP)95928682.	DE(EP)69507 940.9	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
DE(EP)95944494. 4	DE(EP)69500 424.7	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
DE(EP)96919202. 0	DE(EP)96919 009.4	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
DE(EP)96919430.	DE(EP)69601 868.3	METHOD FOR MANAGING GLOBALLY DISTRIBUTED SOFTWARE COMPONENTS	EMC Corporation
DE(EP)96923601.	DE(EP)69601 374.6	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
DE(EP)96923633.	DE(EP)69616 329.2	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
DE(EP)96925331.	DE(EP)69619 531.3	DYNAMIC LOAD BALANCING	EMC Corporation
DE(EP)96928861.	DE(EP)96932 406.7	DATA STORAGE SYSTEM	EMC Corporation

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Number	Number	Title	Owner
DE(EP)97907877.	DE(EP)08838 45	ORTHOGONAL SIGNAL MULTIPLEXING SYSTEM	EMC Corporation
DE(EP)97910942. 8	DE(EP)09387 05	FAIL-OVER SWITCHING SYSTEM	EMC Corporation
DE(EP)97927901.	DE(EP)69710 578.4	METHOD FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
DE(EP)97942453.	DE(EP)69708 932.0	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
DE(EP)97944532.	DE(EP)09502 20	DYNAMICALLY UPGRADEABLE DISK ARRAY SYSTEM AND METHOD	EMC Corporation
DE(EP)98307410.	DE(EP)09320 96	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
DE(EP)99941177. 0	DE(EP)69921 289.8-08	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
DE10048402.6	DE10048402	DATA STORAGE SYSTEM	EMC Corporation
DE10084964.4	DE10084964	SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
DE10124482.7	DE10124482	FAULT TOLERANT, LOW LATENCY SYSTEM RESOURCE WITH HIGH LEVEL LOGGING OF SYSTEM RESOURCE TRANSACTIONS AND CROSS- SERVER MIRRORED HIGH LEVEL LOGGING OF SYSTEM RESOURCE TRANSACTIONS	EMC Corporation
DE10197063.3-31	DE10197063	METHOD AND APARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
DE102004064269		METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
DE10297001.7	DE10297001	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
DE10392181.8		DYNAMIC RDF GROUPS	EMC Corporation
DE112004002315		VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
DE200310393595	DE10393595	METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
DE20051036291.		TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
DE60042055.8-08	DE60042055. 8-08	APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
DE60042225.9	DE60042225.	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
DE91309497.5	DE69130279.	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
DE91906246.3	DE69132511.	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
DE99900240.5	DE69902749.	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation

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Number	Number	Title	Owner
DE99967760.2	EP1058889	DATA STORAGE SYSTEM	EMC Corporation
EDV84201484.7	EDV149858	DATA PROCESSING SYSTEM HAVING A UNIQUE ADDRESS TRANSLATION UNIT	EMC Corporation
EP(DV)04002583 .5	EP1426863	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
EP(DV)09164519 .2		METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
EP(DV1)0611355 8.8	EP(DV1)168 4178	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
EP(DV1)2001020 3306.4	EP(DV1)116 0654	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
EP00125969.6	EP1122629	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP00125969.6	EP1122629	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP00125969.6	EP1122629	CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP00307999.3	EP1093051	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
EP00311601.9	EP1111509	APPARATUS FOR ENABLING INDEPENDENT ACCESS TO REPLICATED DATA	EMC Corporation
EP00311737.1	EP1113363	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL- OVER MECHANISM	EMC Corporation
EP00910144.5	EP1149475	FUZZY COMMITMENT SCHEME	EMC Corporation
EP00911736.7	EP1171820	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
EP00944952.1	EP1194852	DATA STORAGE SYSTEM	EMC Corporation
EP00948778.6	EP1201070	SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
EP00959718.8	EP1250649	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
EP00959781.6	EP1125201	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
EP00978803.5	EP1244966	METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation
EP01102501.2		CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
EP01910598.0		SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
EP01910686.3		HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
EP01923278.4		SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
EP01977554.3		SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
EP01991440.7	DE60136739. 1-08	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation
EP01991440.7	EP1344133	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation

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Number EP02024809.2	EP1313018	HIERARCHICAL APPROACH TO IDENTIFYING	
		CHANGING DEVICE CHARACTERISTICS	EMC Corporation
EP02024812.6	EP1313016	DYNAMIC RDF	EMC Corporation
EP02024812.6	EP1313016	DYNAMIC RDF	EMC Corporation
EP02024813.4	EP1313017	REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
EP02706240.5		SYSTEM AND METHOD OF INDEXING UNIQUE ELECTRONIC MAIL MESSAGES AND USES FOR THE SAME	EMC Corporation
EP02749653.8	DE60232414.	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02749653.8	EP1402420	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02749653.8	EP1402420	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02749653.8	EP1402420	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
EP02756944.1		SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
EP02786369.5		EFFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
EP02795496.5	EP1430400	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
EP02795657.2	EP1461720	DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
EP02795657.2	EP1461720	DYNAMIC FILE ACCESS CONTROL AND MANAGEMENT	EMC Corporation
EP03019062.3	EP1416685	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
EP03783599.8	EP1563411	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
EP03790117.0		IDENTITY AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
EP04010899.5	EP1499074	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
EP04025641.4	EP1507207	HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
EP04104115.3	EP1521419	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
EP04106294.4	EP1555780	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation
EP04715092.5	EP1609071	DATA STORAGE SYSTEM	EMC Corporation
EP04749593.2		METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
EP04753325.2	EP1629383	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation

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Number	Number	Title	Owner
EP04753325.2	EP1629383	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
EP04753325.2	EP1629383	SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
EP04760929.2	EP1625690	METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
EP04783839.6		SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
EP04801039.1	EP1695221	DATA TRANSFERRING METHOD	EMC Corporation
EP04810425.1	EP1680730	METHOD FOR PROVIDING A FLAT VIEW OF A HIERARCHICAL NAMESPACE WITHOUT REQUIRING UNIQUE LEAF NAMES	EMC Corporation
EP04813591.7	EP1704560	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
EP04813591.7	EP1074560	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
EP04813591.7	EP1704560	VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
EP04813604.8	EP1704668	SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
EP05004139.1	EP1569085	METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
EP05101066.8	EP1585285	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
EP05106967.2	EP1624644	PRIVILEGED NETWORK ROUTING	EMC Corporation
EP05109790.5	EP1650926	AUTOMATICALLY GRANTING ROOT ACCESS TO ADMINISTRATORS, WITHOUT REQUIRING THE ROOT PASSWORD	EMC Corporation
EP05712935.5	EP1719283	METHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	EMC Corporation
EP05767801.3		SYSTEMS AND METHODS FOR PROVIDING DISTRIBUTED CACHE COHERENCE	EMC Corporation
EP05779993.4		SYSTEM AND METHOD OF FRAUD REDUCTION	EMC Corporation
EP05812016.3		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
EP05824350.2		CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
EP05854600.3	EP1828920	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
EP05854771.2		BACKUP INFORMATION MANAGEMENT	EMC Corporation
EP05855107.8		SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
EP05855407.2		SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
EP06115645.1	EP1748598	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK	EMC Corporation

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Number	Number	SERVICE	Owner
		BERTIEE	
EP06123514.9	EP1811417	TECHNIQUES FOR PRESERVING AND MANAGING IDENTITIES IN AN AUDIT LOG	EMC Corporation
EP06256154.3		METHOD AND SYSTEM FOR MULTI-LEVEL SECURE PERSONAL PROFILE MANAGEMENT AND ACCESS CONTROL TO THE ENTERPRISE MULTI-MODAL COMMUNICATION ENVIRONMENT IN HETEROGENEOUS CONVERGENT COMMUNICATION NETWORKS	EMC Corporation
EP06711236.7		SYSTEM AND METHOD FOR DETECTING AND MITIGATING DNS SPOOFING TROJANS	EMC Corporation
EP06711344.9		SYSTEM AND METHOD FOR DETECTING A PROXY BETWEEN A CLIENT AND SERVER	EMC Corporation
EP06718171.9	EP1836621	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
EP06718172.7	EP1836622	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
EP06735324.3		DERIVATIVE SEEDS	EMC Corporation
EP06735936.4	EP1854012	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
EP06750264.1	DE(EP)60200 6015311.2	METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
EP06750264.1	EP1894127	METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
EP06750265.8		METHODS AND APPARATUS FOR MANAGING THE REPLICATION OF CONTENT	EMC Corporation
EP06785805.0		CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
EP06796124.3	EP1946514	SYSTEM AND METHOD FOR CONDUCTING SECURE TRANSACTIONS	EMC Corporation
EP06801147.7	EP1915708	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
EP06801780.5		INFORMATION PROTECTION METHOD AND SYSTEM	EMC Corporation
EP06803964.3		AUTHENTICATION METHOD AND APPARATUS UTILIZING PROOF-OF-AUTHENTICATION MODULE	EMC Corporation
EP06816670.1		SYSTEM AND METHOD FOR DETECTING FRAUDULENT TRANSACTIONS	EMC Corporation
EP06848312.2	DE60200601 1058.8	CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
EP06848312.2	EP1969472	CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
EP06848312.2	EP1969472	CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
EP07100979.9		FEDERATION AND ATTESTATION OF ONLINE REPUTATIONS	EMC Corporation
EP07103070.4	EP1838069	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation
EP07104609.8	EP1796001	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
EP07117897.4	EP1918845	MULTIPLE SECURITY ACCESS MECHANISMS FOR A SINGLE IDENTIFIER	EMC Corporation
EP07120346.7	EP1926259	CONTROL OF COMMUNICATION PORTS OF COMPUTING DEVICES USING POLICY-BASED	EMC Corporation

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		DECISIONS	
EP0775225		TRACKING OBJECTS MODIFIED BETWEEN BACKUP OPERATIONS	EMC Corporation
EP07755303.0	EP2013740	EFFICIENT DATA STORAGE USING RESEMBLANCE OF DATA SEGMENTS	EMC Corporation
EP07757004.2		SYSTEMS AND METHODS FOR OBTAINING ULTRA- HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	EMC Corporation
EP07758941.4		HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
EP07762088.8		AUTOMATED PRIORITY RESTORES	EMC Corporation
EP08102532.2	EP1988486	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
EP08163057.6	EP2012460	KEY DISTRIBUTION	EMC Corporation
EP08164542.6	EP2045997	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
EP08726953.6		AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
EP08727213.4		CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
EP08727318.1		SEEDING REPLICATION	EMC Corporation
EP08796521.6		SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
EP08827264.6		SYSTEM AND METHOD FOR PROVIDING WRITE- ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
EP08829858.3		DE-DUPLICATION IN VIRTUALIZED SERVER AND VIRTUALIZED STORAGE ENVIRONMENTS	EMC Corporation
EP08843327.1		POLICY BASED FILE MANAGEMENT	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09153285.3	EP2093971	TECHNIQUES FOR ANONYMOUS INTERNET ACCESS	EMC Corporation
EP09156290.0		RESTRICTED USE INFORMATION CARDS	EMC Corporation
EP09812030.6		METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
EP09826391.6		DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
EP09839371.3		METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
EP10161223.2	EP2252038	SYSLOG MESSAGE ROUTING SYSTEMS AND METHODS	EMC Corporation
EP10736429.1		SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
EP10740101.0		DATA PROCESSING SYSTEM USING CACHE- AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation

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Number	Number	Title	Owner
EP10759144.8		DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
EP10786489.4		SEGMENT DEDUPLICATION SYSTEM WITH ENCRYPTION OF SEGMENTS	EMC Corporation
EP10792440.9		SYSTEM AND METHOD FOR PROVIDING LONG- TERM STORAGE FOR DATA	EMC Corporation
EP10819153.7		SNAPSHOTTING OF A PERFORMANCE STORAGE SYSTEM IN A SYSTEM FOR PERFORMANCE IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	EMC Corporation
EP10838050.2		SYSTEMS AND METHODS FOR FACILITATING DATA DISCOVERY	EMC Corporation
EP11153041.6		SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
EP11737579.0		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
EP11751217.8		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
EP11753708.4		INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
EP11807550.6		SYSTEM AND METHOD FOR DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
EP11829826.4	EP2622456	OPTIMIZED RECOVERY	EMC Corporation
EP11853216.7		EFFICIENT STORAGE TIERING	EMC Corporation
EP12763802.1		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
EP12764154.6		TIME-BASED DATA PARTITIONING	EMC Corporation
EP12765938.1		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
EP12858776.3		EFFICIENT BACKUP REPLICATION	EMC Corporation
EP13831514.8		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
EP13831701.1		FORMAT IDENTIFICATION FOR FRAGMENTED BYTE ALIGNED INTEGER IMAGE DATA	EMC Corporation
EP14753812.8		DATA ANALYTICS PLATFORM OVER PARALLEL DATABASES AND DISTRIBUTED FILE SYSTEMS	EMC Corporation
EP14876123.2		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
EP15152142.4		METHOD AND SYSTEM FOR SERVICE-AWARE DATA PLACEMENT IN A STORAGE SYSTEM	EMC Corporation
EP15159736.6		USING SERVER SIDE FONT PREPARATION TO ACHIEVE WYSIWYG AND CROSS PLATFORM FIDELITY ON WEB BASED WORD PROCESSOR	EMC Corporation
EP15179359.3		SYSTEM AND METHOD FOR SECURE MULTI- TENANCY IN DATADOMAIN OPERATING SYSTEM (DDOS), A PURPOSE BUILT BACKUP APPLIANCE (PBBA) OPERATING SYSTEM	EMC Corporation

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EP15187450.0		METHODS AND APPARATUS FOR INCREASING DATA STORAGE CAPACITY	EMC Corporation
EP1996930609.1	EP0789877	SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
EP20000311748.8	EP1113462	METHOD FOR TRANSMITTING FIBRE-CHANNEL AND NON-FIBRE CHANNEL SIGNALS THROUGH COMMON CABLE	EMC Corporation
EP2002702693	EP1421732	TRANSACTION SYSTEM	EMC Corporation
EP2004793792		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
EP87401108.3	EP0246168	COMMUT 16	EMC Corporation
EP90311828.9	EP0483421	NETWORK COMMUNICATION SYSTEM	EMC Corporation
EP90916922.9	EP0497889	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
EP91309497.5	EP0482819	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
EP91906246.3	EP0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
EP91910198.1	EP0555219	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
EP93301620.6	EP0559454	ON-LINE MODULE REPLACEMENT IN A MULTLIPLE MODULE DATA PROCESSING SYSTEM	EMC Corporation
EP93301685.9	EP0559487	HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
EP93301686.7	EP0559488	IMPROVEMENTS FOR HIGH AVAILABILITY DISK ARRAYS	EMC Corporation
EP93925165.8	EP0667998	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
EP94901649.7	EP0720783	INRUSH CURRENT LIMITER	EMC Corporation
EP94914223.6	EP0695443	REMOTE DATA MIRRORING	EMC Corporation
EP95920589.9	EP0760939	APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
EP95928682.4	EP0730766	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
EP95944494.4	EP0745239	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
EP96919202.0	EP0830651	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
EP96919430.7	EP0827607	Method for managing globally distributed software components	EMC Corporation
EP96923601.7	EP0836781	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
EP96923633.0	EP0838055	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
EP96925331.9	EP0842464	DYNAMIC LOAD BALANCING	EMC Corporation
EP96928861.2	EP0856172	DATA STORAGE SYSTEM	EMC Corporation
EP97907877.1	EP0883845	ORTHOGONAL SIGNAL MULTIPLEXING SYSTEM	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
EP97910701.8	EP1019820	DATA VALIDATION SYSTEM FOR A GROUP OF DATA STORAGE DISKS	EMC Corporation
EP97910942.8	EP0938705	FAIL-OVER SWITCHING SYSTEM	EMC Corporation
EP97927901.5	EP0902923	METHOD FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
EP97942453.8	EP1010072	FILE TRANSFER UTILITY WHICH EMPLOYS AN INTERMEDIATE DATA STORAGE SYSTEM	EMC Corporation
EP97944532.7	EP0950220	DYNAMICALLY UPGRADEABLE DISK ARRAY SYSTEM AND METHOD	EMC Corporation
EP98307410.5	EP0932096	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
EP98923431.5	EP983548	APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
EP98952004.4	EP1019841	REDUNDANT, DISTRIBUTED NETWORK SYSTEMS	EMC Corporation
EP99900240.5	EP1049988	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
EP99900245.4	EP1049989	ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
EP99941177.0	EP1025483	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
EP99966711.6	EP1058888	DATA STORAGE SYSTEM	EMC Corporation
EP99967756.0	EP1145125	ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
EP99967760.2	EP1058889	DATA STORAGE SYSTEM	EMC Corporation
EP99973704.2	EP1071993	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
ES(EP)90916922.	ES(EP)04978 89	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
FR(EDV1)012033 06.4	FR(EDV1)11 60654	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME, DATA MIGRATION	EMC Corporation
FR(EDV1)842014 82.1	FR(EDV1)01 50522	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV	EMC Corporation
FR(EP)00307999.	FR(EP)10930 51	METHOD FOR THE TRANSPARENT EXCHANGE OF LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
FR(EP)00959718.	FR(EP)12506 49	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
FR(EP)01991440. 7	FR(EP)13441 33	METHOD OF "SPLIT BRAIN" PREVENTION IN COMPUTER CLUSTER SYSTEMS	EMC Corporation
FR(EP)02795496. 5	FR(EP)14304 00	EFFICIENT SEARCH FOR MIGRATION AND PURGE CANDIDATES	EMC Corporation
FR(EP)03019062.	FR(EP)14166 85	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
FR(EP)03783599.	FR(EP)15634 11	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
FR(EP)04002583.	FR(EP)14268 63	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
FR(EP)04010899.	FR(EP)14990	DYNAMIC ROUTING THROUGH A CONTENT	EMC Corporation
5	74	DISTRIBUTION NETWORK	2. The corporation
FR(EP)04104115.	FR(EP)15214	TECHNIQUES FOR SECURING ELECTRONIC	EMC Corporation
3	19	IDENTITIES	·
FR(EP)04106294.	FR(EP)15557	METHODS AND SYSTEMS FOR MANAGING	EMC Corporation
4	80	NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	
FR(EP)04810425.	FR(EP)16807	METHOD FOR PROVIDING A FLAT VIEW OF A	EMC Corporation
1	30	HIERARCHICAL NAMESPACE WITHOUT	1
		REQUIRING UNIQUE LEAF NAMES	
FR(EP)04813604.	FR(EP)17046	SYSTEM AND METHOD FOR PROVIDING	EMC Corporation
8	68	IMPROVED CLAIMANT AUTHENTICATION	
FR(EP)05004139.	FR(EP)15690	METHODS AND APPARATUS FOR INCREASING	EMC Corporation
1	85	DATA STORAGE CAPACITY	
FR(EP)05101066.	FR(EP)15852	ISOLATING MULTIPLE AUTHENTICATION	EMC Corporation
8	85	CHANNELS, EACH USING MULTIPLE	
		AUTHENTICATION MODELS	
FR(EP)05109790.	FR(EP)16509	AUTOMATICALLY GRANTING ROOT ACCESS TO	EMC Corporation
5	26	ADMINISTRATORS, WITHOUT REQUIRING THE	
		ROOT PASSWORD	
FR(EP)05712935.	FR(EP)17192	METHOD AND APPARATUS OF AUTHENTICATION	EMC Corporation
5	83	OF USERS AND COMMUNICATIONS RECEIVED	
ED (ED)05954600	ED/ED)19390	FROM COMPUTER SYSTEMS	EMC Componetion
FR(EP)05854600.	FR(EP)18289 20	CONSUMER INTERNET AUTHENTICATION SERVICE	EMC Corporation
3 FR(EP)06115645.	FR(EP)17485	SYSTEM AND METHOD FOR ENSURING A DEVICE	EMC Corporation
1	98	USES THE CORRECT INSTANCE OF A NETWORK	ENIC Corporation
1	70	SERVICE	
FR(EP)06123514.	FR(EP)18114	TECHNIQUES FOR PRESERVING AND MANAGING	EMC Corporation
9	17	IDENTITIES IN AN AUDIT LOG	
FR(EP)06735936.	FR(EP)18540	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
4	12	CILCIN ON THE CONSISTENCE INFINITEDING	2. The Corporation
FR(EP)06801147.	FR(EP)19157	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
7	08		
FR(EP)07103070.	FR(EP)18380	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation
4	69		_
FR(EP)07117897.	FR(EP)19188	MULTIPLE SECURITY ACCESS MECHANISMS FOR	EMC Corporation
4	45	A SINGLE IDENTIFIER	
FR(EP)07120346.	FR(EP)19262	CONTROL OF COMMUNICATION PORTS OF	EMC Corporation
7	59	COMPUTING DEVICES USING POLICY-BASED	
ED (ED) 05555000	ED (ED) 20125	DECISIONS	E) (C C
FR(EP)07755303.	FR(EP)20137	EFFICIENT DATA STORAGE USING RESEMBLANCE	EMC Corporation
0 ED (ED)07757004	40	OF DATA SEGMENTS	EMC Composition
FR(EP)07757004.		SYSTEMS AND METHODS FOR OBTAINING ULTRA-	EMC Corporation
2		HIGH DATA AVAILABILITY AND GEOGRAPHIC DISASTER TOLERANCE	
FR(EP)08102532.	FR(DE)1988	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
2	486	VIKTORED LEDEKATED KOLE I KOVISIONINO	Livic Corporation
FR(EP)08163057.	FR(EP)20124	KEY DISTRIBUTION	EMC Corporation
6	60	The state of the s	2.77C Corporation
FR(EP)08164542.	FR(EP)20459	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
	97		Street Conference
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Application	Registration		
Number	Number	Title	Owner
2	38	METHODS	
FR(EP)11829826.	FR(EP)26224 56	OPTIMIZED RECOVERY	EMC Corporation
FR(EP)19969306 09.1	FR(EP)07898 77	SYSTEM FOR MIGRATING DATA BY SELECTING A FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	EMC Corporation
FR(EP)87401108.	FR(EP)02461 68	COMMUT 16	EMC Corporation
FR(EP)90916922.	FR(EP)04978 89	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
FR(EP)91309497.	FR(EP)04828 19	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
FR(EP)91910198. 1	FR(EP)05552 19	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
FR(EP)93925165.	FR(EP)06679 98	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
FR(EP)95928682.	FR(EP)07307 66	COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
FR(EP)95944494. 4	FR(EP)07452 39	METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
FR(EP)96919202.	FR(EP)08306 51	RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
FR(EP)96919430. 7	FR(EP)08276 07	Method for managing globally distributed software components	EMC Corporation
FR(EP)96923601.	FR(EP)08367 81	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
FR(EP)96923633.	FR(EP)08380 55	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
FR(EP)98307410.	FR(EP)09320 96	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
FR(EP)98952004.	FR(EP)10198 41	REDUNDANT, DISTRIBUTED NETWORK SYSTEMS	EMC Corporation
FR(EP05106967. 2	FR(EP16246 44	PRIVILEGED NETWORK ROUTING	EMC Corporation
FR91906246.3	FR0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
GB(DV)8903669.	GB(DV)2213 025	DISTRIBUTED SWITCHING ARCHITECTURE	EMC Corporation
GB(DV1)041191 8.6	GB(DV1)240 0268	INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE SUBSCRIBERS	EMC Corporation
GB(DV1)042166 6.9	GB(DV1)240 3117	METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
GB(DV1)050458 3.6	GB(DV1)240 9743	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
GB(DV1)070266	GB(DV1)243	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
9.3	4894		
GB(DV1)070762	GB(DV1)243	VIRTUAL ORDERED WRITES FOR MULTIPLE	EMC Corporation
5.0	6746	STORAGE DEVICES	E) (C C
GB(DV2)070266	GB(DV2)243	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
8.5	4893	METHODS AND SYSTEMS FOR IMPLEMENTING	EMC Commontion
GB(EDV)071046 09.8	EP1796001	METHODS AND SYSTEMS FOR IMPLEMENTING	EMC Corporation
	85.55	SHARED DISK ARRAY MANAGEMENT FUNCTIONS	
GB(EDV1)01203	GB(EDV1)11	SYSTEM AND METHOD FOR ON-LINE, REAL-TIME,	EMC Corporation
306.4	60654	DATA MIGRATION	EMC Commontion
GB(EDV1)06113 558.8	GB(EP)1684 178	REVERSING A COMMUNICATION PATH BETWEEN	EMC Corporation
GB(EDV1)84201	GB(EDV1)01	STORAGE DEVICES  DATA PROCESSING SYSTEM HAVING A UNIQUE	EMC Corporation
484.7	49858	ADDRESS TRANSLATION UNIT	EMC Corporation
			EL CO C
GB(EP)00307999	GB(EP)1093	METHOD FOR THE TRANSPARENT EXCHANGE OF	EMC Corporation
.3	051	LOGICAL VOLUMES IN A DISK ARRAY STORAGE DEVICE	
GB(EP)00311601	GB(EP)1111	APPARATUS FOR ENABLING INDEPENDENT	EMC Corporation
.9	509	ACCESS TO REPLICATED DATA	ENIC Corporation
GB(EP)00311737	GB(EP)1113	FIBRE CHANNEL DATA STORAGE SYSTEM FAIL-	EMC Corporation
.1	363	OVER MECHANISM	Livie corporation
GB(EP)00911736	GB(EP)1171	METHODS AND SYSTEMS FOR IMPLEMENTING	EMC Corporation
.7	820	SHARED DISK ARRAY MANAGEMENT FUNCTIONS	
GB(EP)00948778	GB(EP)1201	SYSTEM AND METHODS FOR MAINTAINING AND	EMC Corporation
.6	070	DISTRIBUTING PERSONAL SECURITY DEVICES	Elvie corporation
GB(EP)00959718	GB(EP)1250	CRASH RECOVERY WITHOUT COMPLETE	EMC Corporation
.8	649	REMIRROR	Livic Corporation
GB(EP)00959781	GB(EP)1125	METHOD AND APPARATUS FOR MAINTAINING	EMC Corporation
.6	201	CONSISTENCY OF DATA STORED IN A GROUP OF	2e corporation
		MIRRORING DEVICES	
GB(EP)00978803	GB(EP)1244	METHOD AND APPARATUS FOR MANAGING	EMC Corporation
.5	966	INFORMATION RELATED TO STORAGE ACTIVITIES	_
		OF DATA STORAGE SYSTEMS	
GB(EP)01102501		CONTROLLING ACCESS TO A STORAGE DEVICE	EMC Corporation
.2			
GB(EP)01991440	GB(EP)1344	METHOD OF "SPLIT BRAIN" PREVENTION IN	EMC Corporation
.7	133	COMPUTER CLUSTER SYSTEMS	F1 (C C
GB(EP)02024809	GB(EP)1313	HIERARCHICAL APPROACH TO IDENTIFYING	EMC Corporation
.2	018	CHANGING DEVICE CHARACTERISTICS	
GB(EP)02702693	GB(EP)1421	TRANSACTION SYSTEM	EMC Corporation
.9	732	EFFICIENT OF A DOLL FOR A MORATION AND RUB OF	EN CO C
GB(EP)02795496	GB(EP)1430	EFFICIENT SEARCH FOR MIGRATION AND PURGE	EMC Corporation
.5 CD/ED)02010062	400 GB(EP)1416	CANDIDATES  ENDIQUED TREE FOR A CONTENT DISTRIBUTION	EMC Componetion
GB(EP)03019062 .3	685	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
GB(EP)03783599	(GB)EP1563	SYSTEMS AND METHODS FOR RESTRIPING FILES	EMC Corporation
.8	411	IN A DISTRIBUTED FILE SYSTEM	Livic Corporation
			EMC Composition
GB(EP)04002583	GB(EP)1426 863	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF	EMC Corporation
.5	003	MIRRORING DEVICES	
CD/ED\0.4010000	GB(EP)1499	DYNAMIC ROUTING THROUGH A CONTENT	EMC Corporation
GB(EP)04010899	CIDICELIAAA		

Application	Registration		
Number	Number	Title	Owner
GB(EP)04025641	GB(EP)1507	HIERARCHICAL APPROACH TO IDENTIFYING	EMC Corporation
.4	207	CHANGING DEVICE CHARACTERISTICS	
GB(EP)04104115	GB(EP)1521	TECHNIQUES FOR SECURING ELECTRONIC	EMC Corporation
.3	419	IDENTITIES	1
GB(EP)04106294	GB(EP)1555	METHODS AND SYSTEMS FOR MANAGING	EMC Corporation
.4	780	NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	1
GB(EP)04715092	GB(EP)1609	DATA STORAGE SYSTEM	EMC Corporation
.5	071	DITITION ON THE STATE OF THE ST	Livie corporation
GB(EP)04760929	GB(EP)1625	METHOD AND APPARATUS FOR AUTHENTICATION	EMC Corporation
.2	690	OF USERS AND WEB SITES	2e corporation
GB(EP)04801039	GB(EP)1695	DATA STORAGE SYSTEM	EMC Corporation
. ' '	221	DATA STORAGE STSTEM	EMC Corporation
.1 GB(EP)04810425	GB(EP)1680	METHOD FOR PROVIDING A FLAT VIEW OF A	EMC Corporation
, ,	730	HIERARCHICAL NAMESPACE WITHOUT	EMC Corporation
.1	730	REQUIRING UNIQUE LEAF NAMES	
GB(EP)04813604	GB(EP)1704	SYSTEM AND METHOD FOR PROVIDING	EMC Corporation
.8	668	IMPROVED CLAIMANT AUTHENTICATION	ENIC Corporation
			T) (G G
GB(EP)05004139	GB(EP)1569	METHODS AND APPARATUS FOR INCREASING	EMC Corporation
.1	085	DATA STORAGE CAPACITY	TD 10 0
GB(EP)05101066	GB(EP)1585	ISOLATING MULTIPLE AUTHENTICATION	EMC Corporation
.8	285	CHANNELS, EACH USING MULTIPLE	
CD (ED) 0 510 60 65	GD (ED) 1 (2.1	AUTHENTICATION MODELS	T) (C C
GB(EP)05106967	GB(EP)1624	PRIVILEGED NETWORK ROUTING	EMC Corporation
.2	644	ALTERNAL MICHALL MACRATURE DOOT A COTTON TO	EN CO C
GB(EP)05109790	GB(EP)1650	AUTOMATICALLY GRANTING ROOT ACCESS TO	EMC Corporation
.5	926	ADMINISTRATORS, WITHOUT REQUIRING THE	
CD/ED)05712025	CD/ED)1710	ROOT PASSWORD	EMC Composition
GB(EP)05712935	GB(EP)1719 283	METHOD AND APPARATUS OF AUTHENTICATION	EMC Corporation
.5	283	OF USERS AND COMMUNICATIONS RECEIVED FROM COMPUTER SYSTEMS	
GB(EP)05854600	GB(EP)1828	CONSUMER INTERNET AUTHENTICATION	EMC Corporation
.3	920	SERVICE	ENIC Corporation
GB(EP)06115645	GB(EP)1748	SYSTEM AND METHOD FOR ENSURING A DEVICE	EMC Corporation
.1	598	USES THE CORRECT INSTANCE OF A NETWORK	ENIC Corporation
.1	390	SERVICE	
GB(EP)06123514	GB(EP)1811	TECHNIQUES FOR PRESERVING AND MANAGING	EMC Corporation
.9	417	IDENTITIES IN AN AUDIT LOG	Livic corporation
GB(EP)06718171	GB(EP)1836	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
.9	621	DELETION OF DATA	ENIC Corporation
GB(EP)06718172	GB(EP)1836	METHODS AND APPARATUS FOR MANAGING	EMC Corporation
` '	622	DELETION OF DATA	ENIC Corporation
.7 GB(EP)06735936	GB(EP)1854	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
.4	012	CHECKFOINT AND CONSISTENCT WARKERS	ENIC Corporation
GB(EP)06750264	GB(EP)1894	METHODS AND APPARATUS FOR STORING	EMC Corporation
.1	127	CONTENT IN A FILE SYSTEM	Envic Corporation
GB(EP)06801147	GB(EP)1915	DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
.7	708	DATA ODJECT SEARCH AND RETRIEVAL	Livic Corporation
GB(EP)07103070	GB(EP)1838	REGISTRATION OF PEER-TO-PEER SERVICES	EMC Corporation
.4	069	REGISTRATION OF TEER-TO-TEER SERVICES	Livic Corporation
GB(EP)07117897	GB(EP)1918	MULTIPLE SECURITY ACCESS MECHANISMS FOR	EMC Corporation
.4	845	A SINGLE IDENTIFIER	Livic Corporation
• •	010	AND DESCRIPTION OF THE PROPERTY OF THE PROPERT	1

Application	Registration		
Number	Number	Title	Owner
GB(EP)07120346	GB(EP)1926	CONTROL OF COMMUNICATION PORTS OF	EMC Corporation
.7	259	COMPUTING DEVICES USING POLICY-BASED DECISIONS	
GB(EP)07755303	GB(EP)2013	EFFICIENT DATA STORAGE USING RESEMBLANCE	EMC Corporation
.0	740	OF DATA SEGMENTS	Livie corporation
GB(EP)07757004		SYSTEMS AND METHODS FOR OBTAINING ULTRA-	EMC Corporation
.2		HIGH DATA AVAILABILITY AND GEOGRAPHIC	
		DISASTER TOLERANCE	
GB(EP)08102532	GB(EP)1988	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
.2 CD/CD) 091/2057	486	VEV DICEDIDITION	EMC Commention
GB(EP)08163057	GB(EP)2012 460	KEY DISTRIBUTION	EMC Corporation
GB(EP)08164542	GB(EP)2045	IDENTITY-BASED ADDRESS NORMALIZATION	EMC Corporation
.6	997	IDENTITI-DASED ADDRESS NORMALIZATION	Elvic Corporation
GB(EP)10161223	GB(EP)2252	SYSLOG MESSAGE ROUTING SYSTEMS AND	EMC Corporation
.2	038	METHODS	1
GB(EP)11829826	GB(EP)2622	OPTIMIZED RECOVERY	EMC Corporation
.4	456		
GB(EP)19969306	GB(EP)0789	SYSTEM FOR MIGRATING DATA BY SELECTING A	EMC Corporation
09.1	877	FIRST OR SECOND TRANSFER MEANS BASED ON THE STATUS OF A DATA ELEMENT MAP	
GB(EP)20020248	GB(EP)1313	REVERSING A COMMUNICATION PATH BETWEEN	EMC Corporation
13	017	STORAGE DEVICES	EWIC Corporation
GB(EP)8307410.	GB(EP)0932	APPARATUS AND METHOD OF ACCESSING	EMC Corporation
5	096	TARGET DEVICES ACROSS A BUS UTILIZING	1
		INITIATOR IDENTIFIERS	
GB(EP)90916922	GB(EP)0497	METHOD AND APPARATUS FOR SECURE	EMC Corporation
.9	889	IDENTIFICATION AND VERIFICATION	
GB(EP)91309497	GB(EP)0482	On-Line Reconstruction of a Failed Redundant Array	EMC Corporation
.5 GB(EP)91910198	819 GB(EP)0555	System METHOD AND APPARATUS FOR PERSONAL	EMC Corporation
.1	219	IDENTIFICATION	ENIC Corporation
GB(EP)93925165	GB(EP)0667	METHOD AND APPARATUS FOR AUTHENTICATION	EMC Corporation
.8	998	OF CLIENT SERVER COMMUNICATION	
GB(EP)94914223	GB(EP)0695	REMOTE DATA MIRRORING	EMC Corporation
.6	443		1
GB(EP)95928682	GB(EP)0730	COMPUTER METHOD AND APPARATUS FOR	EMC Corporation
.4	766	ASYNCHRONOUS ORDERED OPERATIONS	
GB(EP)95944494	GB(EP)0745	METHOD AND APPARATUS TO SECURE	EMC Corporation
.4	239	DISTRIBUTED DIGITAL DIRECTORY OBJECT	
GB(EP)96919202	GB(EP)0830	CHANGES RESERVED CYLINDER FOR SCSI DEVICE WRITE	EMC Corporation
.0	651	BACK CACHE	ENIC Corporation
GB(EP)96919430	GB(EP)0827	Method for managing globally distributed software	EMC Corporation
.7	607	components	
GB(EP)96923601	GB(EP)0836	METHOD AND APPARATUS FOR SYNCHRONIZING	EMC Corporation
.7	781	DATA TRANSMISSION WITH ON-DEMAND LINKS	
		OF A NETWORK	
GB(EP)96923633	GB(EP)0838	System for replicating and associating file types with	EMC Corporation
.0	055	application programs among plurality of partitions in a	
		server	

Application	Registration		
Number	Number	Title	Owner
GB(EP)97927901	GB(EP)0902	METHOD FOR INDEPENDENT AND SIMULTANEOUS	EMC Corporation
.5	923	ACCESS TO A COMMON DATA SET	
GB(EP)97942453	GB(EP)1010	FILE TRANSFER UTILITY WHICH EMPLOYS AN	EMC Corporation
.8	072	INTERMEDIATE DATA STORAGE SYSTEM	
GB(EP)98952004	GB(EP)1019	REDUNDANT, DISTRIBUTED NETWORK SYSTEMS	EMC Corporation
.4	841		_
GB(EP)99900245	GB(EP)1049	ACCESS TO CONTENT ADDRESSABLE DATA OVER	EMC Corporation
.4	989	A NETWORK	
GB(EP)99941177	GB(EP)1025	METHOD FOR EXCHANGING VOLUMES IN A DISK	EMC Corporation
.0	483	ARRAY STORAGE DEVICE	
GB(EP)99966711	GB(EP)1058	DATA STORAGE SYSTEM	EMC Corporation
.6	888		77.60.0
GB(EP)99967756	GB(EP)1145	ONLINE DEBUGGING AND TRACING SYSTEM AND	EMC Corporation
.0 CD/ED)00072704	125	METHOD AND ADDADATHS FOR CASCADDIG DATA	EMC Commention
GB(EP)99973704	GB(EP)1071 993	METHOD AND APPARATUS FOR CASCADING DATA	EMC Corporation
.2		THROUGH REDUNDANT DATA STORAGE UNITS	
GB0012368.7	GB2346995	METHOD FOR IMPROVING PERFORMANCE OF	EMC Corporation
CD0022555.4	CD2240255	LARGE DATABASES	EN COCO
GB0023575.4	GB2360377	DATA STORAGE SYSTEM	EMC Corporation
GB0024421.0	GB2353122	METHOD AND APPARATUS FOR	EMC Corporation
		ASYNCHRONOUSLY UPDATING A MIRROR OF A	
CD0100445.6	GD22 (2.102	SOURCE DEVICE	EL CO C
GB0100445.6	GB2363492	METHOD AND APPARATUS FOR PROVIDING DATA	EMC Corporation
		MANAGEMENT FOR A STORAGE SYSTEM	
GB0100446.4	GB2354617	COUPLED TO A NETWORK  METHOD & APPARATUS FOR AUTHENTICATING	EMC Corporation
GB0100440.4	GD2334017	CONNECTIONS TO A STORAGE SYSTEM COUPLED	ENIC Corporation
		TO A NETWORK	
GB0108066.2	GB2366424	DATA STORAGE SYSTEM	EMC Corporation
GB0108069.6	GB2366425	DATA STORAGE SYSTEM	EMC Corporation
GB0108075.3	GB2366049	DATA STORAGE SYSTEM	EMC Corporation
			_
GB0109796.3	GB2359159	METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON	EMC Corporation
		CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT A	
		PHYSICAL LEVEL	
GB0114064.9	GB2359170	METHOD AND APPARATUS FOR BALANCING	EMC Corporation
GB0114004.7	GB2337170	WORKLOADS AMONG PATHS IN A MULTI-PATH	Livic Corporation
		COMPUTER SYSTEM BASED ON THE STATE OF	
		PREVIOUS I/O OPERATIONS (As Amended)	
GB0127444.8	GB2364806	FAULT TOLERANT PARITY GENERATION	EMC Corporation
GB0201491.8	GB2368430	METHOD AND APPARATUS FOR ENHANCING	EMC Corporation
GB0201171.0	GB2300130	RECOVERY OPERATIONS IN DISK ARRAY	21vic corporation
		STORAGE DEVICES	
		(Consistent Split and Consistent Snap)	
GB0204624.1	GB2382179	SYSTEM AND METHOD FOR SECURE STORAGE,	EMC Corporation
•		TRANSFER AND RETRIEVAL OF CONTENT	
		ADDRESSABLE INFORMATION	
GB0210551.8	GB2378022	DATA STORAGE SYSTEM WITH IMPROVED	EMC Corporation
		NETWORK INTERFACE	
GB0214780.9	GB2374175	METHODS AND APPARATUS FOR ACCESSING	EMC Corporation
		SHARED DATA	_

Application	Registration		
Number	Number	Title	Owner
GB0219742.4	GB282185	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation
GB0222838.5	GB2377354	METHODS AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
GB0228432.1	GB2379776	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
GB0306151	GB2383677	METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
GB0306155.3	GB2383658	ADAPTIVE PRE-FETCHING OF DATA FROM A DISK	EMC Corporation
GB0306158.7	GB2384083	SELECTION OF A RESOURCE IN A DISTRIBUTED COMPUTER SYSTEM	EMC Corporation
GB0306159.5	GB2387463	REMOTE MIRRORING IN A SWITCHED ENVIRONMENT	EMC Corporation
GB0312217.3	GB2385446	METHOD AND APARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
GB0312298.3	GB2386291	INTEGRATED PROCEDURE FOR PARTITIONING NETWORK DATA SERVICES AMONG MULTIPLE SUBSCRIBERS	EMC Corporation
GB0316189.0	GB2391745	NETWORK ADAPTER AND METHOD OF USING SAME	EMC Corporation
GB0327608.6	GB2393295	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
GB0410972.4	GB2398203	DYNAMIC RDF GROUPS	EMC Corporation
GB0515989.2	GB2416888	METHODS AND APPARATUS FOR ACCESSING CONTENT IN A VIRTUAL POOL ON A CONTENT ADDRESSABLE STORAGE SYSTEM	EMC Corporation
GB0517063.4	GB2413670	VIRTUAL ORDERED WRITES	EMC Corporation
GB0519952.6	GB2418754	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
GB0609391.8	GB2423173	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
GB91906246.3	GB0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
GB99900240.5	GB1049988	CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND TRANSFER	EMC Corporation
HK(EP)01100515 .5	HK(EP)1031 262	RELIABLE ARRAY OF DISTRIBUTED COMPUTING NODES	EMC Corporation
HK(EP)99100509 .6	HK(EP)1015 487	DATA STORAGE SYSTEM	EMC Corporation
IE(EP)03019062.	IE(EP)14166 85	ENRICHED TREE FOR A CONTENT DISTRIBUTION NETWORK	EMC Corporation
IE(EP)04010899.	IE(EP)14990 74	DYNAMIC ROUTING THROUGH A CONTENT DISTRIBUTION NETWORK	EMC Corporation
IE(EP)04104115.	IE(EP)15214 19	TECHNIQUES FOR SECURING ELECTRONIC IDENTITIES	EMC Corporation
IE(EP)04106294. 4	IE(EP)15557 80	METHODS AND SYSTEMS FOR MANAGING NETWORK TRAFFIC BY MULTIPLE CONSTRAINTS	EMC Corporation

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Number	Number	Title	Owner
IE(EP)05101066. 8	IE(EP)15852 85	ISOLATING MULTIPLE AUTHENTICATION CHANNELS, EACH USING MULTIPLE AUTHENTICATION MODELS	EMC Corporation
IE(EP)05106967.	IE(EP)16246 44	PRIVILEGED NETWORK ROUTING	EMC Corporation
IE(EP)05109790.	IE(EP)16509 26	AUTOMATICALLY GRANTING ROOT ACCESS TO ADMINISTRATORS, WITHOUT REQUIRING THE ROOT PASSWORD	EMC Corporation
IE(EP)06115645.	IE(EP)17485 98	SYSTEM AND METHOD FOR ENSURING A DEVICE USES THE CORRECT INSTANCE OF A NETWORK SERVICE	EMC Corporation
IE(EP)08102532.	IE(EP)19884 86	VIRTUALIZED FEDERATED ROLE PROVISIONING	EMC Corporation
IE(EP)08163057.	IE(EP)20124 60	KEY DISTRIBUTION	EMC Corporation
IE(EP)93925165. 8	IE(EP)06679 98	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
IE(EP)96919430.	IE(EP)08276 07	Method for managing globally distributed software components	EMC Corporation
IE(EP)96923601. 7	IE(EP)08367 81	METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
IE(EP)96923633.	IE(EP)08380 55	System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
IE(EP)96937753.	IE(EP)08573 90	STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND	EMC Corporation
IL(DV1)183096	IL(DIV1)183 096	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
IL105895	IL105895	SYSTEM AND METHOD FOR DYNAMICALLY CONTROLLING CACHE MANAGEMENT	EMC Corporation
IL139069	IL139069	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
IL174987	IL174987	APPARATUS AND METHOD FOR INFORMATION RECOVERY QUALITY ASSESSMENT IN A COMPUTER SYSTEM	EMC Corporation
IN00578KOLNP2 004	IN240911	DYNAMIC RDF GROUPS	EMC Corporation
IN01283KOLNP2 003	IN222138	VIRTUAL STORAGE DEVICES	EMC Corporation
IN120KOL2005		METHOD OF ACCESSING UNIT OF DATA STORED IN A STORAGE ENVIRONMENT INCLUDING A PLURALITY OF STORAGE CLUSTERS	EMC Corporation
IN1260DELNP20 10		SYSTEM AND METHOD FOR REMOTE ASYNCHRONOUS DATA REPLICATION	EMC Corporation
IN1281KOLNP20 03	IN233768	VIRTUAL STORAGE DEVICES	EMC Corporation
IN1335KOLNP20 10		POLICY BASED FILE MANAGEMENT	EMC Corporation
IN1381KOLNP20 03	IN218982	METHOD FOR SELECTING A RESOURCE FROM A PLURALITY OF RESOURCES (as amended 2 August 2006)	EMC Corporation

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Number	Number	Title	Owner
IN1492KOLNP20 06	IN255670	VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
IN1554KOLNP20 07	IN268379	METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT IN A FILE SYSTEM	EMC Corporation
IN1617CHE2015		STORAGE SYSTEM UPGRADE	EMC Corporation
IN1648KOLNP20	IN225420	METHOD OF ORDERING DATA WRITES	EMC Corporation
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IN201641010710		STORAGE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
IN2390/DELNP/2 009		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS IN A MULTI-PATH ENVIRONMENT	EMC Corporation
IN2616KOLNP20 07	IN267258	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
IN2619KOLNP20 07	IN263976	METHOD OF DELETING FIRST CONTENT UNIT FROM STORAGE SYSTEM AND STORAGE SYSTEM THAT STORES FIRST CONTENT UNIT	EMC Corporation
IN3121CHENP20 11		DELTA COMPRESSION AFTER IDENTITY DEDUPLICATION	EMC Corporation
IN3418KOLNP20 06		LOW COST FLEXIBLE NETWORK ACCESSED STORAGE ARCHITECTURE	EMC Corporation
IN3755KOLNP20 08	IN268895	ACCESSING DATA STORAGE DEVICES	EMC Corporation
IN3788KOLNP20 06		METHODS AND APPARATUS FOR MANAGING THE REPLICATION OF CONTENT	EMC Corporation
IN3920KOLNP20 08		METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
IN4442CHE2013		CUSTOMER RELATIONSHIP MANAGEMENT (CRM) SYSTEM HAVING A RULES ENGINE FOR PROCESSING SALES PROGRAM RULES	EMC Corporation
IN500KOL2005	IN252579	TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
IN6007CHENP20 09		AUTOMATED INFORMATION LIFE-CYCLE MANAGEMENT WITH THIN PROVISIONING	EMC Corporation
IN6568CHENP20 11		DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
IN6638CHE2015		ACCESSING A VIRTUAL VOLUME ON A STORAGE ARRAY	EMC Corporation
IN6639CHE2015		PROVIDING STORAGE TECHNOLOGY INFORMATION TO IMPROVE DATABASE PERFORMANCE	EMC Corporation
IN6704CHE2014		PASSIVE SAN DISCOVERY	EMC Corporation
IN6909DEL2009		SEEDING REPLICATION	EMC Corporation
IN7172DELNP20 09		CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
IN749KOL2004	IN255523	METHOD AND APPARATUS FOR DATA RETENTION IN A STORAGE SYSTEM	EMC Corporation
IN750KOL2004	IN212609	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
IN7560/DELNP/2 008		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation

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Number	Number	Title	Owner
IN970CHENP201 0		SYSTEM AND METHOD FOR PROVIDING WRITE- ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
INPCT2001871K OL	IN219545	METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
IT(EP)90916922. 9	IT(EP)04978 89	METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
IT(EP)91309497.	IT(EP)04828 19	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation
IT91906246.3	IT0521924	METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
JP H09-533646	JP3958795	SYSTEM FOR CURRENTLY UPDATING THE DATABASE BY ONE HOST AND READING THE DATABASE BY DIFFERENT HOST FOR THE PURPOSE OF IMPLEMENTING DECISION SUPPORT FUNCTIONS	EMC Corporation
JP(DV)2007- 193889	JP4512620	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation
JP(DV1)2005092 587	JP4405935	METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM	EMC Corporation
JP(DV1)2006- 052397	JP4322260	HIERARCHICAL METHOD AND DEVICE FOR IDENTIFYING CHANGE IN DEVICE CHARACTERISTIC	EMC Corporation
JP(DV1)2007- 056645	JP(DV1)4543 051	REMOTE DATA FACILITY OVER AN IP NETWORK	EMC Corporation
JP(DV1)2009- 000128	JP5198294	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
JP09-543030		METHOD AND APPARATUS FOR INDEPENDENT AND SIMULTANEOUS ACCESS TO A COMMON DATA SET	EMC Corporation
JP16346696	JP3953549	MULTIPROCESSOR CLUSTER MEMBERSHIP MANAGER FRAMEWORK	EMC Corporation
JP16351596	JP3836187	OPERATING SYSTEM FOR A NON-UNIFORM MEMORY ACCESS MULTIPROCESSOR SYSTEM	EMC Corporation
JP2000-130681	JP3796391	EXTENT-BASED FILE SYSTEMS WITH VERSATILE INDIRECTION OR MULTIPLE VOLUMES	EMC Corporation
JP2000-236261	JP3712922	METHOD FOR MAKING INDEPENDENT DATA COPIES IN A DATA PROCESSING SYSTEM	EMC Corporation
JP2000-291217	JP4727800	DIGITAL DATA STORAGE SUBSYSTEM INCLUDING DIRECTORY FOR EFFICIENTLY PROVIDING FORMATTING INFORMATION FOR STORED RECORDS	EMC Corporation
JP2000-321949	JP3860407	LOAD BALANCING ON DISK ARRAY STORAGE DEVICE	EMC Corporation
JP2000-330866	JP3839655	SEGMENTING CACHE TO PROVIDE VARYING SERVICE LEVELS	EMC Corporation

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Number	Number	Title	Owner
JP2000-404617	JP3741609	METHOD AND DEVICE FOR PROCESSING DATA TO ACCESS INDEPENDENTLY OF DUPLICATED DATA	EMC Corporation
JP2000-513192	JP4109416	DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
JP2000-557189	JP3745961	METHOD & APPARATUS FOR AUTHENTICATING CONNECTIONS TO A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
JP2000-557195	JP3779154	METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
JP2000-558454	JP3697395	METHOD & APPARATUS FOR STORING DIVERSE DATA STRUCTURES	EMC Corporation
JP2000-567999	JP3860714	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
JP2000-582895	JP3866038	METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT A PHYSICAL LEVEL	EMC Corporation
JP2000-591519	JP	DATA STORAGE SYSTEM	EMC Corporation
JP2000-600177	JP3769190	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
JP20010532367		SYSTEM AND METHOD FOR SECURE ELECTRONIC TRANSACTIONS	EMC Corporation
JP20010560836	JP4856344	SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
JP20010560878	JP4846156	HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
JP2001-099638	JP4309600	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD AND REDUNDANT SWITCHING NETWORKS	EMC Corporation
JP2001-099693	JP4350319	DATA STORAGE SYSTEM HAVING SEPARATE DATA TRANSFER SECTION AND MESSAGE NETWORK WITH PLURAL DIRECTORS ON A COMMON PRINTED CIRCUIT BOARD	EMC Corporation
JP2001-507187	JP4191927	METHOD AND APPARATUS FOR IDENTIFYING NETWORK DEVICES ON A STORAGE NETWORK	EMC Corporation
JP2001-517262	JP4430846	REMOTE MIRRORING SYSTEM, DEVICE, AND METHOD	EMC Corporation
JP2001-520635	JP3732440	METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
JP2001-535759	JP5039263	MULTIPLE STORAGE ARRAY CONTROL	EMC Corporation
JP2001-541946	JP3718471	CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
JP2001-552230	JP3968242	METHODS AND APPARATUS FOR ACCESSING SHARED DATA	EMC Corporation
JP2001-576582	JP4166472	METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation

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Number	Number	Title	Owner
JP2002-283820	JP4040411	METHODS AND APPARATUS FOR REPRESENTING RESOURCES IN A COMPUTING SYSTEM ENVIRONMENT	EMC Corporation
JP2002-330684	JP3779257	METHOD FOR REVERSING A COMMUNICATION PATH BETWEEN STORAGE DEVICES	EMC Corporation
JP2002-330916		HIERARCHICAL APPROACH TO IDENTIFYING CHANGING DEVICE CHARACTERISTICS	EMC Corporation
JP2002-507375	JP4885406	DATA STORAGE SYSTEM HAVING POINT-TO- POINT CONFIGURATION	EMC Corporation
JP2002-509878	JP3730620	METHOD AND APPARATUS FOR ENHANCING RECOVERY OPERATIONS IN DISK ARRAY STORAGE DEVICES (Consistent Split and Consistent Snap)	EMC Corporation
JP2002-511077	JP3749224	MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
JP2002-540319	JP4263477	SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
JP2002-541538	JP3810738	ADAPTIVE PRE-FETCHING OF DATA FROM A DISK	EMC Corporation
JP2002551706	JP4500490	METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
JP2002-551742	JP4142438	RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SYSTEMS	EMC Corporation
JP2002574508	JP4348087	NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation
JP20030517804	JP4504677	SYSTEM AND METHODS FOR PROVIDING METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE DEVICES	EMC Corporation
JP2003-509318	4744804	INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
JP2003-538922	JP4264001	ENFORCING QUALITY OF SERVICE IN A STORAGE NETWORK	EMC Corporation
JP2003-550066	JP4181044	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
JP2003-580998	JP4364650	DATA STORAGE SYSTEM	EMC Corporation
JP20040553414	JP4639084	CRYPTOGRAPHIC METHODS AND APPARATUS FOR SECURE AUTHENTICATION	EMC Corporation
JP20040553816	JP4464279	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
JP2004-355472	JP4372671	METHODS AND APPARATUS FOR GENERATING A CONTENT ADDRESS TO INDICATE DATA UNITS WRITTEN TO A STORAGE SYSTEM PROXIMATE IN TIME	EMC Corporation
JP2004549924	JP4648003	METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
JP2004-563677		AUTOMATED MEDIA MANAGEMENT	EMC Corporation
JP2004-563678		RESOURCE ALLOCATION AWARE QUEUING OF REQUESTS FOR MEDIA RESOURCES	EMC Corporation
JP2005189105		TRIANGULAR ASYNCHRONOUS REPLICATION	EMC Corporation
JP20060525528		DATA MESSAGE MIRRORING AND REDIRECTION	EMC Corporation
JP2006526341	JP4778899	SYSTEM AND METHOD FOR RISK BASED	EMC Corporation

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		AUTHENTICATION	3 00 Table 10 Table 1
JP2006526361	JP5058600	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
JP2006533412		SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
JP2006535304		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
JP2007-549485	4705649	SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
JP2007-549511	JP4712816	SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
JP2007-551371	JP5081631	METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
JP2007-556314	JP4790731	DERIVATIVE SEEDS	EMC Corporation
JP2008-502972	JP5215840	ASYNCHRONOUS EVENT NOTIFICATION	EMC Corporation
JP2008-519541	JP4712873	CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
JP2008548759	JP5133260	CONTINUOUS BACKUP	EMC Corporation
JP20090261303	JP5096441	SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
JP2009-501704		METHOD AND SYSTEM FOR ARCHIVING DATA	EMC Corporation
JP2010-531015	JP5504165	ACCESS METHOD, CLIENT, COMPUTER SOFTWARE, AND SYSTEM FOR DATA FILE OBJECT*	EMC Corporation
JP2011212673		SYSTEM AND METHOD FOR REPRESENTING AND MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN TRANSCRIPTION TECHNIQUES	EMC Corporation
JP2011-547873	JP5335934	METHOD AND APPARATUS FOR PROCESSING DISTRIBUTED DATA	EMC Corporation
JP2012-014358	JP5451785	SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
JP2012-178384	JP5512760	HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
JP2012-503418	JP5693560	DATA REDISTRIBUTION IN DATA REPLICATION SYSTEMS	EMC Corporation
JP2012-523067	JP5373199	DATA PROCESSING SYSTEM USING CACHE- AWARE MULTIPATH DISTRIBUTION OF STORAGE COMMANDS AMONG CACHING STORAGE CONTROLLERS	EMC Corporation
JP2012-97071		METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
JP2015191066		METHOD AND SYSTEM FOR IMPROVING FLASH STORAGE UTILIZATION USING READ-THRESHOLD TABLES	EMC Corporation
JP2015555452	JP5932171	METHOD AND SYSTEM FOR OBJECT-BASED TRANSACTIONS IN A STORAGE SYSTEM	EMC Corporation
JP28922898	JP3583931	APPARATUS AND METHOD OF ACCESSING TARGET DEVICES ACROSS A BUS UTILIZING INITIATOR IDENTIFIERS	EMC Corporation
JP33929191	JP2959901	On-Line Reconstruction of a Failed Redundant Array System	EMC Corporation

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JP3-506033	JP2859960	DATA STORAGE APPARATUS AND METHOD	EMC Corporation
JP5033541997	JP3083853	METHOD FOR MANAGING GLOBALLY DISTRIBUTED SOFTWARE COMPONENTS	EMC Corporation
JP55044398	JP3792258	APPARATUS AND METHOD FOR BACKUP OF A DISK STORAGE SYSTEM	EMC Corporation
JP9901413		Magnetic Recording Unit	EMC Corporation
JP9901414		Magnetic Recording Unit	EMC Corporation
JP9903193		Magnetic Recording Device	EMC Corporation
JP9905921		Card-Type Electronic Device	EMC Corporation
JPH10-500593	JP4583507	SUPPLEMENTARY COMMUNICATIONS BETWEEN HOST PROCESSOR AND MASS STORAGE CONTROLLER	EMC Corporation
KR10-1998- 0700967	KR10- 0406479	DATA STORAGE SYSTEM	EMC Corporation
KR10-1998- 0703068	KR449981	STAGGERED STREAM SUPPORT FOR VIDEO ON DEMAND	EMC Corporation
KR10-1998- 0707420	KR10- 0674642	MULTI-HOST DECISION SUPPORT SYSTEM	EMC Corporation
KR10-2000- 7004529	KR10- 0655358	METHOD FOR EXCHANGING VOLUMES IN A DISK ARRAY STORAGE DEVICE	EMC Corporation
KR10-2000- 7009605	KR10- 0585414	DATA STORAGE SYSTEM	EMC Corporation
KR10-2000- 7009616	KR0560552	DATA STORAGE SYSTEM	EMC Corporation
KR10-2000- 7011519	KR10- 0562820	METHOD AND APPARATUS FOR CASCADING DATA THROUGH REDUNDANT DATA STORAGE UNITS	EMC Corporation
KR10-2000- 7015105	KR10- 0585368	METHOD AND APPARATUS FOR PROVIDING DATA MANAGEMENT FOR A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
KR102002701080 4	KR0860821	HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
KR102003700597 7	KR878861	SYSTEM FOR IDENTIFYING COMMON DIGITAL SEQUENCES	EMC Corporation
KR102003700729 5	KR608274	RESTORING MASS STORAGE DEVICE TO A PRIOR STATE IN RESPONSE TO PROCESSING INFORMATION	EMC Corporation
KR102003700746 6	KR10064317 9	RESTORATION OF DATA BETWEEN PRIMARY AND BACKUP SYSTEMS	EMC Corporation
KR10-2003- 7008210	KR0557399	METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
KR10-2003- 7016806	KR10- 0577314	MIRRORING NETWORK DATA TO ESTABLISH VIRTUAL STORAGE AREA NETWORK	EMC Corporation
KR10-2004- 7004501	KR10- 962055	SHARING OBJECTS BETWEEN COMPUTER SYSTEMS	EMC Corporation
KR102006700721 7	10-0807926	EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC KEY GENERATIONS	EMC Corporation
KR10-2007- 7010921	KR10- 1164700	CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
KR2000-7003200	KR10-	DYNAMIC MIRROR SERVICE POLICY	EMC Corporation

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	0563147		
KR2004-7008199	KR0560726	PRESERVING A SNAPSHOT OF SELECTED DATA OF A MASS STORAGE SYSTEM	EMC Corporation
KR2007-7012377	KR10- 1162398	CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
KR701742/1995	KR0207815	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
KR98-700461	KR10- 0379222	DYNAMIC LOAD BALANCING	EMC Corporation
NL(EDV1)84201 482.1	NL(EDV1)01 50522	HIERACHIAL MEMORY RING PROTECTION SYSTEM USING COMPARISIONS OF REQUESTED AND PREV	EMC Corporation
PCT/US1996/010 340		Method for managing globally distributed software components	EMC Corporation
PCT/US1996/011 202		METHOD AND APPARATUS FOR SYNCHRONIZING DATA TRANSMISSION WITH ON-DEMAND LINKS OF A NETWORK	EMC Corporation
PCT/US2007/061 798		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS	EMC Corporation
PCT2000003275		METHODS AND SYSTEMS FOR IMPLEMENTING SHARED DISK ARRAY MANAGEMENT FUNCTIONS	EMC Corporation
PCT2001009440		METHOD AND SYSTEM FOR PROVIDING MULTIMEDIA INFORMATION ON DEMAND OVER WIDE AREA NETWORKS	EMC Corporation
PCTFR0101324		BACKUP AND RESTORE SYSTEM FOR DATA DERIVED FROM A PLURALITY OF HOST EQUIPMENT IN HETEROGENOUS ENVIRONMENT	EMC Corporation
PCTFR0102381		METHOD FOR SAVING COMPUTER DATA	EMC Corporation
PCTFR0102420		VIRTUAL STORAGE SYSTEM	EMC Corporation
PCTIB0001354		SYSTEM AND METHOD FOR SECURE STORAGE, TRANSFER AND RETRIEVAL OF CONTENT ADDRESSABLE INFORMATION	EMC Corporation
PCTIB200600406 2		MAINTAINING WRITE ORDER FIDELITY ON A MULTI-WRITER SYSTEM	EMC Corporation
PCTIB201200308 1		PROVISIONING STORAGE RESOURCES BASED ON AN EXPERT SYSTEM	EMC Corporation
PCTIB201200308 4		POLAR CODES FOR EFFICIENT ENCODING AND DECODING IN REDUNDANT DISK ARRAYS	EMC Corporation
PCTIB201300108 4		CONGESTION AVOIDANCE AND CONTROL FOR UPD BASED PROTOCOLS	EMC Corporation
PCTIB201300108		MANAGING PROVISIONING OF STORAGE RESOURCES	EMC Corporation
PCTIB201300109 1		LOSSLESS COLOR IMAGE COMPRESSION ADAPTIVELY USING SPATIAL PREDICTION OR INTER-COMPONENT PREDICTION	EMC Corporation
PCTIB201300118 8		LOAD BALANCING ON DISKS IN RAID BASED ON LINEAR BLOCK CODES	EMC Corporation
PCTIB201300120 6		OFFLOADING RAID UPDATE OPERATIONS TO DISK CONTROLLERS	EMC Corporation
PCTIB9900096		CONTENT ADDRESSABLE INFORMATION ENCAPSULATION, REPRESENTATION, AND	EMC Corporation

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Number	Number	Title	Owner
		TRANSFER	
PCTIB9900101		ACCESS TO CONTENT ADDRESSABLE DATA OVER A NETWORK	EMC Corporation
PCTIL200200018 6		TRANSACTION SYSTEM	EMC Corporation
PCTIL200300828		APPARATUS AND METHOD FOR INFORMATION RECOVERY QUALITY ASSESSMENT IN A COMPUTER SYSTEM	EMC Corporation
PCTIL200600025 4		SYSTEM AND METHOD FOR DETECTING AND MITIGATING DNS SPOOFING TROJANS	EMC Corporation
PCTIL200600037 6		SYSTEM AND METHOD FOR DETECTING A PROXY BETWEEN A CLIENT AND SERVER	EMC Corporation
PCTIL200600112 5		SYSTEM AND METHOD FOR CONDUCTING SECURE TRANSACTIONS	EMC Corporation
PCTIL201205031 4		METHODS AND SYSTEMS OF MANAGING A DISTRIBUTED REPLICA BASED STORAGE	EMC Corporation
PCTJP0003837		Card-Type Magnetic Recording Device	EMC Corporation
PCTJP0003911		Card Type Magnetic Recording Device	EMC Corporation
PCTJP199600223 5		Magnetic Disk Cartridge	EMC Corporation
PCTRU20100008 15		DYNAMIC COMPRESSION OF AN I/O BLOCK	EMC Corporation
PCTRU20110001 96		RETRIEVING DATA FROM DATA STORAGE SYSTEMS	EMC Corporation
PCTRU20110009 53		SUPERVISING A DATA STORAGE SYSTEM	EMC Corporation
PCTRU20120005 20		REDUNDANT DISK ENCODING VIA ERASURE DECODING	EMC Corporation
PCTRU20120005 21		DECISION PROCEDURE FOR CUSTOMER ISSUE RESOLUTION	EMC Corporation
PCTRU20120007 84		ENVIRONMENTAL ALERT FOR COMPUTER SYSTEMS	EMC Corporation
PCTRU20120010 19		STORAGE RESOURCE USAGE ANALYSIS FOR CUSTOMIZED APPLICATION OPTIONS	EMC Corporation
PCTRU20130007 82		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND OBJECTIVE FUNCTIONS	EMC Corporation
PCTRU20130008 46		DYNAMIC MALICIOUS APPLICATION DETECTION IN STORAGE SYSTEMS	EMC Corporation
PCTRU20130008 47		FLEXIBLE LICENSING ARCHITECTURE	EMC Corporation
PCTRU20130009 06		RESOURCE PROVISIONING BASED ON LOGICAL PROFILES AND PIECEWISE OBJECTIVE FUNCTIONS	EMC Corporation
PCTRU20130011 51		ASYNCHRONOUS NOTIFICATION METHOD FOR DATA STORAGE SYSTEMS	EMC Corporation
PCTRU20140002 29		PROVISIONING RESOURCES FOR DATACENTERS	EMC Corporation
PCTRU20140004 70		TECHNIQUES FOR AUTOMATICALLY FREEING SPACE IN A LOG-STRUCTURED STORAGE SYSTEM	EMC Corporation
PCTRU20140007 28		POLICY BASED PROVISIONING OF STORAGE SYSTEM RESOURCES	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
PCTRU20140007		COMPLEXITY-ADAPTIVE COMPRESSION OF	EMC Corporation
32		COLOR IMAGES USING BINARY ARITHMETIC	
		CODING	
PCTRU20140009		METADATA STRUCTURES FOR LOW LATENCY	EMC Corporation
71		AND HIGH THROUGHOUT INLINE DATA	
		COMPRESSION	
PCTRU20140010		METHOD AND APPARATUS FOR IT APPLIANCE	EMC Corporation
15		CONTROL	
PCTRU2015		AUGMENTED REALITY SYSTEM AND METHOD	EMC Corporation
PCTRU20150001		TECHNIQUES FOR SYNCHRONIZATION	EMC Corporation
62		MANAGEMENT	
PCTRU20150001		SMART LOGGING OF TRACE DATA FOR STORAGE	EMC Corporation
78		SYSTEMS	
PCTRU20150001		MANAGING CACHE COMPRESSION IN DATA	EMC Corporation
90		STORAGE SYSTEMS	F
PCTRU20150002		NETWORK ADDRESS SHARING IN A	EMC Corporation
02		MULTITENTANT, MONOLITHIC APPLICATION	F
		ENVIRONMENT	
PCTRU20150004		METHOD, APPRATUS AND COMPUTER PROGRAM	EMC Corporation
08		PRODUCT FOR EVALUATING DATA STORAGE	
		SYSTEMS FOR ENERGY EFFICIENY	
PCTRU20150004		CACHE DATA PLACEMENT FOR COMPRESSION IN	EMC Corporation
09		DATA STORAGE SYSTEMS	Zivic corporation
PCTRU20150006		AUTOMATED LOAD BALANCING FOR STORAGE	EMC Corporation
25		SYSTEMS BASED ON PREDICTIVE ANALYSIS OF	ENIC Corporation
23		WORKLOAD HISTORY	
PCTRU20150006		SELECTIVE COMPRESSION IN DATA STORAGE	EMC Corporation
31		SYSTEMS	ENIC Corporation
PCTRU20150009		EFFICIENT DEDUPLICATION OF LOGICAL UNITS	EMC Corporation
49		EFFICIENT DEDUTEICATION OF EOGICAL UNITS	ENIC Corporation
PCTRU20160001		BACKUP SERVER SELECTION BASED ON DATA	EMC Corporation
76		COMMONALITY	Livic Corporation
PCTRU20160001		VIRTUAL MACHINE STORAGE MANAGEMENT	EMC Corporation
81		QUEUE	Livic Corporation
PCTRU20160003		TECHNIQUES FOR ACCURATELY APPRISING A	EMC Corporation
93		USER OF PROGRESS IN	Livic Corporation
73		BOOTING A VIRTUAL APPLIANCE	
PCTRU20160004		ARRANGING SSD RESOURCES BASED ON	EMC Corporation
06		ESTIMATED ENDURANCE	Livic Corporation
PCTSE20040014		EFFICIENT MANAGEMENT OF CRYPTOGRAPHIC	EMC Corporation
66		KEY GENERATIONS	Livic Corporation
PCTUS0003522		A FUZZY COMMITMENT SCHEME LOGIQUE DE	EMC Corporation
1 0 1 0 30003 322		VALIDATION FLOUE	Envic Corporation
PCTUS0013733		FAULT TOLERANT PARITY GENERATION	EMC Corporation
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PCTUS0017557		METHOD AND APPARATUS FOR IDENTIFYING NETWORK DEVICES ON A STORAGE NETWORK	EMC Corporation
PCTUS0017779		DATA STORAGE SYSTEM	EMC Corporation
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PCTUS0017799		FIBRE CHANNEL BY-PASS	EMC Corporation
PCTUS0017942		DATA INTEGRITY MANAGEMENT FOR DATA	EMC Corporation
		STORAGE SYSTEMS	
PCTUS0019654		SYSTEM AND METHOD FOR CERTIFICATE	EMC Corporation
		EXCHANGE	

Application	Registration		
Number	Number	Title	Owner
PCTUS0019654		SYSTEM AND METHOD FOR CERTIFICATE EXCHANGE	EMC Corporation
PCTUS0019656		SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
PCTUS0019656		SYSTEM AND METHODS FOR MAINTAINING AND DISTRIBUTING PERSONAL SECURITY DEVICES	EMC Corporation
PCTUS0024007		CRASH RECOVERY WITHOUT COMPLETE REMIRROR	EMC Corporation
PCTUS0024128		METHOD AND APPARATUS FOR MAINTAINING CONSISTENCY OF DATA STORED IN A GROUP OF MIRRORING DEVICES	EMC Corporation
PCTUS0024554		METHODS AND APPARATUS FOR FLEXIBLY ALLOCATING BANDWITH FOR A POINT-to-PONT, SERIAL, BIDIRECTIONAL COMMUNICAITON PATH	EMC Corporation
PCTUS0029807		METHOD AND APPARATUS FOR CONVERTING BETWEEN LOGICAL AND PHYSICAL MEMORY SPACE IN A RAID SYSTEM	EMC Corporation
PCTUS0041708		MULTIPLE STORAGE ARRAY CONTROL	EMC Corporation
PCTUS0104760		SYSTEM AND METHOD FOR REDUNDANT ARRAY NETWORK STORAGE	EMC Corporation
PCTUS0104763		HASH FILE SYSTEM AND METHOD FOR USE IN A COMMONALITY FACTORING SYSTEM	EMC Corporation
PCTUS0111792		METHOD AND APPARATUS FOR PRESENTING INFORMATION TO A USER OF A COMPUTER SYSTEM	EMC Corporation
PCTUS0112297		STORAGE NETWORK CABLING VERIFICATION SYSTEM	EMC Corporation
PCTUS0118809		MULTIPATH MULTIHOP REMOTE DATA FACILITY	EMC Corporation
PCTUS0121589		METHOD AND APPARATUS FOR ENHANCING RECOVERY OPERATIONS IN DISK ARRAY STORAGE DEVICES (Consistent Split and Consistent Snap)	EMC Corporation
PCTUS0129145		METHOD AND APPARATUS FOR RECONFIGURING STRIPED LOGICAL DEVICES IN A DISK ARRAY STORAGE	EMC Corporation
PCTUS0129264		SWITCH-BASED ACCELERATION OF COMPUTER DATA STORAGE EMPLOYING AGGREGATIONS OF DISK ARRAYS	EMC Corporation
PCTUS0129532		SYSTEM AND METHOD FOR HEIRARCHICAL DATA STORAGE	EMC Corporation
PCTUS0141175		DATA STORAGE SYSTEM HAVING POINT-TO- POINT CONFIGURATION	EMC Corporation
PCTUS0146889		METHOD AND APARATUS FOR PREVENTING UNAUTHORIZED ACCESS BY A NETWORK DEVICE	EMC Corporation
PCTUS0147505		NETWORK ADAPTER AND METHOD OF USING SAME	EMC Corporation
PCTUS0149600		METHOD OF IMPROVING THE AVAILABILITY OF COMPUTER CLUSTERING SYSTEMS THROUGH THE USE OF A NETWORK MEDIUM LINK STATE	EMC Corporation
PCTUS02008159		NETWORK FILE SHARING METHOD AND SYSTEM	EMC Corporation

Application	Registration		
Number	Number T	itle	Owner
PCTUS0204034	E	YSTEM AND METHOD OF INDEXING UNIQUE LECTRONIC MAIL MESSAGES AND USES FOR THE AME	EMC Corporation
PCTUS0212444	II N	NTEGRATED PROCEDURE FOR PARTITIONING ETWORK DATA SERVICES AMONG MULTIPLE UBSCRIBERS	EMC Corporation
PCTUS0230635	V	TRTUALIZATION IN A STORAGE SYSTEM	EMC Corporation
PCTUS0230841		HARING OBJECTS BETWEEN COMPUTER YSTEMS	EMC Corporation
PCTUS0230889	N	NFORCING QUALITY OF SERVICE IN A STORAGE ETWORK	EMC Corporation
PCTUS0230914		OOLING AND PROVISIONING STORAGE ESOURCES IN A STORAGE NETWORK	EMC Corporation
PCTUS0230946		FFICIENT SEARCH FOR MIGRATION AND PURGE ANDIDATES	EMC Corporation
PCTUS0230970	S	ERVERLESS STORAGE SERVICES	EMC Corporation
PCTUS0230974	S	TORAGE SWITCH FOR STORAGE AREA NETWORK	EMC Corporation
PCTUS0231928	E	FFICIENT MANAGEMENT OF LARGE FILES	EMC Corporation
PCTUS0237309		RESERVING A SNAPSHOT OF SELECTED DATA OF MASS STORAGE SYSTEM	EMC Corporation
PCTUS03040223		ESOURCE ALLOCATION AWARE QUEUING OF EQUESTS FOR MEDIA RESOURCES	EMC Corporation
PCTUS0309112	D	ATA STORAGE SYSTEM	EMC Corporation
PCTUS0311158	V	TRTUAL STORAGE DEVICES	EMC Corporation
PCTUS0311272	V	TRTUAL STORAGE DEVICES	EMC Corporation
PCTUS0327442	D	YNAMIC RDF GROUPS	EMC Corporation
PCTUS0337928		DENTITY AUTHENTICATION SYSTEM AND METHOD	EMC Corporation
PCTUS0339930	A	UTOMATED MEDIA LIBRARY CONFIGURATION	EMC Corporation
PCTUS0340222	A	UTOMATED MEDIA MANAGEMENT	EMC Corporation
PCTUS05003686	0	TETHOD AND APPARATUS OF AUTHENTICATION OF USERS AND COMMUNICATIONS RECEIVED ROM COMPUTER SYSTEMS	EMC Corporation
PCTUS05018102		YSTEM AND METHOD OF FRAUD REDUCTION	EMC Corporation
PCTUS05035200	F	ILE INDEX PROCESSING	EMC Corporation
PCTUS05035212	l)	NDEX PROCESSING	EMC Corporation
PCTUS05045921		ONSUMER INTERNET AUTHENTICATION ERVICE	EMC Corporation
PCTUS0905429		ELTA COMPRESSION AFTER IDENTITY EDUPLICATION	EMC Corporation
PCTUS1000947	D	ATA REDISTRIBUTION IN DATA REPLICATION YSTEMS	EMC Corporation
PCTUS1348841	F	ORMAT IDENTIFICATION FOR FRAGMENTED YTE ALIGNED INTEGER IMAGE DATA	EMC Corporation
PCTUS19910030 34	П	IETHOD AND APPARATUS FOR PERSONAL DENTIFICATION	EMC Corporation
PCTUS19910030 34	II	IETHOD AND APPARATUS FOR PERSONAL DENTIFICATION	EMC Corporation
PCTUS19910056 79	F	AULT TOLERANT COMPUTER SYSTEM	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS19910125 1		Method and Apparatus for Transferring Data through a Staging Memory	EMC Corporation
PCTUS19910125 2		DATA STORAGE APPARATUS AND METHOD	EMC Corporation
PCTUS19910131 0		METHOD AND APPARATUS FOR SCHEDULING ACCESS TO A CSMA COMMUNICATION MEDIUM	EMC Corporation
PCTUS19930105 85		METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
PCTUS19940432 6		REMOTE DATA MIRRORING	EMC Corporation
PCTUS19950094 69		COMPUTER METHOD AND APPARATUS FOR ASYNCHRONOUS ORDERED OPERATIONS	EMC Corporation
PCTUS19950165 43		METHOD AND APPARATUS TO SECURE DISTRIBUTED DIGITAL DIRECTORY OBJECT CHANGES	EMC Corporation
PCTUS19950642 6		APPARATUS AND METHOD FOR EVENT CORRELATION AND PROBLEM REPORTING	EMC Corporation
PCTUS19960112 63		System for replicating and associating file types with application programs among plurality of partitions in a server	EMC Corporation
PCTUS19960197 3		INTEGRITY PROTECTION FOR PARITY CALCULATION FOR RAID PARITY CACHE	EMC Corporation
PCTUS19960534 2		METHOD AND APPARATUS FOR STORING AND RETRIEVING ERROR CHECK INFORMATION	EMC Corporation
PCTUS19960748 4		DISK ARRAY SYSTEM INCLUDING A DUAL- PORTED STAGING MEMORY AND CONCURRENT REDUNDANCY CALCULATION CAPABILITY	EMC Corporation
PCTUS19961178 1		DYNAMIC LOAD BALANCING	EMC Corporation
PCTUS19970436 6		SYSTEM FOR CURRENTLY UPDATING THE DATABASE BY ONE HOST AND READING THE DATABASE BY DIFFERENT HOST FOR THE PURPOSE OF IMPLEMENTING DECISION SUPPORT FUNCTIONS	EMC Corporation
PCTUS19970824 3		SUPPLEMENTARY COMMUNICATIONS BETWEEN HOST PROCESSOR AND MASS STORAGE CONTROLLER	EMC Corporation
PCTUS19991352 2		METHOD & APPARATUS FOR AUTHENTICATING CONNECTIONS TO A STORAGE SYSTEM COUPLED TO A NETWORK	EMC Corporation
PCTUS19991497 4		Readable indelible mark on storage media	EMC Corporation
PCTUS19992169 0		Latent Illuminance Discrimination Marker with Reflective Layer for Data Storage Cartridges	EMC Corporation
PCTUS19992949 9		APPARATUS AND METHODS FOR OPERATING A COMPUTER STORAGE SYSTEM	EMC Corporation
PCTUS20000211 93		REMOTE MIRRORING SYSTEM, DEVICE, AND METHOD	EMC Corporation
PCTUS20000317 35		METHOD AND APPARATUS FOR MANAGING INFORMATION RELATED TO STORAGE ACTIVITIES OF DATA STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
PCTUS20000414	T. WILLIAM	SYSTEM AND METHOD FOR SECURE ELECTRONIC	EMC Corporation
80 PCTUS20010019		TRANSACTIONS METHODS AND APPARATUS FOR ACCESSING	EMC Corporation
6		SHARED DATA	Livic Corporation
PCTUS20010045		SYSTEM AND METHOD FOR REPRESENTING AND	EMC Corporation
64		MAINTAINING REDUNDANT DATA SETS UTILIZING DNA TRANSMISSION ADN	
		TRANSCRIPTION TECHNIQUES	
PCTUS20010047		SYSTEM AND METHOD FOR INTELLIGENT,	EMC Corporation
62		GLOBALLY DISTRIBUTED NETWORK STORAGE	ED (C) C
PCTUS20010047 68		SYSTEM AND METHOD FOR DISTRIBUTED MANAGEMENT OF DATA STORAGE	EMC Corporation
PCTUS20010122		CONTROLLER FAIL-OVER WITHOUT DEVICE	EMC Corporation
98		BRING-UP	
PCTUS20010401 19		SYSTEM AND METHOD FOR DATA PROTECTION WITH MULTIDIMENSIONAL PARITY	EMC Corporation
PCTUS20010504		RESTORING MASS STORAGE DEVICE TO A PRIOR	EMC Corporation
95		STATE IN RESPONSE TO PROCESSING	
PCTUS20013130		INTERRUPTION SYSTEM FOR IDENTIFYING COMMON DIGITAL	EMC Corporation
6		SEQUENCES	-
PCTUS20014508		REMOTE MIRRORING IN A SWITCHED	EMC Corporation
2 PCTUS20014543		ENVIRONMENT ADAPTIVE PRE-FETCHING OF DATA FROM A DISK	EMC Corporation
7		ADAI IIVE I RETEINING OF DATA TROWN A DISK	Livic corporation
PCTUS20014899		DUAL CHANNEL RESTORATION OF DATA	EMC Corporation
1		BETWEEN PRIMARY AND BACKUP SERVERS	EMC C
PCTUS20020022 848		NETWORK SECURITY DEVICES AND METHODS	EMC Corporation
PCTUS20020048 77		METHOD OF AUTHENTICATING A PAYMENT ACCOUNT USER	EMC Corporation
PCTUS20020247		SYSTEM AND METHODS FOR PROVIDING	EMC Corporation
28		METADATA FOR TRACKING OF INFORMATION ON A DISTRIBUTED FILE SYSTEM OF STORAGE	
		DEVICES	
PCTUS20020371		DYNAMIC FILE ACCESS CONTROL AND	EMC Corporation
20 PCTUS20021416		MANAGEMENT SELECTION OF A RESOURCE IN A DISTRIBUTED	EMC Corporation
3		COMPUTER SYSTEM	Livie Corporation
PCTUS20021687 1		INFORMATION REPLICATION SYSTEM HAVING ENHANCED ERROR DETECTION AND RECOVERY	EMC Corporation
PCTUS20022007		MIRRORING NETWORK DATA TO ESTABLISH	EMC Corporation
9		VIRTUAL STORAGE AREA NETWORK	
PCTUS20023055 7		PACKET CLASSIFICATION IN A STORAGE SYSTEM	EMC Corporation
PCTUS20023091 2		PROTOCOL TRANSLATION IN A STORAGE SYSTEM	EMC Corporation
PCTUS20030250 99		CRYPTOGRAPHIC METHODS AND APPARATUS FOR SECURE AUTHENTICATION	EMC Corporation
PCTUS20030278		Disk-Based Archival Data Storage System and Method	EMC Corporation
5			

Application	Registration		
Number	Number	Title	Owner
PCTUS20030366 99		SYSTEMS AND METHODS FOR RESTRIPING FILES IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
PCTUS20032399 8		METHOD AND APPARATUS FOR PROVISIONING STORAGE RESOURCES	EMC Corporation
PCTUS20040025 383		Method for embedding a server into a storage subsystem	EMC Corporation
PCTUS20040034 98		VIRTUAL ORDERED WRITES	EMC Corporation
PCTUS20040057		DATA STORAGE SYSTEM	EMC Corporation
PCTUS20040088 25		SOFT ADDRESSING FOR DISK DRIVE ENCLOSURES	EMC Corporation
PCTUS20040098 36		METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING	EMC Corporation
PCTUS20040099 46		METHOD AND APPARATUS FOR SYSTEM MANAGEMENT USING CODEBOOK CORRELATION WITH SYMPTOM EXCLUSION	EMC Corporation
PCTUS20040143 79		METHOD AND APPARATUS FOR AUTHENTICATION OF USERS AND WEB SITES	EMC Corporation
PCTUS20040218 46		SECURE SEED GENERATION PROTOCOL	EMC Corporation
PCTUS20040257 54		DATA STORAGE SYSTEM HAVING SHARED RESOURCE	EMC Corporation
PCTUS20040296 88		SYSTEM AND METHOD FOR AUTHENTICATION	EMC Corporation
PCTUS20040297 76		SYSTEM AND METHOD PROVIDING DISCONNECTED AUTHENTICATION	EMC Corporation
PCTUS20040343 30		VIRTUAL ORDERED WRITES FOR MULTIPLE STORAGE DEVICES	EMC Corporation
PCTUS20040369 63		METHOD FOR MAPPING A FLAT NAMESPACE ONTO A HIERARCHICAL NAMESPACE USING LOCALITY OF REFERENCE CUES	EMC Corporation
PCTUS20040369 93		SYSTEM AND METHOD OF ADDRESSING EMAIL AND ELECTRONIC COMMUNICATION FRAUD	EMC Corporation
PCTUS20040378 87		DATA STORAGE SYSTEM	EMC Corporation
PCTUS20040412 40		TECHNIQUES FOR MAINTAINING OPERATION OF A DATA STORAGE SYSTEM DURING A FAILURE	EMC Corporation
PCTUS20040412 84		VIRTUAL VOICEPRINT SYSTEM AND METHOD FOR GENERATING VOICEPRINTS	EMC Corporation
PCTUS20040412 98		SYSTEM AND METHOD FOR PROVIDING IMPROVED CLAIMANT AUTHENTICATION	EMC Corporation
PCTUS20041648 0		SYSTEM AND METHOD FOR TRANSFERING DATA FROM A SOURCE MACHINE TO A TARGET MACHINE	EMC Corporation
PCTUS20042917 4		DATA MESSAGE MIRRORING AND REDIRECTION	EMC Corporation
PCTUS20042969 0		SYSTEM AND METHOD FOR RISK BASED AUTHENTICATION	EMC Corporation
PCTUS20050024 203		Systems and methods for providing distributed cache coherence	EMC Corporation

Application	Registration	mer.a	
Number	Number	Title	Owner
PCTUS20050050 9		SYSTEMS AND METHODS FOR PARALLEL COMMUNICATION	EMC Corporation
PCTUS20050143 02		STORAGE SWITCH TRAFFIC BANDWIDTH CONTROL	EMC Corporation
PCTUS20050143 08		ONLINE INITIAL MIRROR SYNCHRONIZATION AND MIRROR SYNCHRONIZATION VERIFICATION IN STORAGE AREA NETWORKS	EMC Corporation
PCTUS20050227 95		LOW COST FLEXIBLE NETWORK ACCESSED STORAGE ARCHITECTURE	EMC Corporation
PCTUS20050259 38		TRACKING OBJECTS MODIFIED BETWEEN BACKUP OPERATIONS	EMC Corporation
PCTUS20050262 07		STORING DATA REPLICAS REMOTELY	EMC Corporation
PCTUS20050352 01		VIRTUAL ORDERED WRITES	EMC Corporation
PCTUS20050369 45		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS USING WEB SERVICES	EMC Corporation
PCTUS20050370 87		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS INCLUDING A VIRTUAL MACHINE	EMC Corporation
PCTUS20050370 88		CONFIGURING, MONITORING AND/OR MANAGING RESOURCE GROUPS	EMC Corporation
PCTUS20050403 76		IMPLEMENTING APPLICATION SPECIFIC MANAGEMENT POLICIES ON A CONTENT ADDRESSED STORAGE DEVICE	EMC Corporation
PCTUS20050403 77		CONTENT ADDRESSED STORAGE DEVICE CONFIGURED TO MAINTAIN CONTENT ADDRESS MAPPING	EMC Corporation
PCTUS20050461 11		BACKUP INFORMATION MANAGEMENT	EMC Corporation
PCTUS20050464 33		METHOD TO PERFORM PARALLEL DATA MIGRATION IN A CLUSTERED STORAGE ENVIRONMENT	EMC Corporation
PCTUS20050464 72		MULTI-FUNCTION EXPANSION SLOTS FOR A STORAGE SYSTEM	EMC Corporation
PCTUS20050464 90		SYSTEMS AND METHODS FOR DYNAMIC DATA BACKUP	EMC Corporation
PCTUS20050468 40		SYSTEMS AND METHODS FOR RESTORING DATA	EMC Corporation
PCTUS20060010 64		METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
PCTUS20060010 65		METHODS AND APPARATUS FOR MANAGING DELETION OF DATA	EMC Corporation
PCTUS20060010 73		ASYNCHRONOUS EVENT NOTIFICATION	EMC Corporation
PCTUS20060056 06		DERIVATIVE SEEDS	EMC Corporation
PCTUS20060064 74		CHECKPOINT AND CONSISTENCY MARKERS	EMC Corporation
PCTUS20060084 24		SECTOR-EDGE CACHE	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
PCTUS20060084 26		ASYNCHRONOUS DETECTION OF LOCAL EVENT BASED POINT-IN-TIME STATE OF LOCAL-COPY IN THE REMOTE-COPY IN A DELTA-SET ASYNCHRONOUS REMOTE REPLICATION	EMC Corporation
PCTUS20060111 29		TECHNIQUES FOR PROVIDING COMMUNICATION IN A DATA STORAGE SYSTEM USING A SINGLE IC FOR BOTH STORAGE DEVICE COMMUNICATIONS AND PEER-TO-PEER COMMUNICATIONS	EMC Corporation
PCTUS20060117 84		DATA STORAGE SYSTEM HAVING MEMORY CONTROLLER WITH EMBEDDED CPU	EMC Corporation
PCTUS20060141 80		METHODS AND APPARATUS FOR STORING CONTENT IN A FILE SYSTEM	EMC Corporation
PCTUS20060141 81		METHODS AND APPARATUS FOR MANAGING THE STORAGE OF CONTENT (TIME BASED DIRECTORY STRUCTURES IN CENTERA)	EMC Corporation
PCTUS20060209 27		MULTIPLEXING SYSTEM	EMC Corporation
PCTUS20060245 35		STORAGE DATA ENCRYPTION	EMC Corporation
PCTUS20060252 87		CREATION OF A SINGLE CLIENT SNAPSHOT USING A CLIENT UTILITY	EMC Corporation
PCTUS20060254 35		REDIRECTING AND MIRRORING OF TELEPHONIC COMMUNICATIONS	EMC Corporation
PCTUS20060308 65		SEARCHABLE BACKUPS	EMC Corporation
PCTUS20060312 02		DATA OBJECT SEARCH AND RETRIEVAL	EMC Corporation
PCTUS20060314 87		SNAPSHOT INDEXING	EMC Corporation
PCTUS20060322 21		INFORMATION PROTECTION METHOD AND SYSTEM	EMC Corporation
PCTUS20060323 79		COMPLIANCE PROCESSING OF RIGHTS MANAGED DATA	EMC Corporation
PCTUS20060396 38		FRAUDULENT TRANSACTIONS BY COLORING	EMC Corporation
PCTUS20060495 39		CONTINUOUS BACKUP USING A MIRROR DEVICE	EMC Corporation
PCTUS20060495 93		METHODS AND APPARATUS FOR CONFIGURING A STORAGE SYSTEM	EMC Corporation
PCTUS20061400 0		TRAVERSING DATA IN A REPEATABLE MANNER	EMC Corporation
PCTUS20062543 4		ENHANCED SERVICES PROVIDED USING COMMUNICATION REDIRECTION AND PROCESSING	EMC Corporation
PCTUS20063676 2		AUTHENTICATION METHOD AND APPARATUS UTILIZING PROOF-OF-AUTHENTICATION MODULE	EMC Corporation
PCTUS20070075 33		METHODS AND APPARATUS FOR TRANSFERRING CONTENT FROM A STORAGE SYSTEM	EMC Corporation
PCTUS20070075 36		ACCESSING DATA STORAGE DEVICES	EMC Corporation
PCTUS20070079 43		SMART CONTAINERS	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
PCTUS20070089		EFFICIENT DATA STORAGE USING RESEMBLANCE	EMC Corporation
89		OF DATA SEGMENTS	E) (C C
PCTUS20070141 48		DATABASE OFFLOAD PROCESSING	EMC Corporation
PCTUS20070621		SYSTEMS AND METHODS FOR OBTAINING ULTRA-	EMC Corporation
56		HIGH DATA AVAILABILITY AND GEOGRAPHIC	2e corporation
		DISASTER TOLERANCE	
PCTUS20070644 40		HIGH EFFICIENCY PORTABLE ARCHIVE	EMC Corporation
PCTUS20070686 61		AUTOMATED PRIORITY RESTORES	EMC Corporation
PCTUS20070810		CRYPTOGRAPHIC KEY MANAGEMENT SYSTEM	EMC Corporation
18		FACILITATING SECURE ACCESS OF DATA	
		PORTIONS TO CORRESPONDING GROUPS OF USERS	
PCTUS20080045		SEEDING REPLICATION	EMC Corporation
60		SEEDING REFERENCE	Elvic Corporation
PCTUS20080119 59		POLICY BASED FILE MANAGEMENT	EMC Corporation
PCTUS20080356		AUTOMATED INFORMATION LIFE-CYCLE	EMC Corporation
8		MANAGEMENT WITH THIN PROVISIONING	
PCTUS20080410		CLUSTER STORAGE USING SUBSEGMENTING	EMC Corporation
4 PCTUS20080700		SYSTEM AND METHOD FOR PROVIDING WRITE-	EMC Composition
97		ONCE-READ-MANY (WORM) STORAGE	EMC Corporation
PCTUS20080754		DE-DUPLICATION IN VIRTUALIZED SERVER AND	EMC Corporation
67		VIRTUALIZED STORAGE ENVIRONMENTS	
PCTUS20087095		SYSTEM AND METHOD FOR REMOTE	EMC Corporation
5		ASYNCHRONOUS DATA REPLICATION	
PCTUS20090005		METHOD AND APPARATUS FOR PROCESSING	EMC Corporation
67		DISTRIBUTED DATA	
PCTUS20090382		SYSTEM, METHOD, AND APPARATUS FOR SINGLE	EMC Corporation
54		SIGN-ON AND MANAGING ACCESS TO RESOURCES	
D.C. T. T. C.		ACROSS A NETWORK	77.40.0
PCTUS20090549 65		METHOD AND APPARATUS FOR MANAGING DATA OBJECTS OF A DATA STORAGE SYSTEM	EMC Corporation
PCTUS20094178		MULTIPEER	EMC Corporation
6		MOLTHEER	Elvic Corporation
PCTUS20100016		SEGMENT DEDUPLICATION SYSTEM WITH	EMC Corporation
39		ENCRYPTION OF SEGMENTS	1
PCTUS20100017		SYSTEM AND METHOD FOR PROVIDING LONG-	EMC Corporation
64		TERM STORAGE FOR DATA	
PCTUS20100025		SNAPSHOTTING OF A PERFORMANCE STORAGE	EMC Corporation
93		SYSTEM IN A SYSTEM FOR PERFORMANCE	
		IMPROVEMENT OF A CAPACITY OPTIMIZED STORAGE SYSTEM	
PCTUS20100438		DATA PROCESSING SYSTEM USING CACHE-	EMC Corporation
21		AWARE MULTIPATH DISTRIBUTION OF STORAGE	
		COMMANDS AMONG CACHING STORAGE	
		CONTROLLERS	
PCTUS20100523		SYSTEMS AND METHODS FOR FACILITATING	EMC Corporation
49		DATA DISCOVERY	

Application	Registration		
Number	Number	Title	Owner
PCTUS20102246 6		SYSTEM AND METHOD FOR SECURE AND RELIABLE MULTI-CLOUD DATA REPLICATION	EMC Corporation
PCTUS20110004 24		INDEX SEARCHING USING A BLOOM FILTER	EMC Corporation
PCTUS20110016 04		TRANSMITTING FILESYSTEM CHANGES OVER A NETWORK	EMC Corporation
PCTUS20110225 78		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE- BROWSER ATTACKS	EMC Corporation
PCTUS20110267 20		SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
PCTUS20110536 82		OPTIMIZED RECOVERY	EMC Corporation
PCTUS20114221		DATA ACCESS DURING DATA RECOVERY	EMC Corporation
PCTUS20114411 5		SYSTEM AND METHOD FOR SUB-BAND DATA DEDUPLICATION FOR DISK STORAGE SUBSYSTEMS	EMC Corporation
PCTUS20116714 5		EFFICIENT STORAGE TIERING	EMC Corporation
PCTUS20120280 35		SYSTEM AND METHOD FOR MAINTAINING CONSISTENT POINTS IN FILE SYSTEMS USING A PRIME DEPENDENCY LIST	EMC Corporation
PCTUS20120280 37		TIME-BASED DATA PARTITIONING	EMC Corporation
PCTUS20120280 41		RESOURCE EFFICIENT SCALE-OUT FILE SYSTEMS	EMC Corporation
PCTUS20120701 88		EFFICIENT BACKUP REPLICATION	EMC Corporation
PCTUS20130614 78		SYSTEM AND METHOD FOR FULL VIRTUAL MACHINE BACKUP USING STORAGE SYSTEM FUNCTIONALITY	EMC Corporation
PCTUS20133328 0		STORAGE SYSTEM WITH INCREMENTAL MULTI- DIMENSIONAL RAID	EMC Corporation
PCTUS20134884 0		LOSSLESS COMPRESSION OF FRAGMENTED IMAGE DATA	EMC Corporation
PCTUS20136176 8		IDENTITY AND ACCESS MANAGEMENT	EMC Corporation
PCTUS20140165 96		DATA ANALYTICS PLATFORM OVER PARALLEL DATABASES AND DISTRIBUTED FILE SYSTEMS	EMC Corporation
PCTUS20147164 7		PARALLEL ON-PREMISES AND CLOUD-BASED AUTHENTICATION	EMC Corporation
PCTUS20156649 7		METHOD AND SYSTEM TO SEARCH LOGS THAT CONTAIN A MASSIVE NUMBER OF ENTRIES	EMC Corporation
PCTUS20161777 0		DISASTER RECOVERY AS A SERVICE	EMC Corporation
PCTUS20161777 2		SECURE CLOUD-BASED STORAGE OF DATA SHARED ACROSS FILE SYSTEM OBJECTS AND CLIENTS	EMC Corporation
PCTUS8904845		SYSTEM & METHOD FOR SHARING RESOURCES OF A HOST COMPUTER AMONG A PLURALITY OF	EMC Corporation

Application	Registration		_
Number	Number	Title	Owner
		REMOTE COMPUTERS	
PCTUS9002315		FAILURE-TOLERANT MASS STORAGE SYSTEM	EMC Corporation
PCTUS9003594		Method and Circuit for Programmably Selecting a Variable Sequence of Elements Using Write-Back (As amended)	EMC Corporation
PCTUS9003629		Method and Circuit for Decoding a Manchester Code Signal	EMC Corporation
PCTUS9006079		METHOD AND APPARATUS FOR SECURE IDENTIFICATION AND VERIFICATION	EMC Corporation
PCTUS9101253		METHOD AND APPARATUS FOR ASSIGNING SIGNATURES TO IDENTIFY MEMBERS OF A SET OF MASS OF STORAGE DEVICES	EMC Corporation
PCTUS9101254		NON-VOLATILE MEMORY STORAGE OF WRITE OPERATION IDENTIFIER IN DATA STORAGE DEVICE	EMC Corporation
PCTUS9101255		Enhanced Interface Permitting Multiple-Byte Parallel Transfers of Control Information and Data on a Small Computer System Interface (SCSI) Communication Bus and a Mass Storage System Incorporating the Enhanced Interface	EMC Corporation
PCTUS9101256		Multi-Port Mass Storage Device Announcing its Active Paths without Deactivating its Ports in a Network Architecture	EMC Corporation
PCTUS9101257		Data Corrections Applicable to Redundant Array of Independent Disks	EMC Corporation
PCTUS9101276		DISK ARRAY SYSTEM	EMC Corporation
PCTUS9101716		Method for Storing Data from an External Processor in Storage Devices Through Buffer Devices (As Amended)	EMC Corporation
PCTUS9102314		APPARATUS AND METHOD FOR CONTROLLING DATA FLOW BETWEEN A COMPUTER AND MEMORY DEVICES	EMC Corporation
PCTUS9102316		Method and Apparatus For Controlling Reselection of a Bus by Overriding a Prioritization Protocol	EMC Corporation
PCTUS9102317		Resource Management in a Multiple Resource System	EMC Corporation
PCTUS9200059		Storage Device Array Architecture with Copyback Cache	EMC Corporation
PCTUS9305255		SYSTEM AND METHOD FOR DYNAMICALLY CONTROLLING CACHE MANAGEMENT	EMC Corporation
PCTUS9311345		INRUSH CURRENT LIMITER	EMC Corporation
PCTUS9503181		METHOD AND APPARATUS FOR UTILIZING A TOKEN FOR RESOURCE ACCESS PROCEDE ET APPAREIL D'UTILISATION D'UN JETON D'ACCES A DE	EMC Corporation
PCTUS9513324		SNAPSHOT OF DATA STORED ON A MASS STORAGE SYSTEM	EMC Corporation
PCTUS96013742		HIGH AVAILABILITY COMPUTER SYSTEM AND METHODS RELATED THERETO	EMC Corporation
PCTUS9609463		RESERVED CYLINDER FOR SCSI DEVICE WRITE BACK CACHE	EMC Corporation
PCTUS9609843		REAL-TIME DATA PROTECTION SYSTEM AND METHOD	EMC Corporation
PCTUS9613172		DATA STORAGE SYSTEM	EMC Corporation

Application	Registration		
Number	Number	Title	Owner
PCTUS9613781		SYSTEM FOR MIGRATING DATA BY SELECTING A	EMC Corporation
		FIRST OR SECOND TRANSFER MEANS BASED ON	
PCTUS9617156		THE STATUS OF A DATA ELEMENT MAP STAGGERED STREAM SUPPORT FOR VIDEO ON	EMC Corporation
PC1US901/130		DEMAND	EMIC Corporation
PCTUS9703000		SYSTEM FOR ORTHOGONAL SIGNAL	EMC Corporation
101037703000		MULTIPLEXING	Ewic Corporation
PCTUS9709419		METHOD AND APPARATUS FOR INDEPENDENT	EMC Corporation
		AND SIMULTANEOUS ACCESS TO A COMMON	
		DATA SET	
PCTUS9715747		DATA VALIDATION SYSTEM FOR A GROUP OF	EMC Corporation
		DATA STORAGE DISKS	
PCTUS9716195		FILE TRANSFER UTILITY WHICH EMPLOYS AN	EMC Corporation
		INTERMEDIATE DATA STORAGE SYSTEM	
PCTUS9717432		DYNAMICALLY UPGRADEABLE DISK ARRAY	EMC Corporation
		SYSTEM AND METHOD	
PCTUS9718522		FAIL-OVER SWITCHING SYSTEM	EMC Corporation
PCTUS9718523		HIGH PERFORMANCE DATA PATH WITH XOR ON	EMC Corporation
		THE FLY	
PCTUS9720406		SYSTEM AND METHOD FOR MAINTAINING A	EMC Corporation
		LOGICALLY CONSISTENT BACKUP USING	
D.C. T. T. C.		MINIMAL DATA TRANSFER	EN CO. C.
PCTUS98019725		DYNAMIC MIRROR SERVICE POLICY	EMC Corporation
PCTUS9802816		I/O CONTROLLER SOFTWARE USING GROUPS OF THREADS	EMC Corporation
PCTUS9805779		AN AGENT-IMPLEMENTED LOCKING MECHANISM	EMC Corporation
PCTUS9809887		APPARATUS AND METHOD FOR BACKUP OF A	EMC Corporation
		DISK STORAGE SYSTEM	· · · · · · · · · · · · · · · · · · ·
PCTUS9820532		RELIABLE ARRAY OF DISTRIBUTED COMPUTING	EMC Corporation
		NODES	
PCTUS9824530		METHOD FOR IMPROVING PERFORMANCE OF	EMC Corporation
		LARGE DATABASES	
PCTUS9904373		METHOD & APPARATUS FOR STORING DIVERSE	EMC Corporation
DCTLIC0006710		DATA STRUCTURES	EMC Commonsticus
PCTUS9906719		METHOD AND APPARATUS FOR ASYNCHRONOUSLY UPDATING A MIRROR OF A	EMC Corporation
		SOURCE DEVICE	
PCTUS9913358		ENHANCED BLOCK CIPHERS WITH DATA-	EMC Corporation
101007713330		DEPENDENT ROTATIONS	2.vie corporation
PCTUS9913358		ENHANCED BLOCK CIPHERS WITH DATA-	EMC Corporation
		DEPENDENT ROTATIONS	1
PCTUS9913628		METHOD AND APPARATUS FOR PROVIDING DATA	EMC Corporation
		MANAGEMENT FOR A STORAGE SYSTEM	
		COUPLED TO A NETWORK	
PCTUS9918601		METHOD FOR EXCHANGING VOLUMES IN A DISK	EMC Corporation
D. OPT. 10		ARRAY STORAGE DEVICE	
PCTUS9923939		METHOD AND APPARATUS FOR CASCADING DATA	EMC Corporation
		THROUGH REDUNDANT DATA STORAGE UNITS	
PCTUS9926450		LOGICAL UNIT MAPPING IN A STORAGE AREA	EMC Corporation
		NETWORK (SAN) ENVIRONMENT	

Application	Registration		
Number	Number	Title	Owner
PCTUS9927569		METHOD AND APPARATUS FOR IDENTIFYING CHANGES TO A LOGICAL OBJECT BASED ON CHANGES TO THE LOGICAL OBJECT AT A PHYSICAL LEVEL	EMC Corporation
PCTUS9931105		METHOD AND APPARATUS FOR BALANCING WORKLOADS AMONG PATHS IN A MULTI-PATH COMPUTER SYSTEM BASED ON THE STATE OF PREVIOUS I/O OPERATIONS (As Amended)	EMC Corporation
PCTUS9931178		DATA STORAGE SYSTEM	EMC Corporation
PCTUS9931208		ONLINE DEBUGGING AND TRACING SYSTEM AND METHOD	EMC Corporation
PCTUS9931213		DATA STORAGE SYSTEM	EMC Corporation
PI9106875-4	PI9106875	FAULT TOLERANT COMPUTER SYSTEM	EMC Corporation
PI9307360-7	PI9307360-7	METHOD AND APPARATUS FOR AUTHENTICATION OF CLIENT SERVER COMMUNICATION	EMC Corporation
RU2013156784		PATH SELECTION TO READ OR WRITE DATA	EMC Corporation
RU2015109763		OBJECT ENCRYPTION	EMC Corporation
RU2015111013		METADATA REPRESENTATION AND STORAGE	EMC Corporation
RU2015139056		WEIGHTLESS DATA OBJECTS CONTENT VERIFICATION	EMC Corporation
RU2015139057		TRACING GARBAGE COLLECTOR FOR SEARCH TREES UNDER MULTIVERSION CONCURRENCY CONTROL	EMC Corporation
RU2015140625		BLOCK LEVEL DEDUPLICATION WITH BLOCK SIMILARITY	EMC Corporation
RU2015141116		DISK SYNCHRONIZATION	EMC Corporation
RU2015153847		COPYING GARBAGE COLLECTOR FOR B+ TREES UNDER MULTI-VERSION CONCURRENCY CONTROL	EMC Corporation
RU2015153848		MUTABLE DATA OBJECTS CONTENT VERIFICATION TOOL	EMC Corporation
RU2015153849		GARBAGE COLLECTION SCOPE DETECTION FOR DISTRIBUTED STORAGE	EMC Corporation
RU2015154486		CAPACITY EXHAUSTION PREVENTION FOR DISTRIBUTED STORAGE	EMC Corporation
RU2015154746		STATISTICS MANAGEMENT FOR SCALE-OUT STORAGE	EMC Corporation
RU2015155279		MULTI-STREAM OBJECT-BASED UPLOAD IN A DISTRIBUTED FILE SYSTEM	EMC Corporation
RU2015155281		OPTIMIZATION OF NETWORK DATA TRANSFERS OVER A WIDE AREA NETWORK	EMC Corporation
RU2015155284		CONNECTION-ORIENTED COMMUNICATION DEVICES WITH ROUND TRIP TIME ESTIMATION	EMC Corporation
RU2015155753		ERASURE CODING FOR ELASTIC CLOUD STORAGE	EMC Corporation
RU2015155763		ACCELERATED GALOIS FIELD CODING FOR STORAGE SYSTEMS	EMC Corporation
RU2016108810		OPTIMIZED AUTO-TIERING	EMC Corporation
RU2016111896		ACCELERATED ERASURE CODING FOR STORAGE SYSTEMS	EMC Corporation

Application Number	Registration Number	Title	Owner
RU2016111898		SYSTEM AND METHOD FOR SYNCHRONIZATION IN A CLUSTER ENVIRONMENT	EMC Corporation
RU2016112119		WRITE CACHE SYSTEM AND METHOD	EMC Corporation
RU2016112133		MANAGING SSD WRITE QUOTAS IN DATA STORAGE SYSTEMS	EMC Corporation
RU2016112139		MANAGING SSD WEAR RATE IN HYBRID STORAGE ARRAYS	EMC Corporation
RU2016112181		SYSTEM AND METHOD FOR REFERENCE TRACKING GARBAGE COLLECTOR	EMC Corporation
RU2016112182		SYSTEM AND METHOD FOR QUASI-COMPACTING GARBAGE COLLECTION	EMC Corporation
RU2016124790		CLOUD STORAGE WRITE CACHE MANAGEMENT SYSTEM AND METHOD	EMC Corporation
RU2016124793		CONFIGURATION MANAGEMENT FOR CLOUD STORAGE SYSTEM AND METHOD	EMC Corporation
RU2016125443		EFFICIENT ERASURE CODING OF LARGE DATA OBJECTS	EMC Corporation
RU2016125850		INCREMENTAL ERASURE CODING FOR STORAGE SYSTEMS	EMC Corporation
RU2016125853		INCREMENTAL BLOOM FILTER REBUILD FOR B+ TREES UNDER MULTI-VERSION CONCURRENCY CONTROL	EMC Corporation
RU2016125855		DATA OBJECT RECOVERY FOR STORAGE SYSTEMS	EMC Corporation
SE(EP)91910198.	SE(EP)05552 19	METHOD AND APPARATUS FOR PERSONAL IDENTIFICATION	EMC Corporation
SG2012055000	182716	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF MAN-IN-THE-BROWSER ATTACKS	EMC Corporation
SG201206053-9	183332	SYSTEM AND METHOD FOR NETWORK SECURITY INCLUDING DETECTION OF ATTACKS THROUGH PARTNER WEBSITES	EMC Corporation
TW85108635	TW125576	INTEGRITY PROTECTION FOR PARITY CALCULATION FOR RAID PARITY CACHE	EMC Corporation
WO1999US14934		Readable Indelible Mark on Storage Media	EMC Corporation
WO2007US78395		SYSTEMS AND METHODS OF IMPROVING PERFORMANCE OF TRANSPORT PROTOCOLS IN A MULTI-PATH ENVIRONMENT	EMC Corporation
11609560	7774565	METHODS AND APPARATUS FOR POINT IN TIME DATA ACCESS AND RECOVERY	EIDC
10512687	8205009	APPARATUS FOR CONTINUOUS COMPRESSION OF LARGE VOLUMES OF DATA	EIDC
11536160	7627687	METHODS AND APPARATUS FOR MANAGING DATA FLOW IN A CONTINUOUS DATA REPLICATION SYSTEM HAVING JOURNALING	EIDC
11536233	7627612	METHODS AND APPARATUS FOR OPTIMAL JOURNALING FOR CONTINUOUS DATA REPLICATION	EIDC
13404129	N/A	HYPERVISOR VIRTUAL SERVER SYSTEM HAS VIRTUAL DATA SERVICES APPLIANCE RECEIVING INTERCEPTED INPUT/OUTPUT REQUESTS FROM	EIDC

Application Number	Registration Number	Title	Owner
Number	Number	TAPPING DRIVER	Owner
		TATTING DIG VER	
15246816	N/A	SECURITY FOR NETWORK COMPUTING	EMC Corporation
		ENVIRONMENT USING CENTRALIZED SECURITY	
		SYSTEM	
15248404	N/A	STATUS MONITORING SYSTEM AND METHOD	EMC Corporation
15248462	N/A	DATA TIERING BASED ON DATA SERVICE STATUS	EMC Corporation
15248434	N/A	CLUSTER-BASED ADAPTIVE METHODS AND	EMC Corporation
		APPARATUS FOR GENERATING	
		PRICE RECOMMENDATIONS USING ONLINE	
(2270066	27/4	TESTING	E) (C C
62379966	N/A	INFRASTRUCTURE BEZEL SYSTEM	EMC Corporation
	N/A	METHOD AND SYSTEM FOR PROCESSING DATA	EMC Corporation
15249066	N/A	MANAGING DATA STORAGE	EMC Corporation
14991614	N/A	[REDACTED]	EMC Corporation
15164188	N/A	[REDACTED]	EMC Corporation
15187434	N/A	[REDACTED]	EMC Corporation
15115890	N/A	EFFICIENT DEDUPLICATION OF LOGICAL UNITS	EMC Corporation
15232652	N/A	METHOD FOR REPLICATING DATA IN A BACKUP	EMC Corporation
		STORAGE SYSTEM USING A COST FUNCTION	
62377957	N/A	WWH SPARK	EMC Corporation
62378101	N/A	WWH Spark	EMC Corporation
62378129	N/A	WWH Spark	EMC Corporation
15246125	N/A	METADATA RECONCILIATION	EMC Corporation
15247321	N/A	STATUS MONITORING SYSTEM AND METHOD	EMC Corporation
15246816	N/A	SECURITY FOR NETWORK COMPUTING	EMC Corporation
		ENVIRONMENT USING CENTRALIZED SECURITY	
		SYSTEM	
15233461	N/A	POWER-SAVING MECHANISMS FOR A DYNAMIC	EMC Corporation
		MIRROR SERVICE POLICY	
15228544	N/A	A DISTRIBUTED CONSUMER CLOUD STORAGE	EMC Corporation
15237945	N/A	SYSTEM  METHOD FOR CENIED ATING DVALANG VECTOR	EMC Componention
1525/945	IN/A	METHOD FOR GENERATING DYNAMIC VECTOR GRAPHICS	EMC Corporation
15236684	N/A	CALCULATING DATA RELEVANCE FOR	EMC Corporation
13230004	IV/A	VALUATION	Livic corporation
15241692	N/A	DATA SERVICES FOR SOFTWARE DEFINED	EMC Corporation
	- ,,	STORAGE SYSTEM	
15235385	N/A	AUTOMATED TEST COVERAGE ANALYSIS,	EMC Corporation
		EXECUTION AND REPORTING	
15122302	N/A	SELECTIVE COMPRESSION IN DATA STORAGE	EMC Corporation
		SYSTEMS	
15251197	N/A	LEASE-BASED LEADER DESIGNATION FOR	EMC Corporation
4.50.1	3777	MULTIPLE PROCESSES	 
15241474	N/A	CREATING DISTRIBUTED STORAGE DURING	EMC Corporation
(2202071	37/4	PARTITIONS  Adaptive Learning Platform for the Design and	EMC C- ···· ··
62382851	N/A	Adaptive Learning Platform for the Design and Management of Corporate Education Training	EMC Corporation
	1	I wanagement of Corporate Education Training	

## SCHEDULE 2 TO PATENT ASSIGNMENT AGREEMENT

## EXCLUDED PATENTS

TITLE	APP. NO.	APP. DATE	REG. NO.	REG. DATE	<u>STATUS</u>
Providing Session Services With					
Application Connectors	11391980	28-Mar-2006	7653732	26-Jan-2010	Granted
Synchronizing Resource Type					
And Property Structures	11644076	21-Dec-2006	8266103	11-Sep-2012	Granted
Synchronizing Resource Type					
And Property Structures	13557115	24-Jul-2012	8473456	25-Jun-2013	Granted
Synchronizing Resource Type					
And Property Structures	13899231	21-May-2013			Published
Method And System For					
Managing Versioned Structured	40000444		0.505.400		
Documents In A Database	13338444	28-Dec-2011	8527480	03-Sep-2013	Granted
Methods And Systems For					
Building A Search Service	1050000	06 I 0010	0000407	04.4 2015	
Application	13533002	26-Jun-2012	9098497	04-Aug-2015	Granted
Phrase Matching For Document	12075220	11 M 2000	0.401042	10 May 2012	C 1
Classification	12075339	11-Mar-2008	8401842	19-Mar-2013	Granted
Method And System For					
Providing A Networked Collaborative Work					
Environment	08893111	15-Jul-1997	6233600	15-May-2001	Granted
Method And Apparatus For	00093111	13-Jul-1997	0233000	13-Way-2001	Granted
Facilitating Communication					
Between Collaborators In A					
Networked Environment	09116069	15-Jul-1998	6230185	08-May-2001	Granted
Method And Apparatus For	07110007	13 341 1330	0230103	00 1414 2001	Grantea
Controlling Access To A Product	09116558	15-Jul-1998	6314408	06-Nov-2001	Granted
Method And System For	0311000	15 (41 1556	0511100	001(0) 2001	Grantea
Providing A Networked					
Collaborative Work					
Environment	09703276	31-Oct-2000	7127501	24-Oct-2006	Granted
Computer Readable Electronic					
Records Automated					
Classification System	13369006	08-Feb-2012	8682893	25-Mar-2014	Granted
Computer Readable Electronic					
Records Automated					
Classification System	12315610	04-Dec-2008	8135710	13-Mar-2012	Granted
Computer Readable Electronic					
Records Automated					
Classification System	14173186	05-Feb-2014	9129003	08-Sep-2015	Granted
Computer Readable Electronic	14819341	05-Aug-2015			Published

Records Automated					
Classification System					
Computer Readable Electronic					
Records Automated					
Classification System	10378025	28-Feb-2003	7478088	13-Jan-2009	Granted
Computer Readable Electronic	10378023	28-1760-2003	7478088	13-3411-2009	Granted
Records Automated					
Classification System	09592778	13-Jun-2000	6553365	22-Apr-2003	Granted
,		03-Jan-2006		15-Jun-2010	
Extensible Portlet Templates	11325363		7739310		Granted
User Interface For Controls	11279706	13-Apr-2006	7783983	24-Aug-2010	Granted
Configurable Views Of Context-	11472544	22 1 2006	0000740	00 D 2014	
Relevant Content	11473544	22-Jun-2006	8909748	09-Dec-2014	Granted
Configurable Views Of Context-	1.4527710	10 Nr. 2014			D 1'
Relevant Content	14537712	10-Nov-2014	0025002	10.35 2015	Pending
Web Page Content Editing	11638857	13-Dec-2006	9037983	19-May-2015	Granted
Dynamic Display Of Web Page	11.00001	10.75	0555150	00000000	
Content For Editing And Review	11638081	13-Dec-2006	8555159	08-Oct-2013	Granted
Incorporated Web Page Content	11639038	13-Dec-2006	8156141	10-Apr-2012	Granted
Access Control For Business					
Process Data	11644340	22-Dec-2006	8086637	27-Dec-2011	Granted
Access Control For Business					
Process Data	13302913	22-Nov-2011			Published
Hierarchical Display Of Project					
Information In A Collaboration					
Environment	11712844	28-Feb-2007	7996774	09-Aug-2011	Granted
Hierarchical Display Of Project					
Information In A Collaboration					
Environment	13174379	30-Jun-2011			Allowed
Electronic Submission					
Preparation	11824303	29-Jun-2007	8065599	22-Nov-2011	Granted
Method And System For					
Providing Information Related					
To A Task In A Case					
Management System	13433499	29-Mar-2012			Pending
Synchronous Business Process					
Execution Engine For Action					
Orchestration In A Single					
Execution Transaction Context	13435997	30-Mar-2012	9250869	02-Feb-2016	Granted
A Synchronous Business Process					
Execution Engine For Action					
Orchestration	14975331	18-Dec-2015			Pending
Method And System For					
Managing Task Assignments	13424604	20-Mar-2012			Pending
Case Management Software					
Development	13529319	21-Jun-2012	8819620	26-Aug-2014	Granted

OCR Data For Grouping And Classifying Documents         13432251         28-Mar-2012         8724907         13-May-2014         Granted           Classifying Documents         28-Mar-2012         8724907         13-May-2014         Granted           Scanner Web Service For Web Application And Scanner Driver Communication         13537726         29-Jun-2012         8994967         31-Mar-2015         Granted           Systems And Methods For Health Information Messages Archiving         14634091         27-Feb-2015         9241030         19-Jan-2016         Granted           Systems And Methods And Systems For Automated Assignment Of Protection To Physical Documents That Arc Digitized         13536425         28-Jun-2012         8931044         06-Jan-2015         Granted           Method And System For Enabling Legacy Patients         13537921         29-Jun-2012         8931044         06-Jan-2015         Granted           Detecting Time Zones Using Historical Date Sampling         13537921         29-Jun-2012         9262414         16-Feb-2016         Granted           Detecting Time Zones Using Historical Date Sampling         14990683         07-Jan-2016         Pending         Pending           New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices         14042521         30-Sep-2013         Pending         Pending           Method To Allow Switching Of	Method And System For Using					
Scanner Web Service For Web Application And Scanner Driver Communication						
Application And Scanner Driver Communication	Classifying Documents	13432251	28-Mar-2012	8724907	13-May-2014	Granted
Communication   13537726   29-Jun-2012   8994967   31-Mar-2015   Granted	Scanner Web Service For Web					
Scanner Web Service For Web Application And Scanner Driver Communication  Systems And Methods For Health Information Messages Archiving  Methods And Systems For Automated Assignment Of Protection To Physical Documents That Are Digitized  Method And System For Enabling Legacy Patients  Clinical Documents For Open Sharing  Detecting Time Zones Using Historical Date Sampling  New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices  Method To Allow Switching Of User Interface Layout Based On Context And Configuration  Composable Events For Dynamic User Interface  Composable Events For Dynamic Discovery And Management Of Page Fragments  Composable Context Menus  Prevention Of Circular Event Publisations In Publish/Subscribe Model Using Path Vector  New Ui Paradign For Enterprise Composition In Publish/Subscribe Model Using Path Vector  14172196  14172196  14172196  14172196  14172196  27-Feb-2015  9241030  19-Jan-2016  9241030  19-Jan-2016  Granted  06-Jan-2015  Of-Jan-2016  Of-Jan-201	Application And Scanner Driver					
Application And Scanner Driver Communication 14634091 27-Feb-2015 9241030 19-Jan-2016 Granted Systems And Methods For Health Information Messages Archiving 13536425 28-Jun-2012 Pending Methods And Systems For Automated Assignment Of Protection To Physical Documents That Are Digitized 13538047 29-Jun-2012 8931044 06-Jan-2015 Granted Method And System For Enabling Legacy Patients Clinical Documents For Open Sharing 13537921 29-Jun-2012 9262414 16-Feb-2016 Granted Detecting Time Zones Using Historical Date Sampling 14990683 07-Jan-2016 Pending New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices 14042521 30-Sep-2013 Pending Method To Allow Switching Of User Interface Layout Based On Context And Configuration 14135511 19-Dec-2013 Pending Method To Allow Switching Of Dynamic User Interface Composition 14136232 20-Dec-2013 Pending Pending Pending Pending Of Dynamic Discovery And Management Of Page Fragments 14136287 20-Dec-2013 9170786 27-Oct-2015 Granted December 14136287 20-Dec-2013 9170786 27-Oct-2015 Granted Pending Pending Pending Pending Pending Pending Pending Pending Of Composable Context Menus 14136287 20-Dec-2013 9170786 27-Oct-2015 Granted Pending	Communication	13537726	29-Jun-2012	8994967	31-Mar-2015	Granted
Communication         14634091         27-Feb-2015         9241030         19-Jan-2016         Granted           Systems And Methods For Health Information Messages Archiving         13536425         28-Jun-2012         Pending           Methods And Systems For Automated Assignment Of Protection To Physical Documents That Are Digitized         13538047         29-Jun-2012         8931044         06-Jan-2015         Granted           Method And System For Enabling Legacy Patients         Clinical Documents For Open Sharing         13537921         29-Jun-2012         8931044         06-Jan-2015         Granted           Detecting Time Zones Using Historical Date Sampling         13630943         28-Sep-2012         9262414         16-Feb-2016         Granted           Detecting Time Zones Using Historical Date Sampling         14990683         07-Jan-2016         Pending         Pending           New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices         14042521         30-Sep-2013         Pending           Method To Allow Switching Of User Interface Layout Based On Context And Configuration         14135511         19-Dec-2013         Pending           Composable Events For Dynamic User Interface Composition         14136232         20-Dec-2013         Pending           Composable Context Menus         14136287         20-Dec-2013         Pending	Scanner Web Service For Web					
Communication         14634091         27-Feb-2015         9241030         19-Jan-2016         Granted           Systems And Methods For Health Information Messages Archiving         13536425         28-Jun-2012         Pending           Methods And Systems For Automated Assignment Of Protection To Physical Documents That Are Digitized         13538047         29-Jun-2012         8931044         06-Jan-2015         Granted           Method And System For Enabling Legacy Patients         Clinical Documents For Open Sharing         13537921         29-Jun-2012         8931044         06-Jan-2015         Granted           Detecting Time Zones Using Historical Date Sampling         13630943         28-Sep-2012         9262414         16-Feb-2016         Granted           Detecting Time Zones Using Historical Date Sampling         14990683         07-Jan-2016         Pending         Pending           New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices         14042521         30-Sep-2013         Pending           Method To Allow Switching Of User Interface Layout Based On Context And Configuration         14135511         19-Dec-2013         Pending           Composable Events For Dynamic User Interface Composition         14136232         20-Dec-2013         Pending           Composable Context Menus         14136287         20-Dec-2013         Pending	Application And Scanner Driver					
Health Information Messages Archiving Methods And Systems For Automated Assignment Of Protection To Physical Documents That Are Digitized Method And System For Enabling Legacy Patients Clinical Documents For Open Sharing 13537921 Detecting Time Zones Using Historical Date Sampling Detecting Time Zones Using Historical Date Sampling 14990683 New Ui Paradigm For Enterprise Collaboration Applications On Touch Base Devices 14042521 Method To Allow Switching Of User Interface Layout Based On Context And Configuration Pending Dynamic User Interface Composable Events For Dynamic User Interface Composable Context Menus 14136287 Composable Context Menus 14182713 Pending	Communication	14634091	27-Feb-2015	9241030	19-Jan-2016	Granted
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A Summarized Task View In A	A Summarized Task View In A					
Case Management System 14320213 30-Jun-2014 Pending		14320213	30-Jun-2014			Pending
Mechanism To Package And 14585981 30-Dec-2014 Pending			+			

Processing Reusable Themes For			
Web Applications			
Method And System For			
Navigation Control	14585842	30-Dec-2014	Pending
Mechanism For Webpage			
Composition	14670949	27-Mar-2015	Pending
Method And System For			
Implementing Custom UI			
Actions In A Web Application			
Using Hidden Containers	14586172	30-Dec-2014	Pending
Method And System For	11300172	30 BCC 2011	Tenang
Implementing Context Based			
Display Of Objects In Web			
Applications Using Link			
Relationships	14586260	30-Dec-2014	Pending
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Binding Traits To Case Nodes	14502281	30-Sep-14	Pending
Composite Index On			
Hierarchical Nodes In The			
Hierarchical Data Model Within			
A Case Model	14502322	30-Sep-14	Pending
Case Leaf Nodes Pointing To			
Business Objects Or Document			
Types	14502361	30-Sep-14	Pending
Modeling Case Phase/State And			
Phase/State Transitions For Case			
Nodes	14502025	30-Sep-2014	Pending
Case Model - Data Model And			
Behavior Versioning	14502066	30-Sep-2014	Pending
Case System Events Triggering			
A Process	14502106	30-Sep-2014	Pending
Placeholder Case Nodes And			
Child Case Nodes In A Case			
Model	14502132	30-Sep-2014	Pending
Creating Templates Based On		•	
Case Model Instances	14502159	30-Sep-2014	Pending
Hierarchical Permissions Model		1	
For Case Management	14502194	30-Sep-2014	Pending
Descendent Case Role Alias	14502222	30-Sep-2014	Pending
Hierarchical Permissions Model	1.50222	20 Sep 2011	1 01101115
Within A Document	14502246	30-Sep-2014	Pending
Expression-Based Hierarchical	11302270	30 50p-201 <del>4</del>	Tonding
Mechanism For Html Form Data			
Validation	14571117	15-Dec-2014	Pending
	173/111/	13-160-2014	rending
Context Menu Fragment	14671289	27-Mar-2015	Donding
Management For Ordinal			Pending
Image Box Filtering For Optical	14788170	30-Jun-2015	Pending

Character Recognition					
Image Box Filtering For Optical					
Character Recognition	62158775	08-May-2015			Pending
Case Fragment Management	14870459	30-Sep-2015			Pending
Method And System For	PCTCN2015	30 Sep 2013			1 chang
Ideogram Character Analysis	091163	30-Sep-2015			Pending
Method And System For	071103	30-3 <b>c</b> p-2013			1 Chang
Document Similarity Analysis	14968421	14-Dec-2015			Pending
Model Of Documents And	14700421	14-DCC-2013			1 chang
Method For Automatically	DE(EP)6020		DE(EP)1583		
Classifying A Document	04017695	30-Mar-2004	023	12-Nov-2008	Granted
Model Of Documents And	04017093	30-1v1a1-2004	023	12-1107-2008	Granted
Method For Automatically					
1	EP0490834.3	30-Mar-2004	EP1583023	12-Nov-2008	Granted
Classifying A Document Model Of Documents And	EF0490634.3	30-1v1a1-2004	EF1363023	12-1107-2008	Granted
Method For Automatically	GB(EP)0490		GB(EP)1583		
1	834.3	30-Mar-2004	023	12 Nov. 2009	Crantad
Classifying A Document Model Of Documents And	034.3	30-1 <b>v</b> 1a1-2004	023	12-Nov-2008	Granted
Method For Automatically				O6 May	
7	10052060	25 Mars 2004	7270050	06-May-	Conntad
Classifying A Document	10852969	25-May-2004	7370059	2008	Granted
Model Of Documents And					
Method For Automatically	ED0400024.2	20 14 2004	ED1502022	10 N 2000	C . 1
Classifying A Document	EP0490834.3	30-Mar-2004	EP1583023	12-Nov-2008	Granted
Automatic Form Generation	11711191	26-Feb-2007	7886219	08-Feb-2011	Granted
Generation Of Randomly					
Structured Forms	11711451	26-Feb-2007	7840890	23-Nov-2010	Granted
Method And System For Using					
OCR Data For Grouping And					
Classifying Documents	13432139	28-Mar-2012	8595235	26-Nov-2013	Granted
Method And System For					
Creating Subgroups Of					
Documents Using Optical					
Character Recognition Data	13855906	03-Apr-2013	9069768	30-Jun-2015	Granted
Method And System For					
Identifying Anchors For Fields					
Using Optical Character					
Recognition Data	13855933	03-Apr-2013			Pending
Method And System For					
Classifying Documents That					
Have Different Scales	13865350	18-Apr-2013	8832108	09-Sep-2014	Granted
Method And System For Using					
Keywords To Merge Document					
Clusters	13868314	23-Apr-2013	8843494	23-Sep-2014	Granted
Method And System For Using					
Location Transformations To					
Identify Objects	13869769	24-Apr-2013	8880540	04-Nov-2014	Granted

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Optimized Gestures For Zoom					
Functionality On Touch-Based	1.40.40.50.1				D 1
Device	14040521				Pending
Determining Multiple Invitee					
Availability Statuses For					
Proposed Meetings	14108906				Pending
Method And System For					
Dynamically Generating A					
Watermarked Document During					
A Printing Or Display Operation	11300954	15-Dec-2005	8321947	27-Nov-2012	Granted
Method And System For					
Rendering Watermarked Content	11796835	30-Apr-2007	8312552	13-Nov-2012	Granted
Method And System For					
Rendering Watermarked Content					
Using A Watermark Window	11796911	30-Apr-2007	8526666	03-Sep-2013	Granted
Method And System For		-			
Implementing Independent					
Message Queues By Specific					
Applications	13331739	20-Dec-2011			Pending
Methods And Systems For					
Providing A Search Service					
Application	13538207	29-Jun-2012			Pending
Methods And Systems For					
Building A Search Service					
Application	13537311	29-Jun-2012			Pending
Extensible Service Execution					<u> </u>
Framework With Data Mapping					
Architecture	14135513	19-Dec-2013			Allowed
Systems And Methods For					
Management Of Collaborative					
Business Processes	11227254	16-Sep-2005			Pending
Providing Access To Managed					
Content In Rich Client					
Application Environments	11392313	28-Mar-2006	8086667	27-Dec-2011	Granted
Providing Access To Managed	11032010	20 1/10/ 2000		27 200 2011	Granica
Content In Rich Client				13-May-	
Application Environments	13306864	29-Nov-2011	8725797	2014	Granted
Providing Access To Managed	13300001	23 1107 2011	0/25/5/	2011	Grantea
Content In Rich Client					
Application Environments	14225357	25-Mar-2014			Published
Dynamic Construction Of Java	1 1223331	23 Will-2014			1 donished
Class Hierarchy Based On					
Metadata	11430428	08-May-2006	8655857	18-Feb-2014	Granted
Linking Business Objects And	11-730-720	00-141ay-2000	0022027	10-100-2014	Granica
Documents	11473538	22-Jun-2006	8898264	25-Nov-2014	Granted
	14519770		0090204	23-1107-2014	
Linking Business Objects And	14319770	21-Oct-2014		1	Published

Documents					
Batching Content Management					
Operations To Facilitate					
Efficient Database Interactions	12005061	21-Dec-2007	8280917	02-Oct-2012	Granted
Batching Content Management	12003001	21-DCC-2007	0200717	02-001-2012	Granted
Operations To Facilitate					
Efficient Database Interactions	13603065	04-Sep-2012	8650224	11-Feb-2014	Granted
Batching Content Management	13003003	04-Sep-2012	8030224	11-1-60-2014	Granteu
Operations To Facilitate					
Efficient Database Interactions	   14147461	03-Jan-2014			Published
	1414/401	03-Jan-2014			Published
System For Delivering					
Notification Messages Across	12526701	20.1. 2012			D 1'
Different Notification Media	13536781	28-Jun-2012			Pending
System For Delivering And					
Confirming Receipt Of					
Notification Messages Across					
Different Notification Media	13536787	28-Jun-2012	8923823	30-Dec-2014	Granted
				05-May-	
Semantic-Based Business Events	13722866	20-Dec-2012	9027144	2015	Granted
Method And System For					
Migrating Content Between					
Enterprise Content Management					
Systems	13910342	05-Jun-2013			Pending
Method And System For					
Morphing Object Types In					
Enterprise Content Management					
Systems	13926573	25-Jun-2013			Pending
Method And System For					
Cloning Enterprise Content					
Management Systems	13926601	25-Jun-2013			Pending
Optimizing Synchronization Of					
Enterprise Content Management					
Systems	14106506	13-Dec-2013			Pending
Optimizing Synchronization Of					<u> </u>
Content Management Servers	14132176	18-Dec-2013			Pending
Action Flow Fragment					
Management	14841146	31-Aug-2015			Pending
Method And Mechanism For	11011110	31 1145 2013			Tenang
Context Driven Alteration Of UI					
Artifacts Instances Behavior					
Using Expression Based					
Pluggable UI Aspects					Unfiled
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Methods And Systems For					
Creating Business-Oriented	12071266	24 Mar 2011	0125597	15 Cor 2015	Crosstad
Report Entities	13071266	24-Mar-2011	9135587	15-Sep-2015	Granted
Methods And Systems For	13245338	26-Sep-2011			Pending

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Providing Automated Predictive					
Analysis					
Business Process Optimization	1.40.402.12	27.6 2012			D 1'
Using Predictive Analytics	14040313	27-Sep-2013			Pending
Expression Based Inter-Widget	12520424	20.1. 2012			D 1'
Communication Mechanism	13538434	29-Jun-2012			Pending
Action Flow Client Framework	13474501	17-May-2012	9189761	17-Nov-2015	Granted
Method And System For					
Business Event Based Reporting	13538708	29-Jun-2012			Pending
Data Services Generation	13631426	28-Sep-2012			Pending
Methods And Systems For					
Multi-Dimensional Aggregation					
Using Composition	13538928	29-Jun-2012			Pending
Reorder And Selection					
Persistence Of Displayed					
Objects	13628402	27-Sep-2012			Pending
Methods And Systems For					
Multi-Dimensional Aggregation					
Using Composition	13538889	29-Jun-2012			Pending
Method And System For					
Stashing Of Document					
Alteration Information For					
Quicker Web Preview	13628511	27-Sep-2012			Pending
Method And System For					
Accelerated Transformation Of					
Content Based On Predictive					
Chunking	13630007	28-Sep-2012	9372840	21-Jun-2016	Granted
Method And System For					
Dynamic Selection Of					
Application Dialog Layout					
Design	13683024	21-Nov-2012			Pending
Mechanism To Support					
Composite Data Models In Html					
Form	13724422	21-Dec-2012	9424243	23-Aug-2016	Granted
Mechanism For Partial Page					
Refresh Using URL Addressable					
Hierarchical Page Structure	13722833	20-Dec-2012			Pending
Minimizing Eye Strain And					
Increasing Targeting Speed In					
Manual Indexing Operations	13720630	19-Dec-2012			Pending
Securing Visual Information On				12-May-	
Images For Document Capture	13720654	19-Dec-2012	9032545	2015	Granted
Securing Visual Information On					
Images For Document Capture	14685280	13-Apr-2015			Published
Multi-Page Document					
Recognition In Document	13720671	19-Dec-2012			Pending

Capture					
Multi-Page Document					
Recognition In Document					
Capture	15221433	27-Jul-2016			Pending
Method And System For Auto-	10221 100	2. 00. 2010			1 01101115
Correcting Perspective					
Distortion In Document Images	14024433	11-Sep-2013	9171359	27-Oct-2015	Granted
Method And System For	11021199	11 Sep 2015	7171337	27 Oct 2019	Grantea
Assessing Similarity Of					
Documents	14871501	30-Sep-2015			Pending
Churn Prediction Based On	146/1301	30-3cp-2013			1 Chang
Social Factors	15083613	29-Mar-2016			Pending
A Tokenization Solution For	13063013	29-1 <b>v</b> 1a1-2010			rending
Mixed Languages Based On Bit					11611
Value Tree					Unfiled
System And Method To Improve					
Query Performance In Enterprise					
Search Based On Permission					TT 01 1
Signature					Unfiled
A Solution To Enhance Phrase					
Search With Nested Thesaurus					
Parsing					Unfiled
Advanced Full Text Search With					
Customized Token Injection					Unfiled
A Restful Batch Template To					
Batchly Execute Content					
Management Services					Unfiled
Optimization Of Faceted Search					
In XML Data					Unfiled
Multi-Dimensional Analysis Of					
Objects By Manipulating					
Discovered Semantic Properties	09017823	03-Feb-1998	6028605	22-Feb-2000	Granted
Dividing Data For Multi-Thread					
Backup	11322176	28-Dec-2005	7574461	11-Aug-2009	Granted
Framework For Defining And				_	
Implementing Behaviors Across					
And Within Content Object					
Types	11391608	27-Mar-2006	7613726	03-Nov-2009	Granted
Automatic Resource Leak					
Detection	11393550	29-Mar-2006	8312062	13-Nov-2012	Granted
Serialization And Deserialization	11393199	30-Mar-2006	8131860	06-Mar-2012	Granted
Dynamic Updating Of Display	11000100	55 1.121 2000	0121000	55 1.1ml 2012	Station
And Ranking For Search Results	11522498	15-Sep-2006	8370334	05-Feb-2013	Granted
User Readability Improvement	11322770	13 Sep-2000	0370331	00 1 00-2013	Granica
For Dynamic Updating Of					
Search Results	11522059	15-Sep-2006	8201107	12-Jun-2012	Granted
Scarcii Nesults	11344039	13-3ch-7000	0201107	12-Juii-2012	Granieu

Hear Pandahility Improvement					
User Readability Improvement For Dynamic Updating Of					
Search Results	13467725	09-May-2012			Allowed
Synchronous Content Transfer	11823608	28-Jun-2007	8543700	24-Sep-2013	Granted
Processing Of A Generalized	11823008	28-Jun-2007	8343700	24-Sep-2013	Granted
Directed Object Graph For					
Storage In A Relational					
Database	11824375	29-Jun-2007	7664779	16-Feb-2010	Granted
Processing Of A Generalized	1102-1373	29-Jun-2007	7004777	10-1 60-2010	Granted
Directed Object Graph For					
Storage In A Relational					
Database	13095143	27-Apr-2011	8166008	24-Apr-2012	Granted
Processing Of A Generalized	13073113	27 7101 2011	0100000	2 1 11p1 2012	Grantea
Directed Object Graph For					
Storage In A Relational					
Database	12653312	11-Dec-2009	7958089	07-Jun-2011	Granted
Service Scripting Framework	11890305	03-Aug-2007	8386608	26-Feb-2013	Granted
Service Scripting Framework	13751924	28-Jan-2013	8812683	19-Aug-2014	Granted
System And Method Of	13731321	20 3411 2013	0012003	13 7145 2011	Grantea
Distributed Query Execution	13341529	30-Dec-2011	8949221	03-Feb-2015	Granted
Progressive Indexing For	100 11025	30 20 2011	03 13221	35 1 65 2010	Granica
Improving Ad-Hoc Query					
Performance	13341423	30-Dec-2011	8965899	24-Feb-2015	Granted
Blueprint-Driven Environment					
Template Creation In A Virtual				26-May-	
Infrastructure	13538392	29-Jun-2012	9043786	2015	Granted
Blueprint-Driven Environment					
Template Creation In A Virtual					
Infrastructure	14693148	22-Apr-2015			Published
Environment-Driven Application					
Deployment In A Virtual					
Infrastructure	13538986	29-Jun-2012	9003406	07-Apr-2015	Granted
Environment-Driven Application					
Deployment In A Virtual					
Infrastructure	14633401	27-Feb-2015			Published
Integrated Search For Shared					
Storage	13837511	15-Mar-2013	9201889	01-Dec-2015	Granted
Method And System For					
Identifying Root Causes Of					
Application Underachievement					
In A Virtually Provisioned			<b></b>		
Environment	13782349	01-Mar-2013	9154398	06-Oct-2015	Granted
Method And System For					
Adjustments For Application					
Underachievement In A	10505 :5 :		007077	20 F 1 201	
Virtually Provisioned	13782474	01-Mar-2013	9270557	23-Feb-2016	Granted

Environment					
Method And System For					
Calculating Costs Of					
Application Operations In A					
Virtually Provisioned					
Environment	13785088	05-Mar-2013	9231885	05-Jan-2016	Granted
Method And System For	12702000	00 1,141 2010	3231005	00 0411 2010	Granica
Estimating Required					
Resources To Support A					
Specific Number Of Users					
In A Virtually Provisioned					
Environment	13785114	05-Mar-2013	9128756	08-Sep-2015	Granted
System And Method For	13703114	03-14141-2013	7120730	00-Sep-2015	Granted
Expression Evaluation					
In A Distributed Networking					
Environment	13795212	12-Mar-2013	9116713	25-Aug-2015	Granted
Method And System For Load	13/93212	12-1111-2013	9110713	23-Aug-2013	Granted
=					
Balancing Using Server Dormant Mode	13433543	29-Mar-2012			Donding
	13433343	29-Mai-2012			Pending
Method And System For					
Dynamic Provisioning Using Server Dormant Mode For					
	13433574	20 Mar 2012			Allowed
Virtual Server Dormancy	13433374	29-Mar-2012			Allowed
Methods And Systems For					
Concurrent Collection And	12525450	10 1 2012			D 1'
Generation Of Shared Data	13525458	18-Jun-2012			Pending
Method And System For					
Memory Efficient, Update					
Optimized, Transactional Full-	12/212/2	20 G 2012	0245002	26 1 2016	
Text Index View Maintenance	13631363	28-Sep-2012	9245003	26-Jan-2016	Granted
Method And System For					
Memory Efficient, Update	CN100120007				
Optimized, Transactional Full-	CN20138005	20 G 2012			D 11: 1 1
Text Index View Maintenance	0962.1	20-Sep-2013			Published
Method And System For	ED12774540				
Memory Efficient, Update	EP13774548.	20.0 2012			D 11: 1 1
Optimized,	5	20-Sep-2013			Published
Method And System For					
Memory Efficient, Update	DOTTION				
Optimized, Transactional Full-	PCTUS2013	000			,, ,
Text Index View Maintenance	60969	20-Sep-2013			National
Environment Template-Driven					
Environment Provisioning In A					
Virtual Infrastructure	13538478	29-Jun-2012	9015712	21-Apr-2015	Granted
Environment Template-Driven					
Environment Provisioning In A	14663723	20-Mar-2015			Published

Virtual Infrastructure  Method And System For	
Tracking Changes To	
Application Model Definitions	
For Application Model	
	Allowed
Method And System For	
	Granted
Automatic Elevation Of System	0144144
	Granted
Automatic Elevation Of System	Grantea
	ublished
Method And System For	aonsnea
Connecting A Content	
Repository To A File Sharing	
	Pending
Integrated Search For Shared	. Unumg
Storage Using Index Throttling	
	Granted
Integrated Search For Shared	Grantea
Storage Using Index Throttling	
	Pending
Method And System For Lock	- Chang
	Granted
Method And System For	- Stantea
Calculating Changes For A	
	Pending
Calculating Expenses To	2 01101115
Determine Whether To	
Provision Additional Resources	
In A Virtually Provisioned	
	Pending
Projecting Resource Allocation	
To Achieve Specific Application	
Operation Times In A Virtually	
	Pending
Synchronizing Stateless Process	
	Pending
Composable Application Session	
	Pending
Expression Based Declarative	8
Data Service Execution	
	Pending
Service To Invoke Companion	8
	Pending
	Pending

Information In Application Pages				
Composable Test Automation	IN2217CHE			
Framework	2015	30-Apr-2015		Pending
Composable Test Automation	2013	30-Apr-2013		renung
Framework	14788106	30-Jun-2015		Danding
		30-Jun-2013		Pending
Annotated Interfaces And	IN2216CHE	20 Am 2015		Dandina
Properties	2015	30-Apr-2015		Pending
Annotated Test Interfaces	14755842	30-Jun-2015		Pending
Event Based Validation	14585907	30-Dec-2014		Pending
Method And System For				
Determining Workload				
Availability In A Multi-Tenant				
Environment	14673415	30-Mar-2015		Pending
Data Retention System For A				
Distributed File System	14675022	31-Mar-2015		Pending
Method And Mechanism For				
Data Source Fetch Through				
Virtual Data Source	14840991	31-Aug-2015		Pending
Method And Mechanism For				
Composite Data Service				
Generation And Implementation	14871425	30-Sep-2015		Pending
Method And System For				
Predictive Loading Of Software				
Resources	14851590	11-Sep-2015		Pending
Translation Of Unstructured		•		
Text Into Semantic Models	14871123	30-Sep-2015		Pending
Application Container And		•		
Application Service System	14970207	15-Dec-2015		Pending
Method And System For				<u>U</u>
Providing Software				
Functionalities To Users Of				
Multi-Tenant Applications Via				
Inheritance	14871548	30-Sep-2015		Pending
Method And Mechanism For		1		<u> </u>
Optimal Saas Based Web				
Application Security				
Configuration Through				
Hierarchical Application				
Structure				Unfiled
Method And Mechanism For				
Distributed & Progressive				
Application Configuration				
Qualification Evaluation				Unfiled
Method And Mechanism For				
Optimal Scope Evaluation In				Unfiled
Spania Stope Diamanion in	1	İ	I	01111100

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Scoped Based Hierarchical					
Configuration Using Evaluated					
Scope Propagation Technique.					
Compos Able Docking					
Navigation For Optimized					** ** 1
Application Interaction					Unfiled
System And Method To Enhance					
Phrase Search With Nested					
Thesaurus Parsing					Unfiled
Seamless Upgrade & Patching					
By Leveraging Docker					
Containers And Enhanced CS					
Dormant Mode					Unfiled
Container Session					Unfiled
Avoiding Duplicative Storage Of					
Managed Content	11364960	28-Feb-2006	8600948	03-Dec-2013	Granted
Incorporated Web Page Content	11731404	30-Mar-2007	7958103	07-Jun-2011	Granted
Incorporated Web Page Content	13015503	27-Jan-2011	8799256	05-Aug-2014	Granted
Object Identity And					
Addressability	11823527	28-Jun-2007	8433699	30-Apr-2013	Granted
Object Identity And					
Addressability	13848903	22-Mar-2013	8874539	28-Oct-2014	Granted
Composable Action Flows	14136316	20-Dec-2013			Pending
Unified System For Connecting					
A Content Repository To A File					
Sharing Service	14231194	31-Mar-2014			Pending
Perfect Pitch - Auto-Tuning Of					
ECD Components, Saas					
Platform					Unfiled
Seamless Upgrade & Patching					
By Leveraging Docker					
Containers And Enhanced CS					
Dormant Mode					Unfiled
	CN20118006				
Virtual Appliance Deployment	3285.8				Published
Virtual Appliance Deployment	12983242		8839241	16-Sep-2014	Granted
Virtual Appliance Deployment	14460030		9213561	15-Dec-2015	Granted
Virtual Appliance Deployment	14937729				Pending
	PCTUS2011				
Virtual Appliance Deployment	67158				National
Decommissioning Virtual					
Appliances	12983246		8799915	05-Aug-2014	Granted
Decommissioning Virtual					
Appliances	14311157		9201699	01-Dec-2015	Granted
Instantiating Virtual Appliances	12983249		8601472	03-Dec-2013	Granted

Instantiating Virtual Appliances	14066252				Published
De-Duplicating Results Of					
Queries Of Multiple Data					
Repositories	14108706				Pending
Information Security					<u> </u>
Architecture For Encrypting					
Documents For Remote Access					
While Maintaining Access					
Control	09321839	28-May-1999	6289450	11-Sep-2001	Granted
Method Of Encrypting					
Information For Remote Access					
While Maintaining Access					
Control	10936829	09-Sep-2004	RE41186	30-Mar-2010	Granted
Method Of Encrypting	101000	** ***********************************			O T ULLI TO G
Information For Remote Access					
While Maintaining Access					
Control	11129746	16-May-2005	RE44364	09-Jul-2013	Granted
Method Of Encrypting	111237.10	10 1/14/ 2000	100.00	03 001 2010	O Turito G
Information For Remote Access					
While Maintaining Access					
Control	09985096	01-Nov-2001	6449721	10-Sep-2002	Granted
Method For Encrypting		77 710 7 2007	2 7 13 7 2 2	11 2 p 2 1 1 2	0100000
Information For Remote Access					
While Maintaining Access					
Control	09906811	18-Jul-2001	6339825	15-Jan-2002	Granted
Information Security					
Architecture For Encryping					
Documents For Remote Acess					
While Maintaining Access					
Control	09736229	15-Dec-2000	6978376	20-Dec-2005	Granted
Information Security					
Architecture For Remote Access					
Control Using Non-Bidirectional					
Protocols	10919300	17-Aug-2004	7458102	25-Nov-2008	Granted
Seamless Integration Of					
Application Programs With					
Security Key Infrastructure	09232977	18-Jan-1999	6490679	03-Dec-2002	Granted
Seamless Integration Of					
Application Programs With	PCTUS0001				
Security Key Infrastructure	167	18-Jan-2000			National
Methods And Apparatus For					
Classifying Objects	11642794	20-Dec-2006	8375020	12-Feb-2013	Granted
Methods And Apparatus For					
Dynamically Classifying Objects	11642803	20-Dec-2006	8380696	19-Feb-2013	Granted
Accessing Rights-Managed					
Content From Constrained	11480300	30-Jun-2006			Pending

Connectivity Devices					
Methods And Apparatus For					
Adapting The Protection Level					
For Protected Content	11541360	29-Sep-2006	9118617	25-Aug-2015	Granted
Systems And Methods For	113 11300	29 Sep 2000	2110017	23 7145 2013	Grantea
Managing Content Having A					
Retention Period On A Content					
Addressable Storage System	11024195	38350	7627726	40148	Granted
Retention And Disposition Of	11021173	30330	1021120	10110	Grantea
Stored Content Associated With					
Multiple Stored Objects	11371147	07-Mar-2006	7970743	28-Jun-2011	Granted
Configurable Prioritization And	113/114/	07-Wai-2000	1910173	20-Jun-2011	Granted
Aging Of Queued Tasks	11388351	23-Mar-2006	8539493	17-Sep-2013	Granted
	11300331	23-1v1a1-2000	0333433	17-Sep-2013	Granted
Profile-Based Assignment Of Queued Tasks	11388856	23-Mar-2006	8347295	01-Jan-2013	Granted
	11300030	23-Wai-2000	8347293	01-Jan-2013	Granted
Processing Raw Information For					
Performing Real-Time	11200577	22 Mar 2006	9926290	02 9 2014	C 4
Monitoring Of Task Queues	11388576	23-Mar-2006	8826280	02-Sep-2014	Granted
Wizard For Web Service Search	11/05044	20 Nr. 2006	9275272	10 F.1 2012	C 1
Adapter	11605844	28-Nov-2006	8375362	12-Feb-2013	Granted
Object Tree Walking	11824477	29-Jun-2007	7792979	07-Sep-2010	Granted
Object Tree Walking	12804663	26-Jul-2010			Published
Assured Federated Records					
Management	14079907	14-Nov-2013			Allowed
Assured Federated Records					
Management	12005125	19-Dec-2007	8615497	24-Dec-2013	Granted
Reusing System Configuration					
Information And Metadata For					
Related Operations	12005143	21-Dec-2007	8131884	06-Mar-2012	Granted
Reusing System Configuration					
Information And Metadata For					
Related Operations	13356473	23-Jan-2012	8341299	25-Dec-2012	Granted
Reusing System Configuration					
Information And Metadata For					
Related Operations	13684003	21-Nov-2012	8612635	17-Dec-2013	Granted
Reusing System Configuration					
Information And Metadata For					
Related Operations	14079912	14-Nov-2013	8990440	24-Mar-2015	Granted
Optimized Fetching For Aspect				01-May-	
Attributes	12005167	21-Dec-2007	8171054	2012	Granted
Optimized Fetching For Aspect					
Attributes	13430580	26-Mar-2012	8694546	08-Apr-2014	Granted
Customization Of Types Using					
Added Default Aspects	12005157	21-Dec-2007	8244778	14-Aug-2012	Granted
System And Method Of					
Dynamic Data Object Upgrades	13251175	30-Sep-2011	8612405	17-Dec-2013	Granted

System And Method Of					
Dynamic Data Object Upgrades	14061386	23-Oct-2013			Allowed
System And Method Of	11001300	23 001 2013			7 HIOWCG
Dynamic Data Object Upgrades	15047043	18-Feb-2016			Pending
System And Method Of Rolling	13017013	10 1 00 2010			Tenamg
Upgrades Of Data Traits	13250992	30-Sep-2011	9164751	20-Oct-2015	Granted
Cross-Reference And Priority	CN20128005	30 Sep 2011	2101731	20 000 2013	Grantea
Claim To Related Applications	8212.4	28-Sep-2012			Published
Cross-Reference And Priority	EP12836509.	20 Sep 2012			1 donished
Claim To Related Applications	5	28-Sep-2012			Published
System And Method Of Rolling		20 Sep 2012			1 donished
Upgrades Of Data Traits	14824876	12-Aug-2015			Pending
Cross-Reference And Priority	PCTUS2012	12 Mag 2013			1 chang
Claim To Related Applications	58037	28-Sep-2012			National
System And Method Of	30037	20-5 <b>c</b> p-2012			Tational
Hierarchical Data Containers	13436926	31-Mar-2012	8949281	03-Feb-2015	Granted
System And Method Of	CN20138002	31-War-2012	0949201	03-170-2013	Granted
Hierarchical Data Containers	8529.8	14-Mar-2013			Published
System And Method Of	EP13769703.	14-1v1a1-2013			ruonsned
Hierarchical Data Containers	3	14-Mar-2013			Published
System And Method Of	3	14-Wai-2013			Fuonsnea
Hierarchical Data Containers	14568726	12-Dec-2014			Published
	PCTUS2013	12-Dec-2014			Published
System And Method Of Hierarchical Data Containers	31509	14-Mar-2013			National
	31309	14-Mai-2013			National
Method And System For Virtual Server Dormancy	13430943	27-Mar-2012			Danding
Delymamhia Amiliation Of	13430943	27-Wai-2012			Pending
Polymorphic Application Of Policy	13435987	30-Mar-2012	9268916	23-Feb-2016	Granted
	13433987	30-Mar-2012	9208910	23-Feb-2016	Granted
Polymorphic Application Of	14007770	18-Jan-2016			Dandina
Policy Mathoda For Hadating	14997779	18-Jan-2016			Pending
Methods For Updating					
Reference Count And Shared	12524411	15-Jun-2012			Dan din a
Objects In A Concurrent System	13524411	13-Jun-2012			Pending
Methods For Updating					
Reference Count And Shared	12524497	15 Jan 2012			Dan din a
Objects In A Concurrent System	13524487	15-Jun-2012			Pending
Data Model Based Context Tree	13626199	25-Sep-2012			Pending
Method And System For	12627121	06.0 0010	0014515	16 D 2011	
Predictive Load Balancing	13627121	26-Sep-2012	8914517	16-Dec-2014	Granted
Method And System For Cache					
Data Analysis For Enterprise	1.402.617.4	0.5 0 0010			D 1.
Content Management Systems	14036174	25-Sep-2013			Pending
Synchronous Default Aspects To					
Force Customizations On					
Existing And New Object	140405				
Instances	14040143	27-Sep-2013			Pending

Method And System For Using					
External Content Type Object					
Types	14755000	30-Jun-2015			Pending
Method And System For Using					Ü
Dynamic Content Types	14755858	30-Jun-2015			Pending
Method And System For Using					Ü
Micro Objects	14755537	30-Jun-2015			Pending
Method And System For					
Extracting Content From Noisy					
Data	14673472	30-Mar-2015			Pending
Method And System For					
Configuring Processes Of					
Software Applications Using					
Activity Fragments	14871523	30-Sep-2015			Pending
Method And System For		_			
Enforcing Governance Across					
Multiple Content Repositories					
Using A Content Broker	14870986	30-Sep-2015			Pending
Method And Apparatus For					
Generating Metadata For A	PCTUS0140				
Document	363	23-Mar-2001			National
Providing Direct Access To					
Managed Content	11229318	15-Sep-2005	8082334	20-Dec-2011	Granted
Providing Direct Access To					
Distributed Managed Content	11229036	15-Sep-2005	8396938	12-Mar-2013	Granted
Providing Local Access To				21-May-	
Managed Content	11229317	15-Sep-2005	8447827	2013	Granted
Providing Local Access To					
Managed Content	13869864	24-Apr-2013			Allowed
Providing Local Access To					
Managed Content	15003595	21-Jan-2016			Pending
Virtual Repository Management	13189230	22-Jul-2011	8782096	15-Jul-2014	Granted
Virtual Repository Management	14282126	20-May-2014	9223817	29-Dec-2015	Granted
Virtual Repository Management	14945763	19-Nov-2015			Pending
	PCTUS2006				
Virtual Repository Management	041254	24-Oct-2006			National
Virtual Repository Management	11355556	16-Feb-2006	8015222	06-Sep-2011	Granted
Virtual Repository Management		. —		F	
To Provide Retention					
Management Services	11355555	16-Feb-2006	8819048	26-Aug-2014	Granted
Virtual Repository Management	EP07763646.				
To Provide Functionality	2	24-Jan-2007			Published
Virtual Repository Management	PCTUS2007				
To Provide Functionality	01944	24-Jan-2007			National
Providing A Visual Indication	11370296	07-Mar-2006			Pending

That Stand Contact In		T		<u> </u>	I
That Stored Content Is Associated With A					
Collaboration Environment					
Containerized Security For	11270202	07.142006			D 1'
Managed Content	11370293	07-Mar-2006			Pending
Consistent Retention And					
Disposition Of Managed Content	11270000	07.15 2006	7010200	10.0 . 2010	
And Associated Metadata	11370292	07-Mar-2006	7818300	19-Oct-2010	Granted
Consistent Retention And					
Disposition Of Managed Content	10070000	21 4 2010	0712000	20 4 2014	
And Associated Metadata	12872892	31-Aug-2010	8712980	29-Apr-2014	Granted
Resolving Retention Policy	11050450	07.16	7504000	22 6 2000	
Conflicts	11370473	07-Mar-2006	7594082	22-Sep-2009	Granted
Resolving Retention Policy	10460700	07.4	<b>7</b> 0/ <b>07</b> 00	14 1 2011	
Conflicts	12462790	07-Aug-2009	7962708	14-Jun-2011	Granted
Retention And Disposition Of					
Components Of A Complex	11270402	07.14 2006	7014062	10.0 . 2010	
Stored Object	11370423	07-Mar-2006	7814063	12-Oct-2010	Granted
Deploying And Distributing	10500640	14.7 2012	0020046	19-May-	
Content Management Code	13523648	14-Jun-2012	9038046	2015	Granted
Deploying And Distributing	11420401	2006	0005011	17.1.1.0010	
Content Management Code	11430491	08-May-2006	8225311	17-Jul-2012	Granted
Automatic Detection And					
Redistribution Of Content	11420401	00 M 2006	9225210	17 1 1 2012	C 1
Management Code	11430481	08-May-2006	8225310	17-Jul-2012	Granted
In Place Object Reconstruction	13687876	28-Nov-2012	9223639	29-Dec-2015	Granted
In Place Object Reconstruction	11430353	08-May-2006	8347321	01-Jan-2013	Granted
Managed Content Delivery Via	11100100	2006			D 1:
Web Services	11430433	08-May-2006			Pending
Mandatory Access Control List			<b>-</b> 004066	10.7.1.0011	
For Managed Content	11393219	30-Mar-2006	7984066	19-Jul-2011	Granted
Mandatory Access Control List	10155054	10.1.	005000	05 E 1 2012	
For Managed Content	13157954	10-Jun-2011	8370388	05-Feb-2013	Granted
Priveleged Access To Managed	11202001	20.35 2006	0555400	00.00012	
Content	11393081	30-Mar-2006	8555403	08-Oct-2013	Granted
Priveleged Access To Managed	4.404.504.4		0050155	00.35	
Content	14015844	30-Aug-2013	8973157	03-Mar-2015	Granted
Dynamic Access Control List	11202624	20.15 2006	0.710000	06-May-	
For Managed Content	11393624	30-Mar-2006	8719903	2014	Granted
Application-Supervised Access	11202020	20.34 2005			D "
To Managed Content	11393039	30-Mar-2006			Pending
Retention Of Complex Objects	11540503	29-Sep-2006	7801862	21-Sep-2010	Granted
Superseding Objects In A					
Retention System	11541485	29-Sep-2006	9063940	23-Jun-2015	Granted
Superseding Objects In A	14716650	19-May-2015			Published

Retention System					
User Management For					
Repository Manager	11638654	12-Dec-2006	8533789	10-Sep-2013	Granted
Configurable User Management	11638340	12-Dec-2006	7702787	20-Apr-2010	Granted
System For Lightweight Objects	11906185	28-Sep-2007	7987210	26-Jul-2011	Granted
System For Lightweight Objects	13161580	16-Jun-2011	8560572	15-Oct-2013	Granted
System For Lightweight Objects	13969101	16-Aug-2013	0000072	10 000 2010	Published
Conversion Of Lightweight	13707101	10 1145 2013			1 401151164
Object To A Heavyweight					
Object	11906174	28-Sep-2007	8656410	18-Feb-2014	Granted
Conversion Of Lightweight		100 1			
Object To A Heavyweight					
Object	14148052	06-Jan-2014	9009731	14-Apr-2015	Granted
Converting Heavyweight				1	
Objects To Lightweight Objects	11906184	28-Sep-2007	7987470	26-Jul-2011	Granted
Single Retention Policy	12494645	30-Jun-2009	8856081	07-Oct-2014	Granted
Method And System For					
Managing Versioned Structured					
Documents In A Database	13338553	28-Dec-2011	9002810	07-Apr-2015	Granted
Method And System For					
Managing Versioned Structured					
Documents In A Database	13338587	28-Dec-2011	8918379	23-Dec-2014	Granted
Method And System For					
Managing Versioned Structured				20-May-	
Documents In A Database	13338499	28-Dec-2011	8732127	2014	Granted
Active Records Management	13436466	30-Mar-2012	8949194	03-Feb-2015	Granted
Method And System For					
Managing Versioned Structured					
Documents In A Database	13338533	28-Dec-2011	8898122	25-Nov-2014	Granted
Activity Stream Based					
Collaboration	13529286	21-Jun-2012			Pending
Method And System For					
Describing How Retention					
Should Be Applied To	12620006	20.0	0001055	01.5	
Composite Objects	13630096	28-Sep-2012	9201877	01-Dec-2015	Granted
Stateless Services In Content	12/20024	20 0 2012	0000570	14 7 1 2015	
Management Clients	13630834	28-Sep-2012	9083579	14-Jul-2015	Granted
Stateless Services In Content	1 472 4210	00 1 2015			D 11: 1 1
Management Clients	14734318	09-Jun-2015			Published
Activity Stream Based	12520200	21 Ive 2012			Dom diam
Interaction  Method And System For	13529290	21-Jun-2012			Pending
Method And System For					
Connection Pooling For Content  Management Clients	13630538	28 San 2012			Donding
Management Clients  Method And System For		28-Sep-2012	0259702	00 Ech 2016	Pending
Method And System For	13630438	28-Sep-2012	9258793	09-Feb-2016	Granted

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Lightweight Sessions In Content			
Management Clients  Method And System For Access			
Method And System For Access Request Alerts For Protected			
Information	13926194	25-Jun-2013	Allowed
Chronological Based Retention	13920194	23-Jun-2013	Allowed
For Objects Archived Through A			
Web-Based Storage Interface			
For Ilm	14040527	27-Sep-2013	Pending
Content Access Based On	11010027	27 Sep 2013	
Mobile Device Geographical			
Location	14312909	24-Jun-2014	Pending
Assimilation In Multi Model			
Webpage Composition	14671212	27-Mar-2015	Pending
Process Fragment Management	14671396	27-Mar-2015	Pending
Rules Based Data Extraction	14788196	30-Jun-2015	Pending
Rules Based Data Extraction	62158797	08-May-2015	Pending
Method And System For			
Communication Using Published			
Events	14851499	11-Sep-2015	Pending
Server-Orchestrated Peer-To-		•	
Peer Content Sharing In CMS			
And Sync-N-Share Applications	14858913	18-Sep-2015	Pending
Method And System For			
Creating And Using Persona In			
A Content Management System	14871557	30-Sep-2015	Pending
Method And System For			
Managing And Tracking Content			
Dissemination In An Enterprise	14871126	30-Sep-2015	Pending
Method And System			
Implementing Dynamic And/Or	1.4071000	20.0 2015	D 1
Adaptive User Interfaces	14871288	30-Sep-2015	Pending
Dynamic External Views With			
Encryption To Support Global			
Data Compliance For Global Archives	14871414	30-Sep-2015	Pending
Method And System For	146/1414	30-8ер-2013	rending
Software Application			
Optimization Using Natural			
Language-Based Queries	14970259	15-Dec-2015	Pending
Dynamic Expression Based	1.2.020	10 2 00 2010	1 4.1.4.1.5
Default Values Of Child			
Hierarchical Nodes Based On			
Ancestor Level Meta-Data.			Unfiled
Expression Based Conditional			
Creation Of Child Hierarchical			Unfiled

	T		<u> </u>		
Nodes Based On Ancestor Level					
Meta-Data.					
System And Method For End To					
End Performance Response					
Time Measurement Based On					
Graphic Recognition					Unfiled
System And Method To Solve					
Full Text Search Performance					
Issue Caused By Low-Privileged					
Users Based On Security Hash					Unfiled
System And Method To					
Tokenize Mixed Languages					
Based On Z-Tree					Unfiled
Method And Mechanism Of					Omned
Context Driven Multi Nodal					
Content Discovery And Delivery					
In An Access Controlled Content					
					Unfiled
Management System					Onnea
Systems And Methods For					
Facilitating Management Of	11022111				A 11 1
Data	11933111				Allowed
Systems And Methods For					
Performing Integrated Searches					
With Actions	12030153		8521741	27-Aug-2013	Granted
Systems And Methods For					
Managing Movement	12023941				Pending
Extending Content Management					
Policies To Local Copies Of					
Content	11810528	06-Jun-2007			Pending
Transfering Virtual Datacenters					
Between Hosting Locations					
While Maintaining					
Communication With A					
Gateway Server Following The					
Transfer	13174213	30-Jun-2011	9282142	08-Mar-2016	Granted
Managing Virtual Datacenters					
With Tool That Maintains					
Communications With A Virtual					
Data Center That Is Moved	13248372	29-Sep-2011	9058336	16-Jun-2015	Granted
Provisioning Interfacing Virtual	102.100.72	23 5 tp 2311	3 30 30 0	10 0001 2010	
Machines To Separate Virtual					
Datacenters	13248404	29-Sep-2011	8769058	01-Jul-2014	Granted
Virtual Datacenter Redundancy	14042200	30-Sep-2013	0,0000	01 301-2014	Pending
Defining Virtual Application	17072200	30-36p-2013			1 chang
	14042210	20 Son 2012			Donding
Templates  Province of the Vietness	14042219	30-Sep-2013			Pending
Provisioning Virtual	14042260	30-Sep-2013			Pending

Applications From Virtual					
Application Templates					
Method And System For					
Indexing A Structured					
Document	13161700	16-Jun-2011	8903829	02-Dec-2014	Granted
Method And System For					
Processing A Query	13161717	16-Jun-2011	8645388	04-Feb-2014	Granted
Methods And Systems For					
Building					
An Application Execution Map	13245390	26-Sep-2011	9203894	01-Dec-2015	Granted
Methods And Systems For		•			
Providing Recommendation					
Information	13074188	29-Mar-2011			Allowed
Methods And Systems For					
Providing Recommendation					
Information In A Workflow					
Process	13074193	29-Mar-2011			Pending
Method And Systems For					
Providing A Warning By A Case					
Management System	13245298	26-Sep-2011			Pending
Efficient Xacml Access Control		•			
Processing	13174719	30-Jun-2011	8875222	28-Oct-2014	Granted
Trait Definitions	13174746	30-Jun-2011	9092466	28-Jul-2015	Granted
System And Method Of					
Hierarchical Archive					
Management	13341194	30-Dec-2011			Pending
Risk-Adaptive Access Control	13852865	28-Mar-2013	9240996	19-Jan-2016	Granted
Risk-Adaptive Access Control	14957406	02-Dec-2015			Published
Method And System For					
Configuring Resources					
To Enable Resource Monitoring	13833499	15-Mar-2013	9118538	25-Aug-2015	Granted
Execution Path Determination In					
A Distributed Environment	13630966	28-Sep-2012			Pending
Method And System For Multi-					
Dimensional Logging For					
Enterprise					
Applications	13627148	26-Sep-2012	8949195	03-Feb-2015	Granted
Method And System For On-					
Demand Aggregated Logging					
For Distributed Systems	13921335	19-Jun-2013			Pending
Method And System For					
Translating Mind Maps To Test					
Management Utility Test Cases	13627086	26-Sep-2012	8949670	03-Feb-2015	Granted
Generating Customized					
Documentation For Applications	13725581	21-Dec-2012			Pending
Generation And Use Of A	13725609	21-Dec-2012	9275233	01-Mar-2016	Granted

Modified Protected File					
Generation And Use Of A					
Modified Protected File	14937680	10-Nov-2015			Published
Page-Independent Multi-Field					
Validation In Document Capture	13720679	19-Dec-2012	9317484	19-Apr-2016	Granted
Page-Independent Multi-Field				r	
Validation In Document Capture	15055154	26-Feb-2016			Published
Method And System For					
Deciding On Ordering Of					
Scripting Language Source					
Code For Dependency					
Resolution	13710030	10-Dec-2012			Pending
Using Server Side Font					
Preparation To Achieve					
Wysiwyg And Cross Platform					
Fidelity On Web Based Word					
Processor	14256101	18-Apr-2014			Published
Using Server Side Font		1			
Preparation To Achieve					
Wysiwyg And Cross Platform					
Fidelity On Web Based Word	EP15159736.				
Processor	6	18-Mar-2015			Published
Method And System For Content					
Access Authorization	14641934	09-Mar-2015			Pending
Method And System For Content					_
Management Of Structured And					
Unstructured Data	14754955	30-Jun-2015			Pending
Network Configuration Backup					
And Restore Operations Using					
Continuous Data Protection	11381343	02-May-2006	7971091	28-Jun-2011	Granted
A Method And Apparatus For					
Implementing A Remote					
Mirroring Data Facility Without					
Employing A Dedicated Leased					
Line To Form The Link Between					
Two Remotely Disposed Storage					
Devices	08935844	23-Sep-1997	7647460	12-Jan-2010	Granted
Using Pseudosnapshots For					
Continuous Data Protection					
Systems To Surface a Copy Of					
Data	11381347	02-May-2006	7603395	13-Oct- 2009	Granted
Using a Virtual Device to					
Access Data as it Previously					
Existed in a Mass Data Storage					
System	09268739	16-Mar-1999	6073222	6-Jun-2000	Granted
Method and System For	08322697	13-Oct-1994	5649152	15-Jul-1997	Granted

Draviding a Static Spanshot of	1				
Providing a Static Snapshot of					
Data Stored on a Mass Storage System					
Backup System That Takes A					
Snapshot Of The Locations In A					
Mass Storage Device That Has					
Been Identified For Updating	08747151	08-Nov-1996	5835953	10-Jan-1998	Granted
Prior To Updating Comparing Mass Storage	08/4/131	08-1NOV-1990	3833933	10-Jan-1998	Granted
Devices Through Digests That					
Are Representative Of Stored					
Data In Order To Minimize Data					
Transfer	09165180	01-Oct-1998	6085298	04-Jul-2000	Granted
Methods And Apparatus For	07103100	01-001-1998	0003270	04-341-2000	Granted
Multiple Point In Time Data					
Access	11609561	12-Dec-2006	7849361	07-Dec-2010	Granted
Cross Tagging Of Data For	11003301	12 200 2000	7019001	07 202010	Grantea
Consistent Recovery	11356920	17-Feb-2006	7577867	18-Aug-2009	Granted
Methods And Apparatus For		1 2 2 2 2 2 3 3 3			
Optimal Journaling For					
Continuous Data Replication	11536215	28-Sep-2006	7516287	07-Apr-2009	Granted
I/O Scheduling for Flash Drives	11862417	27-Sep-2007	8375187	12-Feb-2013	Granted
Efficient data storage system	11974961	16-Oct-2007	7434015	07-Oct-2008	Granted
Efficient data storage system	11403153	11-Apr-2006	7305532	04-Dec-2007	Granted
Efficient data storage system	10325479	20-Dec-2002	7065619	20-Jun-2006	Granted
Efficient data storage system	10323173	20 200 2002	7002013	13-May-	Grantea
Efficient data storage system	11136263	24-May-2005	7373464	2008	Granted
Efficient data storage system	10325690	12/20/2002	6928526	09-Aug-2005	Granted
Efficient data storage system	12079766	28-Mar-2008	7769967	03-Aug-2010	Granted
Efficient data storage system	12819356	21-Jun-2010	8275955	25-Sep-2012	Granted
Efficient data storage system	13592746	23-Aug-2012	8612696	17-Dec-2013	Granted
Efficient data storage system	14068415	31-Oct-2013	9081728	14-Jul-2015	Granted
Efficient data storage system	14734920	09-Jun-2015	3001720	11 341 2013	Pending
Data Integrity Management for	11731920	07-Jun-2013			1 chang
Data Storage Systems	09342955	29-Jun-1999	6915475	05-Jul-2005	Granted
Systems and methods which	09912999	25 3411 1555	0313173	03 341 2003	Grantea
utilize parity sets	09927042	09-Aug-2001	6904556	07-Jun-2005	Granted
danze parity sets	1 03327012	09 1148 2001	0301000	07 <b>7 GH</b> 2002	Grantea
Snapshot Of Data Stored On A					
Mass Storage System			AT237842	15-May-2003	Granted
System And Method For				1=15 = 3 3 3	
Maintaining A Logically					
Consistent Backup Using			AT266228		
Minimal Data Transfer			(T)	15-May-2004	Granted

Snapshot of data stored on a

19-Feb-1998

Granted

AU687274

mass storage system			(B2)		
System and method for			()		
maintaining a logically					
consistent backup using minimal			AU726915		
data transfer			(B2)	23-Nov-2000	Granted
Snapshot of data stored on a			AU3958595	23 1107 2000	Granted
mass storage system			(A)	6-May-1996	Granted
System and method for				,	
maintaining a logically					
consistent backup using minimal			AU5174098		
data transfer			(A)	29-May-1998	Granted
			CA2201859	, , , , , , , , , , , , , , , , , , ,	
			(A1);		
Snapshot Of Data Stored On A	PCT/US1995		CA2201859		
Mass Storage System	/013324	10-Oct-1995	(C)	19-Dec-2000	Granted
System And Method For			(-)		
Maintaining A Logically					
Consistent Backup Using	PCT/US1997		CA2268929		
Minimal Data Transfer	/020406	7-Nov-1997	(A1)	14-May-1998	Granted
Snapshot Of Data Stored On A	, , , , , , , , , , , , , , , , , , , ,	. 1 (0 ( 1) ) .	DE69530405	11.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1	01411104
Mass Storage System			(T2)	30-Oct-2003	Granted
System And Method For			(1-)		01441104
Maintaining A Logically					
Consistent Backup Using			DE69729011		
Minimal Data Transfer			(T2)	14-Jul-2005	Granted
Snapshot Of Data Stored On A			EP0786111		
Mass Storage System			(B1)	16-Apr-2003	Granted
System And Method For				•	
Maintaining A Logically					
Consistent Backup Using			EP1012716		
Minimal Data Transfer			(A4)	16-Aug-2001	Granted
Snapshot Of Data Stored On A			WO9612232		
Mass Storage System			(A1)	25-Apr-1996	Granted
System And Method For				•	
Maintaining A Logically					
Consistent Backup Using			WO9820419		
Minimal Data Transfer			(A1)	14-May-1998	Granted
Data Integrity Management For				,	
Data Storage Systems			DE60032239	31-May-2007	Granted
Data Integrity Management For			EP1198891		
Data Storage Systems			(B1)	6-Dec-2006	Granted
Data integrity management for			EP1758253		
data storage systems			(A1)	28-Feb-2007	Granted
Data Integrity Management For			WO0101581		
Data Storage Systems			(A9)	4-Jan-2001	Granted
Cache memory system for			DE10236179	20-Feb-2003	Granted
cashe memory bystem for	l		1 2210230177	1 20 1 60 2003	Grantea

network data storage system,			(A1)		
comprises memory segment					
having respective parity segment					
and data segments					
Fault-tolerant memory system	GB0217160.		GB2380836		
having parity groups	1	24-Jul-2002	(B)	15-Jun-2005	Granted
Memory System And Method			JP4643539		
For Using Same			(B2)	2-Mar-2011	Granted
Memory System And Using			JP200313195		
Method Therefor			3 (A)	9-May-2003	Granted

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