

INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement is entered into as of June 28, 2011, by and between SILICON VALLEY BANK ("Bank") and PANASAS, INC., a Delaware corporation ("Grantor").

RECITALS

- A. Bank has agreed to make certain advances of money and to extend certain financial accommodation to Grantor (the "Loans") in the amounts and manner set forth in that certain Loan and Security Agreement by and between Bank, Grantor, and Panasas Federal Systems, Inc., a Delaware corporation, dated December 11, 2008 (as amended and as the same may be further amended, modified or supplemented from time to time, the "Loan Agreement"; capitalized terms used herein are used as defined in the Loan Agreement). Bank is willing to make the Loans to Grantor, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works to secure the obligations of Grantor under the Loan Agreement.
- B. Pursuant to the terms of the Loan Agreement, Grantor has granted to Bank a security interest in all of Grantor's right, title and interest, whether presently existing or hereafter acquired, in, to and under all of the Collateral.

NOW, THEREFORE, for good and valuable consideration, receipt of which is hereby acknowledged, and intending to be legally bound, as collateral security for the prompt and complete payment when due of its obligations under the Loan Agreement, Grantor hereby represents, warrants, covenants and agrees as follows:

AGREEMENT

To secure its obligations under the Loan Agreement, Grantor grants and pledges to Bank a security interest in all of Grantor's right, title and interest in, to and under its Intellectual Property Collateral (including without limitation those Copyrights, Patents, Trademarks and Mask Works listed on Schedules A, B, C, and D hereto), and including without limitation all proceeds thereof (such as, by way of example but not by way of limitation, license royalties and proceeds of infringement suits), the right to sue for past, present and future infringements, all rights corresponding thereto throughout the world and all re-issues, divisions continuations, renewals, extensions and continuations-in-part thereof.

This security interest is granted in conjunction with the security interest granted to Bank under the Loan Agreement. The rights and remedies of Bank with respect to the security interest granted hereby are in addition to those set forth in the Loan Agreement and the other Loan Documents, and those which are now or hereafter available to Bank as a matter of law or equity. Each right, power and remedy of Bank provided for herein or in the Loan Agreement or any of the Loan Documents, or now or hereafter existing at law or in equity shall be cumulative and concurrent and shall be in addition to every right, power or remedy provided for herein and the exercise by Bank of any one or more of the rights, powers or remedies provided for in this

Intellectual Property Security Agreement, the Loan Agreement or any of the other Loan Documents, or now or hereafter existing at law or in equity, shall not preclude the simultaneous or later exercise by any person, including Bank, of any or all other rights, powers or remedies.

IN WITNESS WHEREOF, the parties have cause this Intellectual Property Security Agreement to be duly executed by its officers thereunto duly authorized as of the first date written above.

GRANTOR:

Address of Grantor:

Panasas, Inc.
969 W. Maude Avenue
Sunnyvale, CA 94085
Attn: Stephanie Vinella, CFO
Fax: (408) 215-6801
Email: svinella@panasas.com

PANASAS, INC.

By: _____

Name: Stephanie Vinella

Title: CFO

BANK:

Address of Bank:

Silicon Valley Bank
2400 Hanover Street
Palo Alto, CA 94304
Attn: Liam Fairbairn
Fax: (650) 320-0016
E-mail: lfairbairn@svb.com

SILICON VALLEY BANK

By: _____

Name: _____

Title: _____

EXHIBIT A

Copyrights

Description

Registration/
Application
Number

Registration/
Application
Date

None.

EXHIBIT B

Patents

Description

Registration/
Application
Number

Registration/
Application
Date

See following

Exhibit D

US patents held

Type	Issue Date	Patent No.	Inventor(s)	Title
Design	12/03	D483,376	Mundt	Cover for blank computer slot
Design	12/03	D483,377	Mundt	Two door computer blade cover
Design	12/03	D483,378	Mundt	Single door computer blade cover
Design	12/03	D483,366	Mundt	Single door computer blade cover
Utility	1/06	6,985,995	Holland, Welch	Data file migration from a mirrored RAID to a non-mirrored XOR-based RAID without rewriting the data
Utility	2/06	7,007,024	Zelenka	Hashing objects into multiple directories for better concurrency
Utility	2/06	7,007,047	Zelenka, Holland	Internally consistent file system image in distributed object-based data storage
Utility	4/06	7,036,039	Holland	Distributing manager-failure-induced workload through the use of a manager-naming scheme
Utility	12/06	7,155,464	Belov	Recovering and checking large file systems in an object-based data storage system
Utility	3/07	7,191,357	Holland, Zelenka, Gibson	Hybrid quorum/primary-backup fault-tolerance model
Utility	3/07	7,194,467	Holland	Using whole-file and dual-mode locks to reduce locking traffic in data storage systems
Utility	12/08	7,461,302	Halevy	System and method for I/O error recovery
Utility	3/10	7,681,072	Gibson, Nagle, Umungsi	Systems and Methods For Facilitating File Reconstruction and Restoration In Data Storage Systems Where A Raid-X Format Is Implemented At A File Level Within A Plurality Of Storage Devices
Utility	12/07	7,793,146	Gibson, Belov	Systems and Methods For Facilitating File Reconstruction and Restoration in Data Storage Systems Where A Raid-X Format Is Implemented At A File Level Within A Plurality Of Storage Devices
Utility	1/08	7,805,412	Small, Mian, Gibson	Systems and Methods For Parallel Reconstruction Of Files And Objects

TRADEMARK

REEL: 004578 FRAME: 0671

EXHIBIT B

Foreign patents held

Type	Issue Date	Country	Patent No.	Inventor(s)	Title
Utility	6/09	China	ZL 200580034789.1	Unangst, Moyer	Distributed object-based storage system that stores virtualization maps in object attributes
Utility	6/09	Hong Kong	HKP0820063-CN- 2:50624	Unangst, Moyer	Distributed object-based storage system that stores virtualization maps in object attributes

Patents applied for

Type	Application Date	Application No.	Inventor(s)	Title
Utility	2/03	10/372,346 20040003055	Serenyi, Holland	Allowing client systems to interpret higher-revision data structures in storage systems
Utility	4/04	11/825,921; 10/918,202 20060036636	Small, Belov, Halevy	Distributed object-based storage system that uses pointers stored as attributes for object analysis and monitoring
Utility	8/04	10/918,200 20060036602	Unangst, Moyer	Distributed object-based storage system that stores virtualization maps in object attributes
Utility	5/08	12/149,583	Jacobson, Gibson	Data Storage Systems, Methods and Networks Having a Snapshot Efficient Block Map
Utility	7/08	12/219,323	Gronke, Welch, Gibson	Block Group Error Correcting Codes for Repairing Unrecoverable Read Errors
	8/4/05	1898-DELNP/2007		Distributed Object-Based Storage System that Stores Virtualization Maps in Object Attributes

EXHIBIT C

Trademarks

Description

Registration/
Application
Number

Registration/
Application
Date

See following

Panasas Trademark Portfolio
(Active Only)

EXPORT

Mark	Reg. No.	Reg. Date	Status	Active / Expired	Jurisd.
ACCELERATING TIME TO RESULTS	3399499	18-Mar-08	Registered	Active	U.S.
ACTIVESCALE	2886927	02-Mar-2005	Registered	Active	EU/CTM
ACTIVESCALE	2848394	01-Jun-2004	Registered	Active-Renewed 6/1/2010	U.S.
DIRECTFLOW	2884112	27-Apr-2004	Registered	Active	EU/CTM
DIRECTFLOW	2848395	01-Jun-2004	Registered	Active-Renewed 6/1/2010	U.S.
DIRECTORBLADE	2883791	23-Sep-2004	Registered	Active	EU/CTM
DIRECTORBLADE	2836984	27-Apr-2004	Registered	Expired 4/27/2010	U.S.
Miscellaneous Design (Panasas Logo)	2836972	27-Apr-2004	Registered	Active-Renewed 4/27/2010	U.S.
MYPANASAS	2884963	23-Sep-2004	Registered	Active	EU/CTM
MYPANASAS	2903681	16-Nov-2009	Registered	Active	U.S.
PANACTIVE	2884120	06-Apr-2004	Registered	Active	EU/CTM
PANACTIVE	2792470	09-Dec-2003	Registered	Expired 12/9/2009	U.S.
PANASAS	2518090	03-Apr-2003	Registered	Active	EU/CTM
PANASAS	2798480	23-Dec-2003	Registered	Active-Renewed 12/23/2009	U.S.
Panasas P Ingo	2883635	13-May-2004	Registered	Active	EU/CTM
PANASAS Plus P Design	2867312	27-Jul-2004	Registered	Active-Renewed 7/27/2010	U.S.

Panasas Trademark Portfolio
(Active Only)

EXPIRE C

Mark	Reg. No.	Reg. Date	Status	Active / Expired	Jurisd.
PANASAS STORAGE CLUSTER			Proposed/ unfiled	Proposed/ unfiled	U.S.
STORAGEBLADE	2848393	01-Jun-2004	Registered	Expired 6/1/2009	U.S.

EXHIBIT D

Mask Works

Description

Registration/
Application
Number

Registration/
Application
Date

None