

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT2888498

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LSI CORPORATION	05/06/2011
RECEIVING PARTY DATA	
Name:	NetApp, Inc.
Street Address:	495 East Java Drive
City:	Sunnyvale
State/Country:	CALIFORNIA
Postal Code:	94089
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14161439
CORRESPONDENCE DATA	
Fax Number:	(214)200-0853
<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>	
Phone:	214-651-5000
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Correspondent Name:	HAYNES AND BOONE, LLP.
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Address Line 2:	SUITE 700
Address Line 4:	DALLAS, TEXAS 75219
ATTORNEY DOCKET NUMBER:	P01-6952.02/CON 47415.464
NAME OF SUBMITTER:	THOMAS W. KELTON
SIGNATURE:	/Thomas W. Kelton/
DATE SIGNED:	06/06/2014
Total Attachments: 33	
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JULY 27, 2011

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DAVID L. MCCOMBS
HAYNES AND BOONE, LLP
2323 VICTORY AVENUE, SUITE 700
DALLAS, TX 75219



501607675

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RECORDATION DATE: 07/27/2011

REEL/FRAME: 026656/0659
NUMBER OF PAGES: 19

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).
DOCKET NUMBER: 47415.2

ASSIGNOR:
LSI CORPORATION

DOC DATE: 05/06/2011

ASSIGNEE:
NETAPP, INC.
495 EAST JAVA DRIVE
SUNNYVALE, CALIFORNIA 94089

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TO:DAVID L. MCCOMBS COMPANY:HAYNES AND BOONE, LLP

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APPLICATION NUMBER: 12211838 FILING DATE: 09/17/2008
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD FOR REMOTE DATA BACK UP WITH DE-DUPLICATION AND
RECOVERY FROM CLUSTERED SECONDARY STORAGE ARRAYS

APPLICATION NUMBER: 12354126 FILING DATE: 01/15/2009
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD FOR HANDLING INTERRUPTED WRITES USING MULTIPLE CORES

APPLICATION NUMBER: 12100520 FILING DATE: 04/10/2008
PATENT NUMBER: ISSUE DATE:
TITLE: STORAGE BLADE

APPLICATION NUMBER: 12324224 FILING DATE: 11/26/2008
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD AND/OR APPARATUS FOR CERTIFYING AN IN-BAND MANAGEMENT
APPLICATION OF AN EXTERNAL STORAGE ARRAY

APPLICATION NUMBER: 12143123 FILING DATE: 06/20/2008
PATENT NUMBER: 7958397 ISSUE DATE: 06/07/2011
TITLE: SYSTEM FOR AUTOMATICALLY CONFIGURING A STORAGE ARRAY

APPLICATION NUMBER: 12492147 FILING DATE: 06/26/2009
PATENT NUMBER: ISSUE DATE:
TITLE: UNIFIED ENTERPRISE LEVEL METHOD AND SYSTEM FOR ENHANCING
APPLICATION AND STORAGE PERFORMANCE

APPLICATION NUMBER: 11545872 FILING DATE: 10/10/2006
PATENT NUMBER: 7958273 ISSUE DATE: 06/07/2011
TITLE: SYSTEM AND METHOD FOR CONNECTING SAS RAID CONTROLLER DEVICE
CHANNELS ACROSS REDUNDANT STORAGE SUBSYSTEMS

APPLICATION NUMBER: 12429519 FILING DATE: 04/24/2009
PATENT NUMBER: ISSUE DATE:
TITLE: VIRTUALIZED DATA STORAGE IN A VIRTUALIZED SERVER ENVIRONMENT

APPLICATION NUMBER: 12221515 FILING DATE: 08/04/2008
PATENT NUMBER: ISSUE DATE:
TITLE: SCHEDULING PROPORTIONAL STORAGE SHARE FOR STORAGE SYSTEMS

APPLICATION NUMBER: 12080217 FILING DATE: 04/01/2008
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM FOR AUTOMATING STORAGE DEVICE SWAPS AND/OR
REPLACEMENTS

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APPLICATION NUMBER: 12573238 FILING DATE: 10/05/2009
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD AND APPARATUS FOR DEBUGGING PROTOCOL TRAFFIC BETWEEN
DEVICES IN INTEGRATED SUBSYSTEMS

APPLICATION NUMBER: 12559915 FILING DATE: 09/15/2009
PATENT NUMBER: ISSUE DATE:
TITLE: DEVICES AND METHODS FOR MATCHING LINK SPEEDS BETWEEN
CONTROLLERS AND CONTROLLED DEVICES

APPLICATION NUMBER: 12605056 FILING DATE: 10/23/2009
PATENT NUMBER: ISSUE DATE:
TITLE: ADJUSTABLE EMI BAFFLING APPARATUS FOR DATA STORAGE SYSTEMS

APPLICATION NUMBER: 12405128 FILING DATE: 03/16/2009
PATENT NUMBER: ISSUE DATE:
TITLE: SWITCHING SERIAL ADVANCED TECHNOLOGY ATTACHMENT (SATA) TO A
PARALLEL INTERFACE

APPLICATION NUMBER: 12406029 FILING DATE: 03/17/2009
PATENT NUMBER: ISSUE DATE:
TITLE: ROUTE AWARE SERIAL ADVANCED TECHNOLOGY ATTACHMENT (SATA)
SWITCH

APPLICATION NUMBER: 60477857 FILING DATE: 06/11/2003
PATENT NUMBER: ISSUE DATE:
TITLE: SERIAL ATA SWITCH

APPLICATION NUMBER: 12404257 FILING DATE: 03/13/2009
PATENT NUMBER: ISSUE DATE:
TITLE: SERIAL ADVANCED TECHNOLOGY ATTACHMENT (SATA) SWITCH

APPLICATION NUMBER: 11863688 FILING DATE: 09/28/2007
PATENT NUMBER: ISSUE DATE:
TITLE: FUEL CELL BASED BATTERY BACKUP APPARATUS FOR STORAGE
SUBSYSTEMS

APPLICATION NUMBER: 10714031 FILING DATE: 11/14/2003
PATENT NUMBER: ISSUE DATE:
TITLE: METHODS AND STRUCTURES FOR A CACHING TO ROUTER IN ISCSI
STORAGE SYSTEMS

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APPLICATION NUMBER: 11002610 FILING DATE: 12/02/2004
PATENT NUMBER: ISSUE DATE:
TITLE: DYNAMIC COMMAND CAPACITY ALLOCATION ACROSS MULTIPLE SESSIONS
AND TRANSPORTS

APPLICATION NUMBER: 10973478 FILING DATE: 10/26/2004
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD AND SYSTEM FOR EFFICIENT WRITE JOURNAL ENTRY
MANAGEMENT FOR A DISTRIBUTED FILE SYSTEM

APPLICATION NUMBER: 11289140 FILING DATE: 11/29/2005
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEMS AND METHOD FOR SIMPLE SCALE-OUT STORAGE CLUSTERS

APPLICATION NUMBER: 11516232 FILING DATE: 09/05/2006
PATENT NUMBER: ISSUE DATE:
TITLE: SECURITY-ENABLED STORAGE CONTROLLER

APPLICATION NUMBER: 12077804 FILING DATE: 03/20/2008
PATENT NUMBER: ISSUE DATE:
TITLE: SENDING VOLUMINOUS DATA OVER THE INTERNET

APPLICATION NUMBER: 12070443 FILING DATE: 02/19/2008
PATENT NUMBER: ISSUE DATE:
TITLE: UTILIZING REMOVABLE VIRTUAL VOLUMES FOR SHARING DATA ON A
STORAGE AREA NETWORK

APPLICATION NUMBER: 12200497 FILING DATE: 08/28/2008
PATENT NUMBER: ISSUE DATE:
TITLE: METHODS AND SYSTEMS FOR INTEGRATED STORAGE AND DATA
MANAGEMENT USING A HYPERVISOR

APPLICATION NUMBER: 12200643 FILING DATE: 08/28/2008
PATENT NUMBER: ISSUE DATE:
TITLE: CIRCUITS, SYSTEMS, AND METHODS TO INTEGRATE STORAGE
VIRTUALIZATION IN A STORAGE CONTROLLER

APPLICATION NUMBER: 12262248 FILING DATE: 10/31/2008
PATENT NUMBER: ISSUE DATE:
TITLE: CONTROL I/O OFFLOAD IN A SPLIT-PATH STORAGE VIRTUALIZATION
SYSTEM

APPLICATION NUMBER: 12201104 FILING DATE: 08/29/2008
PATENT NUMBER: ISSUE DATE:
TITLE: STORAGE ARRAY BOOT AND CONFIGURATION

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APPLICATION NUMBER: 12969892 FILING DATE: 12/16/2010
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM TO CONNECT A SERIAL SCSI ARRAY CONTROLLER TO A
STORAGE AREA NETWORK

APPLICATION NUMBER: 61080762 FILING DATE: 07/15/2008
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM TO CONNECT A SERIAL SCSI ARRAY CONTROLLER TO A
STORAGE AREA NETWORK

APPLICATION NUMBER: 12182325 FILING DATE: 07/30/2008
PATENT NUMBER: ISSUE DATE:
TITLE: LOW POWER CONSUMPTION STORAGE ARRAY

APPLICATION NUMBER: 12165181 FILING DATE: 06/30/2008
PATENT NUMBER: ISSUE DATE:
TITLE: OPTIMIZED CACHE COHERENCY IN A DUAL-CONTROLLER STORAGE ARRAY

APPLICATION NUMBER: 12428703 FILING DATE: 04/23/2009
PATENT NUMBER: ISSUE DATE:
TITLE: ACTIVE-ACTIVE SUPPORT OF VIRTUAL STORAGE MANAGEMENT IN A
STORAGE AREA NETWORK ("SAN")

APPLICATION NUMBER: 12286591 FILING DATE: 09/30/2008
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM AND METHOD FOR PROVIDING PERFORMANCE-ENHANCED REBUILD
OF A SOLID-STATE DRIVE (SSD) IN A SOLID-STATE DRIVE HARD
DISK DRIVE (SSD HDD) REDUNDANT ARRAY OF INEXPENSIVE DISKS 1
(RAID 1) PAIR

APPLICATION NUMBER: 12260324 FILING DATE: 10/29/2008
PATENT NUMBER: ISSUE DATE:
TITLE: METHODS AND SYSTEMS FOR RECOVERING A COMPUTER SYSTEM USING A
STORAGE AREA NETWORK

APPLICATION NUMBER: 12316902 FILING DATE: 12/17/2008
PATENT NUMBER: ISSUE DATE:
TITLE: STORAGE SYSTEM SNAPSHOT ASSISTED BY SSD TECHNOLOGY

APPLICATION NUMBER: 12238438 FILING DATE: 09/26/2008
PATENT NUMBER: ISSUE DATE:
TITLE: PRIORITY COMMAND QUEUES FOR LOW LATENCY SOLID STATE DRIVES

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APPLICATION NUMBER: 12316713 FILING DATE: 12/15/2008
PATENT NUMBER: ISSUE DATE:
TITLE: SMALL COMPUTER SYSTEM INTERFACE INPUT OUTPUT (SCSI IO)
REFERRAL

APPLICATION NUMBER: 12506143 FILING DATE: 07/20/2009
PATENT NUMBER: ISSUE DATE:
TITLE: VIRTUALIZED DATA STORAGE IN A NETWORK COMPUTING ENVIRONMENT

APPLICATION NUMBER: 12316778 FILING DATE: 12/15/2008
PATENT NUMBER: ISSUE DATE:
TITLE: MULTI-PATHING WITH SCSI I/O REFERRALS

APPLICATION NUMBER: 12387610 FILING DATE: 05/05/2009
PATENT NUMBER: ISSUE DATE:
TITLE: EMBEDDED SCALE-OUT AGGREGATOR FOR STORAGE ARRAY CONTROLLERS

APPLICATION NUMBER: 61106309 FILING DATE: 10/17/2008
PATENT NUMBER: ISSUE DATE:
TITLE: EMBEDDED SCALE OUT AGGREGATOR FOR LSI STORAGE SYSTEM
CONTROLLERS

APPLICATION NUMBER: 12317151 FILING DATE: 12/19/2008
PATENT NUMBER: ISSUE DATE:
TITLE: ACCELERATING INTERNET SMALL COMPUTER SYSTEM INTERFACE
(ISCSI) PROXY INPUT/OUTPUT (I/O)

APPLICATION NUMBER: 12402675 FILING DATE: 03/12/2009
PATENT NUMBER: ISSUE DATE:
TITLE: APPLICATION INDEPENDENT STORAGE ARRAY PERFORMANCE OPTIMIZER

APPLICATION NUMBER: 12395786 FILING DATE: 03/02/2009
PATENT NUMBER: ISSUE DATE:
TITLE: SYSTEM FOR HANDLING INPUT/OUTPUT REQUESTS BETWEEN STORAGE
ARRAYS WITH DIFFERENT PERFORMANCE CAPABILITIES

APPLICATION NUMBER: 12507700 FILING DATE: 07/22/2009
PATENT NUMBER: ISSUE DATE:
TITLE: NON-DISRUPTIVE METHODS FOR UPDATING A CONTROLLER OF A
STORAGE SYSTEM

APPLICATION NUMBER: 12474280 FILING DATE: 05/29/2009
PATENT NUMBER: ISSUE DATE:
TITLE: POLICY-BASED APPLICATION AWARE STORAGE ARRAY SNAPSHOT BACKUP
AND RESTORE TECHNIQUE

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APPLICATION NUMBER: 12417510 FILING DATE: 04/02/2009
PATENT NUMBER: 7984605 ISSUE DATE: 07/26/2011
TITLE: CABLE CHAIN RETURN SYSTEM AND ASSOCIATED METHODS

APPLICATION NUMBER: 12481389 FILING DATE: 06/09/2009
PATENT NUMBER: ISSUE DATE:
TITLE: EMBEDDED PRIVATE SCALE OUT NETWORK

APPLICATION NUMBER: 12481303 FILING DATE: 06/09/2009
PATENT NUMBER: ISSUE DATE:
TITLE: STORAGE ARRAY ASSIST ARCHITECTURE

APPLICATION NUMBER: 12407795 FILING DATE: 03/20/2009
PATENT NUMBER: ISSUE DATE:
TITLE: METHOD AND SYSTEM FOR GOVERNING AN ENTERPRISE LEVEL GREEN
STORAGE SYSTEM DRIVE TECHNIQUE

APPLICATION NUMBER: 12600877 FILING DATE: 11/19/2009
PATENT NUMBER: ISSUE DATE:
TITLE: CUSTOMER REPLACEABLE UNIT DRIVE ISOLATOR

APPLICATION NUMBER: 10143649 FILING DATE: 05/10/2002
PATENT NUMBER: 7796396 ISSUE DATE: 09/14/2010
TITLE: INTEGRATED CRU LATCH

APPLICATION NUMBER: 10161478 FILING DATE: 05/31/2002
PATENT NUMBER: 6969928 ISSUE DATE: 11/29/2005
TITLE: MAGNETIC PROXIMITY INTERFACE CONTROL

APPLICATION NUMBER: 10198684 FILING DATE: 07/18/2002
PATENT NUMBER: 7493404 ISSUE DATE: 02/17/2009
TITLE: APPARATUS AND METHOD FOR PROVIDING TRANSPARENT SHARING OF
CHANNEL RESOURCES BY MULTIPLE HOST MACHINES UTILIZING MIXED
MODE BLOCK AND FILE PROTOCOLS

APPLICATION NUMBER: 10218726 FILING DATE: 08/14/2002
PATENT NUMBER: 7616631 ISSUE DATE: 11/10/2009
TITLE: METHOD AND APPARATUS FOR DEBUGGING PROTOCOL TRAFFIC BETWEEN
DEVICES IN INTEGRATED SUBSYSTEMS

APPLICATION NUMBER: 10620778 FILING DATE: 07/15/2003
PATENT NUMBER: 7478758 ISSUE DATE: 01/20/2009
TITLE: METHOD AND APPARATUS FOR AUTOMATICALLY TRACKING AND
COMMUNICATING DATA STORAGE DEVICE INFORMATION USING RF TAGS:
OPERATING CONDITION, CONFIGURATION AND LOCATION

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APPLICATION NUMBER: 12317226 FILING DATE: 12/19/2008
PATENT NUMBER: 7766220 ISSUE DATE: 08/03/2010
TITLE: METHOD AND APPARATUS FOR AUTOMATICALLY TRACKING AND
COMMUNICATING DATA STORAGE DEVICE INFORMATION USING RF TAGS:
OPERATING CONDITION, CONFIGURATION AND LOCATION

APPLICATION NUMBER: 10424408 FILING DATE: 04/28/2003
PATENT NUMBER: 7818461 ISSUE DATE: 10/19/2010
TITLE: SYSTEMS AND METHODS FOR ALLOCATING AN ASSET TO
INTERCONNECTED DEVICES

APPLICATION NUMBER: 10741559 FILING DATE: 12/19/2003
PATENT NUMBER: 7568216 ISSUE DATE: 07/28/2009
TITLE: METHODS FOR DEFINING AND NAMING ISCSI TARGETS USING VOLUME
ACCESS AND SECURITY POLICY

APPLICATION NUMBER: 10741563 FILING DATE: 12/19/2003
PATENT NUMBER: 7461140 ISSUE DATE: 12/02/2008
TITLE: METHOD AND APPARATUS FOR IDENTIFYING IPSEC SECURITY POLICY
IN ISCSI

APPLICATION NUMBER: 10671353 FILING DATE: 09/25/2003
PATENT NUMBER: 7573870 ISSUE DATE: 08/11/2009
TITLE: TRANSMIT PRIORITIZER CONTEXT PRIORITIZATION SCHEME

APPLICATION NUMBER: 10817344 FILING DATE: 04/02/2004
PATENT NUMBER: 7395460 ISSUE DATE: 07/01/2008
TITLE: FAILED DRIVE LOCATOR FOR REMOVABLE DISK ARRAY MODULES

APPLICATION NUMBER: 10783785 FILING DATE: 02/20/2004
PATENT NUMBER: 7783792 ISSUE DATE: 08/24/2010
TITLE: ENCLOSURE SLOT IDENTIFICATION BY MODULES

APPLICATION NUMBER: 11130618 FILING DATE: 05/17/2005
PATENT NUMBER: 7492608 ISSUE DATE: 02/17/2009
TITLE: ELECTROMAGNETIC INTERFERENCE SHIELD FOR DATA STORAGE SYSTEMS

APPLICATION NUMBER: 10984287 FILING DATE: 11/08/2004
PATENT NUMBER: 7376546 ISSUE DATE: 05/20/2008
TITLE: USER CONFIGURABLE ULTRA320 SCSI TARGET DEVICE SIMULATOR AND
ERROR INJECTOR

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APPLICATION NUMBER: 10968495 FILING DATE: 10/19/2004
PATENT NUMBER: 7584272 ISSUE DATE: 09/01/2009
TITLE: METHOD AND APPARATUS FOR FULLY AUTOMATED ISCSI TARGET
CONFIGURATION

APPLICATION NUMBER: 10972809 FILING DATE: 10/25/2004
PATENT NUMBER: 7769849 ISSUE DATE: 08/03/2010
TITLE: METHOD FOR DETECTING CHANGES IN A STORAGE AREA NETWORK
WITHOUT EXTERNAL TOOLS AND HARDWARE

APPLICATION NUMBER: 10959619 FILING DATE: 10/06/2004
PATENT NUMBER: 7409618 ISSUE DATE: 08/05/2008
TITLE: SELF VERIFYING COMMUNICATIONS TESTING

APPLICATION NUMBER: 11136741 FILING DATE: 05/24/2005
PATENT NUMBER: 7840755 ISSUE DATE: 11/23/2010
TITLE: METHODS AND SYSTEMS FOR AUTOMATICALLY IDENTIFYING A
MODIFICATION TO A STORAGE ARRAY

APPLICATION NUMBER: 10966861 FILING DATE: 10/15/2004
PATENT NUMBER: 7441320 ISSUE DATE: 10/28/2008
TITLE: METHOD OF VALIDATING MANUFACTURING CONFIGURATIONS DURING
HARDWARE ASSEMBLY

APPLICATION NUMBER: 11052434 FILING DATE: 02/07/2005
PATENT NUMBER: 7673179 ISSUE DATE: 03/02/2010
TITLE: ONLINE TESTING UNIFICATION SYSTEM WITH REMOTE TEST
AUTOMATION TECHNOLOGY

APPLICATION NUMBER: 11070361 FILING DATE: 03/02/2005
PATENT NUMBER: 7689586 ISSUE DATE: 03/30/2010
TITLE: REMOTE STATUS AND CONTROL OF STORAGE DEVICES

APPLICATION NUMBER: 11057548 FILING DATE: 02/14/2005
PATENT NUMBER: 7620320 ISSUE DATE: 11/17/2009
TITLE: FIBRE SELECTIVE CONTROL SWITCH SYSTEM

APPLICATION NUMBER: 11167379 FILING DATE: 06/27/2005
PATENT NUMBER: 7760727 ISSUE DATE: 07/20/2010
TITLE: SYSTEM & METHOD FOR FABRIC STORAGE UTILIZING MULTICAST WITH
DISTRIBUTED INTELLIGENCE

APPLICATION NUMBER: 11253368 FILING DATE: 10/19/2005
PATENT NUMBER: 7529902 ISSUE DATE: 05/05/2009
TITLE: METHODS AND SYSTEMS FOR LOCKING IN STORAGE CONTROLLERS

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APPLICATION NUMBER: 10986751 FILING DATE: 11/12/2004
PATENT NUMBER: 7428665 ISSUE DATE: 09/23/2008
TITLE: METHODS AND STRUCTURE FOR DETECTION AND HANDLING OF
CATASTROPHIC SCSI ERRORS

APPLICATION NUMBER: 11924813 FILING DATE: 10/26/2007
PATENT NUMBER: 7853831 ISSUE DATE: 12/14/2010
TITLE: METHODS AND STRUCTURE FOR DETECTION AND HANDLING OF
CATASTROPHIC SCSI ERRORS

APPLICATION NUMBER: 11064684 FILING DATE: 02/24/2005
PATENT NUMBER: 7552355 ISSUE DATE: 06/23/2009
TITLE: SYSTEM FOR PROVIDING AN ALTERNATIVE COMMUNICATION PATH IN A
SAS CLUSTER

APPLICATION NUMBER: 12387043 FILING DATE: 04/27/2009
PATENT NUMBER: 7836351 ISSUE DATE: 11/16/2010
TITLE: SYSTEM FOR PROVIDING AN ALTERNATIVE COMMUNICATION PATH IN A
SAS CLUSTER

APPLICATION NUMBER: 11148395 FILING DATE: 06/07/2005
PATENT NUMBER: 7761630 ISSUE DATE: 07/20/2010
TITLE: APPLICATION PROGRAMMING INTERFACE FOR FUSION MESSAGE PASSING
TECHNOLOGY

APPLICATION NUMBER: 11248544 FILING DATE: 10/12/2005
PATENT NUMBER: 7444267 ISSUE DATE: 10/28/2008
TITLE: SYSTEM AND METHOD TO SYNCHRONIZE AND COORDINATE PARALLEL,
AUTOMATED FAULT INJECTION PROCESSES AGAINST STORAGE AREA
NETWORK ARRAYS

APPLICATION NUMBER: 11283232 FILING DATE: 11/18/2005
PATENT NUMBER: 7765365 ISSUE DATE: 07/27/2010
TITLE: METHOD OF PARTITIONING STORAGE IN SYSTEMS WITH BOTH SINGLE AND
VIRTUAL TARGET INTERFACES

APPLICATION NUMBER: 11192636 FILING DATE: 07/29/2005
PATENT NUMBER: 7568069 ISSUE DATE: 07/28/2009
TITLE: METHOD FOR CREATING A LARGE-SCALE STORAGE ARRAY SYSTEM OUT
OF MULTIPLE MID-RANGE STORAGE ARRAYS

APPLICATION NUMBER: 11328700 FILING DATE: 01/10/2006
PATENT NUMBER: 7650642 ISSUE DATE: 01/19/2010
TITLE: PEER-TO-PEER LICENSE TRACKING AND CONTROL

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APPLICATION NUMBER: 11224850 FILING DATE: 09/13/2005
PATENT NUMBER: 7412631 ISSUE DATE: 08/12/2008
TITLE: METHODS AND STRUCTURE FOR VERIFYING DOMAIN FUNCTIONALITY

APPLICATION NUMBER: 11493260 FILING DATE: 07/25/2006
PATENT NUMBER: 7390975 ISSUE DATE: 06/24/2008
TITLE: SELF-ALIGNING ELECTROMAGNETIC INTERFERENCE GASKETS FOR
CUSTOMER REMOVABLE MODULES

APPLICATION NUMBER: 11220936 FILING DATE: 09/07/2005
PATENT NUMBER: 7533298 ISSUE DATE: 05/12/2009
TITLE: WRITE JOURNALING USING BATTERY BACKED CACHE

APPLICATION NUMBER: 11286633 FILING DATE: 11/23/2005
PATENT NUMBER: 7599392 ISSUE DATE: 10/06/2009
TITLE: DEVICES AND METHODS FOR MATCHING LINK SPEEDS BETWEEN
CONTROLLERS AND CONTROLLED DEVICES

APPLICATION NUMBER: 11272920 FILING DATE: 11/14/2005
PATENT NUMBER: 7623472 ISSUE DATE: 11/24/2009
TITLE: DYNAMIC PEER APPLICATION DISCOVERY

APPLICATION NUMBER: 11540468 FILING DATE: 09/29/2006
PATENT NUMBER: 7847801 ISSUE DATE: 12/07/2010
TITLE: METHOD FOR REPORTING REDUNDANT CONTROLLERS AS INDEPENDENT
STORAGE ENTITIES

APPLICATION NUMBER: 11634064 FILING DATE: 12/05/2006
PATENT NUMBER: 7667984 ISSUE DATE: 02/23/2010
TITLE: ADJUSTABLE EMI BAFFLING APPARATUS FOR DATA STORAGE SYSTEMS

APPLICATION NUMBER: 11673466 FILING DATE: 02/09/2007
PATENT NUMBER: 7515411 ISSUE DATE: 04/07/2009
TITLE: MULTI-FAN AIRFLOW REGULATION FOR FAN FAIL CONDITIONS

APPLICATION NUMBER: 10257426 FILING DATE: 10/10/2002
PATENT NUMBER: 6898670 ISSUE DATE: 05/24/2005
TITLE: STORAGE VIRTUALIZATION IN A STORAGE AREA NETWORK

APPLICATION NUMBER: 10469727 FILING DATE: 08/28/2003
PATENT NUMBER: 7437753 ISSUE DATE: 10/14/2008
TITLE: STORAGE AREA NETWORK (SAN) SECURITY

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APPLICATION NUMBER: 12082481 FILING DATE: 04/11/2008
PATENT NUMBER: 7864539 ISSUE DATE: 01/04/2011
TITLE: HORIZONTAL DRIVE DRAWER SYSTEM AND METHOD

APPLICATION NUMBER: 12072145 FILING DATE: 02/25/2008
PATENT NUMBER: 7713066 ISSUE DATE: 05/11/2010
TITLE: CARD EDGE CONNECTOR DEVICE AND METHOD

APPLICATION NUMBER: 10775521 FILING DATE: 02/09/2004
PATENT NUMBER: 7523236 ISSUE DATE: 04/21/2009
TITLE: SWITCHING SERIAL ADVANCED TECHNOLOGY ATTACHMENT (SATA) TO A
PARALLEL INTERFACE

APPLICATION NUMBER: 10775523 FILING DATE: 02/09/2004
PATENT NUMBER: 7539797 ISSUE DATE: 05/26/2009
TITLE: ROUTE AWARE SERIAL ADVANCED TECHNOLOGY ATTACHMENT (SATA)
SWITCH

APPLICATION NUMBER: 10775488 FILING DATE: 02/09/2004
PATENT NUMBER: 7523235 ISSUE DATE: 04/21/2009
TITLE: SERIAL ADVANCED TECHNOLOGY ATTACHMENT (SATA) SWITCH

APPLICATION NUMBER: 12167472 FILING DATE: 07/03/2008
PATENT NUMBER: 7715182 ISSUE DATE: 05/11/2010
TITLE: DRIVE BOX

APPLICATION NUMBER: 12208182 FILING DATE: 09/10/2008
PATENT NUMBER: 7552581 ISSUE DATE: 06/30/2009
TITLE: ARTICULATING CABLE CHAIN ASSEMBLY

APPLICATION NUMBER: 12419840 FILING DATE: 04/07/2009
PATENT NUMBER: 7913027 ISSUE DATE: 03/22/2011
TITLE: CONFIGURABLE STORAGE ARRAY CONTROLLER

APPLICATION NUMBER: 09350742 FILING DATE: 07/09/1999
PATENT NUMBER: 7640325 ISSUE DATE: 12/29/2009
TITLE: METHODS AND APPARATUS FOR ISSUING UPDATES TO MULTIPLE
MANAGEMENT ENTITIES

APPLICATION NUMBER: FILING DATE: 04/30/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0942311
TITLE: VIRTUALIZED DATA STORAGE IN A VIRTUALIZED SERVER ENVIRONMENT

USPTO 7/27/2011 2:05:57 PM PAGE 14/019 Fax Server
TO: DAVID L. MCCOMBS COMPANY: HAYNES AND BOONE, LLP

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APPLICATION NUMBER: 12600877 FILING DATE: 11/19/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0875045
TITLE: CUSTOMER REPLACEABLE UNIT DRIVE ISOLATOR

APPLICATION NUMBER: FILING DATE: 10/10/2007
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0721613
TITLE: SYSTEM AND METHOD FOR CONNECTING SAS RAID CONTROLLER DEVICE
CHANNELS ACROSS REDUNDANT STORAGE SUBSYSTEMS

APPLICATION NUMBER: FILING DATE: 09/24/2007
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0720570
TITLE: METHOD FOR REPORTING REDUNDANT CONTROLLERS AS INDEPENDENT
STORAGE ENTITIES

APPLICATION NUMBER: FILING DATE: 01/07/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0930302
TITLE: DRIVE BOX

APPLICATION NUMBER: FILING DATE: 08/21/2008
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0809944
TITLE: SYSTEM TO CONNECT A SERIAL SCSI ARRAY CONTROLLER TO A
STORAGE AREA NETWORK

APPLICATION NUMBER: FILING DATE: 05/12/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0943561
TITLE: ACTIVE-ACTIVE SUPPORT OF VIRTUAL STORAGE MANAGEMENT IN A
STORAGE AREA NETWORK ("SAN")

APPLICATION NUMBER: FILING DATE: 05/11/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0943468
TITLE: METHODS AND SYSTEMS FOR RECOVERING A COMPUTER SYSTEM USING A
STORAGE AREA NETWORK

APPLICATION NUMBER: FILING DATE: 03/30/2009
PATENT NUMBER: ISSUE DATE:
PCT NUMBER: US0902008
TITLE: STORAGE SYSTEM SNAPSHOT ASSISTED BY SSD TECHNOLOGY

MARY BENTON, EXAMINER
ASSIGNMENT SERVICES BRANCH
PUBLIC RECORDS DIVISION

PATENT ASSIGNMENT

Electronic Version v1.1
Stylesheet Version v1.1

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501607675

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
LSI Corporation	05/06/2011
RECEIVING PARTY DATA	
Name:	NETAPP, INC.
Street Address:	495 East Java Drive
City:	Sunnyvale
State/Country:	CALIFORNIA
Postal Code:	94089
PROPERTY NUMBERS Total: 114	
Property Type	Number
Patent Number:	7796396
Patent Number:	6989928
Patent Number:	7493404
Patent Number:	7616631
Patent Number:	7478758
Patent Number:	7766220
Patent Number:	7818461
Patent Number:	7568216
Patent Number:	7461140
Patent Number:	7573870
Patent Number:	7395460
Patent Number:	7783792
Patent Number:	7492608
Patent Number:	7376546
Patent Number:	7584272

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Patent Number:	7769849
Patent Number:	7409618
Patent Number:	7840755
Patent Number:	7441320
Patent Number:	7673179
Patent Number:	7689586
Patent Number:	7620320
Patent Number:	7760727
Patent Number:	7529902
Patent Number:	7428665
Patent Number:	7853831
Patent Number:	7552355
Patent Number:	7836351
Patent Number:	7761630
Patent Number:	7444267
Patent Number:	7765365
Patent Number:	7668069
Patent Number:	7650642
Patent Number:	7412631
Patent Number:	7390975
Patent Number:	7533298
Patent Number:	7599392
Patent Number:	7623472
Patent Number:	7847801
Patent Number:	7667984
Patent Number:	7515411
Patent Number:	6898670
Patent Number:	7437753
Patent Number:	7864539
Patent Number:	7713066
Patent Number:	7523236
Patent Number:	7539797
Patent Number:	7523235
Patent Number:	7715182
Patent Number:	7552581

	7913027
Patent Number:	7640325
Application Number:	12211838
Application Number:	12354126
Application Number:	12100520
Application Number:	12324224
Application Number:	12143123
Application Number:	12492147
Application Number:	11545872
Application Number:	12429519
Application Number:	12221515
Application Number:	12080217
Application Number:	12573238
Application Number:	12550916
Application Number:	12605056
Application Number:	12405128
Application Number:	12406029
Application Number:	60477857
Application Number:	12404257
Application Number:	11863688
Application Number:	10714031
Application Number:	11002610
Application Number:	10973478
Application Number:	11289140
Application Number:	11516232
Application Number:	12077804
Application Number:	12070443
Application Number:	12200497
Application Number:	12200643
Application Number:	12262248
Application Number:	12201104
Application Number:	12969892
Application Number:	61080762
Application Number:	12182325
Application Number:	12165181

	12428703
Application Number:	12286591
Application Number:	12260324
Application Number:	12316902
Application Number:	12238438
Application Number:	12316713
Application Number:	12506143
Application Number:	12316778
Application Number:	12387610
Application Number:	61106309
Application Number:	12317151
Application Number:	12402675
Application Number:	12395786
Application Number:	12507700
Application Number:	12474280
Application Number:	12417510
Application Number:	12481389
Application Number:	12481303
Application Number:	12407795
Application Number:	12600877
PCT Number:	US0942311
PCT Number:	US0875045
PCT Number:	US0721613
PCT Number:	US0720570
PCT Number:	US0930302
PCT Number:	US0809944
PCT Number:	US0943561
PCT Number:	US0943468
PCT Number:	US0902008

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ATTORNEY DOCKET NUMBER:	47415.2
NAME OF SUBMITTER:	David L. McCombs
<p>Total Attachments: 14</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page1.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page2.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page3.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page4.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page5.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page6.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page7.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page8.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page9.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page10.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page11.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page12.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page13.tif</p> <p>source=47415_LSI Corporation_NetApp_Assignment#page14.tif</p>	

PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT is made as of May 6, 2011 by **LSI CORPORATION**, a Delaware corporation, hereinafter referred to as the **ASSIGNOR**, and **NETAPP, INC.**, a Delaware corporation, hereinafter referred to as the **ASSIGNEE**.

ASSIGNOR is the owner of certain patents and patent applications identified on Schedule "A" attached hereto (the "ASSIGNED PATENTS").

ASSIGNEE desires to acquire the entire right, title and interest of **ASSIGNOR** in and to said **ASSIGNED PATENTS**.

For good and valuable consideration paid by the **ASSIGNEE**, the receipt of which is hereby acknowledged, **ASSIGNOR** does hereby sell, assign and transfer to the **ASSIGNEE**, at **ASSIGNEE**'s sole expense, **ASSIGNOR**'s entire right, title and interest in and to the **ASSIGNED PATENTS**, in the U.S. and every foreign country, and all patent rights, including extensions or derivations thereof, both foreign and domestic, that exist and may issue on the **ASSIGNED PATENTS**. **ASSIGNEE** hereby authorizes and requests the Commissioner of Patents that all U.S. patents that issue on the **ASSIGNED PATENTS** shall issue to **ASSIGNEE**. This assignment includes assignment to **ASSIGNEE** of the right to make application in its own behalf for protection of the **ASSIGNED PATENTS** and any patents issued on the **ASSIGNED PATENTS**, in the U.S. and countries foreign to the U.S., and to claim under the Patent Cooperation Treaty, the International Convention and/or other international arrangement for any such application the date of any earlier U.S. application (or any other application on the invention) to gain priority with respect to other applications. The **ASSIGNED PATENTS** and all patents that issue on the **ASSIGNED PATENTS** shall be held and enjoyed by the **ASSIGNEE**, its successors and assigns as fully and entirely as the same would have been held and enjoyed by the **ASSIGNOR** had this assignment not been made.

ASSIGNOR covenants and agrees to execute such further and confirmatory assignments in recordable form as the **ASSIGNEE** may require to vest record title of said respective **ASSIGNED PATENTS** in **ASSIGNEE**.

IN WITNESS WHEREOF, the **ASSIGNOR** has caused this Assignment to be executed by a duly authorized officer.

LSI CORPORATION

By: Marie H. MacNichol
Name: Marie H. MacNichol
Title: Vice President – IP Law

SCHEDULE A
ASSIGNED PATENTS

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Method For Remote Data Back Up With De-Duplication And Recovery From Clustered Secondary Storage Arrays	US	12/211838	17-Sep-08		
Method For Handling Interrupted Writes Using Multiple Cores	US	12/354126	15-Jan-09		
Drive Blade Construction	US	12/100520	10-Apr-08		
Method And/Or Apparatus For Certifying An In-Band Management Application Of An External Storage Array	US	12/324224	26-Nov-08		
System For Automatically Configuring A Storage Array	US	12/143123	20-Jun-08		
Unified Enterprise Level Method And System For Enhancing Application And Storage Performance	US	12/492147	26-Jun-09		
System And Method For Connecting SAS RAID Controller Device Channels Across Redundant Storage Subsystems	US	11/545872	10-Oct-06		
System And Method For Connecting SAS RAID Controller Device Channels Across Redundant Storage Subsystems	CN	2007800340247.0	10-Oct-07		
System And Method For Connecting SAS RAID Controller Device Channels Across Redundant Storage Subsystems	DE	1120070022116.0	10-Oct-07		
System And Method For Connecting SAS RAID Controller Device	GB	9049974	10-Oct-07		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Channels Across Redundant Storage Subsystems					
System And Method For Connecting SAS RAID Controller Device Channels Across Redundant Storage Subsystems	JP	2009532384	10-Oct-07		
System And Method For Connecting SAS RAID Controller Device Channels Across Redundant Storage Subsystems	KR	1020097009479.0	10-Oct-07		
System And Method For Connecting SAS RAID Controller Device Channels Across Redundant Storage Subsystems	PCT	PCTUS0721613	10-Oct-07		
Virtualized Data Storage In A Virtualized Server Environment	US	12/429519	24-Apr-09		
Virtualized Data Storage In A Virtualized Server Environment	WO	PCT/US2009/042311	30-Apr-09		
Virtualized Data Storage In A Virtualized Server Environment	TW	98116944	21-May-09		
Scheduling Proportional Storage Share For Storage Systems	US	12/221515	4-Aug-08		
System For Automating Storage Device Swaps And/Or Replacements	US	12/080217	1-Apr-08		
Integrated Cru Latch	US	10/143649	10-May-02	7796396	14-Sep-10
Magnetic Proximity Interface Control	US	10/161478	31-May-02	6969928	29-Nov-05
Apparatus For Providing Transparent Sharing Of Channel Resources By Multiple Host Machines, For Use With Mixed Mode Block And File	US	10/198684	18-Jul-02	7493404	17-Feb-09

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Protocols					
Method And Apparatus For Debugging Protocol Traffic Between Devices Inintegrated Subsystems	US	10/218726	14-Aug-02	7616631	10-Nov-09
Method And Apparatus For Debugging Protocol Traffic Between Devices In Integrated Subsystems	US	12/573238	5-Oct-09		
Method And Apparatus For Automatically Tracking And Communicating Data Storage Device Information Using RF Tags: Operating Condition, Configuration And Location	US	10/620778	15-Jul-03	7478758	20-Jan-09
Method And Apparatus For Automatically Tracking And Communicating Data Storage Device Information Using RF Tags: Operating Condition, Configuration And Location	US	12/317226	19-Dec-08	7766220	3-Aug-10
Systems And Methods For Allocating An Asset To Interconnected Devices	US	10/424408	28-Apr-03	7818461	19-Oct-10
Methods For Defining And Naming ISCSI Targets Using Volume Access And Security Policy	US	10/741559	19-Dec-03	7568216	28-Jul-09
Method And Apparatus For Identifying Ipsec Security Policy In Iscsi	US	10/741563	19-Dec-03	7461140	2-Dec-08

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Transmit Prioritizer Context Prioritization Scheme	US	10/671353	25-Sep-03	7573870	11-Aug-09
Failed Drive Locator For Removable Disk Array Modules	US	10/817344	2-Apr-04	7395460	1-Jul-08
Enclosure Slot Identification By Modules	US	10/783785	20-Feb-04	7783792	24-Aug-10
Electromagnetic Interference Shield For Data Storage Systems	US	11/130618	17-May-05	7492608	17-Feb-09
User Configurable Ultra320 SCSI Target Device Simulator And Error Injector	US	10/984287	8-Nov-04	7376546	20-May-08
Method And Apparatus For Fully Automated Iscsi Target Configuration	US	10/968495	19-Oct-04	7584272	1-Sep-09
Method For Detecting Changes In A Storage Area Network Without External Tools And Hardware	US	10/972809	25-Oct-04	7769849	3-Aug-10
Self Verifying Communications Testing	US	10/959619	6-Oct-04	7409618	5-Aug-08
Methods And Systems For Automatically Identifying A Modification To A Storage Array	US	11/136741	24-May-05	7840755	23-Nov-10
Method Of Validating Manufacturing Configurations During Hardware Assembly	US	10/966861	15-Oct-04	7441320	28-Oct-08
Online Testing Unification System With Remote Test Automation Technology	US	11/052434	7-Feb-05	7673179	2-Mar-10
Remote Status And Control Of Storage Devices	US	11/070361	2-Mar-05	7689586	30-Mar-10
Fibre Selective Control Switch System	US	11/057548	14-Feb-05	7620320	17-Nov-09

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
System And Method For Fabric Storage Utilizing Multicast With Distributed Intelligence	US	11/167379	27-Jun-05	7760727	20-Jul-10
Methods And Systems For Locking In Storage Controllers	US	11/253368	19-Oct-05	7529902	5-May-09
Methods And Structure For Detection And Handling Of Catastrophic SCSI Errors	US	10/986751	12-Nov-04	7428665	23-Sep-08
Methods And Structure For Detection And Handling Of Catastrophic SCSI Errors	US	11/924813	26-Oct-07	7853831	14-Dec-10
System For Providing An Alternative Communication Path In A SAS Cluster	US	11/064684	24-Feb-05	7552355	23-Jun-09
System For Providing An Alternative Communication Path In A SAS Cluster	US	12/387043	27-Apr-09	7836351	16-Nov-10
Application Programming Interface For Fusion Message Passing Technology	US	11/148395	7-Jun-05	7761630	20-Jul-10
System And Method To Synchronize And Coordinate Parallel, Automated Fault Injection Processes Against Storage Area Network Arrays	US	11/248544	12-Oct-05	7444267	28-Oct-08
Method Of Partitioning Storage In Systems With Both Single And Virtual Target Interfaces	US	11/283232	18-Nov-05	7765365	27-Jul-10
Method For Creating A Large-Scale Storage Array System Out Of Multiple Mid-Range Storage Arrays	US	11/192636	29-Jul-05	7568069	28-Jul-09
Peer-To-Peer License Tracking And Control	US	11/328700	10-Jan-06	7650642	19-Jan-10
Methods And Structure For Verifying Domain Functionality	US	11/224850	13-Sep-05	7412631	12-Aug-08

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Self-Aligning Electromagnetic Interference Gaskets For Customer Removable Modules	US	11/493260	25-Jul-06	7390975	24-Jun-08
Write Journaling Using Battery Backed Cache	US	11/220936	7-Sep-05	7533298	12-May-09
Devices And Methods For Matching Link Speeds Between Controllers And Controlled Devices	US	11/286633	23-Nov-05	7599392	6-Oct-09
Devices And Methods For Matching Link Speeds Between Controllers And Controlled Devices	US	12/559915	15-Sep-09		
Dynamic Peer Application Discovery	US	11/272920	14-Nov-05	7623472	24-Nov-09
Method For Reporting Redundant Controllers As Independent Storage Entitles	US	11/540468	29-Sep-06	7847801	7-Dec-10
Methods For Reporting A Storage Array With Redundant Dual Active Controllers As Two Independent Storage Entries To The Hosts	PCT	PCT/US2007/020570	24-Sep-07		
Adjustable EMI Baffling Apparatus For Data Storage Systems	US	11/634064	5-Dec-06	7667984	23-Feb-10
Adjustable Emi Baffling Apparatus For Data Storage Systems	US	12/605056	23-Oct-09		
Multi-Fan Airflow Regulation For Fan Fail Conditions	US	11/673466	9-Feb-07	7515411	7-Apr-09
Storage Virtualization In A Storage Area Network	US	10/257426	10-Oct-02	6898670	24-May-05
Storage Virtualization In A SAN	CA	2405405	04-Apr-01		
Storage Virtualization In A SAN	EPO	19197417	04-Apr-01		
Storage Area Network (SAN) Security	US	10/469727	28-Aug-03	7437753	14-Oct-08
Storage Area Network (SAN) Security	CA	2439692	27-Feb-02		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Storage Area Network (SAN) Security	EP	27005560	27-Feb-02	1374056	21-Jun-06
Storage Area Network (SAN) Security	GB	27005560	27-Feb-02	1374056	21-Jun-06
Storage Area Network (SAN) Security	IE	27005560	27-Feb-02	1374056	21-Jun-06
Horizontal Drive System And Method	US	12/082481	11-Apr-08	7864539	4-Jan-11
Improved Method Of Securing And Protecting Expansion Cards In Mating Slots	US	12/072145	25-Feb-08	7713066	11-May-10
Switching Serial Advanced Technology Attachment (Sata)	US	10/775521	9-Feb-04	7523236	21-Apr-09
Switching Serial Advanced Technology Attachment (Sata)	US	12/405128	16-Mar-09		
Route Aware Serial Advanced Technology Attachment (Sata) Switch	US	10/775523	9-Feb-04	7539797	26-May-09
Route Aware Serial Advanced Technology Attachment (Sata) Switch	US	12/406029	17-Mar-09		
Serial Ata Switch	US	10/775488	9-Feb-04	7523235	21-Apr-09
Serial Ata Switch	US	60/477857	11-Jun-03		
Serial Ata Switch	US	12/404257	13-Mar-09		
Serial Ata Switch	CN	2004100493109.0	10-Jun-04	ZL200410049310.9	12-Nov-08
Serial Ata Switch	DE	42530931	26-May-04	1486880	12-Jan-11
Serial Ata Switch	EP	42530931	26-May-04	1486880	12-Jan-11
Serial Ata Switch	JP	2004174862	11-Jun-04		
Serial Ata Switch	TW	93113828	17-May-04	I318738	21-Dec-09
Serial Ata Switch	GB	42530931	26-May-04	1486880	12-Jan-11
Drive Box	US	12/167472	3-Jul-08	7715182	11-May-10
Drive Box	CN	2009801224026.0	07-Jan-09		
Drive Box	EP	97739346	07-Jan-09		
Drive Box	KR	1020117002292	07-Jan-09		
Drive Box	PCT	PCT/US2009/030302	07-Jan-09		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Drive Box	TW	98102345	21-Jan-09		
Articulating Cable Chain Assembly	US	12/208182	10-Sep-08	7552581	30-Jun-09
Configurable Storage Array Controller	US	12/419840	7-Apr-09	7913027	22-Mar-11
Methods And Apparatus For Issuing Updates To Multiple Management Entities	US	09/350742	9-Jul-99	7640325	29-Dec-09
Fuel Cell Based Battery Backup Apparatus For Storage Subsystems	US	11/863688	28-Sep-07		
Methods And Structures For A Caching To Router In Iscsi Storage Systems	US	10/714031	14-Nov-03		
Dynamic Command Capacity Allocation Across Multiple Sessions And Transports	US	11/002610	2-Dec-04		
Method And System For Efficient Write Journal Entry Management For A Distributed File System	US	10/973478	26-Oct-04		
Systems And Method For Simple Scale-Out Storage Clusters	US	11/289140	29-Nov-05		
Security-Enabled Storage Controller	US	11/516232	5-Sep-06		
Sending Voluminous Data Over The Internet	US	12/077804	20-Mar-08		
Utilizing Removable Virtual Volumes For Sharing Data On A Storage Area Network	US	12/070443	19-Feb-08		
Methods And Systems For Integrated Storage And Data Management Using A Hypervisor	US	12/200497	28-Aug-08		
Circuits, Systems, And Methods To Integrate Storage Virtualization In A Storage Controller	US	12/200643	28-Aug-08		
Control IO Offload In A Split Path-Storage Virtualization System	US	12/262248	31-Oct-08		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Storage Array Boot And Configuration	US	12/201104	29-Aug-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	US	12/969892	21-Aug-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	US	61/080762	15-Jul-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	CN	2008801303220.0	21-Aug-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	EP	87954855	21-Aug-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	KR	20117001394	21-Aug-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	PCT	PCT/US2008/009944	21-Aug-08		
System To Connect A Serial SCSI Array Controller To A Storage Area Network	TW	97138858	21-Oct-08		
Low Power Consumption Storage Array	US	12/182325	30-Jul-08		
Optimized Cache Coherency In A Dual-Controller Storage Array	US	12/165181	30-Jun-08		
Active-Active Support Of Virtual Storage Management In A Storage Area Network ("San")	US	12/428703	23-Apr-09		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Active-Active Presentation Of Volumes From Data Path Modules	PCT	PCT/US2009/043561	12-May-09		
Active-Active Support Of Virtual Storage Management In A Storage Area Network ("San")	TW	98118506	05-Jun-09		
System And Method For Providing Performance-Enhanced Rebuild Of A Solid-State Drive (Ssd) In A Solid-State Drive Hard Disk Drive (Ssd Hdd) Redundant Array Of Inexpensive Disks 1 (Raid 1) Pair	US	12/286591	30-Sep-08		
Methods And Systems For Recovering A Computer System Using A Storage Area Network	US	12/260324	29-Oct-08		
Methods And Systems For Recovering A Computer System Using A Storage Area Network	PCT	PCT/US2009/043468	11-May-09		
Methods And Systems For Recovering A Computer System Using A Storage Area Network	TW	98118808	05-Jun-09		
Storage System Snapshot Assisted By SSD Technology	US	12/316902	17-Dec-08		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Flash SSD Assisted Snapshot	PCT	PCT/US2009/002008	30-Mar-09		
Flash SSD Assisted Snapshot	TW	98110790	01-Apr-09		
Priority Command Queues For Low Latency Solid State Drives	US	12/238438	26-Sep-08		
Small Computer System Interface Input Output (Scsi Io) Referral	US	12/316713	15-Dec-08		
Virtualized Data Storage In A Network Computing Environment	US	12/506143	20-Jul-09		
Multi-Pathing With SCSI I/O Referrals	US	12/316778	15-Dec-08		
Embedded Scale Out Aggregator For LSI Storage System Controllers	US	12/387610	5-May-09		
Embedded Scale Out Aggregator For LSI Storage System Controllers	US	61/106309	17-Oct-08		
Embedded Scale Out Aggregator For LSI Storage System Controllers	CN	2009101692649.0	25-Aug-09		
Embedded Scale Out Aggregator For LSI Storage System Controllers	EP	92517754	9-Jul-09		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Embedded Scale Out Aggregator For LSI Storage System Controllers	JP	2009237920	15-Oct-09		
Embedded Scale Out Aggregator For LSI Storage System Controllers	KR	20090067089	23-Jul-09		
Embedded Scale Out Aggregator For LSI Storage System Controllers	TW	98125174	27-Jul-09		
ACCELERATING INTERNET SMALL COMPUTER SYSTEM INTERFACE (iscsi) PROXY INPUT/OUTPUT (I/O)	US	12/317151	19-Dec-08		
Application Independent Storage Array Performance Optimizer	US	12/402675	12-Mar-09		
A Method To Handle Ios Between Two Arrays With Different Performance Capabilities	US	12/395786	2-Mar-09		
Non-Disruptive Methods For Updating A Controller Of A Storage Subsystem	US	12/507700	22-Jul-09		
Policy-Based Application Aware Storage Array Snapshot Backup And Restore Technique	US	12/474280	29-May-09		
Cable Chain Return System And Associated Methods	US	12/417510	2-Apr-09		
Embedded Private Scale Out Network	US	12/481389	9-Jun-09		
Embedded Private Scale Out Network	CN	2009101706675.0	01-Sep-09		
Embedded Private Scale Out Network	EP	91752550	06-Nov-09		
Embedded Private Scale Out Network	JP	20107804	18-Jan-10		

TITLE	COUNTRY / REGION	APPLICATION NUMBER	APPLICATION DATE	PATENT NUMBER	ISSUE DATE
Embedded Private Scale Out Network	KR	20090096172	09-Oct-09		
Embedded Private Scale Out Network	TW	98125374	28-Jul-09		
Storage Array Assist Architecture	US	12/481303	9-Jun-09		
Storage Array Assist Architecture	CN	200910170668X	01-Sep-09		
Storage Array Assist Architecture	EP	101563351	12-Mar-10		
Storage Array Assist Architecture	JP	20107803	18-Jan-10		
Storage Array Assist Architecture	KR	1020090096167.0	09-Oct-09		
Storage Array Assist Architecture	TW	98125377	28-Jul-09		
Enterprise Level Green Storage System Disk Drive Technique	US	12/407795	20-Mar-09		
Customer Replaceable Unit Drive Isolator	US	12/600877	19-Nov-09		
Customer Replaceable Unit Drive Isolator	WO	PCTUS2008075045	02-Sep-08		
Customer Replaceable Unit Drive Isolator	CN	2008800128099.0	02-Sep-08		
Customer Replaceable Unit Drive Isolator	EP	88210935	02-Sep-08		
Customer Replaceable Unit Drive Isolator	KR	1020107006822.0	02-Sep-08		
Customer Replaceable Unit Drive Isolator	TW	97143731	12-Nov-08		

