

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5308917

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| <b>SUBMISSION TYPE:</b>                                                                                                                                                                         | NEW ASSIGNMENT                              |
| <b>NATURE OF CONVEYANCE:</b>                                                                                                                                                                    | ASSIGNMENT                                  |
| <b>CONVEYING PARTY DATA</b>                                                                                                                                                                     |                                             |
| <b>Name</b>                                                                                                                                                                                     | <b>Execution Date</b>                       |
| CLEVERSAFE, INC.                                                                                                                                                                                | 11/06/2015                                  |
| <b>RECEIVING PARTY DATA</b>                                                                                                                                                                     |                                             |
| <b>Name:</b>                                                                                                                                                                                    | INTERNATIONAL BUSINESS MACHINES CORPORATION |
| <b>Street Address:</b>                                                                                                                                                                          | NEW ORCHARD ROAD                            |
| <b>City:</b>                                                                                                                                                                                    | ARMONK                                      |
| <b>State/Country:</b>                                                                                                                                                                           | NEW YORK                                    |
| <b>Postal Code:</b>                                                                                                                                                                             | 10504                                       |
| <b>PROPERTY NUMBERS Total: 1</b>                                                                                                                                                                |                                             |
| <b>Property Type</b>                                                                                                                                                                            | <b>Number</b>                               |
| <b>Application Number:</b>                                                                                                                                                                      | 16239651                                    |
| <b>CORRESPONDENCE DATA</b>                                                                                                                                                                      |                                             |
| <b>Fax Number:</b>                                                                                                                                                                              | (888)708-9048                               |
| <i>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.</i> |                                             |
| <b>Email:</b>                                                                                                                                                                                   | ktaylor@texaspatents.com                    |
| <b>Correspondent Name:</b>                                                                                                                                                                      | GARLICK & MARKISON                          |
| <b>Address Line 1:</b>                                                                                                                                                                          | 106 E. 6TH STREET, SUITE 900                |
| <b>Address Line 4:</b>                                                                                                                                                                          | AUSTIN, TEXAS 78701                         |
| <b>ATTORNEY DOCKET NUMBER:</b>                                                                                                                                                                  | END920165709US07                            |
| <b>NAME OF SUBMITTER:</b>                                                                                                                                                                       | KIMBERLY BROWN                              |
| <b>SIGNATURE:</b>                                                                                                                                                                               | /KIMBERLY BROWN/                            |
| <b>DATE SIGNED:</b>                                                                                                                                                                             | 01/04/2019                                  |
| <b>Total Attachments: 49</b>                                                                                                                                                                    |                                             |
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Agreement between Cleversafe, Inc. (hereinafter "ASSIGNOR") a Delaware corporation and International Business Machines Corporation, a New York Corporation (hereinafter "IBM").

WHEREAS, pursuant to an acquisition completed as of November 6, 2015 (the "Closing Date"), by and among IBM and ASSIGNOR, ASSIGNOR has become a wholly owned Subsidiary of IBM;

WHEREAS, ASSIGNOR now desires to assign title and ownership of the Assigned Patents to IBM, subject to ASSIGNOR's retention of beneficial financial interest, in accordance with the terms and conditions herein; and

WHEREAS, IBM desires to obtain such title and ownership of the Assigned Patents in accordance with the terms and conditions herein.

NOW, THEREFORE, in consideration of the premises and the terms, covenants and conditions herein contained, the parties hereby agree as follows:

**Section I.            Definitions**



"Agreement Date" shall mean the date on which this Agreement is signed by the second of IBM and ASSIGNOR to so sign, as shown on the signature page.

"Assigned Patents" shall mean the patents and patent applications listed in Exhibit A, including all foreign counterparts, continuations, divisionals, reissues, and/or reexams that may issue therefrom.

"Effective Date" shall mean the Agreement Date.

"IBM Intercompany Agreement" shall mean a written agreement between IBM and any of its Subsidiaries, or between any of IBM's Subsidiaries, that provide Intercompany Rights under the Assigned Patents.



[REDACTED]

"Subsidiary" of a party hereto or of a third party shall mean a corporation, company or other entity:

- (a) more than fifty percent (50%) of whose outstanding shares or securities (representing the right to vote for the election of directors or other managing authority) are, now or hereafter, owned or controlled, directly or indirectly, by a party hereto or such third party, but such corporation, company or other entity shall be deemed to be a Subsidiary only so long as such ownership or control exists; or
- (b) which does not have outstanding shares or securities, as may be the case in a partnership, joint venture or unincorporated association, but more than fifty percent (50%) of whose ownership interest representing the right to make the decisions for such corporation, company or other entity is, now or hereafter, owned or controlled, directly or indirectly, by a party hereto or such third party, but such corporation, company or other entity shall be deemed to be a Subsidiary only so long as such ownership or control exists.

**Section 2.**

**Assignment and License**

2.1 Subject to all rights granted to others prior to the Effective Date, [REDACTED]

[REDACTED] ASSIGNOR hereby sells, transfers and assigns to IBM all right, title and interest in and to the Assigned Patents, including: the right to sue for injunctive relief and damages for infringement of any of the Assigned Patents accruing prior to, on, and after the Effective Date.

[REDACTED]

[REDACTED]

**Section 5. Consideration and Agreement Date**

5.1 This Agreement will not be binding upon the parties until it has been signed herein below by or on behalf of each party, in which event it shall be effective as of the Effective Date.


5.2 Consideration shall be made in accordance with the terms of the relevant IBM Intercompany Agreement pertaining to the Assigned Patents assigned hereunder.

**Section 6. Miscellaneous**

6.1 Neither party shall assign any of its rights (other than the right to receive payments) or delegate any of its obligations under this Agreement. Any attempt to do so shall be void.

6.2 The validity, construction, and performance of this Agreement will be governed by the substantive law of the State of New York and the patent and trademark laws of the United States, as if this Agreement was executed in, and fully performed within the State of New York.

6.3 The headings of the Sections hereof are for convenience of reference only and shall not modify, define or limit any of the terms or provisions hereof.



6.6 Subject to IBM Intercompany Agreements, the provisions of this Agreement constitute the entire agreement between the parties and supersede all prior agreements, oral or written, and all other communications relating to the subject matter hereof.

6.7 No amendment or modification of this Agreement shall be effective unless it is set forth in a writing that refers to the provisions so amended or modified and is executed by authorized representatives of both parties. No waiver of any provision of this Agreement shall be effective unless it is set forth in a writing that refers to the provisions so waived and the instrument in which such provision is contained and is executed by an authorized representative of the party waiving its rights. No failure or delay by either party in exercising any right, power or remedy will operate as a waiver of any such right, power or remedy.

6.8 This Agreement and any amendments hereto may be signed in one or more counterparts, each of which, when signed and delivered, shall be deemed to be an original. All such counterparts together shall constitute one and the same valid and binding agreement, even if all of the parties have not signed the same counterpart. Signatures to this Agreement may be delivered by facsimile, in which case the facsimile copy of an original signature shall be deemed to be an original signature.

The parties hereto have executed this Agreement by their respective duly constituted officers in their respective corporate names.

Agreed to:  
Cleversafe, Inc.

Agreed to:  
INTERNATIONAL BUSINESS  
MACHINES CORPORATION

By: Michael P Healy

By: Kenton Milhouse

Name: Michael P Healy  
Title: Vice President, Cleversafe  
IE.

Name: Kenton Milhouse  
Title: Director

Date: April 5<sup>th</sup>, 2016

Date: April 12, 2016

EXHIBIT A

| Application Number | Patent Number | Application Title                                                                                                           | Filed Date |
|--------------------|---------------|-----------------------------------------------------------------------------------------------------------------------------|------------|
| 11/973,613         | 8,285,878     | Block Based Access To A Dispersed Data Storage Network                                                                      | 10/9/2007  |
| 11/973,622         | 8171101       | SMART ACCESS TO A DISPERSED DATA STORAGE NETWORK                                                                            | 10/9/2007  |
| 12/684,085         | 8171102       | SMART ACCESS TO A DISPERSED DATA STORAGE NETWORK                                                                            | 1/7/2010   |
| 11/973,621         | 7904475       | Virtualized Data Storage Vaults on a Dispersed Data Storage Network                                                         | 10/9/2007  |
| 12/633,779         | 7,953,771     | Virtualized Data Storage Vaults on a Dispersed Data Storage Network                                                         | 12/8/2009  |
| 13/094,375         | 8,190,662     | Virtualized Data Storage Vaults on a Dispersed Data Storage Network                                                         | 4/26/2011  |
| 13/106,577         | 9092439       | Virtualized Data Storage Vaults on a Dispersed Data Storage Network                                                         | 5/12/2011  |
| 12/648,497         | 8185614       | Systems, Methods and Apparatus for Identifying Accessible Dispersed Digital Storage Vaults Utilizing a Centralized Registry | 12/29/2009 |
| 12/817,140         | 8,200,788     | SLICE SERVER METHOD AND APPARATUS OF DISPERSED DIGITAL STORAGE VAULTS                                                       | 6/16/2010  |
| 11/241,555         | 7953937       | Systems, Methods, And Apparatus For Subdividing Data For Storage In A Dispersed Data Storage Grid                           | 9/30/2005  |
| 11/403,684         | 7574570       | Billing System for Information Dispersal System                                                                             | 4/13/2006  |
| 12/499,489         | 8140777       | BILLING SYSTEM FOR INFORMATION DISPERSAL SYSTEM                                                                             | 7/8/2009   |
| 11/404,071         | 7574579       | Metadata Management System for an Information Dispersed Storage System                                                      | 4/13/2006  |
| 12/499,013         | 8019960       | METADATA MANAGEMENT SYSTEM FOR AN INFORMATION DISPERSED STORAGE SYSTEM                                                      | 7/7/2009   |
| 11/403,391         | 7546427       | System for Rebuilding Dispersed Data                                                                                        | 4/13/2006  |
| 12/431,166         | 7818518       | System for Rebuilding Dispersed Data                                                                                        | 4/28/2009  |
| 12/575,577         | 8244991       | Systems, Methods, And Apparatus For Subdividing Data For Storage In A Dispersed Data Storage Grid                           | 10/8/2009  |
| 13/488,650         | 8468311       | System, Methods, And Apparatus For Subdividing Data For Storage In A Dispersed Data Storage Grid                            | 6/5/2012   |
| 12/080,042         | 8880799       | Rebuilding data on a dispersed storage network                                                                              | 3/31/2008  |
| 12/648,691         | 8352782       | Range Based Rebuilder For Use With A Dispersed Data Storage Network                                                         | 12/29/2009 |
| 12/716,106         | 8560882       | Method and Apparatus for Rebuilding Data in a Dispersed Data Storage Network                                                | 3/2/2010   |
| 13/558,008         | 8464096       | METHOD AND APPARATUS FOR REBUILDING DATA IN A DISPERSED DATA STORAGE NETWORK                                                | 7/25/2012  |
| 13/914,228         | 8868969       | METHOD AND APPARATUS FOR REBUILDING DATA IN A DISPERSED DATA STORAGE NETWORK                                                | 6/10/2013  |
| 13/914,232         | 8713358       | METHOD AND APPARATUS FOR REBUILDING DATA IN A DISPERSED DATA STORAGE NETWORK                                                | 6/10/2013  |



|            |           |                                                                                                                                                  |            |
|------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 12/218,200 | 8,209,363 | File system adapted for use with a dispersed data storage network                                                                                | 7/14/2008  |
| 12/648,669 | 8478865   | Systems, Methods, And Apparatus For Matching A Connection Request With A Network Interface Adapted For Use With A Dispersed Data Storage Network | 12/29/2009 |
| 12/649,099 | 8965956   | Integrated Client For Use With A Dispersed Data Storage Network                                                                                  | 12/29/2009 |
| 12/648,528 | 8533256   | Object Interface To A Dispersed Data Storage Network                                                                                             | 12/29/2009 |
| 14/021,037 | 8892698   | OBJECT INTERFACE TO A DISPERSED DATA STORAGE NETWORK                                                                                             | 9/9/2013   |
| 12/947,941 | 8886711   | FILE SYSTEM ADAPTED FOR USE WITH A DISPERSED DATA STORAGE NETWORK                                                                                | 11/17/2010 |
| 12/218,594 | 7,962,641 | Streaming Media Software Interface To A Dispersed Data Storage Network                                                                           | 7/16/2008  |
| 13/107,040 | 8694668   | Streaming Media Software Interface To A Dispersed Data Storage Network                                                                           | 5/13/2011  |
| 12/426,623 | 9092294   | Systems, Apparatus, And Methods For Utilizing A Reachability Set To Manage A Network Upgrade                                                     | 4/20/2009  |
| 12/551,117 | 8744071   | DISPERSED DATA STORAGE SYSTEM DATA ENCRYPTION AND ENCODING                                                                                       | 8/31/2009  |
| 12/547,753 | 8656187   | Dispersed Storage Secure Data Decoding                                                                                                           | 8/26/2009  |
| 12/426,807 | 8819781   | Management of Network Devices within a Dispersed Data Storage Network                                                                            | 4/20/2009  |
| 12/764,275 | 8560798   | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS SPACE                                                                                                  | 4/21/2010  |
| 14/026,202 | 8972692   | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS SPACE                                                                                                  | 9/13/2013  |
| 13/154,708 | 8782227   | IDENTIFYING AND CORRECTING AN UNDESIRED CONDITION OF A DISPERSED STORAGE NETWORK ACCESS REQUEST                                                  | 6/7/2011   |
| 14/331,526 | 9300477   | IDENTIFYING AND CORRECTING AN UNDESIRED CONDITION OF A DISPERSED STORAGE NETWORK ACCESS REQUEST                                                  | 7/15/2014  |
| 12/767,364 | 8555109   | METHOD AND APPARATUS FOR DISTRIBUTED STORAGE INTEGRITY PROCESSING                                                                                | 4/26/2010  |
| 14/047,661 | 8819482   | METHOD AND APPARATUS FOR DISTRIBUTED STORAGE INTEGRITY PROCESSING                                                                                | 10/7/2013  |
| 13/021,510 | 9047218   | DISPERSED STORAGE NETWORK SLICE NAME VERIFICATION                                                                                                | 2/4/2011   |
| 14/726,699 | 9311186   | DISPERSED STORAGE NETWORK SLICE NAME VERIFICATION                                                                                                | 6/1/2015   |
| 13/887,560 | 8769379   | IDENTIFYING A STORAGE ERROR OF A DATA SLICE                                                                                                      | 5/6/2013   |
| 14/319,372 | 9043689   | IDENTIFYING A STORAGE ERROR OF A DATA SLICE                                                                                                      | 6/30/2014  |
| 12/767,390 | 8706980   | METHOD AND APPARATUS FOR SLICE PARTIAL REBUILDING IN A DISPERSED STORAGE NETWORK                                                                 | 4/26/2010  |
| 12/776,098 | 9167277   | DISPERSED STORAGE NETWORK DATA MANIPULATION                                                                                                      | 5/7/2010   |
| 12/797,025 | 8595435   | DISPERSED STORAGE WRITE PROCESS                                                                                                                  | 6/9/2010   |
| 13/863,475 | 9092140   | DISPERSED STORAGE WRITE PROCESS                                                                                                                  | 4/16/2013  |
| 12/759,948 | 8468609   | AUTHENTICATING USE OF A DISPERSED STORAGE NETWORK                                                                                                | 4/14/2010  |
| 13/917,922 | 8813204   | AUTHENTICATING USE OF A DISPERSED STORAGE NETWORK                                                                                                | 6/14/2013  |

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| 14/335,912 | 9270298 | SELECTING STORAGE UNITS TO REBUILD AN ENCODED DATA SLICE                                                  | 7/20/2014 |
| 12/764,873 | 8275744 | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS FIELDS                                                          | 4/21/2010 |
| 12/764,930 | 8275966 | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS GENERATIONS                                                     | 4/21/2010 |
| 13/594,199 | 8886905 | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS GENERATIONS                                                     | 8/24/2012 |
| 12/767,404 | 8473677 | METHOD AND APPARATUS FOR STORAGE INTEGRITY PROCESSING BASED ON ERROR TYPES IN A DISPERSED STORAGE NETWORK | 4/26/2010 |
| 13/916,138 | 8819516 | METHOD AND APPARATUS FOR STORAGE INTEGRITY PROCESSING BASED ON ERROR TYPES IN A DISPERSED STORAGE NETWORK | 6/12/2013 |
| 14/303,956 | 9207870 | ALLOCATING STORAGE UNITS IN A DISPERSED STORAGE NETWORK                                                   | 6/13/2014 |
| 12/817,171 | 8589637 | CONCURRENT SET STORAGE IN DISTRIBUTED STORAGE NETWORK                                                     | 6/16/2010 |
| 14/288,453 | 9063658 | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                             | 5/28/2014 |
| 14/291,205 | 9098376 | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                             | 5/30/2014 |
| 14/792,846 | 9304759 | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                             | 7/7/2015  |
| 12/818,137 | 8468137 | DISTRIBUTED STORAGE NETWORK THAT PROCESSES DATA IN EITHER FIXED OR VARIABLE SIZES                         | 6/17/2010 |
| 12/779,640 | 9244768 | DISPERSED STORAGE NETWORK FILE SYSTEM DIRECTORY                                                           | 5/13/2010 |
| 14/304,054 | 9208025 | VIRTUAL MEMORY MAPPING IN A DISPERSED STORAGE NETWORK                                                     | 6/13/2014 |
| 12/839,220 | 8630987 | SYSTEM AND METHOD FOR ACCESSING A DATA OBJECT STORED IN A DISTRIBUTED STORAGE NETWORK                     | 7/19/2010 |
| 12/839,209 | 8819011 | COMMAND LINE INTERPRETER FOR ACCESSING A DATA OBJECT STORED IN A DISTRIBUTED STORAGE NETWORK              | 7/19/2010 |
| 12/839,181 | 8769035 | DISTRIBUTED STORAGE NETWORK FOR STORING A DATA OBJECT BASED ON STORAGE REQUIREMENTS                       | 7/19/2010 |
| 12/779,658 | 8281182 | DISPERSED STORAGE UNIT SELECTION                                                                          | 5/13/2010 |
| 13/593,997 | 8516299 | DISPERSED STORAGE UNIT SELECTION                                                                          | 8/24/2012 |
| 14/292,132 | 9203812 | DISPERSED STORAGE NETWORK WITH ENCRYPTED PORTION WITHHOLDING AND METHODS FOR USE THEREWITH                | 5/30/2014 |
| 13/529,052 | 8862800 | DISTRIBUTED STORAGE NETWORK INCLUDING MEMORY DIVERSITY                                                    | 6/21/2012 |
| 12/762,352 | 8504847 | Securing Data in a Dispersed Storage Network Using Shared Secret Slices                                   | 4/18/2010 |
| 13/742,577 | 9104691 | Securing Data in a Dispersed Storage Network Using An Encoding Equation                                   | 1/16/2013 |
| 12/778,647 | 8281181 | METHOD AND APPARATUS FOR SELECTIVELY ACTIVE DISPERSED STORAGE MEMORY DEVICE UTILIZATION                   | 5/12/2010 |
| 12/778,663 | 8381025 | METHOD AND APPARATUS FOR DISPERSED STORAGE MEMORY DEVICE SELECTION                                        | 5/12/2010 |
| 13/524,346 | 8448020 | METHOD AND APPARATUS FOR DISPERSED STORAGE MEMORY DEVICE SELECTION                                        | 6/15/2012 |

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| 12/777,864 | 8918534 | WRITING DATA SLICES TO READY AND NON-READY DISTRIBUTED STORAGE UNITS IN A DISTRIBUTED STORAGE NETWORK | 5/11/2010  |
| 12/814,467 | 8351600 | DISTRIBUTED STORAGE NETWORK AND METHOD FOR ENCRYPTING AND DECRYPTING DATA USING HASH FUNCTIONS        | 6/13/2010  |
| 13/736,848 | 9009491 | DISTRIBUTED STORAGE NETWORK AND METHOD FOR ENCRYPTING AND DECRYPTING DATA USING HASH FUNCTIONS        | 1/8/2013   |
| 12/779,675 | 8370600 | DISPERSED STORAGE UNIT AND METHOD FOR CONFIGURATION THEREOF                                           | 5/13/2010  |
| 13/730,223 | 9043574 | DISPERSED STORAGE UNIT AND METHOD FOR CONFIGURATION THEREOF                                           | 12/28/2012 |
| 12/779,709 | 8566552 | DISPERSED STORAGE NETWORK RESOURCE ALLOCATION                                                         | 5/13/2010  |
| 14/032,776 | 8812812 | DISPERSED STORAGE NETWORK RESOURCE ALLOCATION                                                         | 9/20/2013  |
| 12/862,871 | 8621268 | WRITE THRESHOLD UTILIZATION IN A DISPERSED STORAGE SYSTEM                                             | 8/25/2010  |
| 14/292,772 | 9088407 | DISTRIBUTED STORAGE NETWORK AND METHOD FOR STORING AND RETRIEVING ENCRYPTION KEYS                     | 5/30/2014  |
| 12/838,407 | 9015431 | DISTRIBUTED STORAGE REVISION ROLLBACKS                                                                | 7/16/2010  |
| 12/777,887 | 8554994 | DISTRIBUTED STORAGE NETWORK UTILIZING MEMORY STRIPES                                                  | 5/11/2010  |
| 12/862,878 | 8688907 | LARGE SCALE SUBSCRIPTION BASED DISPERSED STORAGE NETWORK                                              | 8/25/2010  |
| 14/230,253 | 9268641 | LARGE SCALE SUBSCRIPTION BASED DISPERSED STORAGE NETWORK                                              | 3/31/2014  |
| 12/942,692 | 8522113 | SELECTING STORAGE FACILITIES AND DISPERSAL PARAMETERS IN A DISPERSED STORAGE NETWORK                  | 11/9/2010  |
| 12/712,773 | 8949695 | METHOD AND APPARATUS FOR NESTED DISPERSED STORAGE                                                     | 2/25/2010  |
| 12/778,680 | 8478937 | METHOD AND APPARATUS FOR DISPERSED STORAGE MEMORY DEVICE UTILIZATION                                  | 5/12/2010  |
| 12/712,842 | 9047217 | NESTED DISTRIBUTED STORAGE UNIT AND APPLICATIONS THEREOF                                              | 2/25/2010  |
| 14/290,549 | 9195408 | HIGHLY AUTONOMOUS DISPERSED STORAGE SYSTEM RETRIEVAL METHOD                                           | 5/29/2014  |
| 14/287,340 | 8977931 | Method and apparatus for nested dispersed storage                                                     | 5/27/2014  |
| 14/612,059 | 9189336 | Method and apparatus for nested dispersed storage                                                     | 2/2/2015   |
| 12/886,368 | 8990585 | TIME BASED DISPERSED STORAGE ACCESS                                                                   | 9/20/2010  |
| 14/294,131 | 9311185 | DISPERSED STORAGE UNIT SOLICITATION METHOD AND APPARATUS                                              | 6/2/2014   |
| 14/302,772 | 9262288 | AUTONOMOUS DISPERSED STORAGE SYSTEM RETRIEVAL METHOD                                                  | 6/12/2014  |
| 12/797,208 | 8402344 | METHOD AND APPARATUS FOR CONTROLLING DISPERSED STORAGE OF STREAMING DATA                              | 6/9/2010   |
| 12/797,339 | 8438456 | METHOD AND APPARATUS FOR DISPERSED STORAGE OF STREAMING DATA                                          | 6/9/2010   |
| 13/870,194 | 8595596 | METHOD AND APPARATUS FOR DISPERSED STORAGE OF STREAMING DATA                                          | 4/25/2013  |
| 12/789,459 | 8924387 | SOCIAL NETWORKING UTILIZING A DISPERSED STORAGE NETWORK                                               | 5/28/2010  |

|            |         |                                                                                                   |            |
|------------|---------|---------------------------------------------------------------------------------------------------|------------|
| 14/540,305 | 9313293 | SOCIAL NETWORKING UTILIZING A DISPERSED STORAGE NETWORK                                           | 11/13/2014 |
| 12/850,609 | 8464133 | MEDIA CONTENT DISTRIBUTION IN A SOCIAL NETWORK UTILIZING DISPERSED STORAGE                        | 8/4/2010   |
| 12/983,209 | 8938013 | DISPERSAL OF PRIORITY DATA IN A DISPERSED STORAGE NETWORK                                         | 12/31/2010 |
| 12/789,461 | 8357048 | INTERACTIVE GAMING UTILIZING A DISPERSED STORAGE NETWORK                                          | 5/28/2010  |
| 13/711,295 | 8882599 | INTERACTIVE GAMING UTILIZING A DISPERSED STORAGE NETWORK                                          | 12/11/2012 |
| 12/850,610 | 9043489 | ROUTER-BASED DISPERSED STORAGE NETWORK METHOD AND APPARATUS                                       | 8/4/2010   |
| 12/755,181 | 8533424 | COMPUTING SYSTEM UTILIZING DISPERSED STORAGE                                                      | 4/6/2010   |
| 14/021,098 | 8977801 | COMPUTING SYSTEM UTILIZING DISPERSED STORAGE                                                      | 9/9/2013   |
| 12/755,200 | 8352719 | COMPUTING DEVICE BOOTING UTILIZING DISPERSED STORAGE                                              | 4/6/2010   |
| 13/645,703 | 8578147 | Computing device booting utilizing dispersed storage                                              | 10/5/2012  |
| 12/755,225 | 8448016 | COMPUTING CORE APPLICATION ACCESS UTILIZING DISPERSED STORAGE                                     | 4/6/2010   |
| 13/753,432 | 8612796 | Computing Core Application Access Utilizing Dispersed Storage                                     | 1/29/2013  |
| 13/753,444 | 8621265 | Computing Core Application Access Utilizing Dispersed Storage                                     | 1/29/2013  |
| 14/143,524 | 8972774 | COMPUTING CORE APPLICATION ACCESS UTILIZING DISPERSED STORAGE                                     | 12/30/2013 |
| 14/302,377 | 9081675 | ENCODING DATA IN A DISPERSED STORAGE NETWORK                                                      | 6/11/2014  |
| 14/302,390 | 9098409 | DETECTING A COMPUTING SYSTEM BASIC INPUT/OUTPUT SYSTEM ISSUE                                      | 6/11/2014  |
| 12/755,232 | 8527838 | MEMORY CONTROLLER UTILIZING AN ERROR CODING DISPERSAL FUNCTION                                    | 4/6/2010   |
| 14/302,397 | 9086964 | UPDATING USER DEVICE CONTENT DATA USING A DISPERSED STORAGE NETWORK                               | 6/11/2014  |
| 12/839,197 | 8479078 | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                     | 7/19/2010  |
| 13/932,320 | 8631303 | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                     | 7/1/2013   |
| 14/132,020 | 8914707 | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                     | 12/18/2013 |
| 12/817,201 | 8522022 | DISTRIBUTED STORAGE NETWORK EMPLOYING MULTIPLE ENCODING LAYERS IN DATA ROUTING                    | 6/17/2010  |
| 12/779,721 | 8560794 | DISPERSED STORAGE NETWORK FOR MANAGING DATA DELETION                                              | 5/13/2010  |
| 14/025,215 | 8972684 | DISPERSED STORAGE NETWORK FOR MANAGING DATA DELETION                                              | 9/12/2013  |
| 12/845,590 | 8527807 | LOCALIZED DISPERSED STORAGE MEMORY SYSTEM                                                         | 7/28/2010  |
| 13/779,452 | 8726071 | Localized Dispersed Storage Memory System                                                         | 2/27/2013  |
| 12/862,887 | 8918897 | DISPERSED STORAGE NETWORK DATA SLICE INTEGRITY VERIFICATION                                       | 8/25/2010  |
| 12/749,583 | 9235350 | DISPERSED STORAGE UNIT AND METHODS WITH METADATA SEPARATION FOR USE IN A DISPERSED STORAGE SYSTEM | 3/30/2010  |

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|------------|---------|-----------------------------------------------------------------------------------------------------------|------------|
| 12/749,592 | 8938591 | DISPERSED STORAGE PROCESSING UNIT AND METHODS WITH DATA AGGREGATION FOR USE IN A DISPERSED STORAGE SYSTEM | 3/30/2010  |
| 14/292,344 | 9276912 | DISPERSED STORAGE NETWORK WITH SLICE REFRESH AND METHODS FOR USE THEREWITH                                | 5/30/2014  |
| 12/760,066 | 8601259 | Securing Data in a Dispersed Storage Network Using Security Sentinel Value                                | 4/14/2010  |
| 12/759,701 | 8560855 | VERIFICATION OF DISPERSED STORAGE NETWORK ACCESS CONTROL INFORMATION                                      | 4/14/2010  |
| 14/051,588 | 9086994 | VERIFICATION OF DISPERSED STORAGE NETWORK ACCESS CONTROL INFORMATION                                      | 10/11/2013 |
| 12/817,165 | 9076138 | METHOD AND APPARATUS FOR OBFUSCATING SLICE NAMES IN A DISPERSED STORAGE SYSTEM                            | 6/16/2010  |
| 12/759,703 | 8782086 | UPDATING DISPERSED STORAGE NETWORK ACCESS CONTROL INFORMATION                                             | 4/14/2010  |
| 12/797,228 | 8548913 | METHOD AND APPARATUS TO SECURE AN ELECTRONIC COMMERCE TRANSACTION                                         | 6/9/2010   |
| 12/797,165 | 8689354 | METHOD AND APPARATUS FOR ACCESSING SECURE DATA IN A DISPERSED STORAGE SYSTEM                              | 6/9/2010   |
| 12/777,904 | 8473677 | DISTRIBUTED STORAGE NETWORK MEMORY ACCESS BASED ON MEMORY STATE                                           | 5/11/2010  |
| 13/925,270 | 9274890 | DISTRIBUTED STORAGE NETWORK MEMORY ACCESS BASED ON MEMORY STATE                                           | 6/24/2013  |
| 12/814,470 | 8307263 | METHOD AND APPARATUS FOR DISPERSED STORAGE OF STREAMING MULTI-MEDIA DATA                                  | 6/13/2010  |
| 12/838,080 | 8732206 | DISTRIBUTED STORAGE TIMESTAMPED REVISIONS                                                                 | 7/16/2010  |
| 13/866,224 | 9152514 | REBUILDING A DATA SEGMENT IN A DISPERSED STORAGE NETWORK                                                  | 4/19/2013  |
| 12/842,942 | 8433978 | DATA DISTRIBUTION UTILIZING UNIQUE READ PARAMETERS IN A DISPERSED STORAGE SYSTEM                          | 7/23/2010  |
| 13/870,138 | 8667371 | DATA DISTRIBUTION UTILIZING UNIQUE READ PARAMETERS IN A DISPERSED STORAGE SYSTEM                          | 4/25/2013  |
| 14/194,961 | 9049463 | DATA DISTRIBUTION UTILIZING UNIQUE READ PARAMETERS IN A DISPERSED STORAGE SYSTEM                          | 3/3/2014   |
| 13/919,746 | 9215476 | MEDIA DISTRIBUTION TO A PLURALITY OF DEVICES UTILIZING BUFFERED DISPERSED STORAGE                         | 6/17/2013  |
| 12/842,949 | 8291277 | DATA DISTRIBUTION UTILIZING UNIQUE WRITE PARAMETERS IN A DISPERSED STORAGE SYSTEM                         | 7/23/2010  |
| 13/540,289 | 8527828 | DATA DISTRIBUTION UTILIZING UNIQUE WRITE PARAMETERS IN A DISPERSED STORAGE SYSTEM                         | 7/2/2012   |
| 12/842,932 | 8522074 | INTENTIONALLY INTRODUCED STORAGE DEVIATIONS IN A DISPERSED STORAGE NETWORK                                | 7/23/2010  |
| 12/850,611 | 8572282 | ROUTER ASSISTED DISPERSED STORAGE NETWORK METHOD AND APPARATUS                                            | 8/4/2010   |
| 14/062,974 | 8966009 | ROUTER ASSISTED DISPERSED STORAGE NETWORK METHOD AND APPARATUS                                            | 10/25/2013 |
| 12/886,389 | 9027080 | PROXY ACCESS TO A DISPERSED STORAGE NETWORK                                                               | 9/20/2010  |
| 14/453,176 | 9229824 | CACHING REBUILT ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                                        | 8/6/2014   |

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|------------|---------|-----------------------------------------------------------------------------------------|------------|
| 12/903,205 | 8856552 | DIRECTORY SYNCHRONIZATION OF A DISPERSED STORAGE NETWORK                                | 10/13/2010 |
| 12/903,781 | 8352831 | DIGITAL CONTENT DISTRIBUTED STORAGE                                                     | 10/13/2010 |
| 13/736,856 | 8612827 | DIGITAL CONTENT DISTRIBUTION UTILIZING DISPERSED STORAGE                                | 1/8/2013   |
| 14/334,051 | 9305597 | ACCESSING STORED MULTI-MEDIA CONTENT BASED ON A SUBSCRIPTION PRIORITY LEVEL             | 7/17/2014  |
| 12/885,244 | 8458233 | DATA DE-DUPLICATION IN A DISPERSED STORAGE NETWORK UTILIZING DATA CHARACTERIZATION      | 9/17/2010  |
| 13/908,516 | 8762346 | DATA DE-DUPLICATION IN A DISPERSED STORAGE NETWORK UTILIZING DATA CHARACTERIZATION      | 6/3/2013   |
| 12/885,124 | 8819452 | EFFICIENT STORAGE OF ENCRYPTED DATA IN A DISPERSED STORAGE NETWORK                      | 9/17/2010  |
| 12/885,160 | 8468368 | DATA ENCRYPTION PARAMETER DISPERSAL                                                     | 9/17/2010  |
| 14/316,336 | 9021273 | EFFICIENT STORAGE OF ENCRYPTED DATA IN A DISPERSED STORAGE NETWORK                      | 6/26/2014  |
| 14/680,298 | 9208331 | EFFICIENT STORAGE OF ENCRYPTED DATA IN A DISPERSED STORAGE NETWORK                      | 4/7/2015   |
| 14/336,189 | 9043616 | EFFICIENT STORAGE OF ENCRYPTED DATA IN A DISPERSED STORAGE NETWORK                      | 7/21/2014  |
| 12/942,990 | 8352501 | DISPERSED STORAGE NETWORK UTILIZING REVISION SNAPSHOTS                                  | 11/9/2010  |
| 12/903,209 | 9152489 | REVISION SYNCHRONIZATION OF A DISPERSED STORAGE NETWORK                                 | 10/13/2010 |
| 12/942,992 | 8918674 | DIRECTORY FILE SYSTEM IN A DISPERSED STORAGE NETWORK                                    | 11/9/2010  |
| 12/954,025 | 8572429 | OPTIMISTIC DATA WRITING IN A DISPERSED STORAGE NETWORK                                  | 11/24/2010 |
| 14/062,478 | 8826067 | OPTIMISTIC DATA WRITING IN A DISPERSED STORAGE NETWORK                                  | 10/24/2013 |
| 12/954,137 | 8549351 | PESSIMISTIC DATA READING IN A DISPERSED STORAGE NETWORK                                 | 11/24/2010 |
| 14/042,844 | 8880940 | PESSIMISTIC DATA READING IN A DISPERSED STORAGE NETWORK                                 | 10/1/2013  |
| 12/954,232 | 8819179 | DATA REVISION SYNCHRONIZATION IN A DISPERSED STORAGE NETWORK                            | 11/24/2010 |
| 13/097,305 | 9026758 | MEMORY DEVICE UTILIZATION IN A DISPERSED STORAGE NETWORK                                | 4/29/2011  |
| 14/446,703 | 9201732 | SELECTIVE ACTIVATION OF MEMORY TO RETRIEVE DATA IN A DISPERSED STORAGE NETWORK          | 7/30/2014  |
| 12/943,826 | 8954667 | DATA MIGRATION IN A DISPERSED STORAGE NETWORK                                           | 11/10/2010 |
| 12/902,684 | 8762343 | DISPERSED STORAGE OF SOFTWARE                                                           | 10/12/2010 |
| 14/449,549 | 9043548 | Streaming Content Storage                                                               | 8/1/2014   |
| 12/983,226 | 9311184 | STORING RAID DATA AS ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                 | 12/31/2010 |
| 12/983,232 | 8725940 | DISTRIBUTEDLY STORING RAID DATA IN A RAID MEMORY AND A DISPERSED STORAGE NETWORK MEMORY | 12/31/2010 |
| 14/275,814 | 9122628 | DISTRIBUTEDLY STORING RAID DATA IN A RAID MEMORY AND A DISPERSED STORAGE NETWORK MEMORY | 5/12/2014  |
| 14/458,686 | 9116832 | STORING RAID DATA AS ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                 | 8/13/2014  |

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| 14/458,721 | 9158624 | STORING RAID DATA AS ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK     | 8/13/2014  |
| 14/454,852 | 9135115 | STORING DATA IN MULTIPLE FORMATS INCLUDING A DISPERSED STORAGE FORMAT       | 8/8/2014   |
| 12/983,214 | 8495466 | ADJUSTING DATA DISPERSAL IN A DISPERSED STORAGE NETWORK                     | 12/31/2010 |
| 13/946,136 | 8627178 | ADJUSTING DATA DISPERSAL IN A DISPERSED STORAGE NETWORK                     | 7/19/2013  |
| 14/148,652 | 9110819 | ADJUSTING DATA DISPERSAL IN A DISPERSED STORAGE NETWORK                     | 1/6/2014   |
| 12/954,875 | 8885821 | SEQUENCING ENCODED DATA SLICES                                              | 11/28/2010 |
| 12/954,880 | 8959366 | DE-SEQUENCING ENCODED DATA SLICES                                           | 11/28/2010 |
| 12/954,884 | 8649521 | OBFUSCATION OF SEQUENCED ENCODED DATA SLICES                                | 11/28/2010 |
| 13/021,589 | 8683119 | ACCESS CONTROL IN A DISPERSED STORAGE NETWORK                               | 2/4/2011   |
| 14/223,219 | 9092148 | ACCESS CONTROL IN A DISPERSED STORAGE NETWORK                               | 3/24/2014  |
| 13/021,657 | 8707091 | FAILSAFE DIRECTORY FILE SYSTEM IN A DISPERSED STORAGE NETWORK               | 2/4/2011   |
| 14/257,341 | 9116626 | FAILSAFE DIRECTORY FILE SYSTEM IN A DISPERSED STORAGE NETWORK               | 4/21/2014  |
| 12/983,235 | 8850113 | DATA MIGRATION BETWEEN A RAID MEMORY AND A DISPERSED STORAGE NETWORK MEMORY | 12/31/2010 |
| 13/587,802 | 8782491 | Detecting Intentional Corruption of Data in a Dispersed Storage Network     | 8/16/2012  |
| 14/330,194 | 9087016 | DETECTING INTENTIONAL CORRUPTION OF DATA IN A DISPERSED STORAGE NETWORK     | 7/14/2014  |
| 12/983,221 | 8527705 | TEMPORARILY CACHING AN ENCODED DATA SLICE                                   | 12/31/2010 |
| 13/154,735 | 8621269 | IDENTIFYING A SLICE NAME INFORMATION ERROR IN A DISPERSED STORAGE NETWORK   | 6/7/2011   |
| 14/143,471 | 9137022 | IDENTIFYING A SLICE NAME INFORMATION ERROR IN A DISPERSED STORAGE NETWORK   | 12/30/2013 |
| 14/453,241 | 9170884 | UTILIZING CACHED ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK         | 8/6/2014   |
| 13/180,669 | 8938552 | RESOLVING A PROTOCOL ISSUE WITHIN A DISPERSED STORAGE NETWORK               | 7/12/2011  |
| 13/180,673 | 9077734 | AUTHENTICATION OF DEVICES OF A DISPERSED STORAGE NETWORK                    | 7/12/2011  |
| 13/080,490 | 8654789 | INTERMEDIATE WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                | 4/5/2011   |
| 14/182,528 | 9244879 | INTERMEDIATE WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                | 2/18/2014  |
| 13/073,948 | 8625635 | DISPERSED STORAGE NETWORK FRAME PROTOCOL HEADER                             | 3/28/2011  |
| 13/080,286 | 8625637 | CONCLUSIVE WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                  | 4/5/2011   |
| 13/080,446 | 8649399 | CHECK OPERATION DISPERSED STORAGE NETWORK FRAME                             | 4/5/2011   |
| 13/080,431 | 9047242 | READ OPERATION DISPERSED STORAGE NETWORK FRAME                              | 4/5/2011   |
| 13/080,234 | 8681787 | WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                             | 4/5/2011   |
| 14/223,020 | 9256571 | WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                             | 3/24/2014  |
| 13/080,200 | 8625636 | CHECKED WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                     | 4/5/2011   |

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| 13/080,312 | 8761167 | LIST RANGE OPERATION DISPERSED STORAGE NETWORK FRAME                                      | 4/5/2011  |
| 14/312,163 | 9235549 | LIST RANGE OPERATION DISPERSED STORAGE NETWORK FRAME                                      | 6/23/2014 |
| 13/080,177 | 8681790 | LIST DIGEST OPERATION DISPERSED STORAGE NETWORK FRAME                                     | 4/5/2011  |
| 13/920,708 | 9092386 | INDICATING AN ERROR WITHIN A DISPERSED STORAGE NETWORK                                    | 6/18/2013 |
| 13/021,664 | 8578205 | REQUESTING CLOUD DATA STORAGE                                                             | 2/4/2011  |
| 14/048,659 | 8886992 | REQUESTING CLOUD DATA STORAGE                                                             | 10/8/2013 |
| 13/180,675 | 8627114 | AUTHENTICATING A DATA ACCESS REQUEST TO A DISPERSED STORAGE NETWORK                       | 7/12/2011 |
| 14/148,198 | 9143499 | AUTHENTICATING A DATA ACCESS REQUEST TO A DISPERSED STORAGE NETWORK                       | 1/6/2014  |
| 13/154,740 | 9231768 | UTILIZING A DETERMINISTIC ALL OR NOTHING TRANSFORMATION IN A DISPERSED STORAGE NETWORK    | 6/7/2011  |
| 13/291,009 | 8914669 | SECURE REBUILDING OF AN ENCODED DATA SLICE IN A DISPERSED STORAGE NETWORK                 | 11/7/2011 |
| 13/097,338 | 8874868 | MEMORY UTILIZATION BALANCING IN A DISPERSED STORAGE NETWORK                               | 4/29/2011 |
| 13/180,677 | 8966194 | PROCESSING A WRITE REQUEST IN A DISPERSED STORAGE NETWORK                                 | 7/12/2011 |
| 13/021,537 | 8566354 | STORAGE AND RETRIEVAL OF REQUIRED SLICES IN A DISPERSED STORAGE NETWORK                   | 2/4/2011  |
| 13/021,552 | 9063881 | SLICE RETRIEVAL IN ACCORDANCE WITH AN ACCESS SEQUENCE IN A DISPERSED STORAGE NETWORK      | 2/4/2011  |
| 13/105,074 | 8998513 | Storing Data In Multiple Dispersed Storage Networks                                       | 5/11/2011 |
| 13/105,094 | 8521697 | Rebuilding Data in Multiple Dispersed Storage Networks                                    | 5/11/2011 |
| 13/105,103 | 8683259 | Accessing Data in Multiple Dispersed Storage Networks                                     | 5/11/2011 |
| 13/154,744 | 8892598 | COORDINATED RETRIEVAL OF DATA FROM A DISPERSED STORAGE NETWORK                            | 6/7/2011  |
| 13/105,118 | 8707088 | Reconfiguring Data Storage in Multiple Dispersed Storage Networks                         | 5/11/2011 |
| 13/105,127 | 8626871 | Accessing a Global Vault in Multiple Dispersed Storage Networks                           | 5/11/2011 |
| 13/105,135 | 8959597 | Entity Registration in Multiple Dispersed Storage Networks                                | 5/11/2011 |
| 13/105,136 | 8683205 | Accessing Data Utilizing Entity Registration in Multiple Dispersed Storage Networks       | 5/11/2011 |
| 13/097,357 | 8448044 | RETRIEVING DATA FROM A DISPERSED STORAGE NETWORK IN ACCORDANCE WITH A RETRIEVAL THRESHOLD | 4/29/2011 |
| 13/897,567 | 8627177 | RETRIEVING DATA FROM A DISPERSED STORAGE NETWORK IN ACCORDANCE WITH A RETRIEVAL THRESHOLD | 5/20/2013 |
| 13/920,766 | 9009575 | REBUILDING A DATA REVISION IN A DISPERSED STORAGE NETWORK                                 | 6/18/2013 |
| 13/097,396 | 8861727 | STORAGE OF SENSITIVE DATA IN A DISPERSED STORAGE NETWORK                                  | 4/29/2011 |
| 13/413,232 | 8627091 | GENERATING A SECURE SIGNATURE UTILIZING A PLURALITY OF KEY SHARES                         | 3/6/2012  |
| 13/943,520 | 9063968 | IDENTIFYING A COMPROMISED ENCODED DATA SLICE                                              | 7/16/2013 |



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|------------|---------|---------------------------------------------------------------------------------------------------------|------------|
| 13/231,332 | 9116831 | CORRECTING AN ERRANT ENCODED DATA SLICE                                                                 | 9/13/2011  |
| 13/154,167 | 8612831 | ACCESSING DATA STORED IN A DISPERSED STORAGE MEMORY                                                     | 6/6/2011   |
| 13/154,181 | 8555142 | VERIFYING INTEGRITY OF DATA STORED IN A DISPERSED STORAGE MEMORY                                        | 6/6/2011   |
| 13/180,680 | 8842746 | RECEIVING ENCODED DATA SLICES VIA WIRELESS COMMUNICATION                                                | 7/12/2011  |
| 13/251,566 | 9112535 | DATA TRANSMISSION UTILIZING PARTITIONING AND DISPERSED STORAGE ERROR ENCODING                           | 10/3/2011  |
| 13/270,654 | 9274977 | STORING DATA INTEGRITY INFORMATION UTILIZING DISPERSED STORAGE                                          | 10/11/2011 |
| 13/937,400 | 9098441 | STORING DATA INTEGRITY INFORMATION UTILIZING DISPERSED STORAGE                                          | 7/9/2013   |
| 13/251,587 | 8612821 | DATA TRANSMISSION UTILIZING ROUTE SELECTION AND DISPERSED STORAGE ERROR ENCODING                        | 10/3/2011  |
| 14/107,204 | 8839068 | DATA TRANSMISSION UTILIZING ROUTE SELECTION AND DISPERSED STORAGE ERROR ENCODING                        | 12/16/2013 |
| 13/251,603 | 9037937 | RELAYING DATA TRANSMITTED AS ENCODED DATA SLICES                                                        | 10/3/2011  |
| 13/251,618 | 8918693 | DATA TRANSMISSION UTILIZING DATA PROCESSING AND DISPERSED STORAGE ERROR ENCODING                        | 10/3/2011  |
| 13/959,688 | 9015499 | VERIFYING DATA INTEGRITY UTILIZING DISPERSED STORAGE                                                    | 8/5/2013   |
| 13/231,375 | 8656138 | EFFICIENTLY ACCESSING AN ENCODED DATA SLICE UTILIZING A MEMORY BIN                                      | 9/13/2011  |
| 14/182,755 | 9141307 | EFFICIENTLY ACCESSING AN ENCODED DATA SLICE IN A MEMORY CONTAINER UTILIZING A MEMORY BIN                | 2/18/2014  |
| 13/197,998 | 8621580 | RETRIEVING ACCESS INFORMATION IN A DISPERSED STORAGE NETWORK                                            | 8/4/2011   |
| 14/143,583 | 9094402 | RETRIEVING ACCESS INFORMATION IN A DISPERSED STORAGE NETWORK                                            | 12/30/2013 |
| 13/587,224 | 9092385 | FACILITATING ACCESS OF A DISPERSED STORAGE NETWORK                                                      | 8/16/2012  |
| 13/204,039 | 8621271 | REPROVISIONING A MEMORY DEVICE INTO A DISPERSED STORAGE NETWORK MEMORY                                  | 8/5/2011   |
| 13/252,410 | 8707105 | UPDATING A SET OF MEMORY DEVICES IN A DISPERSED STORAGE NETWORK                                         | 10/4/2011  |
| 14/257,398 | 9122596 | UPDATING A SET OF MEMORY DEVICES IN A DISPERSED STORAGE NETWORK                                         | 4/21/2014  |
| 13/204,050 | 8762793 | MIGRATING ENCODED DATA SLICES FROM A RE-PROVISIONED MEMORY DEVICE OF A DISPERSED STORAGE NETWORK MEMORY | 8/5/2011   |
| 13/204,057 | 8904226 | MIGRATING STORED COPIES OF A FILE TO STORED ENCODED DATA SLICES                                         | 8/5/2011   |
| 13/413,261 | 8874990 | PRE-FETCHING DATA SEGMENTS STORED IN A DISPERSED STORAGE NETWORK                                        | 3/6/2012   |
| 14/524,037 | 9137303 | PRE-FETCHING DATA SEGMENTS STORED IN A DISPERSED STORAGE NETWORK                                        | 10/27/2014 |
| 13/413,302 | 8874991 | APPENDING DATA TO EXISTING DATA STORED IN A DISPERSED STORAGE NETWORK                                   | 3/6/2012   |

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| 13/288,076 | 8627065 | VALIDATING A CERTIFICATE CHAIN IN A DISPERSED STORAGE NETWORK                                                      | 11/3/2011 |
| 14/030,354 | 9065820 | VALIDATING A CERTIFICATE CHAIN IN A DISPERSED STORAGE NETWORK                                                      | 9/18/2013 |
| 13/449,950 | 9219604 | GENERATING AN ENCRYPTED MESSAGE FOR STORAGE                                                                        | 4/18/2012 |
| 13/413,320 | 8949688 | UPDATING ERROR RECOVERY INFORMATION IN A DISPERSED STORAGE NETWORK                                                 | 3/6/2012  |
| 13/588,259 | 8776186 | OBTAINING A SIGNED CERTIFICATE FOR A DISPERSED STORAGE NETWORK                                                     | 8/17/2012 |
| 14/325,604 | 9104541 | OBTAINING A SIGNED CERTIFICATE FOR A DISPERSED STORAGE NETWORK                                                     | 7/8/2014  |
| 13/308,724 | 8832493 | STORING DIRECTORY METADATA IN A DISPERSED STORAGE NETWORK                                                          | 12/1/2011 |
| 14/479,905 | 9037904 | STORING DIRECTORY METADATA IN A DISPERSED STORAGE NETWORK                                                          | 9/8/2014  |
| 13/308,777 | 9170882 | RETRIEVING DATA SEGMENTS FROM A DISPERSED STORAGE NETWORK                                                          | 12/1/2011 |
| 13/308,889 | 8892845 | SEGMENTING DATA FOR STORAGE IN A DISPERSED STORAGE NETWORK                                                         | 12/1/2011 |
| 13/309,353 | 8897443 | WATERMARKING SLICES STORED IN A DISPERSED STORAGE NETWORK                                                          | 12/1/2011 |
| 13/309,432 | 8683231 | OBFUSCATING DATA STORED IN A DISPERSED STORAGE NETWORK                                                             | 12/1/2011 |
| 13/309,469 | 9319463 | REPRODUCING DATA FROM OBFUSCATED DATA RETRIEVED FROM A DISPERSED STORAGE NETWORK                                   | 12/1/2011 |
| 13/347,140 | 9081714 | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO STORE DATA IN A DISPERSED STORAGE NETWORK MEMORY      | 1/10/2012 |
| 13/347,204 | 9081715 | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO RETRIEVE DATA FROM A DISPERSED STORAGE NETWORK MEMORY | 1/10/2012 |
| 13/347,266 | 8726127 | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO ACCESS A DISPERSED STORAGE NETWORK MEMORY             | 1/10/2012 |
| 14/276,006 | 8966341 | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO ACCESS A DISPERSED STORAGE NETWORK MEMORY             | 5/13/2014 |
| 13/372,611 | 8868695 | CONFIGURING A GENERIC COMPUTING DEVICE UTILIZING SPECIFIC COMPUTING DEVICE OPERATION INFORMATION                   | 2/14/2012 |
| 13/372,650 | 8910022 | RETRIEVAL OF ENCODED DATA SLICES AND ENCODED INSTRUCTION SLICES BY A COMPUTING DEVICE                              | 2/14/2012 |
| 13/343,353 | 8694752 | TRANSFERRING DATA IN RESPONSE TO DETECTION OF A MEMORY SYSTEM IMBALANCE                                            | 1/4/2012  |
| 13/343,405 | 8688949 | MODIFYING DATA STORAGE IN RESPONSE TO DETECTION OF A MEMORY SYSTEM IMBALANCE                                       | 1/4/2012  |
| 14/230,446 | 8914609 | MODIFYING DATA STORAGE IN RESPONSE TO DETECTION OF A MEMORY SYSTEM IMBALANCE                                       | 3/31/2014 |
| 13/343,449 | 8909858 | STORING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                                                         | 1/4/2012  |
| 13/372,677 | 9183073 | MAINTAINING DATA CONCURRENCY WITH A DISPERSED STORAGE NETWORK                                                      | 2/14/2012 |

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| 13/413,436 | 8843803 | UTILIZING LOCAL MEMORY AND DISPERSED STORAGE MEMORY TO ACCESS ENCODED DATA SLICES                        | 3/6/2012  |
| 14/480,945 | 9110834 | UTILIZING LOCAL MEMORY AND DISPERSED STORAGE MEMORY TO ACCESS ENCODED DATA SLICES                        | 9/9/2014  |
| 13/413,452 | 8843804 | ADJUSTING A DISPERSAL PARAMETER OF DISPERSEDLY STORED DATA                                               | 3/6/2012  |
| 14/481,245 | 9135114 | ADJUSTING A DISPERSAL PARAMETER OF DISPERSEDLY STORED DATA                                               | 9/9/2014  |
| 13/413,469 | 8880978 | UTILIZING A LOCAL AREA NETWORK MEMORY AND A DISPERSED STORAGE NETWORK MEMORY TO ACCESS DATA              | 3/6/2012  |
| 14/505,835 | 9208026 | UTILIZING A LOCAL AREA NETWORK MEMORY AND A DISPERSED STORAGE NETWORK MEMORY TO ACCESS DATA              | 10/3/2014 |
| 13/450,034 | 9292682 | ACCESSING A SECOND WEB PAGE FROM A DISPERSED STORAGE NETWORK MEMORY BASED ON A FIRST WEB PAGE SELECTION  | 4/18/2012 |
| 13/450,055 | 8707393 | PROVIDING DISPERSED STORAGE NETWORK LOCATION INFORMATION OF A HYPERTEXT MARKUP LANGUAGE FILE             | 4/18/2012 |
| 13/464,048 | 8656253 | STORING PORTIONS OF DATA IN A DISPERSED STORAGE NETWORK                                                  | 5/4/2012  |
| 14/182,482 | 8965939 | STORING PORTIONS OF DATA IN A DISPERSED STORAGE NETWORK                                                  | 2/18/2014 |
| 13/464,082 | 8782439 | SECURING A DATA SEGMENT FOR STORAGE                                                                      | 5/4/2012  |
| 14/331,676 | 9110593 | SECURING A DATA SEGMENT FOR STORAGE                                                                      | 7/15/2014 |
| 13/450,186 | 9141458 | ADJUSTING A DATA STORAGE ADDRESS MAPPING IN A MAINTENANCE FREE STORAGE CONTAINER                         | 4/18/2012 |
| 13/588,350 | 8782492 | Updating data stored in a dispersed storage network                                                      | 8/17/2012 |
| 14/331,596 | 9262247 | UPDATING DATA STORED IN A DISPERSED STORAGE NETWORK                                                      | 7/15/2014 |
| 13/288,116 | 8627066 | PROCESSING A DISPERSED STORAGE NETWORK ACCESS REQUEST UTILIZING CERTIFICATE CHAIN VALIDATION INFORMATION | 11/3/2011 |
| 13/588,391 | 9274864 | ACCESSING LARGE AMOUNTS OF DATA IN A DISPERSED STORAGE NETWORK                                           | 8/17/2012 |
| 13/252,340 | 8555130 | STORING ENCODED DATA SLICES IN A DISPERSED STORAGE UNIT                                                  | 10/4/2011 |
| 14/046,089 | 8726120 | STORING ENCODED DATA SLICES IN A DISPERSED STORAGE UNIT                                                  | 10/4/2013 |
| 13/527,881 | 9244770 | RESPONDING TO A MAINTENANCE FREE STORAGE CONTAINER SECURITY THREAT                                       | 6/20/2012 |
| 13/527,929 | 8924770 | REBUILDING A DATA SLICE OF A MAINTENANCE FREE STORAGE CONTAINER                                          | 6/20/2012 |
| 13/450,198 | 8996910 | ASSIGNING A DISPERSED STORAGE NETWORK ADDRESS RANGE IN A MAINTENANCE FREE STORAGE CONTAINER              | 4/18/2012 |
| 14/658,725 | 9298550 | ASSIGNING A DISPERSED STORAGE NETWORK ADDRESS RANGE IN A MAINTENANCE FREE STORAGE CONTAINER              | 3/16/2015 |
| 13/450,212 | 8954787 | ESTABLISHING TRUST IN A MAINTENANCE FREE STORAGE CONTAINER                                               | 4/18/2012 |
| 13/527,959 | 8966311 | MAINTENANCE FREE STORAGE CONTAINER STORAGE MODULE ACCESS                                                 | 6/20/2012 |

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| 13/464,166 | 8762479 | DISTRIBUTING MULTI-MEDIA CONTENT TO A PLURALITY OF POTENTIAL ACCESSING DEVICES | 5/4/2012   |
| 14/312,823 | 9094428 | DISTRIBUTING MULTI-MEDIA CONTENT TO A PLURALITY OF POTENTIAL ACCESSING DEVICES | 6/24/2014  |
| 13/464,846 | 8756480 | PRIORITIZED DELETING OF SLICES STORED IN A DISPERSED STORAGE NETWORK           | 5/4/2012   |
| 14/305,880 | 8984371 | PRIORITIZED DELETING OF SLICES STORED IN A DISPERSED STORAGE NETWORK           | 6/16/2014  |
| 13/527,778 | 8694545 | STORING DATA AND METADATA IN A DISTRIBUTED STORAGE NETWORK                     | 6/20/2012  |
| 14/246,253 | 9104719 | STORING DATA AND METADATA IN A DISTRIBUTED STORAGE NETWORK                     | 4/7/2014   |
| 13/527,819 | 8762770 | Distribution of a customized preview of multi-media content                    | 6/20/2012  |
| 13/587,277 | 9229823 | Storage and retrieval of dispersed storage network access information          | 8/16/2012  |
| 13/547,941 | 9170868 | IDENTIFYING AN ERROR CAUSE WITHIN A DISPERSED STORAGE NETWORK                  | 7/12/2012  |
| 13/547,887 | 8914667 | IDENTIFYING A SLICE ERROR IN A DISPERSED STORAGE NETWORK                       | 7/12/2012  |
| 13/548,033 | 9135098 | MODIFYING DISPERSED STORAGE NETWORK EVENT RECORDS                              | 7/12/2012  |
| 13/611,622 | 9304843 | Highly Secure Method for Accessing a Dispersed Storage Network                 | 9/12/2012  |
| 13/565,562 | 8930649 | CONCURRENT CODING OF DATA STREAMS                                              | 8/2/2012   |
| 13/565,607 | 8751894 | Concurrent Decoding of Data Streams                                            | 8/2/2012   |
| 13/565,636 | 9213742 | Time Aligned Transmission of Concurrently Coded Data Streams                   | 8/2/2012   |
| 13/611,962 | 8677214 | Encoding Data Utilizing a Zero Information Gain Function                       | 9/12/2012  |
| 13/612,043 | 8782494 | Reproducing Data Utilizing a Zero Information Gain Function                    | 9/12/2012  |
| 13/612,116 | 8856617 | Sending a Zero Information Gain Formatted Encoded Data Slice                   | 9/12/2012  |
| 14/480,139 | 9128870 | SENDING A ZERO INFORMATION GAIN FORMATTED ENCODED DATA SLICE                   | 9/8/2014   |
| 13/611,803 | 8683286 | Storing Data in a Dispersed Storage Network                                    | 9/12/2012  |
| 13/611,866 | 8607122 | Accessing a Large Data Object in a Dispersed Storage Network                   | 9/12/2012  |
| 14/100,368 | 9208009 | ACCESSING A LARGE DATA OBJECT IN A DISPERSED STORAGE NETWORK                   | 12/9/2013  |
| 13/647,533 | 8839368 | Acquiring a Trusted Set of Encoded Data Slices                                 | 10/9/2012  |
| 14/480,882 | 9158625 | ACQUIRING A TRUSTED SET OF ENCODED DATA SLICES                                 | 9/9/2014   |
| 13/683,964 | 9203625 | Transferring Encoded Data Slices in a Distributed Storage Network              | 11/21/2012 |
| 13/686,827 | 8848906 | Encrypting Data for Storage in a Dispersed Storage Network                     | 11/27/2012 |
| 13/684,009 | 8856549 | Deleting Encoded Data Slices in a Dispersed Storage Network                    | 11/21/2012 |
| 13/707,471 | 9009564 | Storing Data in a Distributed Storage Network                                  | 12/6/2012  |
| 14/492,602 | 9268639 | STORING DATA IN A DISTRIBUTED STORAGE NETWORK                                  | 9/22/2014  |
| 13/707,490 | 9304857 | Retrieving Data from a Distributed Storage Network                             | 12/6/2012  |

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| 13/718,897 | 8990664 | IDENTIFYING A POTENTIALLY COMPROMISED ENCODED DATA SLICE                       | 12/18/2012 |
| 14/615,966 | 9146810 | IDENTIFYING A POTENTIALLY COMPROMISED ENCODED DATA SLICE                       | 2/6/2015   |
| 13/707,502 | 8898542 | Executing Partial Tasks in a Distributed Storage and Task Network              | 12/6/2012  |
| 13/707,428 | 9298548 | Distributed Computing in a Distributed Storage and Task Network                | 12/6/2012  |
| 13/707,525 | 9304858 | Analyzing Found Data in a Distributed Storage and Task Network                 | 12/6/2012  |
| 13/707,542 | 9015556 | Transforming Data in a Distributed Storage and Task Network                    | 12/6/2012  |
| 14/635,178 | 9292385 | Transforming Data in a Distributed Storage and Task Network                    | 3/2/2015   |
| 13/707,118 | 9203901 | EFFICIENTLY STORING DATA IN A DISPERSED STORAGE NETWORK                        | 12/6/2012  |
| 13/707,153 | 9203902 | SECURELY AND RELIABLY STORING DATA IN A DISPERSED STORAGE NETWORK              | 12/6/2012  |
| 13/753,404 | 9195684 | Redundant Task Execution in a Distributed Storage and Task Network             | 1/29/2013  |
| 13/775,701 | 9171031 | MERGING INDEX NODES OF A HIERARCHICAL DISPERSED STORAGE INDEX                  | 2/25/2013  |
| 13/775,734 | 8930375 | SPLITTING AN INDEX NODE OF A HIERARCHICAL DISPERSED STORAGE INDEX              | 2/25/2013  |
| 13/775,769 | 8935256 | EXPANDING A HIERARCHICAL DISPERSED STORAGE INDEX                               | 2/25/2013  |
| 13/865,679 | 9141468 | MANAGING MEMORY UTILIZATION IN A DISTRIBUTED STORAGE AND TASK NETWORK          | 4/18/2013  |
| 13/866,631 | 9164841 | RESOLUTION OF A STORAGE ERROR IN A DISPERSED STORAGE NETWORK                   | 4/19/2013  |
| 13/890,438 | 9292212 | DETECTING STORAGE ERRORS IN A DISPERSED STORAGE NETWORK                        | 5/9/2013   |
| 13/919,673 | 9258177 | STORING A DATA STREAM IN A SET OF STORAGE DEVICES                              | 6/17/2013  |
| 13/889,557 | 9110833 | NON-TEMPORARILY STORING TEMPORARILY STORED DATA IN A DISPERSED STORAGE NETWORK | 5/8/2013   |
| 13/889,942 | 8935761 | ACCESSING STORAGE NODES IN AN ON-LINE MEDIA STORAGE SYSTEM                     | 5/8/2013   |
| 13/890,510 | 9141297 | VERIFYING ENCODED DATA SLICE INTEGRITY IN A DISPERSED STORAGE NETWORK          | 5/9/2013   |
| 13/944,118 | 9021263 | SECURE DATA ACCESS IN A DISPERSED STORAGE NETWORK                              | 7/17/2013  |
| 13/916,980 | 9009567 | ENCRYPTING DISTRIBUTED COMPUTING DATA                                          | 6/13/2013  |
| 13/944,277 | 9154298 | SECURELY STORING DATA IN A DISPERSED STORAGE NETWORK                           | 7/17/2013  |
| 13/944,342 | 9176822 | ADJUSTING DISPERSED STORAGE ERROR ENCODING PARAMETERS                          | 7/17/2013  |
| 14/027,538 | 9311179 | THRESHOLD DECODING OF DATA BASED ON TRUST LEVELS                               | 9/16/2013  |
| 14/027,694 | 9223723 | VERIFYING DATA OF A DISPERSED STORAGE NETWORK                                  | 9/16/2013  |
| 14/027,823 | 9298542 | RECOVERING DATA FROM CORRUPTED ENCODED DATA SLICES                             | 9/16/2013  |
| 14/029,124 | 9277011 | PROCESSING AN UNSUCCESSFUL WRITE REQUEST IN A DISPERSED STORAGE NETWORK        | 9/17/2013  |
| 14/088,794 | 9311187 | ACHIEVING STORAGE COMPLIANCE IN A DISPERSED STORAGE NETWORK                    | 11/25/2013 |

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| 14/103,141 | 9043499 | MODIFYING A DISPERSED STORAGE NETWORK MEMORY DATA ACCESS RESPONSE PLAN | 12/11/2013 |
| 14/704,069 | 9223653 | MODIFYING A DISPERSED STORAGE NETWORK MEMORY DATA ACCESS RESPONSE PLAN | 5/5/2015   |
| 14/153,366 | 9274908 | RESOLVING WRITE CONFLICTS IN A DISPERSED STORAGE NETWORK               | 1/13/2014  |
| 10/234,636 | 7636724 | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING            | 9/3/2002   |
| 12/623,234 | 7933876 | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING            | 11/20/2009 |
| 13/051,897 | 8805792 | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING            | 3/18/2011  |

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| 11/973,542        | Ensuring Data Integrity On A Dispersed Storage Grid                                                                 | 10/9/2007  |
| 12/426,727        | Efficient And Secure Data Storage Utilizing A Dispersed Data Storage System                                         | 4/20/2009  |
| 12/551,145        | DISPERSED DATA STORAGE SYSTEM DATA DECODING AND DECRYPTION                                                          | 8/31/2009  |
| 12/749,606        | DISPERSED STORAGE PROCESSING UNIT AND METHODS WITH OPERATING SYSTEM DIVERSITY FOR USE IN A DISPERSED STORAGE SYSTEM | 3/30/2010  |
| 12/749,625        | DISPERSED STORAGE PROCESSING UNIT AND METHODS WITH GEOGRAPHICAL DIVERSITY FOR USE IN A DISPERSED STORAGE SYSTEM     | 3/30/2010  |
| 12/753,569        | METHOD AND APPARATUS FOR IDENTIFYING DATA INCONSISTENCY IN A DISPERSED STORAGE NETWORK                              | 4/2/2010   |
| 12/762,350        | VERIFYING DATA SECURITY IN A DISPERSED STORAGE NETWORK                                                              | 4/18/2010  |
| 12/775,299        | DISTRIBUTED STORAGE PROCESSING MODULE                                                                               | 5/6/2010   |
| 12/777,850        | DISTRIBUTED STORAGE NETWORK INCLUDING MEMORY DIVERSITY                                                              | 5/11/2010  |
| 12/778,701        | METHOD AND APPARATUS FOR DISPERSED STORAGE DATA TRANSFER                                                            | 5/12/2010  |
| 12/814,474        | DISPERSED STORAGE CAMERA DEVICE AND METHOD OF OPERATION                                                             | 6/13/2010  |
| 12/816,126        | DISTRIBUTED STORAGE NETWORK AND METHOD FOR COMMUNICATING DATA ACROSS A PLURALITY OF PARALLEL WIRELESS DATA STREAMS  | 6/15/2010  |
| 12/817,208        | ENCODED DATA SLICE CACHING IN A DISTRIBUTED STORAGE NETWORK                                                         | 6/17/2010  |
| 12/837,961        | DISTRIBUTED STORAGE NETWORK DATA REVISION CONTROL                                                                   | 7/16/2010  |
| 12/842,842        | MEDIA DISTRIBUTION TO A PLURALITY OF DEVICES UTILIZING BUFFERED DISPERSED STORAGE                                   | 7/23/2010  |
| 12/850,606        | DISPERSED STORAGE UNIT SOLICITATION METHOD AND APPARATUS                                                            | 8/4/2010   |
| 12/850,607        | INDIRECT STORAGE OF DATA IN A DISPERSED STORAGE SYSTEM                                                              | 8/4/2010   |

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| 12/903,212         | DIGITAL CONTENT RETRIEVAL UTILIZING DISPERSED STORAGE                                                                | 10/13/2010 |
| 12/942,721         | SELECTING STORAGE FACILITIES IN A PLURALITY OF DISPERSED STORAGE NETWORKS                                            | 11/9/2010  |
| 12/950,755         | BLOCK BASED ACCESS TO A DISPERSED DATA STORAGE NETWORK                                                               | 11/19/2010 |
| 13/154,725         | METADATA ACCESS IN A DISPERSED STORAGE NETWORK                                                                       | 6/7/2011   |
| 13/198,078         | STORING ACCESS INFORMATION IN A DISPERSED STORAGE NETWORK                                                            | 8/4/2011   |
| 13/204,061         | MIGRATING AN ENCODED DATA SLICE BASED ON AN END-OF-LIFE MEMORY LEVEL OF A MEMORY DEVICE                              | 8/5/2011   |
| 13/252,418         | FILE RETRIEVAL DURING A LEGACY STORAGE SYSTEM TO DISPERSED STORAGE NETWORK MIGRATION                                 | 10/4/2011  |
| 13/270,528         | COMPACTING DISPERSED STORAGE SPACE                                                                                   | 10/11/2011 |
| 13/270,571         | COMPACTING DISPERSED STORAGE SPACE                                                                                   | 10/11/2011 |
| 13/289,200         | BALANCING MEMORY UTILIZATION IN A DISPERSED STORAGE NETWORK                                                          | 11/4/2011  |
| 13/291,030         | PARTITIONING DATA FOR STORAGE IN A DISPERSED STORAGE NETWORK                                                         | 11/7/2011  |
| 13/291,042         | SELECTING A MEMORY FOR STORAGE OF AN ENCODED DATA SLICE IN A DISPERSED STORAGE NETWORK                               | 11/7/2011  |
| 13/347,334         | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO ACQUIRE DIGITAL CONTENT FROM A DIGITAL CONTENT PROVIDER | 1/10/2012  |
| 13/372,628         | TRANSFERRING DATA UTILIZING A TRANSFER TOKEN MODULE                                                                  | 2/14/2012  |
| 13/372,689         | DETERMINING A STALENESS STATE OF A DISPERSED STORAGE NETWORK LOCAL DIRECTORY                                         | 2/14/2012  |
| 13/372,715         | SELECTING A DIRECTORY OF A DISPERSED STORAGE NETWORK                                                                 | 2/14/2012  |
| 13/372,748         | SHARING AND UPDATING A GLOBAL DIRECTORY OF A DISPERSED STORAGE NETWORK                                               | 2/14/2012  |
| 13/450,000         | RETRIEVING A HYPERTEXT MARKUP LANGUAGE FILE FROM A DISPERSED STORAGE NETWORK MEMORY                                  | 4/18/2012  |
| 13/463,991         | SECURELY REBUILDING AN ENCODED DATA SLICE                                                                            | 5/4/2012   |
| 13/464,015         | UPDATING DISTRIBUTED STORAGE NETWORK SOFTWARE                                                                        | 5/4/2012   |
| 13/464,272         | ACQUIRING MULTI-MEDIA CONTENT                                                                                        | 5/4/2012   |
| 13/527,785         | COMPLETING DISTRIBUTION OF MULTI-MEDIA CONTENT TO AN ACCESSING DEVICE                                                | 6/20/2012  |
| 13/527,811         | DISTRIBUTION OF MULTI-MEDIA CONTENT TO A USER DEVICE                                                                 | 6/20/2012  |
| 13/547,769         | GENERATING DISPERSED STORAGE NETWORK EVENT RECORDS                                                                   | 7/12/2012  |

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| 13/588,286          | PROCESSING A CERTIFICATE SIGNING REQUEST IN A DISPERSED STORAGE NETWORK  | 8/17/2012  |
| 13/611,533          | Copying Data in a Dispersed Storage Network without Replication          | 9/12/2012  |
| 13/647,518          | Wirelessly Sending a Set of Encoded Data Slices                          | 10/9/2012  |
| 13/647,528          | Wirelessly Communicating a Data File                                     | 10/9/2012  |
| 13/683,951          | Prioritization of Messages of a Dispersed Storage Network                | 11/21/2012 |
| 13/683,998          | Creating a New File for a Dispersed Storage Network                      | 11/21/2012 |
| 13/706,991          | TRANSFERRING A PARTIAL TASK IN A DISTRIBUTED COMPUTING SYSTEM            | 12/6/2012  |
| 13/718,961          | RETRIEVING DATA UTILIZING A DISTRIBUTED INDEX                            | 12/18/2012 |
| 13/718,985          | SECURE DATA MIGRATION IN A DISPERSED STORAGE NETWORK                     | 12/18/2012 |
| 13/753,418          | Transferring Task Execution in a Distributed Storage and Task Network    | 1/29/2013  |
| 13/775,491          | LISTING DATA OBJECTS USING A HIERARCHICAL DISPERSED STORAGE INDEX        | 2/25/2013  |
| 13/775,555          | MODIFYING AN INDEX NODE OF A HIERARCHICAL DISPERSED STORAGE INDEX        | 2/25/2013  |
| 13/779,469          | Method and Apparatus for Dispersed Storage Memory Device Utilization     | 2/27/2013  |
| 13/865,641          | DISPERSED STORAGE NETWORK SECURE HIERARCHICAL FILE DIRECTORY             | 4/18/2013  |
| 13/865,659          | AUTHORIZING DISTRIBUTED TASK PROCESSING IN A DISTRIBUTED STORAGE NETWORK | 4/18/2013  |
| 13/866,457          | REPRIORITIZING PENDING DISPERSED STORAGE NETWORK REQUESTS                | 4/19/2013  |
| 13/868,064          | Retrieving Data in a Dispersed Storage Network                           | 4/22/2013  |
| 13/868,311          | Encrypting Data for Storage in a Dispersed Storage Network               | 4/23/2013  |
| 13/868,988          | ESTABLISHING TRUST WITHIN A CLOUD COMPUTING SYSTEM                       | 4/23/2013  |
| 13/869,655          | UPDATING ACCESS CONTROL INFORMATION WITHIN A DISPERSED STORAGE UNIT      | 4/24/2013  |
| 13/874,088          | REBUILDING AN ENCODED DATA SLICE WITHIN A DISPERSED STORAGE NETWORK      | 4/30/2013  |
| 13/874,560          | REBUILDING SLICES OF A SET OF ENCODED DATA SLICES                        | 5/1/2013   |
| 13/887,662          | TEMPORARILY STORING AN ENCODED DATA SLICE                                | 5/6/2013   |
| 13/888,324          | SECURE STORAGE OF SECRET DATA IN A DISPERSED STORAGE NETWORK             | 5/6/2013   |
| 13/917,017          | ENCRYPTING SEGMENTED DATA IN A DISTRIBUTED COMPUTING SYSTEM              | 6/13/2013  |
| 13/917,058          | DISTRIBUTED STORAGE AND COMPUTING OF INTERIM DATA                        | 6/13/2013  |
| 13/919,210          | DATA ENCRYPTION PARAMETER DISPERSAL                                      | 6/17/2013  |
| 13/919,566          | STORING A STREAM OF DATA IN A DISPERSED STORAGE NETWORK                  | 6/17/2013  |



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| 13/920,635          | RESOLVING A PERFORMANCE ISSUE WITHIN A DISPERSED STORAGE NETWORK                                                                                  | 6/18/2013  |
| 13/921,095          | METHOD AND SYSTEM FOR THE NORMALIZATION, FILTERING AND SECURING OF ASSOCIATED METADATA INFORMATION ON FILE OBJECTS DEPOSITED INTO AN OBJECT STORE | 6/18/2013  |
| 13/943,352          | RETRIEVING INDEXED DATA FROM A DISPERSED STORAGE NETWORK.                                                                                         | 7/16/2013  |
| 13/943,456          | STORING INDEXED DATA TO A DISPERSED STORAGE NETWORK                                                                                               | 7/16/2013  |
| 13/959,006          | ALLOCATING DISTRIBUTED STORAGE AND TASK EXECUTION RESOURCES                                                                                       | 8/5/2013   |
| 13/959,077          | ROBUST TRANSMISSION OF DATA UTILIZING ENCODED DATA SLICES                                                                                         | 8/5/2013   |
| 13/959,262          | ROBUST RECEPTION OF DATA UTILIZING ENCODED DATA SLICES                                                                                            | 8/5/2013   |
| 13/959,702          | WRITING DATA AVOIDING WRITE CONFLICTS IN A DISPERSED STORAGE NETWORK                                                                              | 8/5/2013   |
| 13/959,727          | UPDATING LOCAL DATA UTILIZING A DISTRIBUTED STORAGE NETWORK                                                                                       | 8/5/2013   |
| 14/014,692          | MEMORY CONTROLLER UTILIZING AN ERROR CODING DISPERSAL FUNCTION                                                                                    | 8/30/2013  |
| 14/028,881          | BALANCING STORAGE NODE UTILIZATION OF A DISPERSED STORAGE NETWORK                                                                                 | 9/17/2013  |
| 14/029,006          | ACCESS CONTROL OF DATA IN A DISPERSED STORAGE NETWORK.                                                                                            | 9/17/2013  |
| 14/029,347          | TRANSFERRING DATA OF A DISPERSED STORAGE NETWORK                                                                                                  | 9/17/2013  |
| 14/035,433          | MEMORY SELECTION FOR SLICE STORAGE IN A DISPERSED STORAGE NETWORK                                                                                 | 9/24/2013  |
| 14/055,174          | ACCESSING DISTRIBUTED COMPUTING FUNCTIONS IN A DISTRIBUTED COMPUTING SYSTEM                                                                       | 10/16/2013 |
| 14/056,015          | UTILIZING DATA OBJECT STORAGE TRACKING IN A DISPERSED STORAGE NETWORK.                                                                            | 10/17/2013 |
| 14/083,724          | CONCURRENT SET STORAGE IN DISTRIBUTED STORAGE NETWORK                                                                                             | 11/19/2013 |
| 14/088,897          | MAPPING STORAGE OF DATA IN A DISPERSED STORAGE NETWORK.                                                                                           | 11/25/2013 |
| 14/102,987          | UPDATING SHARED GROUP INFORMATION IN A DISPERSED STORAGE NETWORK                                                                                  | 12/11/2013 |
| 14/107,157          | ACCESSING DATA STORED IN A DISPERSED STORAGE MEMORY                                                                                               | 12/16/2013 |
| 14/142,206          | SYSTEM AND METHOD FOR ACCESSING A DATA OBJECT STORED IN A DISTRIBUTED STORAGE NETWORK                                                             | 12/27/2013 |
| 14/147,982          | GENERATING A SECURE SIGNATURE UTILIZING A PLURALITY OF KEY SHARES                                                                                 | 1/6/2014   |

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| 14/148,118          | PROCESSING A DISPERSED STORAGE NETWORK ACCESS REQUEST UTILIZING CERTIFICATE CHAIN VALIDATION INFORMATION | 1/6/2014   |
| 14/148,286          | DISPERSED STORAGE NETWORK FRAME PROTOCOL HEADER                                                          | 1/6/2014   |
| 14/148,380          | CONCLUSIVE WRITE OPERATION DISPERSED STORAGE NETWORK FRAME                                               | 1/6/2014   |
| 14/153,319          | TEMPORARILY STORING DATA IN A DISPERSED STORAGE NETWORK                                                  | 1/13/2014  |
| 14/172,140          | EFFICIENT STORAGE OF DATA IN A DISPERSED STORAGE NETWORK                                                 | 2/4/2014   |
| 14/172,218          | POWER CONTROL IN A DISPERSED STORAGE NETWORK                                                             | 2/4/2014   |
| 14/176,807          | CHECK OPERATION DISPERSED STORAGE NETWORK FRAME                                                          | 2/10/2014  |
| 14/182,393          | ENCODED DATA SLICE CACHING IN A DISTRIBUTED STORAGE NETWORK                                              | 2/18/2014  |
| 14/192,098          | METHOD AND APPARATUS FOR SLICE PARTIAL REBUILDING IN A DISPERSED STORAGE NETWORK                         | 2/27/2014  |
| 14/215,335          | PRIORITIZING REBUILDING OF STORED DATA IN A DISPERSED STORAGE NETWORK                                    | 3/17/2014  |
| 14/215,542          | STORING RELATED DATA IN A DISPERSED STORAGE NETWORK                                                      | 3/17/2014  |
| 14/217,662          | ENCODING DATA UTILIZING A ZERO INFORMATION GAIN FUNCTION                                                 | 3/18/2014  |
| 14/223,138          | LIST DIGEST OPERATION DISPERSED STORAGE NETWORK FRAME                                                    | 3/24/2014  |
| 14/223,406          | STORING DATA IN A DISPERSED STORAGE NETWORK                                                              | 3/24/2014  |
| 14/230,169          | METHOD AND APPARATUS FOR ACCESSING SECURE DATA IN A DISPERSED STORAGE SYSTEM                             | 3/31/2014  |
| 14/256,205          | ADJUSTING DISPERSED STORAGE NETWORK TRAFFIC DUE TO REBUILDING                                            | 4/18/2014  |
| 14/256,472          | SECURING DATA IN A DISPERSED STORAGE NETWORK                                                             | 4/18/2014  |
| 14/256,536          | STORING DATA IN ACCORDANCE WITH A PERFORMANCE THRESHOLD                                                  | 4/18/2014  |
| 14/275,560          | LOCALIZED DISPERSED STORAGE MEMORY SYSTEM                                                                | 5/12/2014  |
| 14/287,401          | DISTRIBUTED STORAGE NETWORK WITH ALTERNATIVE FOSTER STORAGE APPROACHES AND METHODS FOR USE THEREWITH     | 5/27/2014  |
| 14/287,464          | DISTRIBUTED STORAGE NETWORK WITH REPLICATION CONTROL AND METHODS FOR USE THEREWITH                       | 5/27/2014  |
| 14/287,499          | DISTRIBUTED STORAGE NETWORK WITH COORDINATED PARTIAL TASK EXECUTION AND METHODS FOR USE THEREWITH        | 5/27/2014  |
| 14/287,534          | DISTRIBUTED STORAGE NETWORK WITH CLIENT SUBSETS AND METHODS FOR USE THEREWITH                            | 5/27/2014  |

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| 14/289,064          | DISTRIBUTION OF UNIQUE COPIES OF BROADCAST DATA UTILIZING FAULT-TOLERANT RETRIEVAL FROM DISPERSED STORAGE | 5/28/2014  |
| 14/289,738          | HYBRID CENTRALIZED AND AUTONOMOUS DISPERSED STORAGE SYSTEM STORAGE METHOD                                 | 5/29/2014  |
| 14/290,389          | MEDIA DISTRIBUTION TO A PLURALITY OF DEVICES UTILIZING BUFFERED DISPERSED STORAGE                         | 5/29/2014  |
| 14/291,199          | Dispersed storage network file system directory                                                           | 5/30/2014  |
| 14/292,009          | ACCOUNTING FOR DATA THAT NEEDS TO BE REBUILT OR DELETED                                                   | 5/30/2014  |
| 14/292,070          | DISPERSED STORAGE NETWORK WITH ACCESS CONTROL AND METHODS FOR USE THEREWITH                               | 5/30/2014  |
| 14/292,206          | Optimized Disk Load Distribution                                                                          | 5/30/2014  |
| 14/292,285          | DISPERSED STORAGE NETWORK WITH SLICE REBUILDING AND METHODS FOR USE THEREWITH                             | 5/30/2014  |
| 14/292,318          | Obfuscating a Transaction in a Dispersed Storage System                                                   | 5/30/2014  |
| 14/292,585          | METHOD AND APPARATUS FOR SELECTING STORAGE UNITS TO STORE DISPERSED STORAGE DATA                          | 5/30/2014  |
| 14/292,662          | Co-locate objects request                                                                                 | 5/30/2014  |
| 14/292,727          | Distributed Storage Network and Method for Storing and Retrieving Encryption Keys                         | 5/30/2014  |
| 14/302,582          | REBUILDING DATA STORED IN A DISPERSED STORAGE NETWORK                                                     | 6/12/2014  |
| 14/302,664          | DETECTING DATA REQUIRING REBUILDING IN A DISPERSED STORAGE NETWORK                                        | 6/12/2014  |
| 14/302,974          | STORING DATA AND DIRECTORY INFORMATION IN A DISTRIBUTED STORAGE NETWORK                                   | 6/12/2014  |
| 14/306,312          | REBUILDING DATA WHILE READING DATA IN A DISPERSED STORAGE NETWORK                                         | 6/17/2014  |
| 14/306,335          | STORING DATA IN A DISPERSED STORAGE NETWORK                                                               | 6/17/2014  |
| 14/307,625          | STORING DATA IN A DIRECTORY-LESS DISPERSED STORAGE NETWORK                                                | 6/18/2014  |
| 14/307,672          | TIME-BASED STORAGE WITHIN A DISPERSED STORAGE NETWORK                                                     | 6/18/2014  |
| 14/307,883          | RECORD ADDRESSING INFORMATION RETRIEVAL BASED ON USER DATA DESCRIPTORS                                    | 6/18/2014  |
| 14/312,259          | MIGRATING ENCODED DATA SLICES FROM A RE-PROVISIONED MEMORY DEVICE OF A DISPERSED STORAGE NETWORK MEMORY   | 6/23/2014  |
| 14/312,532          | DATA DEDUPLICATION IN A DISPERSED STORAGE SYSTEM                                                          | 6/23/2014  |
| 14/312,550          | EFFICIENT MEMORY UTILIZATION IN A DISPERSED STORAGE SYSTEM                                                | 6/23/2014  |
| 14/315,716          | DISPERSED STORAGE NETWORK WITH PARAMETER SEARCH AND METHODS FOR USE THEREWITH                             | 6/26/2014  |
| 14/315,748          | DISPERSED STORAGE NETWORK WITH DATA SEGMENT BACKUP AND METHODS FOR USE THEREWITH                          | 6/26/2014  |

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| 14/315,775         | DISPERSED STORAGE NETWORK WITH CUSTOMIZED SECURITY AND METHODS FOR USE THEREWITH                                                         | 6/26/2014  |
| 14/315,842         | DISPERSED STORAGE NETWORK WITH METADATA GENERATION AND METHODS FOR USE THEREWITH                                                         | 6/26/2014  |
| 14/315,893         | DISPERSED STORAGE BASED ON RANGE AVAILABILITY AND METHODS FOR USE THEREWITH                                                              | 6/26/2014  |
| 14/315,925         | DISPERSED STORAGE BASED ON ESTIMATED LIFE AND METHODS FOR USE THEREWITH                                                                  | 6/26/2014  |
| 14/315,981         | DISPERSED STORAGE WITH VARIABLE SLICE LENGTH AND METHODS FOR USE THEREWITH                                                               | 6/26/2014  |
| 14/316,061         | DISPERSED STORAGE WITH COORDINATED EXECUTION AND METHODS FOR USE THEREWITH                                                               | 6/26/2014  |
| 14/318,347         | DIGITAL CONTENT RETRIEVAL UTILIZING DISPERSED STORAGE                                                                                    | 6/27/2014  |
| 14/318,790         | DISTRIBUTED STORAGE NETWORK FOR STORING A DATA OBJECT BASED ON STORAGE REQUIREMENTS                                                      | 6/30/2014  |
| 14/319,159         | Distributed Storage Time Synchronization Based On Retrieval Delay                                                                        | 6/30/2014  |
| 14/319,282         | Distributed Storage Time Synchronization Based on Storage Delay                                                                          | 6/30/2014  |
| 14/319,849         | SELECTING STORAGE FACILITIES IN A PLURALITY OF DISPERSED STORAGE NETWORKS                                                                | 6/30/2014  |
| 14/320,518         | STORING LOW RETENTION PRIORITY DATA IN A DISPERSED STORAGE NETWORK                                                                       | 6/30/2014  |
| 14/320,547         | UPDATING DE-DUPLICATION TRACKING DATA FOR A DISPERSED STORAGE NETWORK                                                                    | 6/30/2014  |
| 14/321,629         | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING                                                                              | 7/1/2014   |
| 14/325,425         | CACHE FOR FILE-BASED DISPERSED STORAGE                                                                                                   | 7/8/2014   |
| 14/325,433         | SLICE MIGRATION IN A DISPERSED STORAGE NETWORK                                                                                           | 7/8/2014   |
| 14/327,582         | LIKELIHOOD BASED REBUILDING OF MISSING ENCODED DATA SLICES                                                                               | 7/10/2014  |
| 14/327,585         | DETECTING A UTILIZATION IMBALANCE BETWEEN DISPERSED STORAGE NETWORK STORAGE UNITS                                                        | 7/10/2014  |
| 14/327,615         | STORING AN ENCODED DATA SLICE AS A SET OF SUB-SLICES                                                                                     | 7/10/2014  |
| 14/328,311         | DISPERSED DATA STORAGE IN A VPN GROUP OF DEVICES                                                                                         | 7/10/2014  |
| 14/328,861         | Defragmenting Slices in a Dispersed Storage Network Memory                                                                               | 7/11/2014  |
| 14/328,904         | DISPERSED STORAGE USING LOCALIZED PEER-TO-PEER CAPABLE WIRELESS DEVICES IN A PEER-TO-PEER OR FEMTO CELL SUPPORTED CARRIER SERVED FASHION | 7/11/2014  |
| 14/328,919         | STORAGE POOLS FOR A DISPERSED STORAGE NETWORK                                                                                            | 7/11/2014  |

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| 14/331,997          | METHOD AND APPARATUS FOR DISTRIBUTED STORAGE<br>INTEGRITY PROCESSING                         | 7/15/2014  |
| 14/333,834          | APPLYING DIGITAL RIGHTS MANAGEMENT TO MULTI-MEDIA FILE PLAYBACK                              | 7/17/2014  |
| 14/333,968          | ENCODING MULTI-MEDIA CONTENT FOR A CENTRALIZED DIGITAL VIDEO STORAGE SYSTEM                  | 7/17/2014  |
| 14/335,915          | MULTI-WRITER REVISION SYNCHRONIZATION IN A DISPERSED STORAGE NETWORK                         | 7/20/2014  |
| 14/336,195          | CHANGING DISPERSED STORAGE ERROR ENCODING PARAMETERS                                         | 7/21/2014  |
| 14/338,504          | COMMAND LINE INTERPRETER FOR ACCESSING A DATA OBJECT STORED IN A DISTRIBUTED STORAGE NETWORK | 7/23/2014  |
| 14/444,058          | DISPERSED STORAGE HAVING A PLURALITY OF SNAPSHOT PATHS AND METHODS FOR USE THEREWITH         | 7/28/2014  |
| 14/444,134          | DISPERSED STORAGE HAVING SNAPSHOT CLONES AND METHODS FOR USE THEREWITH                       | 7/28/2014  |
| 14/444,183          | DISPERSED STORAGE WITH PARTIAL DATA OBJECT STORAGE AND METHODS FOR USE THEREWITH             | 7/28/2014  |
| 14/445,334          | COOPERATIVE STORAGE SYSTEM UTILIZING DISPERSED STORAGE                                       | 7/29/2014  |
| 14/447,890          | DIGEST LISTING DECOMPOSITION                                                                 | 7/31/2014  |
| 14/447,909          | DISTRIBUTED REBUILDING OF DATA IN A DISPERSED STORAGE NETWORK                                | 7/31/2014  |
| 14/449,487          | REVISION DELETION MARKERS                                                                    | 8/1/2014   |
| 14/450,804          | SESSION EXECUTION DECISION                                                                   | 8/4/2014   |
| 14/450,943          | MULTIPLE REVISION MAILBOX                                                                    | 8/4/2014   |
| 14/451,610          | DISPERSED STORAGE SYSTEM WITH SUB-VAULTS AND METHODS FOR USE THEREWITH                       | 8/5/2014   |
| 14/451,911          | DISPERSED STORAGE SYSTEM WITH VAULT UPDATING AND METHODS FOR USE THEREWITH                   | 8/5/2014   |
| 14/452,136          | DISPERSED STORAGE SYSTEM WITH WIDTH DISPERSAL CONTROL AND METHODS FOR USE THEREWITH          | 8/5/2014   |
| 14/452,182          | DISTRIBUTED STORAGE WITH AUXILIARY DATA INTERSPERSAL AND METHOD FOR USE THEREWITH            | 8/5/2014   |
| 14/452,475          | ADJUSTING EXECUTION OF TASKS IN A DISPERSED STORAGE NETWORK                                  | 8/5/2014   |
| 14/452,483          | MIGRATION OF ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                              | 8/5/2014   |
| 14/452,774          | DATA MODIFICATION IN A DISPERSED STORAGE NETWORK                                             | 8/6/2014   |
| 14/452,791          | HARDWARE AUTHENTICATION IN A DISPERSED STORAGE NETWORK                                       | 8/6/2014   |
| 14/454,013          | COOPERATIVE DATA ACCESS REQUEST AUTHORIZATION IN A DISPERSED STORAGE                         | 8/7/2014   |

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|                    | NETWORK                                                                                          |            |
| 14/454,942         | STORING DATA IN A DISPERSED STORAGE NETWORK                                                      | 8/8/2014   |
| 14/457,907         | DISPERSED STORAGE SYSTEM WITH IDENTITY UNIT SELECTION AND METHODS FOR USE THEREWITH              | 8/12/2014  |
| 14/458,969         | BALANCING STORAGE UNIT UTILIZATION WITHIN A DISPERSED STORAGE NETWORK                            | 8/13/2014  |
| 14/461,824         | DISPERSED STORAGE RE-DISPERSION METHOD BASED ON A FAILURE                                        | 8/18/2014  |
| 14/467,273         | MANAGEMENT OF NETWORK DEVICES WITHIN A DISPERSED DATA STORAGE NETWORK                            | 8/25/2014  |
| 14/468,731         | OBTAINING DISPERSED STORAGE NETWORK SYSTEM REGISTRY INFORMATION                                  | 8/26/2014  |
| 14/471,474         | ADJUSTING ALLOCATION OF DISPERSED STORAGE NETWORK RESOURCES                                      | 8/28/2014  |
| 14/475,772         | UTILIZING MULTIPLE DATA STRUCTURES FOR SLICE STORAGE                                             | 9/3/2014   |
| 14/481,892         | DIRECTORY SYNCHRONIZATION OF A DISPERSED STORAGE NETWORK                                         | 9/9/2014   |
| 14/482,320         | DELETING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                                      | 9/10/2014  |
| 14/482,509         | CONFIGURING A GENERIC COMPUTING DEVICE UTILIZING SPECIFIC COMPUTING DEVICE OPERATION INFORMATION | 9/10/2014  |
| 14/482,633         | DATA MIGRATION BETWEEN A RAID MEMORY AND A DISPERSED STORAGE NETWORK MEMORY                      | 9/10/2014  |
| 14/499,570         | ENCRYPTING DATA FOR STORAGE IN A DISPERSED STORAGE NETWORK                                       | 9/29/2014  |
| 14/502,337         | ACCESSING STORAGE UNITS OF A DISPERSED STORAGE NETWORK                                           | 9/30/2014  |
| 14/527,139         | CONFIGURING STORAGE RESOURCES OF A DISPERSED STORAGE NETWORK                                     | 10/29/2014 |
| 14/549,253         | RECOVERING DATA FROM MICROSPLICES IN A DISPERSED STORAGE NETWORK                                 | 11/20/2014 |
| 14/556,657         | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING                                      | 12/1/2014  |
| 14/556,703         | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING                                      | 12/1/2014  |
| 14/557,078         | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING                                      | 12/1/2014  |
| 14/557,136         | DATA STORAGE SYSTEM AND METHOD BY SHREDDING AND DESHREDDING                                      | 12/1/2014  |
| 14/570,366         | WRITING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                                       | 12/15/2014 |
| 14/587,781         | ENTITY REGISTRATION IN MULTIPLE DISPERSED STORAGE NETWORKS                                       | 12/31/2014 |
| 14/587,948         | UPDATING ERROR RECOVERY INFORMATION IN A DISPERSED STORAGE NETWORK                               | 12/31/2014 |

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| 14/589,391          | CONCATENATING DATA OBJECTS FOR STORAGE IN A DISPERSED STORAGE NETWORK       | 1/5/2015   |
| 14/589,639          | STORAGE OF DATA WITH VERIFICATION IN A DISPERSED STORAGE NETWORK            | 1/5/2015   |
| 14/610,220          | DISTRIBUTING REGISTRY INFORMATION IN A DISPERSED STORAGE NETWORK            | 1/30/2015  |
| 14/610,331          | CONTROLLING ACCESS IN A DISPERSED STORAGE NETWORK                           | 1/30/2015  |
| 14/612,422          | TIME BASED DISPERSED STORAGE ACCESS                                         | 2/3/2015   |
| 14/613,899          | GENERATING MOLECULAR ENCODING INFORMATION FOR DATA STORAGE                  | 2/4/2015   |
| 14/615,655          | OPTIMIZING ROUTING OF DATA ACROSS A COMMUNICATIONS NETWORK                  | 2/6/2015   |
| 14/615,701          | ADJUSTING ROUTING OF DATA WITHIN A NETWORK PATH                             | 2/6/2015   |
| 14/628,817          | INTEGRATED CLIENT FOR USE WITH A DISPERSED DATA STORAGE NETWORK             | 2/23/2015  |
| 14/633,315          | EFFICIENT AND SECURE DATA STORAGE UTILIZING A DISPERSED DATA STORAGE SYSTEM | 2/27/2015  |
| 14/636,860          | ADJUSTING A NUMBER OF DISPERSED STORAGE UNITS                               | 3/3/2015   |
| 14/637,348          | SELF-VALIDATING REQUEST MESSAGE STRUCTURE AND OPERATION                     | 3/3/2015   |
| 14/638,175          | RETRIEVING MULTI-GENERATIONAL STORED DATA IN A DISPERSED STORAGE NETWORK    | 3/4/2015   |
| 14/638,575          | DELEGATING ITERATIVE STORAGE UNIT ACCESS IN A DISPERSED STORAGE NETWORK     | 3/4/2015   |
| 14/638,654          | RESOLVING WRITE REQUEST CONFLICTS IN A DISPERSED STORAGE NETWORK            | 3/4/2015   |
| 14/675,070          | SECURE DATA ACCESS IN A DISPERSED STORAGE NETWORK                           | 3/31/2015  |
| 14/675,183          | ACCESSING DATA BASED ON A DISPERSED STORAGE NETWORK REBUILDING ISSUE        | 3/31/2015  |
| 14/675,360          | RELIABLY RECOVERING STORED DATA IN A DISPERSED STORAGE NETWORK              | 3/31/2015  |
| 14/679,578          | REBUILDING A DATA REVISION IN A DISPERSED STORAGE NETWORK                   | 4/6/2015   |
| 14/680,459          | MAINTAINING DATA STORAGE IN ACCORDANCE WITH AN ACCESS METRIC                | 4/7/2015   |
| 14/680,575          | VERIFYING A STATUS LEVEL OF STORED ENCODED DATA SLICES                      | 4/7/2015   |
| 14/705,752          | EFFICIENT STORAGE OF ENCRYPTED DATA IN A DISPERSED STORAGE NETWORK          | 5/6/2015   |
| 14/707,943          | ACCESSING A DISPERSED STORAGE NETWORK                                       | 5/8/2015   |
| 14/707,974          | MIGRATING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                | 5/8/2015   |

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| 14/707,999          | ACCESSING DATA WHILE MIGRATING STORAGE OF THE DATA                                          | 5/8/2015   |
| 14/721,615          | RECOVERING AN ENCODED DATA SLICE IN A DISPERSED STORAGE NETWORK                             | 5/26/2015  |
| 14/721,723          | IDENTIFYING A TASK EXECUTION RESOURCE OF A DISPERSED STORAGE NETWORK                        | 5/26/2015  |
| 14/721,838          | ADJUSTING TIMING OF STORING DATA IN A DISPERSED STORAGE NETWORK                             | 5/26/2015  |
| 14/789,968          | DISPERSED STORAGE NETWORK WITH DATA SEGMENT BACKUP AND METHODS FOR USE THEREWITH            | 7/1/2015   |
| 14/792,577          | DISPERSED STORAGE WRITE PROCESS                                                             | 7/6/2015   |
| 14/792,898          | NON-TEMPORARILY STORING TEMPORARILY STORED DATA IN A DISPERSED STORAGE NETWORK              | 7/7/2015   |
| 14/794,723          | CONSISTENCY BASED ACCESS OF DATA IN A DISPERSED STORAGE NETWORK                             | 7/8/2015   |
| 14/805,637          | MAINTAINING A DESIRED NUMBER OF STORAGE UNITS                                               | 7/22/2015  |
| 14/819,113          | SENDING A ZERO INFORMATION GAIN FORMATTED ENCODED DATA SLICE                                | 8/5/2015   |
| 14/842,129          | ADJUSTING A DISPERSAL PARAMETER OF DISPERSEDLY STORED DATA                                  | 9/1/2015   |
| 14/843,022          | AUTHENTICATING A DATA ACCESS REQUEST TO A DISPERSED STORAGE NETWORK                         | 9/2/2015   |
| 14/843,049          | EFFICIENTLY ACCESSING AN ENCODED DATA SLICE IN A MEMORY CONTAINER UTILIZING A MEMORY BIN    | 9/2/2015   |
| 14/843,092          | MANAGING MEMORY UTILIZATION IN A DISTRIBUTED STORAGE AND TASK NETWORK                       | 9/2/2015   |
| 14/844,145          | ADJUSTING A DATA STORAGE ADDRESS MAPPING IN A MAINTENANCE FREE STORAGE CONTAINER            | 9/3/2015   |
| 14/844,328          | SECURELY STORING DATA IN A DISPERSED STORAGE NETWORK                                        | 9/3/2015   |
| 14/847,855          | DETERMINISTICALLY SHARING A PLURALITY OF PROCESSING RESOURCES                               | 9/8/2015   |
| 14/869,240          | COORDINATING STORAGE OF DATA IN DISPERSED STORAGE NETWORKS                                  | 9/29/2015  |
| 14/875,079          | RETRIEVING DATA SEGMENTS FROM A DISPERSED STORAGE NETWORK                                   | 10/5/2015  |
| 14/876,154          | STORING DATA IN A DISPERSED STORAGE NETWORK                                                 | 10/6/2015  |
| 14/926,891          | REDISTRIBUTING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                           | 10/29/2015 |
| 14/927,446          | SYNCHRONIZING STORAGE OF DATA COPIES IN A DISPERSED STORAGE NETWORK                         | 10/29/2015 |
| 14/929,925          | UTILIZING A LOCAL AREA NETWORK MEMORY AND A DISPERSED STORAGE NETWORK MEMORY TO ACCESS DATA | 11/2/2015  |
| 14/930,128          | VIRTUAL MEMORY MAPPING IN A DISPERSED STORAGE NETWORK                                       | 11/2/2015  |



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| 14/953,579         | EFFICIENTLY STORING DATA IN A DISPERSED STORAGE NETWORK                                                                                          | 11/30/2015 |
| 14/954,527         | STORAGE AND RETRIEVAL OF DISPERSED STORAGE NETWORK ACCESS INFORMATION                                                                            | 11/30/2015 |
| 14/954,836         | TIME ALIGNED TRANSMISSION OF CONCURRENTLY CODED DATA STREAMS                                                                                     | 11/30/2015 |
| 14/954,873         | MODIFYING A DISPERSED STORAGE NETWORK MEMORY DATA ACCESS RESPONSE PLAN                                                                           | 11/30/2015 |
| 14/955,200         | STORING DATA USING A DUAL PATH STORAGE APPROACH                                                                                                  | 12/1/2015  |
| 14/956,818         | SELECTING A DATA STORAGE RESOURCE OF A DISPERSED STORAGE NETWORK                                                                                 | 12/2/2015  |
| 14/984,024         | REBUILDING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                                                                                    | 12/30/2015 |
| 14/986,279         | STORING DATA IN A DISPERSED STORAGE NETWORK                                                                                                      | 12/31/2015 |
| 15/005,306         | RESPONDING TO A MAINTENANCE FREE STORAGE CONTAINER SECURITY THREAT                                                                               | 1/25/2016  |
| 15/006,735         | MODIFYING STORAGE CAPACITY OF A SET OF STORAGE UNITS                                                                                             | 1/26/2016  |
| 15/006,845         | PRIORITIZING REBUILDING OF ENCODED DATA SLICES                                                                                                   | 1/26/2016  |
| 15/011,807         | RESOLVING WRITE CONFLICTS IN A DISPERSED STORAGE NETWORK                                                                                         | 2/1/2016   |
| 15/012,555         | DETECTING STORAGE ERRORS IN A DISPERSED STORAGE NETWORK                                                                                          | 2/1/2016   |
| 15/017,991         | STORING A DATA STREAM IN A SET OF STORAGE DEVICES                                                                                                | 2/8/2016   |
| 15/056,517         | SELECTING STORAGE UNITS IN A DISPERSED STORAGE NETWORK                                                                                           | 2/29/2016  |
| 15/058,408         | ACCESSING COMMON DATA IN A DISPERSED STORAGE NETWORK                                                                                             | 3/2/2016   |
| 15/075,946         | RE-ENCODING DATA IN A DISPERSED STORAGE NETWORK                                                                                                  | 3/21/2016  |
| 15/082,887         | TRANSFERRING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                                                                                  | 3/28/2016  |
| 15/085,648         | LOCALIZED DISPERSED STORAGE MEMORY SYSTEM                                                                                                        | 3/30/2016  |
| 15/089,943         | DISTRIBUTED STORAGE NETWORK FOR MODIFICATION OF A DATA OBJECT                                                                                    | 4/4/2016   |
| 60/316,601         | Information preservation system                                                                                                                  | 8/31/2001  |
| 61/141,312         | Object Interface To A Dispersed Data Storage Network                                                                                             | 12/30/2008 |
| 61/141,428         | Range Based Rebuilder For Use With A Dispersed Data Storage Network                                                                              | 12/30/2008 |
| 61/141,478         | Systems, Methods, And Apparatus For Matching A Connection Request With A Network Interface Adapted For Use With A Dispersed Data Storage Network | 12/30/2008 |
| 61/141,494         | Systems, Methods and Apparatus for Identifying Accessible Dispersed Digital Storage Vaults Utilizing a Centralized Registry                      | 12/30/2008 |

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| 61/141,534         | Integrated Client For Use With A Dispersed Data Storage Network                                   | 12/30/2008 |
| 61/221,762         | DISBURSED STORAGE NETWORK INTERFACE MODULE AND PendingS THEREOF                                   | 6/30/2009  |
| 61/230,019         | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS SPACE                                                   | 7/30/2009  |
| 61/230,034         | DISPERSED STORAGE NETWORK DATA REBUILDING                                                         | 7/30/2009  |
| 61/230,038         | DISPERSED STORAGE NETWORK VERSION SYNCHRONIZATION                                                 | 7/30/2009  |
| 61/230,304         | COMPUTING SYSTEM UTILIZING DISPERSED STORAGE                                                      | 7/31/2009  |
| 61/230,937         | DISPERSED STORAGE NETWORK DATA MANIPULATION                                                       | 8/3/2009   |
| 61/237,624         | DISPERSED STORAGE UNIT AND METHODS WITH METADATA SEPARATION FOR USE IN A DISPERSED STORAGE SYSTEM | 8/27/2009  |
| 61/237,634         | SECURING DATA IN A DISPERSED STORAGE NETWORK                                                      | 8/27/2009  |
| 61/237,645         | AUTHENTICATING USE OF A DISPERSED STORAGE NETWORK                                                 | 8/27/2009  |
| 61/237,650         | METHOD AND APPARATUS FOR IDENTIFYING DATA INCONSISTENCY IN A DISPERSED STORAGE NETWORK            | 8/27/2009  |
| 61/237,652         | DISPERSED STORAGE NETWORK STORAGE SYSTEM                                                          | 8/27/2009  |
| 61/246,809         | FINANCIAL TRANSACTIONS UTILIZING A DISTRIBUTED STORAGE NETWORK                                    | 9/29/2009  |
| 61/246,818         | SOCIAL NETWORKING UTILIZING A DISPERSED STORAGE NETWORK                                           | 9/29/2009  |
| 61/246,876         | DISTRIBUTED STORAGE NETWORK MEMORY UTILIZATION OPTIMIZATION                                       | 9/29/2009  |
| 61/247,190         | DISTRIBUTED STORAGE NETWORK MEMORY UTILIZATION                                                    | 9/30/2009  |
| 61/248,548         | MULTIMEDIA DISTRIBUTED STORAGE NETWORK                                                            | 10/5/2009  |
| 61/256,193         | MEDIA DISTRIBUTION UTILIZING DISTRIBUTED STORAGE                                                  | 10/29/2009 |
| 61/256,226         | DISTRIBUTED STORAGE NETWORK DATA REVISION CONTROL                                                 | 10/29/2009 |
| 61/256,314         | AUTONOMOUS DISTRIBUTED STORAGE NETWORK                                                            | 10/30/2009 |
| 61/256,411         | DISTRIBUTED STORAGE NETWORK DATA PROCESSING                                                       | 10/30/2009 |
| 61/256,419         | DISTRIBUTED STORAGE NETWORK DATA ROUTING                                                          | 10/30/2009 |
| 61/256,436         | DISTRIBUTED STORAGE NETWORK ACCESSS                                                               | 10/30/2009 |
| 61/264,072         | DISTRIBUTED STORAGE NETWORK REBUILDING                                                            | 11/24/2009 |
| 61/264,297         | DISTRIBUTED STORAGE NETWORK COMMUNICATIONS METHOD                                                 | 11/25/2009 |
| 61/264,316         | DISTRIBUTED STORAGE NETWORK MEMORY SYSTEM                                                         | 11/25/2009 |
| 61/264,504         | LARGE SCALE DISTRIBUTED STORAGE NETWORK                                                           | 11/25/2009 |
| 61/264,516         | STORING DATA IN A DISTRIBUTED STORAGE NETWORK                                                     | 11/25/2009 |

| Pending App. Number | Pending Title                                                               | Filed Date |
|---------------------|-----------------------------------------------------------------------------|------------|
| 61/264,534          | DISTRIBUTED STORAGE DE-DUPLICATION                                          | 11/25/2009 |
| 61/290,632          | DIGITAL CONTENT DISTRIBUTED STORAGE                                         | 12/29/2009 |
| 61/290,662          | DISTRIBUTED STORAGE OF SOFTWARE                                             | 12/29/2009 |
| 61/290,689          | DISTRIBUTED STORAGE WITH DATA SECURITY                                      | 12/29/2009 |
| 61/290,757          | DISTRIBUTED STORAGE TIME SYNCHRONIZATION                                    | 12/29/2009 |
| 61/290,775          | DISTRIBUTED STORAGE DATA SYNCHRONIZATION                                    | 12/29/2009 |
| 61/299,075          | DISTRIBUTED STORAGE RESOURCE DETERMINATION METHOD                           | 1/28/2010  |
| 61/299,197          | DIRECTORY FILE SYSTEM IN A DISPERSED STORAGE NETWORK                        | 1/28/2010  |
| 61/299,228          | DISTRIBUTED STORAGE SYSTEM STORAGE METHOD                                   | 1/28/2010  |
| 61/299,245          | SECURE DATA TRANSMISSION UTILIZING DISTRIBUTED STORAGE                      | 1/28/2010  |
| 61/308,737          | DISTRIBUTED STORAGE DATA REVISIONS MANAGEMENT                               | 2/26/2010  |
| 61/308,938          | MULTIPLE MEMORY TYPE STORAGE SYSTEM                                         | 2/27/2010  |
| 61/313,582          | DISTRIBUTED STORAGE NETWORK RESOURCE ALLOCATION                             | 3/12/2010  |
| 61/313,885          | DISTRIBUTED STORAGE SYSTEM ACCESS                                           | 3/15/2010  |
| 61/314,166          | STORAGE AND RETRIEVAL IN A DISTRIBUTED STORAGE SYSTEM                       | 3/16/2010  |
| 61/327,921          | SYSTEM ACCESS AND DATA INTEGRITY VERIFICATION IN A DISPERSED STORAGE SYSTEM | 4/26/2010  |
| 61/328,000          | DISPERSED STORAGE SYSTEM ACCESS PROTOCOL FORMAT AND METHOD                  | 4/26/2010  |
| 61/346,173          | DISPERSED STORAGE NETWORK MEMORY DEVICE UTILIZATION                         | 5/19/2010  |
| 61/346,203          | INTER-DISPERSED STORAGE NETWORK COMMUNICATIONS                              | 5/19/2010  |
| 61/357,390          | DISTRIBUTED STORAGE UTILIZING SIMPLE STORAGE UNITS                          | 6/22/2010  |
| 61/357,430          | DISPERSAL METHOD IN A DISPERSED STORAGE SYSTEM                              | 6/22/2010  |
| 61/369,802          | DISPERSED STORAGE SYSTEM ACCESS PROTOCOL FORMAT AND METHOD                  | 8/2/2010   |
| 61/369,812          | DISPERSED STORAGE NETWORK ACCESS REQUEST AUTHENTICATION                     | 8/2/2010   |
| 61/377,413          | ACCESS INFORMATION DISTRIBUTION UTILIZING DISTRIBUTED AUTHENTICATION        | 8/26/2010  |
| 61/377,428          | REPURPOSING MEMORY IN A DISPERSED STORAGE NETWORK                           | 8/26/2010  |
| 61/390,368          | DATA MANIPULATION IN A DISPERSED STORAGE SYSTEM                             | 10/6/2010  |
| 61/390,472          | COMMUNICATIONS UTILIZING INFORMATION DISPERSAL                              | 10/6/2010  |
| 61/408,971          | MEMORY UTILIZATION IN A DISPERSED STORAGE NETWORK                           | 11/1/2010  |
| 61/408,980          | DISPERSED STORAGE NETWORK COMMUNICATION                                     | 11/1/2010  |

| Pending App. Number | Pending Title                                                                                     | Filed Date |
|---------------------|---------------------------------------------------------------------------------------------------|------------|
| 61/411,478          | BALANCING MEMORY UTILIZATION IN A DISPERSED STORAGE NETWORK                                       | 11/9/2010  |
| 61/417,873          | DATA REBUILDING IN A DISPERSED STORAGE NETWORK                                                    | 11/29/2010 |
| 61/426,237          | DISPERSED STORAGE NETWORK FILE SYSTEM                                                             | 12/22/2010 |
| 61/427,457          | STORING SECRET DATA IN A DISPERSED STORAGE NETWORK                                                | 12/27/2010 |
| 61/438,490          | DISPERSED STORAGE NETWORK ACCESS TOKEN                                                            | 2/1/2011   |
| 61/438,516          | UNIFIED DISPERSED STORAGE                                                                         | 2/1/2011   |
| 61/448,518          | DISPERSED STORAGE NETWORK ACCESS UTILIZING AN ACCESS TOKEN                                        | 3/2/2011   |
| 61/448,526          | DISPERSED STORAGE NETWORK DIRECTORY SYSTEM UTILIZATION                                            | 3/2/2011   |
| 61/470,521          | FLASH MEMORY UTILIZATION IN A USER DEVICE OF A DISPERSED STORAGE NETWORK                          | 4/1/2011   |
| 61/470,524          | ENCODING DATA STORED IN A DISPERSED STORAGE NETWORK<br><br>(may be changed when utility is filed) | 4/1/2011   |
| 61/483,846          | Key Storage Protocol Utilizing a Dispersed Storage Network                                        | 5/9/2011   |
| 61/483,852          | CONTAINER BASED DISPERSED STORAGE NETWORK                                                         | 5/9/2011   |
| 61/483,856          | CONTENT DISTRIBUTION NETWORK UTILIZING A DISPERSED STORAGE NETWORK                                | 5/9/2011   |
| 61/493,820          | DATA SECURITY IN A DISPERSED STORAGE NETWORK                                                      | 6/6/2011   |
| 61/493,825          | ACCESSING DATA IN A DISPERSED STORAGE NETWORK                                                     | 6/6/2011   |
| 61/505,010          | OPTIMIZING A CONTAINER BASED DISPERSED STORAGE NETWORK                                            | 7/6/2011   |
| 61/505,013          | COMPLETING RETRIEVAL OF CONTENT STORED IN A DISPERSED STORAGE NETWORK                             | 7/6/2011   |
| 61/512,040          | PROCESSING NAMED OBJECTS IN A DISPERSED STORAGE NETWORK                                           | 7/27/2011  |
| 61/512,122          | PROCESSING EVENT INFORMATION IN A DISPERSED STORAGE NETWORK                                       | 7/27/2011  |
| 61/524,521          | DISTRIBUTED AUTHENTICATION TOKEN DEVICE                                                           | 8/17/2011  |
| 61/531,317          | COMMUNICATING ONE OR MORE DATA STREAMS UTILIZING DISPERSED STORAGE ERROR ENCODING                 | 9/6/2011   |
| 61/542,914          | DATA TRANSFER UTILIZING DISPERSED STORAGE ENCODING                                                | 10/4/2011  |
| 61/542,923          | STORING PASSWORDS IN A DISPERSED CREDENTIAL STORAGE SYSTEM                                        | 10/4/2011  |
| 61/554,152          | COMMUNICATING DATA UTILIZING DATA DISPERSAL                                                       | 11/1/2011  |
| 61/554,358          | ACCESSING A DISPERSED STORAGE NETWORK                                                             | 11/1/2011  |
| 61/564,185          | OPTIMIZING PERFORMANCE OF DISPERSED STORAGE NETWORK                                               | 11/28/2011 |
| 61/564,200          | DISPERSED STORAGE NETWORK STORAGE MODULE                                                          | 11/28/2011 |
| 61/569,387          | DISTRIBUTED STORAGE AND TASK PROCESSING                                                           | 12/12/2011 |

| Pending App Number | Pending Title                                                                                                                                     | Filed Date |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 61/593,116         | INDEXING IN A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                                | 1/31/2012  |
| 61/593,126         | REDISTRIBUTING DATA IN A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                     | 1/31/2012  |
| 61/605,856         | UTILIZING AN INDEX OF A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                      | 3/2/2012   |
| 61/605,869         | TASK EXECUTION IN A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                          | 3/2/2012   |
| 61/619,232         | ACCESS CONTROL IN A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                          | 4/2/2012   |
| 61/619,240         | SUB-TASK PROCESSING BY A DISTRIBUTED STORAGE AND TASK EXECUTION UNIT                                                                              | 4/2/2012   |
| 61/637,932         | OPTIMIZING ACCESS OF DATA FROM A DISTRIBUTED STORAGE AND TASK NETWORK                                                                             | 4/25/2012  |
| 61/637,940         | DATA PROCESSING BY A DISTRIBUTED STORAGE AND TASK EXECUTION UNIT                                                                                  | 4/25/2012  |
| 61/655,736         | Storing data in a layered distributed storage and task network                                                                                    | 6/5/2012   |
| 61/655,753         | Establishing an address range assignment in a distributed storage and task network                                                                | 6/5/2012   |
| 61/661,075         | METHOD AND SYSTEM FOR THE NORMALIZATION, FILTERING AND SECURING OF ASSOCIATED METADATA INFORMATION ON FILE OBJECTS DEPOSITED INTO AN OBJECT STORE | 6/18/2012  |
| 61/663,796         | ACCESSING A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                                  | 6/25/2012  |
| 61/663,836         | LOAD BALANCING ACCESS OF A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                   | 6/25/2012  |
| 61/679,000         | PERFORMANCE OPTIMIZATION OF A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                | 8/2/2012   |
| 61/679,007         | TASK PROCESSING IN A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                         | 8/2/2012   |
| 61/695,997         | Utilizing metadata to access a dispersed storage and task network                                                                                 | 8/31/2012  |
| 61/696,018         | Authorizing access to a distributed storage and task network                                                                                      | 8/31/2012  |
| 61/700,691         | Updating a dispersed storage and task network index                                                                                               | 9/13/2012  |
| 61/711,106         | Prioritizing Tasks in a Distributed Storage and Task Network                                                                                      | 10/8/2012  |
| 61/720,204         | ACCESSING A DISTRIBUTED STORAGE AND TASK NETWORK                                                                                                  | 10/30/2012 |
| 61/720,274         | VERIFYING SLICE INTEGRITY IN A DISTRIBUTED STORAGE AND TASK NETWORK                                                                               | 10/30/2012 |
| 61/733,686         | GENERATING A DISPERSED QUEUE                                                                                                                      | 12/5/2012  |
| 61/733,698         | ACCESSING DATA UTILIZING A REGION HEADER OBJECT                                                                                                   | 12/5/2012  |
| 61/748,891         | OBFUSCATING AN ENCRYPTION KEY IN A DISPERSED STORAGE NETWORK                                                                                      | 1/4/2013   |
| 61/748,916         | UTILIZING A HIERARCHICAL REGION HEADER OBJECT STRUCTURE FOR DATA STORAGE                                                                          | 1/4/2013   |

| Pending App. Number | Pending Title                                                            | Filed Date |
|---------------------|--------------------------------------------------------------------------|------------|
| 61/760,962          | MANAGING A DISPERSED STORAGE NETWORK POWER CONSUMPTION                   | 2/5/2013   |
| 61/761,005          | ACCESSING DATA IN A DISPERSED STORAGE NETWORK                            | 2/5/2013   |
| 61/769,588          | Confirming Integrity of Data in a Dispersed Storage Network              | 2/26/2013  |
| 61/769,595          | Securely Storing Data without Duplication in a Dispersed Storage Network | 2/26/2013  |
| 61/807,288          | DE-DUPLICATING DATA STORED IN A DISPERSED STORAGE NETWORK                | 4/1/2013   |
| 61/807,291          | OPTIMIZING DATA ACCESS IN A DISPERSED STORAGE NETWORK                    | 4/1/2013   |
| 61/819,025          | STORING A SPARSE DATA OBJECT IN A DISPERSED STORAGE NETWORK              | 5/3/2013   |
| 61/819,039          | SLICE MIGRATION TRACKING IN A DISPERSED STORAGE NETWORK                  | 5/3/2013   |
| 61/826,316          | PERFORMANCE OPTIMIZED STORAGE OF DATA IN A DISPERSED STORAGE NETWORK     | 5/22/2013  |
| 61/828,883          | ACCESSING DATA IN A DISPERSED STORAGE NETWORK                            | 5/30/2013  |
| 61/828,905          | ENCRYPTED ZERO INFORMATION GAIN DATA REBUILDING                          | 5/30/2013  |
| 61/841,603          | ACCESSING PERMUTATIONS OF DATA WITHIN A DISPERSED STORAGE NETWORK        | 7/1/2013   |
| 61/841,625          | PRIORITIZING TASKS IN A DISPERSED STORAGE NETWORK                        | 7/1/2013   |
| 61/860,456          | ESTABLISHING A SLICE REBUILDING RATE IN A DISPERSED STORAGE NETWORK      | 7/31/2013  |
| 61/860,498          | DISPERSED STORAGE AND COMPUTING NETWORK COMPONENTS AND OPTIMIZATIONS     | 7/31/2013  |
| 61/871,649          | OPTIMIZING DATA STORAGE IN A DISPERSED STORAGE NETWORK                   | 8/29/2013  |
| 61/871,833          | PRIORITIZING DATA RETENTION IN A DISPERSED STORAGE NETWORK               | 8/29/2013  |
| 61/886,452          | ACCESSING A VAULT OF A DISPERSED STORAGE NETWORK                         | 10/3/2013  |
| 61/898,934          | UPDATING REGISTRY INFORMATION OF A DISPERSED STORAGE NETWORK             | 11/1/2013  |
| 61/911,544          | SELECTING STORAGE UNITS OF A DISPERSED STORAGE NETWORK                   | 12/4/2013  |
| 61/924,196          | CONFIGURING STORAGE SLOTS IN A DISPERSED STORAGE NETWORK                 | 1/6/2014   |
| 61/933,953          | IDENTIFYING SLICE ERRORS ASSOCIATED WITH A DISPERSED STORAGE NETWORK     | 1/31/2014  |
| 61/934,036          | UTILIZING STORAGE SLOTS IN A DISPERSED STORAGE NETWORK                   | 1/31/2014  |
| 61/944,722          | SELECTING RESOURCES OF A DISPERSED STORAGE NETWORK                       | 2/26/2014  |

| Pending App Number | Pending Title                                                               | Filed Date |
|--------------------|-----------------------------------------------------------------------------|------------|
| 61/944,742         | EXECUTING TASKS IN A DISTRIBUTED STORAGE AND TASK NETWORK                   | 2/26/2014  |
| 61/974,110         | ACCESSING DATA IN A DISPERSED STORAGE NETWORK                               | 4/2/2014   |
| 61/974,142         | SCHEDULING REBUILDING OF STORED DATA IN A DISPERSED STORAGE NETWORK         | 4/2/2014   |
| 61/986,361         | ACCESSING METADATA IN A DISPERSED STORAGE NETWORK                           | 4/30/2014  |
| 61/986,399         | ALLOCATING STORAGE GENERATIONS IN A DISPERSED STORAGE NETWORK               | 4/30/2014  |
| 62/008,182         | UTILIZING LOCAL REDUNDANCY IN A DISPERSED STORAGE NETWORK                   | 6/5/2014   |
| 62/008,207         | PRIORITIZING TASKS IN A STORAGE UNIT                                        | 6/5/2014   |
| 62/019,074         | UTILIZING A DECENTRALIZED AGREEMENT PROTOCOL IN A DISPERSED STORAGE NETWORK | 6/30/2014  |
| 62/019,126         | SELECTING STORAGE RESOURCES OF A DISPERSED STORAGE NETWORK                  | 6/30/2014  |
| 62/031,320         | REBUILDING DATA IN A DISPERSED STORAGE NETWORK                              | 7/31/2014  |
| 62/031,342         | DISPERSED STORAGE NETWORK STORAGE RETRY MECHANISM                           | 7/31/2014  |
| 62/046,444         | FACILITATING DATA CONSISTENCY IN A DISPERSED STORAGE NETWORK                | 9/5/2014   |
| 62/047,458         | SELECTING RESOURCES IN A DISPERSED STORAGE NETWORK                          | 9/8/2014   |
| 62/072,123         | ASSIGNING TASK EXECUTION RESOURCES IN A DISPERSED STORAGE NETWORK           | 10/29/2014 |
| 62/086,542         | CONSISTENT STORAGE OF DATA IN A DISPERSED STORAGE NETWORK                   | 12/2/2014  |
| 62/086,611         | MAINTAINING DATA INTEGRITY IN A DISPERSED STORAGE NETWORK                   | 12/2/2014  |
| 62/098,414         | SYNCHRONIZING UTILIZATION OF A PLURALITY OF DISPERSED STORAGE RESOURCES     | 12/31/2014 |
| 62/098,449         | SYNCHRONOUSLY STORING DATA IN A PLURALITY OF DISPERSED STORAGE NETWORKS     | 12/31/2014 |
| 62/109,700         | REDUNDANTLY STORING DATA IN A DISPERSED STORAGE NETWORK                     | 1/30/2015  |
| 62/109,712         | UTILIZING ALTERNATE STORAGE RESOURCES WITHIN A DISPERSED STORAGE NETWORK    | 1/30/2015  |
| 62/121,667         | SELECTING A STORAGE POOL OF A DISPERSED STORAGE NETWORK                     | 2/27/2015  |
| 62/121,736         | TRANSITIONING A STATE OF A DISPERSED STORAGE NETWORK                        | 2/27/2015  |
| 62/140,861         | MODIFYING STORAGE CAPACITY OF A STORAGE UNIT POOL                           | 3/31/2015  |
| 62/141,034         | REBUILDING ENCODED DATA SLICES ASSOCIATED WITH STORAGE ERRORS               | 3/31/2015  |

| Pending App Number | Pending Title                                                              | Filed Date |
|--------------------|----------------------------------------------------------------------------|------------|
| 62/154,867         | AUTHORIZING A SLICE ACCESS REQUEST IN A DISPERSED STORAGE NETWORK          | 4/30/2015  |
| 62/154,886         | BALANCING MAINTENANCE AND ACCESS TASKS IN A DISPERSED STORAGE NETWORK      | 4/30/2015  |
| 62/168,114         | RE-ENCODING DATA IN A DISPERSED STORAGE NETWORK                            | 5/29/2015  |
| 62/168,145         | TRANSFERRING ENCODED DATA SLICES BETWEEN STORAGE RESOURCES                 | 5/29/2015  |
| 62/186,590         | ACCESSING DATA WHEN TRANSFERRING THE DATA BETWEEN STORAGE FACILITIES       | 6/30/2015  |
| 62/199,816         | STORING DATA AND ASSOCIATED METADATA IN A DISPERSED STORAGE NETWORK        | 7/31/2015  |
| 62/211,975         | STORING ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK                 | 8/31/2015  |
| 62/222,819         | IDENTIFYING AN ENCODED DATA SLICE FOR REBUILDING                           | 9/24/2015  |
| 62/248,636         | SECURELY STORING DATA IN A DISPERSED STORAGE NETWORK                       | 10/30/2015 |
| 62/248,752         | MIGRATING DATA IN A DISPERSED STORAGE NETWORK                              | 10/30/2015 |
| 62/260,735         | ACCESSING COPIES OF DATA STORED IN A DISPERSED STORAGE NETWORK             | 11/30/2015 |
| 62/260,743         | COMMUNICATING DISPERSED STORAGE NETWORK STORAGE UNIT TASK EXECUTION STATUS | 11/30/2015 |
| 62/272,848         | OPTIMIZING UTILIZATION OF STORAGE MEMORY IN A DISPERSED STORAGE NETWORK    | 12/30/2015 |
| 62/287,145         | VERIFYING INTEGRITY OF ENCODED DATA SLICES                                 | 1/26/2016  |
| 62/301,214         | ENHANCING PERFORMANCE OF A DISPERSED STORAGE NETWORK                       | 2/29/2016  |
| 62/314,792         | SELECTING A PROCESSING UNIT IN A DISPERSED STORAGE NETWORK                 | 3/29/2016  |
| 62/314,839         | PROCESSING AN ENCODED DATA SLICE IN A DISPERSED STORAGE NETWORK            | 3/29/2016  |



AMENDMENT NO. 1 TO AGREEMENT

This Amendment No. 1 to Agreement (hereinafter "Amendment No. 1") is entered into as of ~~October 20~~ 2016 (hereinafter the "Amendment No. 1 Effective Date") by and between Cleversafe, Inc., a Delaware corporation (hereinafter "ASSIGNOR"), and International Business Machines Corporation, a New York corporation (hereinafter "IBM").

WHEREAS, ASSIGNOR and IBM entered into that certain Agreement identified as License Reference Number L159437 dated as of April 12, 2016 (hereinafter the "Original Agreement"); and

WHEREAS, ASSIGNOR and IBM wish to enter into this Amendment No. 1 in order to amend certain provisions of the Original Agreement pursuant to Section 6.7 of the Original Agreement.

NOW, THEREFORE, in consideration of the mutual promises made herein and for other good and valuable consideration the receipt and sufficiency of which is hereby acknowledged, the parties hereby agree to amend the Original Agreement as follows:

1. The contents of Exhibit A-1 to this Amendment No. 1 are hereby added to and made a part of Exhibit A to the Original Agreement.
2. Except as expressly modified hereby, the Original Agreement shall remain in full force and effect.
3. This Amendment No. 1 constitutes the parties' entire agreement and understanding with respect to modification of the Original Agreement, supersedes and replaces any and all prior or contemporaneous proposals, agreements, understandings, commitments or representations of any kind, whether written or oral, relating to the parties' modification of the Original Agreement.
4. The Amendment No. 1 and the Original Agreement are intended to be read and construed in harmony with each other, but in the event any provision in the Original Agreement conflicts with any provision of this Amendment No. 1, then this Amendment No. 1 shall be deemed to control, and such conflicting provision, to the extent it conflicts, shall be deemed removed and replaced with the governing provision herein.
5. This Amendment No. 1 may be executed in one or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument and be binding upon the parties.
6. This Amendment No. 1 shall be governed by and construed in accordance with the laws of the State of New York in all respects, without giving effect to the principles of conflicts of law thereof.

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IN WITNESS WHEREOF, the parties have executed this Amendment No. 1 as of the  
Amendment No. 1 Effective Date.

Agreed to:  
CLEVERSAFE, INC.

Agreed to:  
INTERNATIONAL BUSINESS  
MACHINES CORPORATION

By: Michael P. Healy

By: Karen Milhoua

Name: Michael P. Healy

Name: Karen Milhoua

Title: Vice President

Title: Director

EXHIBIT A-1

| Country Code | App No.    | Patent No. | App Title                                                                          | Filed Date |
|--------------|------------|------------|------------------------------------------------------------------------------------|------------|
| EP           | 07753725.6 |            | System for Rebuilding Dispersed Data                                               | 2007-03-22 |
| EP           | 08836961.6 |            | Virtualized Storage Vaults on a Dispersed Data Storage Network                     | 2008-09-22 |
| EP           | 08837248.7 |            | Ensuring Data Integrity On A Dispersed Storage Network                             | 2008-09-22 |
| EP           | 08837609.0 |            | Block Based Access To A Dispersed Data Storage Network                             | 2008-09-22 |
| EP           | 09727284.3 |            | Rebuilding Data On A Dispersed Data Network                                        | 2009-03-20 |
| EP           | 10794620.4 |            | DISTRIBUTED STORAGE PROCESSING MODULE                                              | 2010-06-29 |
| EP           | 10804922.2 |            | METHOD AND APPARATUS FOR DISTRIBUTED STORAGE INTEGRITY PROCESSING                  | 2010-07-25 |
| EP           | 10805139.2 |            | MEMORY CONTROLLER UTILIZING DISTRIBUTED STORAGE                                    | 2010-07-30 |
| EP           | 10812543.6 |            | AUTHENTICATING USE OF A DISPERSED STORAGE NETWORK                                  | 2010-08-24 |
| EP           | 10833826.0 |            | LOCALIZED DISPERSED STORAGE MEMORY SYSTEM                                          | 2010-11-22 |
| EP           | 10833828.6 |            | DATA DE-DUPLICATION IN A DISPERSED STORAGE NETWORK UTILIZING DATA CHARACTERIZATION | 2010-11-23 |
| EP           | 11753801.7 |            | DISPERSED STORAGE UNIT CONFIGURATION                                               | 2011-02-28 |

| Country Code | App No.    | Patent No. | App Title                                                                     | Filed Date |
|--------------|------------|------------|-------------------------------------------------------------------------------|------------|
| EP           | 11775472.1 |            | A DISPERSED STORAGE NETWORK FRAME PROTOCOL HEADER                             | 2011-04-25 |
| EP           | 11820710.9 |            | REPROVISIONING A MEMORY DEVICE INTO A DISPERSED STORAGE NETWORK MEMORY        | 2011-08-26 |
| EP           | 11831169.5 |            | ACCESSING AN ENCODED DATA SLICE UTILIZING A MEMORY BIN                        | 2011-09-14 |
| DE           | 11831571.2 | 2625804    | DATA TRANSMISSION UTILIZING PARTITIONING AND DISPERSED STORAGE ERROR ENCODING | 2011-10-06 |
| EP           | 11831571.2 | 2625804    | DATA TRANSMISSION UTILIZING PARTITIONING AND DISPERSED STORAGE ERROR ENCODING | 2011-10-06 |
| FR           | 11831571.2 | 2625804    | DATA TRANSMISSION UTILIZING PARTITIONING AND DISPERSED STORAGE ERROR ENCODING | 2011-10-06 |
| GB           | 11831571.2 | 2625804    | DATA TRANSMISSION UTILIZING PARTITIONING AND DISPERSED STORAGE ERROR ENCODING | 2011-10-06 |
| EP           | 11840584.4 |            | BALANCING MEMORY UTILIZATION IN A DISPERSED STORAGE NETWORK                   | 2011-11-07 |

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| EP           | 12741687.3 |            | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO STORE DATA IN A DISPERSED STORAGE NETWORK MEMORY | 2012-01-31 |
| EP           | 12797604.1 |            | SECURELY REBUILDING AN ENCODED DATA SLICE                                                                     | 2012-05-30 |
| EP           | 12817413.3 |            | PROCESSING EVENT INFORMATION IN A DISPERSED STORAGE NETWORK                                                   | 2012-07-12 |
| EP           | 12856963.9 |            | Distributed Computing in a Distributed Storage and Task Network                                               | 2012-12-11 |
| EP           | 13156630.9 |            | MEMORY CONTROLLER UTILIZING DISTRIBUTED STORAGE                                                               | 2010-07-30 |
| EP           | 14757797.7 |            | RESOLVING WRITE CONFLICTS IN A DISPERSED STORAGE NETWORK                                                      | 2014-02-19 |
| EP           | 14791412.1 |            | PRIORITIZING REBUILDING OF STORED DATA IN A DISPERSED STORAGE NETWORK                                         | 2014-04-25 |
| EP           | 14791471.7 |            | STORING RELATED DATA IN A DISPERSED STORAGE NETWORK                                                           | 2014-04-25 |
| EP           | 14800632.3 |            | STORING DATA IN ACCORDANCE WITH A PERFORMANCE THRESHOLD                                                       | 2014-05-15 |
| EP           | 14804193.2 |            | ADJUSTING DISPERSED STORAGE NETWORK TRAFFIC DUE TO REBUILDING                                                 | 2014-05-30 |

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| EP           | 14819242.0     |            | REBUILDING DATA WHILE READING DATA IN A DISPERSED STORAGE NETWORK                  | 2014-06-30 |
| CN           | 201280061203.0 |            | Distributed Computing in a Distributed Storage and Task Network                    | 2012-12-11 |
| JP           | 2009-505374    |            | System for Rebuilding Dispersed Data                                               | 2007-03-22 |
| PCT          | PCT/US06/37894 |            | Digital Data Storage System                                                        | 2006-09-27 |
| PCT          | PCT/US09/50198 |            | File System Adapted for Use with a Dispersed Data Storage Network                  | 2009-07-10 |
| PCT          | PCT/US09/50203 |            | Streaming Media Software Interface To A Dispersed Data Storage Network             | 2009-07-10 |
| PCT          | PCT/US10/40325 |            | DISTRIBUTED STORAGE PROCESSING MODULE                                              | 2010-06-29 |
| PCT          | PCT/US10/43178 |            | METHOD AND APPARATUS FOR DISTRIBUTED STORAGE INTEGRITY PROCESSING                  | 2010-07-25 |
| PCT          | PCT/US10/43995 |            | MEMORY CONTROLLER UTILIZING DISTRIBUTED STORAGE                                    | 2010-07-30 |
| PCT          | PCT/US10/46441 |            | AUTHENTICATING USE OF A DISPERSED STORAGE NETWORK                                  | 2010-08-24 |
| PCT          | PCT/US10/57675 |            | LOCALIZED DISPERSED STORAGE MEMORY SYSTEM                                          | 2010-11-22 |
| PCT          | PCT/US10/57691 |            | DATA DE-DUPLICATION IN A DISPERSED STORAGE NETWORK UTILIZING DATA CHARACTERIZATION | 2010-11-23 |

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| PCT          | PCT/US11/26536 |            | DISPERSED STORAGE UNIT CONFIGURATION                                                                          | 2011-02-28 |
| PCT          | PCT/US11/33745 |            | A DISPERSED STORAGE NETWORK FRAME PROTOCOL HEADER                                                             | 2011-04-25 |
| PCT          | PCT/US11/49296 |            | REPROVISIONING A MEMORY DEVICE INTO A DISPERSED STORAGE NETWORK MEMORY                                        | 2011-08-26 |
| PCT          | PCT/US11/51624 |            | ACCESSING AN ENCODED DATA SLICE UTILIZING A MEMORY BIN                                                        | 2011-09-14 |
| PCT          | PCT/US11/55038 |            | DATA TRANSMISSION UTILIZING PARTITIONING AND DISPERSED STORAGE ERROR ENCODING                                 | 2011-10-06 |
| PCT          | PCT/US11/59616 |            | BALANCING MEMORY UTILIZATION IN A DISPERSED STORAGE NETWORK                                                   | 2011-11-07 |
| PCT          | PCT/US12/23311 |            | UTILIZING A DISPERSED STORAGE NETWORK ACCESS TOKEN MODULE TO STORE DATA IN A DISPERSED STORAGE NETWORK MEMORY | 2012-01-31 |
| PCT          | PCT/US12/40033 |            | SECURELY REBUILDING AN ENCODED DATA SLICE                                                                     | 2012-05-30 |
| PCT          | PCT/US12/46544 |            | PROCESSING EVENT INFORMATION IN A DISPERSED STORAGE NETWORK                                                   | 2012-07-12 |
| PCT          | PCT/US12/68883 |            | Distributed Computing in a Distributed Storage and Task Network                                               | 2012-12-11 |

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| PCT          | PCT/US13/28049    |            | LISTING DATA OBJECTS USING A HIERARCHICAL DISPERSED STORAGE INDEX        | 2013-02-27 |
| PCT          | PCT/US14/17094    |            | RESOLVING WRITE CONFLICTS IN A DISPERSED STORAGE NETWORK                 | 2014-02-19 |
| PCT          | PCT/US14/35494    |            | PRIORITIZING REBUILDING OF STORED DATA IN A DISPERSED STORAGE NETWORK    | 2014-04-25 |
| PCT          | PCT/US14/35528    |            | STORING RELATED DATA IN A DISPERSED STORAGE NETWORK                      | 2014-04-25 |
| PCT          | PCT/US14/38145    |            | STORING DATA IN ACCORDANCE WITH A PERFORMANCE THRESHOLD                  | 2014-05-15 |
| PCT          | PCT/US14/40217    |            | ADJUSTING DISPERSED STORAGE NETWORK TRAFFIC DUE TO REBUILDING            | 2014-05-30 |
| PCT          | PCT/US14/44869    |            | REBUILDING DATA WHILE READING DATA IN A DISPERSED STORAGE NETWORK        | 2014-06-30 |
| PCT          | PCT/US15/14625    |            | GENERATING MOLECULAR ENCODING INFORMATION FOR DATA STORAGE               | 2015-02-05 |
| PCT          | PCT/US15/19161    |            | RETRIEVING MULTI-GENERATIONAL STORED DATA IN A DISPERSED STORAGE NETWORK | 2015-03-06 |
| PCT          | PCT/US2007/007119 |            | Billing System for Information Dispersal System                          | 2007-03-22 |
| PCT          | PCT/US2007/007120 |            | System for Rebuilding Dispersed Data                                     | 2007-03-22 |



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| PCT          | PCT/US2008/077162 |            | Ensuring Data Integrity On A Dispersed Storage Network                           | 2008-09-22 |
| PCT          | PCT/US2008/077166 |            | Virtualized Storage Vaults on a Dispersed Data Storage Network                   | 2008-09-22 |
| PCT          | PCT/US2008/077171 |            | SMART ACCESS TO A DISPERSED DATA STORAGE NETWORK                                 | 2008-09-22 |
| PCT          | PCT/US2008/077174 |            | Block Based Access To A Dispersed Data Storage Network                           | 2008-09-22 |
| PCT          | PCT/US2009/037768 |            | Rebuilding Data On A Dispersed Data Network                                      | 2009-03-20 |
| US           | 13/588,111        | 9,201,805  | DISPERSED STORAGE NETWORK VIRTUAL ADDRESS FIELDS                                 | 2012-08-17 |
| US           | 14/481,885        | 9,323,603  | STORAGE OF SENSITIVE DATA IN A DISPERSED STORAGE NETWORK                         | 2014-09-09 |
| US           | 15/095,402        |            | SOCIAL NETWORKING UTILIZING A DISPERSED STORAGE NETWORK                          | 2016-04-11 |
| US           | 15/095,637        |            | STORING RAID DATA AS ENCODED DATA SLICES IN A DISPERSED STORAGE NETWORK          | 2016-04-11 |
| US           | 15/131,488        |            | REPRODUCING DATA FROM OBFUSCATED DATA RETRIEVED FROM A DISPERSED STORAGE NETWORK | 2016-04-18 |
| US           | 15/161,383        |            | MODIFYING A DISPERSED STORAGE NETWORK MEMORY DATA ACCESS RESPONSE PLAN           | 2016-05-23 |

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| US           | 15/167,482 |            | ENTITY REGISTRATION IN MULTIPLE DISPERSED STORAGE NETWORKS                     | 2016-05-27 |
| US           | 15/190,925 |            | WIRELESSLY COMMUNICATING A DATA FILE                                           | 2016-06-23 |
| US           | 15/193,335 |            | ENCRYPTING DATA FOR STORAGE IN A DISPERSED STORAGE NETWORK                     | 2016-06-27 |
| US           | 15/213,329 |            | STORING A STREAM OF DATA IN A DISPERSED STORAGE NETWORK                        | 2016-07-18 |
| US           | 15/213,343 |            | RETRIEVING DATA UTILIZING A DISTRIBUTED INDEX                                  | 2016-07-18 |
| US           | 15/215,614 |            | SECURE DATA MIGRATION IN A DISPERSED STORAGE NETWORK                           | 2016-07-21 |
| US           | 15/216,494 |            | UTILIZING DATA OBJECT STORAGE TRACKING IN A DISPERSED STORAGE NETWORK          | 2016-07-21 |
| US           | 15/223,707 |            | AVOIDING WRITE CONFLICTS IN A DISPERSED STORAGE NETWORK                        | 2016-07-29 |
| US           | 15/224,784 |            | MEMORY CONTROLLER UTILIZING AN ERROR CODING DISPERSAL FUNCTION                 | 2016-08-01 |
| US           | 15/224,839 |            | NON-TEMPORARILY STORING TEMPORARILY STORED DATA IN A DISPERSED STORAGE NETWORK | 2016-08-01 |
| US           | 15/224,863 |            | STORING DATA IN ACCORDANCE WITH A PERFORMANCE THRESHOLD                        | 2016-08-01 |

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| US           | 15/230,108 |            | COMMAND LINE INTERPRETER FOR ACCESSING A DATA OBJECT STORED IN A DISTRIBUTED STORAGE NETWORK | 2016-08-05 |
| US           | 15/230,113 |            | METHOD AND APPARATUS FOR IDENTIFYING DATA INCONSISTENCY IN A DISPERSED STORAGE NETWORK       | 2016-08-05 |
| US           | 15/230,145 |            | DISTRIBUTED STORAGE NETWORK AND METHOD FOR STORING AND RETRIEVING ENCRYPTION KEYS            | 2016-08-05 |
| US           | 15/242,858 |            | ADJUSTING DISPERSED STORAGE NETWORK TRAFFIC DUE TO REBUILDING                                | 2016-08-22 |
| US           | 15/249,800 |            | AUTHORIZING DISTRIBUTED TASK PROCESSING IN A DISTRIBUTED STORAGE NETWORK                     | 2016-08-29 |
| US           | 15/249,905 |            | SECURING DATA IN A DISPERSED STORAGE NETWORK                                                 | 2016-08-29 |