

PATENT ASSIGNMENT

Electronic Version v1.1
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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
SandForce, Inc.	01/04/2012
RECEIVING PARTY DATA	
Name:	LSI Corporation
Street Address:	1621 Barber Lane
City:	Milipitas
State/Country:	CALIFORNIA
Postal Code:	95035
PROPERTY NUMBERS Total: 1	
Property Type	Number
Patent Number:	7904764
CORRESPONDENCE DATA	
Fax Number:	(512)869-8268
Phone:	512-869-2068
Email:	Bennett@patentventures.com
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i>	
Correspondent Name:	Walstein Bennett Smith III
Address Line 1:	P.O. Box 1668
Address Line 4:	Georgetown, TEXAS 78627
ATTORNEY DOCKET NUMBER:	SAF1P004
NAME OF SUBMITTER:	Walstein Bennett Smith III
<p>Total Attachments: 14 source=SandForce2LSI-Redated-w-CertOfMerger_image_cute#page1.tif source=SandForce2LSI-Redated-w-CertOfMerger_image_cute#page2.tif source=SandForce2LSI-Redated-w-CertOfMerger_image_cute#page3.tif source=SandForce2LSI-Redated-w-CertOfMerger_image_cute#page4.tif</p>	

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PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT is made as of January 4, 2012 by SandForce, Inc., a Delaware corporation, hereinafter referred to as the ASSIGNOR, and LSI Corporation, a Delaware corporation, hereinafter referred to as the ASSIGNEE.

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

WHEREAS, ASSIGNEE is desirous of acquiring the entire right, title and interest of ASSIGNOR in and to said ASSIGNED PATENTS.

NOW, THEREFORE, 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, 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 Patent Assignment to be executed by a duly authorized officer.

SANDFORCE, INC.

By:



Printed Name: Paul Bento

Title: Vice President

Schedule A

(Part 1: SandForce Applications and Issued Patents, as of 1/4/2012)

Filing Date	Country / Territory	Serial No.	Status	Title
11/20/06	US	60/860,843	Expired	METHOD AND APARATUS FOR REDUCING AND DISTRIBUTING WRITES
12/04/06	US	60/873,630	Expired	METHOD AND SYSTEM USING INTRA-DRIVE REDUNDANCY FOR REDUCING COST AND IMPROVING PERFORMANCE OF STORAGE SUBSYSTEM
01/07/07	US	60/878,242	Expired	METHOD AND APPARATUS GUARANTEEING LIFETIME IN PRESENCE OF OPERATIONS REDUCING LIFETIME
09/07/07	US	11/852,082	Issued as US 7,809,900	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR DELAYING AN OPERATION THAT REDUCES A LIFETIME OF MEMORY
09/07/07	US	11/852,104	Issued as US 7,904,619	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR REDUCING MEMORY WRITE OPERATIONS USING DIFFERENCE INFORMATION
09/07/07	US	11/852,117	Issued as US 7,747,813	MULTI-MEMORY DEVICE SYSTEM AND METHOD FOR MANAGING A LIFETIME THEREOF
09/07/07	US	11/852,129	Issued as US 7,904,764	MEMORY LIFETIME GAUGING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT
09/07/07	US	11/852,138	Abandoned	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR REDUCING MEMORY WRITE OPERATIONS USING AN INSTRUCTION SET
11/19/07	US	11/942,623	Issued as US 8,090,980	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING DATA REDUNDANCY IN A PLURALITY OF STORAGE DEVICES
11/19/07	US	11/942,629	Issued as US 7,904,672	SYSTEM AND METHOD FOR PROVIDING DATA REDUNDANCY AFTER REDUCING MEMORY WRITES
11/19/07	US	11/942,631	Issued as US 7,903,486	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR INCREASING A LIFETIME OF A PLURALITY OF BLOCKS OF MEMORY
11/19/07	US	11/942,640	Issued as US 7,849,275	SYSTEM, METHOD AND A COMPUTER PROGRAM PRODUCT FOR WRITING DATA TO DIFFERENT STORAGE DEVICES BASED ON WRITE FREQUENCY
11/21/07	WO	PCT/US07/24294	Expired	Data Redundancy in a Plurality of Storage Devices
11/21/07	WO	PCT/US07/24295	Expired	Delaying an Operation that Reduces a Lifetime of Memory

Schedule A

(Part 1: SandForce Applications and Issued Patents, as of 1/4/2012)

Filing Date	Country / Territory	Serial No.	Status	Title
11/28/07	US	11/946,753	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR INCREASING SPARE SPACE IN MEMORY TO EXTEND A LIFETIME OF THE MEMORY
07/15/08	US	12/173,631	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR PROVIDING AN EXTENDED CAPABILITY TO A SYSTEM
07/15/08	US	12/173,643	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR TRANSPARENT COMMUNICATION BETWEEN A STORAGE DEVICE AND AN APPLICATION
07/15/08	US	12/173,654	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR INTERFACING COMPUTING DEVICE HARDWARE OF A COMPUTING DEVICE AND AN OPERATING SYSTEM UTILIZING A VIRTUALIZATION LAYER
09/09/08	US	12/207,379	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR CONVERTING DATA IN A BINARY REPRESENTATION TO A NON-POWER OF TWO REPRESENTATION
10/23/08	WO	PCT/US08/12031	Expired	Increasing Spare Space in Memory to Extend a Lifetime of the Memory
10/23/08	WO	PCT/US08/12033	Expired	Writing Data to Different Storage Devices Based on Write Frequency
10/23/08	WO	PCT/US08/12044	Expired	Increasing a Lifetime of a Plurality of Blocks of Memory
12/08/08	US	12/330,183	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR RENDERING AT LEAST A PORTION OF DATA USELESS IN IMMEDIATE RESPONSE TO A DELETE COMMAND
03/27/09	US	12/413,307	Issued as US 8,090,905	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR CONVERTING LOGICAL BLOCK ADDRESS DE-ALLOCATION INFORMATION IN A FIRST FORMAT TO A SECOND FORMAT
03/27/09	US	12/413,312	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR SENDING LOGICAL BLOCK ADDRESS DE-ALLOCATION STATUS INFORMATION

Schedule A

(Part 1: SandForce Applications and issued Patents, as of 1/4/2012)

Filing Date	Country / Territory	Serial No.	Status	Title
03/27/09	US	12/413,329	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR HARDENING DATA STORED ON A SOLID STATE DISK
07/02/09	US	12/497,327	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR ORDERING A PLURALITY OF WRITE COMMANDS ASSOCIATED WITH A STORAGE DEVICE
07/06/09	US	12/498,162	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR INTERFACING ONE OR MORE STORAGE DEVICES WITH A PLURALITY OF BRIDGE CHIPS
07/17/09	US	12/505,333	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR INSERTING A GAP IN INFORMATION SENT FROM A DRIVE TO A HOST DEVICE
07/20/09	US	12/506,068	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR REDUCING A RATE OF DATA TRANSFER TO AT LEAST A PORTION OF MEMORY
07/23/09	US	12/508,259	Pending	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR MAINTAINING A DIRECT CONNECTION BETWEEN AN INITIATOR AND A DRIVE
10/05/09	US	12/573,792	Allowed / Issue Fee Paid	SYSTEM, METHOD, AND COMPUTER PROGRAM PRODUCT FOR SENDING FAILURE INFORMATION FROM A SERIAL ATA (SATA) SOLID STATE DRIVE (SSD) TO A HOST DEVICE
03/12/10	US	61/313,681	Expired	LDPC Erasure Decoding for Flash Memories
03/27/10	WO	PCT/US10/28981	Pending	STORAGE SYSTEM LOGICAL BLOCK ADDRESS DE-ALLOCATION MANAGEMENT AND DATA HARDENING
06/18/10	US	61/356,443	Expired	SCALABLE STORAGE DEVICES

Schedule A

(Part 1: SandForce Applications and Issued Patents, as of 1/4/2012)

Filing Date	Country / Territory	Serial No.	Status	Title
06/24/10	US	12/822,442	Pending	MULTI-MEMORY DEVICE SYSTEM AND METHOD FOR MANAGING A LIFETIME THEREOF
07/02/10	WO	PCT/US10/40855	Pending	ORDERING A PLURALITY OF WRITE COMMANDS ASSOCIATED WITH A STORAGE DEVICE
07/15/10	WO	PCT/US10/42147	Pending	INSERTING A GAP IN INFORMATION SENT FROM A DRIVE TO A HOST DEVICE
07/18/10	WO	PCT/US10/42376	Pending	REDUCING A RATE OF DATA TRANSFER TO AT LEAST A PORTION OF MEMORY
07/22/10	WO	PCT/US10/42823	Pending	MAINTAINING A DIRECT CONNECTION BETWEEN AN INITIATOR AND A DRIVE
07/26/10	US	12/843,851	Pending	DELAYING AN OPERATION THAT REDUCES A LIFETIME OF MEMORY
11/30/10	US	12/956,926	Pending	SYSTEM, METHOD AND A COMPUTER PROGRAM PRODUCT FOR WRITING DATA TO DIFFERENT STORAGE DEVICES BASED ON WRITE FREQUENCY
01/18/11	US	61/433,918	Pending	Higher-Level Redundancy Information Computation
02/08/11	US	61/440,710	Pending	Selective Enablement Of Status Coalescing Via Host Transfer Rate Detection
03/07/11	US	13/042,237	Allowed	MEMORY LIFETIME GAUGING SYSTEM, METHOD AND COMPUTER PROGRAM PRODUCT

Schedule A

(Part 1: SandForce Applications and Issued Patents, as of 1/4/2012)

Filing Date	Country / Territory	Serial No.	Status	Title
03/11/11	WO	PCT/US11/28244	Pending	LDPC Erasure Decoding for Flash Memories
[REDACTED]				
04/26/11	US	61/479,249	Pending	Variable Over-Provisioning for Non-Volatile Storage
04/29/11	US	61/480,518	Pending	Encrypted-Transport Solid-State Disk Controller
[REDACTED]				
06/16/11	US	61/497,525	Pending	SCALABLE STORAGE DEVICES
[REDACTED]				
06/17/11	WO	PCT/US11/40996	Pending	SCALABLE STORAGE DEVICES
[REDACTED]				

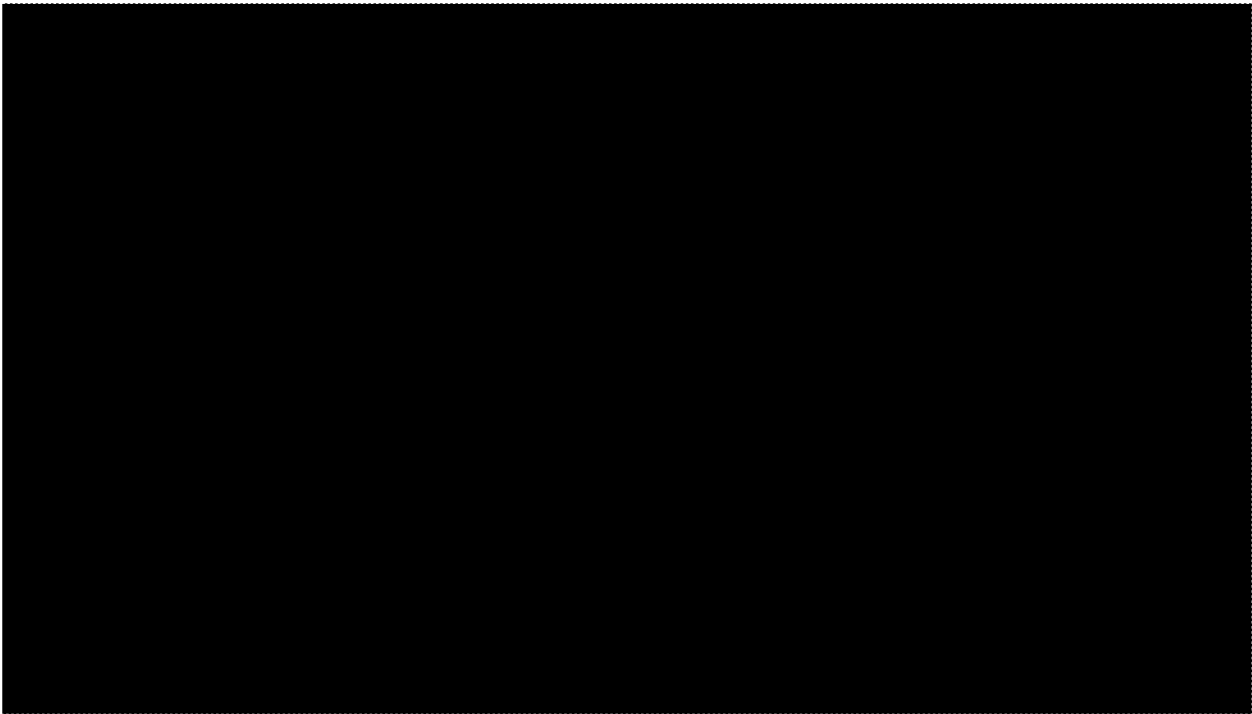
Schedule A

(Part 1: SandForce Applications and Issued Patents, as of 1/4/2012)

Filing Date	Country / Territory	Serial No.	Status	Title
[REDACTED]				



Schedule A



Delaware

PAGE 1

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"AUTOBAHN ACQUISITION CORPORATION", A DELAWARE CORPORATION, WITH AND INTO "SANDFORCE, INC." UNDER THE NAME OF "SANDFORCE, INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE THIRD DAY OF JANUARY, A.D. 2012, AT 1:02 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



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You may verify this certificate online
at corp.delaware.gov/authver.shtml


Jeffrey W. Bullock, Secretary of State
AUTHENTICATION: 9267686

DATE: 01-03-12

PATENT
REEL: 027916 FRAME: 0633

CERTIFICATE OF MERGER
OF
AUTOBAHN ACQUISITION CORPORATION
INTO
SANDFORCE, INC.

Pursuant to Title 8, Section 251 of the Delaware General Corporation Law (“DGCL”), SandForce, Inc., a Delaware corporation (the “Company”), does hereby certify to the following facts relating to the merger (the “Merger”) of Autobahn Acquisition Corporation, a Delaware corporation (“Merger Sub”), with and into the Company, with the Company continuing as the surviving corporation of the Merger (the “Surviving Corporation”):

FIRST: That the name and state of incorporation of each of the constituent corporations to the Merger (each, a “Constituent Corporation”) is as follows:

<u>Name</u>	<u>State of Incorporation</u>
Autobahn Acquisition Corporation	Delaware
SandForce, Inc.	Delaware

SECOND: That an Agreement and Plan of Merger, dated as of October 26, 2011 (the “Merger Agreement”), by and among Merger Sub, the Company and certain other parties set forth therein, has been approved, adopted, certified, executed and acknowledged by each of the Constituent Corporations in accordance with the provisions of Section 251 of the DGCL.

THIRD: That the Surviving Corporation of the Merger shall be the Company and the name of the Surviving Corporation will be “SandForce, Inc.”

FOURTH: That the certificate of incorporation of the Company, as amended from time to time and as in effect immediately prior to the effective time of the Merger, shall be amended and restated in its entirety at the effective time of the Merger to read as set forth on **Exhibit A** attached hereto and as so amended and restated shall be the Amended and Restated Certificate of Incorporation of the Surviving Corporation.

FIFTH: That an executed copy of the Merger Agreement is on file at the principal place of business of the Surviving Corporation at the following address: 1621 Barber Lane, Milpitas, California 95035.

SIXTH: That a copy of the Merger Agreement will be furnished by the Surviving Corporation, on request and without cost, to any stockholder of a Constituent Corporation.

SEVENTH: That the Merger shall become effective immediately upon the filing of this Certificate of Merger with the Secretary of State of the State of Delaware.

* * *

IN WITNESS WHEREOF, the Surviving Corporation has caused this Certificate of Merger to be executed by its duly authorized officer as of this 3rd day of January, 2012.

SANDFORCE, INC.

By: /s/ Michael Raam
Name: Michael Raam
Title: Chief Executive Officer

[Signature Page to Certificate of Merger]

PATENT
REEL: 027916 FRAME: 0635

Exhibit A

CERTIFICATE OF INCORPORATION

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION OF
SANDFORCE, INC.

ARTICLE I

The name of the corporation is SandForce, Inc. (the "**Company**").

ARTICLE II

The address of the Company's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

ARTICLE III

The purpose of the Company is to engage in any lawful act or activity for which corporations may be organized under the Delaware General Corporation Law, as the same exists or as may hereafter be amended from time to time.

ARTICLE IV

This Company is authorized to issue one class of shares to be designated Common Stock. The total number of shares of Common Stock the Company has authority to issue is 1,000 with par value of \$0.001 per share.

ARTICLE V

In furtherance and not in limitation of the powers conferred by statute, the board of directors of the Company is expressly authorized to make, alter, amend or repeal the bylaws of the Company.

ARTICLE VI

Elections of directors need not be by written ballot unless otherwise provided in the bylaws of the Company.

ARTICLE VII

To the fullest extent permitted by the Delaware General Corporation Law, as the same exists or as may hereafter be amended from time to time, a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director. If the Delaware General Corporation Law is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Company shall be eliminated or limited to the fullest extent permitted by the Delaware General Corporation Law, as so amended.

The Company shall indemnify, to the fullest extent permitted by applicable law, any director or officer of the Company who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "**Proceeding**") by reason of the fact that he or she is or was a director, officer, employee or agent of the Company or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding. The Company shall be required to indemnify a person in connection with a Proceeding initiated by such person only if the Proceeding was authorized by the Board.

The Company shall have the power to indemnify, to the extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, any employee or agent of the Company who was or is a party or is threatened to be made a party to any Proceeding by reason of the fact that he or she is or was a director, officer, employee or agent of the Company or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding.

Neither any amendment nor repeal of this Article, nor the adoption of any provision of this Certificate of Incorporation inconsistent with this Article, shall eliminate or reduce the effect of this Article in respect of any matter occurring, or any cause of action, suit or claim accruing or arising or that, but for this Article, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

ARTICLE VIII

Except as provided in **Article VIII** above, the Company reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.