# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3347843

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

# **CONVEYING PARTY DATA**

Name	Execution Date
ADAPTIVE COMPUTING ENTERPRISES, INC.	11/19/2014

# **RECEIVING PARTY DATA**

Name:	SILICON VALLEY BANK	
Street Address:	3003 TASMAN DRIVE	
City:	SANTA CLARA	
State/Country:	CALIFORNIA	
Postal Code:	95054	

# **PROPERTY NUMBERS Total: 66**

Property Type	Number
Application Number:	11276853
Patent Number:	8782654
Patent Number:	8782120
Application Number:	13099116
Application Number:	11279007
Patent Number:	8370495
Patent Number:	7698430
Application Number:	13758164
Patent Number:	8782246
Patent Number:	8200824
Patent Number:	7774471
Application Number:	14154912
Patent Number:	8631130
Patent Number:	8782231
Patent Number:	8413155
Application Number:	13169417
Patent Number:	8504548
Application Number:	13959257
Patent Number:	8108869
Application Number:	13362243
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PATENT REEL: 035634 FRAME: 0954

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Property Type	Number
Patent Number:	7356770
Patent Number:	8863143
Patent Number:	8549333
Patent Number:	8276008
Patent Number:	8271813
Patent Number:	8271807
Patent Number:	8245059
Application Number:	14043245
Application Number:	14081610
Application Number:	12855443
Application Number:	13949916
Patent Number:	7725583
Patent Number:	7620706
Application Number:	12573967
Patent Number:	8037475
Patent Number:	8572253
Patent Number:	7996455
Application Number:	14064251
Patent Number:	8763000
Application Number:	10589339
Application Number:	10530576
Patent Number:	8151103
Application Number:	13758182
Patent Number:	8370898
Application Number:	13269893
Application Number:	13418777
Application Number:	12503424
Patent Number:	7971204
Application Number:	13760600
Patent Number:	8850434
Patent Number:	8806492
Patent Number:	8176490
Application Number:	13949845
Application Number:	14106254
Patent Number:	8739173
Patent Number:	8341634
Patent Number:	7870552
Application Number:	14228454

Property Type	Number
Patent Number:	8150972
Patent Number:	7890629
Patent Number:	8271980
Application Number:	13621987
Patent Number:	8321871
Application Number:	13686045
Application Number:	10530580
Application Number:	11726852

#### CORRESPONDENCE DATA

**Fax Number:** (858)550-6420

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

**Phone:** 858-550-6403

**Email:** erin.obrien@cooley.com

Correspondent Name: ERIN O'BRIEN
Address Line 1: C/O COOLEY LLP
Address Line 2: 4401 EASTGATE MALL

Address Line 4: SAN DIEGO, CALIFORNIA 92121

ATTORNEY DOCKET NUMBER:	194491-1431 ADAP COMPUT
NAME OF SUBMITTER:	ERIN O'BRIEN
SIGNATURE:	/Erin O'Brien/
DATE SIGNED:	05/11/2015

#### **Total Attachments: 10**

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#### INTELLECTUAL PROPERTY SECURITY AGREEMENT

This Intellectual Property Security Agreement ("Agreement") is entered into as of November 19, 2014 by and between SILICON VALLEY BANK ("Bank") and ADAPTIVE COMPUTING ENTERPRISES, 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 and Grantor dated as of February 16, 2012, as amended by that certain First Amendment to Loan and Security Agreement dated as of December 18, 2012, that certain Second Amendment to Loan and Security Agreement dated as of February 5, 2014, and that certain Third Amendment and Forbearance to Loan and Security Agreement dated as of June 30, 2014 (as the same may from time to time be amended, modified, supplemented, or restated, the "Loan Agreement"). Capitalized terms used herein are used as defined in the Loan Agreement.
- B. Bank and Grantor proposed to enter into that certain Fourth Amendment and Forbearance to Loan and Security Agreement dated as of November 19, 2014 (the "Fourth Amendment"). Bank is willing to enter into the Fourth Amendment, but only upon the condition, among others, that Grantor shall grant to Bank a security interest in certain Copyrights, Trademarks, Patents, and Mask Works (as each term is described below) to secure the obligations of Grantor under the Loan Agreement and the Fourth Amendment.
- C. Pursuant to the terms of the Loan Agreement and Fourth Amendment, 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**

- 1. Grant of Security Interest. To secure its obligations under the Loan Agreement as amended by the Fourth Amendment, 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 (all of which shall collectively be called the "Intellectual Property Collateral"), including, without limitation, the following:
- (a) Any and all copyright rights, copyright applications, copyright registrations and like protections in each work or authorship and derivative work thereof, whether published or unpublished and whether or not the same also constitutes a trade secret, now or hereafter existing, created, acquired or held, including without limitation those set forth on Exhibit A attached hereto (collectively, the "Copyrights");
- (b) Any and all trade secrets, and any and all intellectual property rights in computer software and computer software products now or hereafter existing, created, acquired or held;
- (c) Any and all design rights that may be available to Grantor now or hereafter existing, created, acquired or held;
- (d) All patents, patent applications and like protections including, without limitation, improvements, divisions, continuations, renewals, reissues, extensions and continuations-in-part of the same, including without limitation the patents and patent applications set forth on Exhibit B attached hereto (collectively, the "Patents");
- (e) Any trademark and servicemark rights, whether registered or not, applications to register and registrations of the same and like protections, and the entire goodwill of the business of Grantor connected with

111561562 v2

and symbolized by such trademarks, including without limitation those set forth on Exhibit C attached hereto (collectively, the "Trademarks");

- (f) All mask works or similar rights available for the protection of semiconductor chips, now owned or hereafter acquired, including, without limitation those set forth on Exhibit D attached hereto (collectively, the "Mask Works");
- (g) Any and all claims for damages by way of past, present and future infringements of any of the rights included above, with the right, but not the obligation, to sue for and collect such damages for said use or infringement of the intellectual property rights identified above;
- (h) All licenses or other rights to use any of the Copyrights, Patents, Trademarks, or Mask Works and all license fees and royalties arising from such use to the extent permitted by such license or rights;
- (i) All amendments, extensions, renewals and extensions of any of the Copyrights, Trademarks, Patents, or Mask Works; and
- (j) All proceeds and products of the foregoing, including without limitation all payments under insurance or any indemnity or warranty payable in respect of any of the foregoing.
- 2. Recordation. Grantor authorizes the Commissioner for Patents, the Commissioner for Trademarks and the Register of Copyrights and any other government officials to record and register this Agreement upon request by Bank.
- 3. <u>Authorization</u>. Grantor hereby authorizes Bank to (a) modify this Agreement unilaterally by amending the exhibits to this Agreement to include any Intellectual Property Collateral which Grantor obtains subsequent to the date of this Agreement, and (b) file a duplicate original of this Agreement containing amended exhibits reflecting such new Intellectual Property Collateral.
- 4. <u>Loan Documents</u>. This Agreement has been entered into pursuant to and in conjunction with the Loan Agreement (as amended), which is hereby incorporated by reference. The provisions of the Loan Agreement (as amended) shall supersede and control over any conflicting or inconsistent provision herein. The rights and remedies of Bank with respect to the Intellectual Property Collateral are as provided by the Loan Agreement (as amended) and related documents, and nothing in this Agreement shall be deemed to limit such rights and remedies.
- 5. Execution in Counterparts. This Agreement may be executed in counterparts (and by different parties hereto in different counterparts), each of which shall constitute an original, but all of which when taken together shall constitute a single contract. Delivery of an executed counterpart of a signature page to this Agreement by facsimile or in electronic (i.e., "pdf" or "tif" format) shall be effective as delivery of a manually executed counterpart of this Agreement.
- 6. <u>Successors and Assigns</u>. This Agreement will be binding on and shall inure to the benefit of the parties hereto and their respective successors and assigns.
- 7. Governing Law. This Agreement and any claim, controversy, dispute or cause of action (whether in contract or tort or otherwise) based upon, arising out of or relating to this Agreement and the transactions contemplated hereby and thereby shall be governed by, and construed in accordance with, the laws of the United States and the State of California, without giving effect to any choice or conflict of law provision or rule (whether of the State of California or any other jurisdiction).

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

# **GRANTOR:**

ADAPTIVE COMPUTING ENTERPRISES, INC., a Delaware corporation

By: \_\_///Lets 

Title: CO

BANK:

SILICON VAIZEY BANK

Title: \_\_\_\_

Title:

# EXHIBIT A

Copyrights

None.

111561562 v2

# EXHIBIT B

# Patents

Title	Serial / Patent Number	Application / Issue Date
Automatic workload transfer to an on-demand center	11/276,853	03/16/06
Co-allocating a reservation spanning	8,782,654	07/15/14
different compute resources types	11/616,156	
Elastic management of compute	8,782,120	07/15/14
resources between a web server and an on-demand	13/099,114	
Compute environment	ng tang a v r	
Elastic management of compute resources between a web server and	13/099,116	05/02/11
an on-demand compute environment		
On-demand access to compute	11/279,007	04/07/06
resources	Extension of	5461100
On-demand compute environment	8,370,495	92/05/13
	12/752,622	
On-demand compute environment	7,698,430	04/13/10
	11/276,856	
On-demand compute environment	13/758,164	02/04/13
Optimized multi-component co-	8,782,246	07/15/14
allocation scheduling with advanced	13/493,300	
reservations for Data transfers and distributed jobs	107.150,000	3
Optimized multi-component co-	8,200,824	06/12/12
allocation scheduling with advanced		Adi con 870
reservations for	12/842,636	
Data transfers and distributed jobs		
Optimized multi-component co-	7,774,471	98/10/10
allocation scheduling with advanced reservations for	11/763,010	
Data transfers and distributed jobs		***************************************
Reserving resources in an on-	14/154,912	01/14/14
demand compute environment	3 7 2 7 3 2 2 2 3	01/1-11/14
Reserving resources in an on-	8,631,130	01/14/14
demand compute environment from	11/276,855	
a local compute	11/2/0,655	
Environment		
Simple integration of on-demand compute environment	8,782,231	07/15/14
confidence en an entrement	11/276,854	
System and method for a self-	8,413,155	04/02/13
optimizing reservation in time of compute resources	10/530,581	
System and method for co-allocating	13/169,417	06/27/11
a reservation spanning different	2002003	51 477 50 77 E X
compute resources types		

Title	Serial / Patent Number	Application / Issue Date
System and method for dynamically	8,504,548	08/06/13
managing data centric searches		56r00, 13
	12/245,276	·
System and method for dynamically	13/959,257	08/05/13
manging data centric searches	0 100 BZ0	
System and method for enforcing future policies in a compute	8,108,869	01/31/12
environment	10/530,575	
System and method for enforcing	13/362,243	01/31/12
future policies in a compute	active to the agent and	03/22/12
environment		
System and method for graphically	7,356,770	04/08/08
managing and monitoring a compute	11/268,857	
environment	***************************************	
System and method for managing a hybrid compute environment	8,863,143	10/14/14
when a combate and nontinent	12/023,722	
System and method for managing	8,549,333	10/01/13
energy consumption in a compute		10/01/13
environment	13/621,989	
System and method for managing	8,276,008	09/25/12
energy consumption in a compute	12/855,407	
environment		
System and method for managing	8,271,813	09/18/12
energy consumption in a compute environment	12/855,357	
System and method for managing	8,271,807	09/18/12
energy consumption in a compute		33/18/12
environment	12/179,142	
System and method for managing	8,245,059	08/14/12
energy consumption in a compute	12/855,318	
environnient	H-T	
System and method for managing	14/043,245	10/01/13
energy consumption in a compute environment		
System and method for managing	14/081,610	11/15/13
energy consumption in a compute	17001,010	11/13/13
environment		
System and method for managing	12/855,443	08/12/10
energy consumption in a compute		
environment		
System and method for managing	13/949,916	07/24/13
storage input/output for a compute environment		
System and method for providing	7,725,583	05/25/10
advanced reservations in a compute	<b>§</b>	ማብ <del>የተ</del> ደነ ያ <i>ነ</i> ት
environment	11/751,899	
System and method for providing	7,620,706	11/17/09
advanced reservations in a compute	10/530,583	
environment		
System and method for providing advanced reservations in a compute	12/573,967	10/06/09
environment		
WIN Y IN WISSESPING		

111561562 v2 2

Title	Serial / Patent Number	Application / Issue Date
System and method for providing	8,037,475	10/11/11
dynamic provisioning within a compute environment	11/155,091	
System and method for providing	8,572,253	10/29/13
dynamic roll-back	13/205,385	
System and method for providing	7,996,455	08/09/11
dynamic roll-back reservations in	11/208,138	
time		
System and method for providing dynamic roll-back reservations in time	14/064,251	19/28/13
System and method for providing	8,763,000	06/24/14
intelligent pre-staging of data in a	12/344,844	
compute environment		
System and method for providing intelligent pre-staging of data in a compute environment	10/589,339	03/11/05
System and method for providing	10/530,576	03/11/05
multi-resource management support in a compute environment	X WI MAN VAND 7 W	VOI 12792
System and method for providing	8,151,103	04/03/12
object triggers	10/530,578	
System and method for providing	13/758,182	02/04/13
threhold-based access to compute		
resources		
System and method for providing	8,370,898	02/05/13
threshold-based access to compute resources	11/155,347	
System and method fro providing	13/269,893	10/10/11
dynamic provisioning within a compute environment	13/207,873	10/10/11
System and method of brokering	13/418,777	03/13/12
cloud computing resources		SPACE E SOL E SO
System and method of brokering	12/503,424	07/15/09
cloud computing resources		
System and method of co-allocating	8,418,186	04/09/13
a reservation spanning different	13/169,417	
compute	,,	
Resources types System and method of co-allocating	7,971,204	££ /30/3 2
a reservation spanning different		06/28/11
compute	10/530,582	
Resources types		
System and method of co-allocating	13/760,600	02/06/13
a reservation spanning different		
compute resources type		***************************************
System and method of constraining	8,850,434	09/30/14
auto live migration of virtual	13/618,896	
machines using Group tags	• • • •	
Group rags		

111561562 v2 3

System and method of interfacing a workload manager and scheduler with an identity Manager  System and method of interfacing a workload manager and scheduler with an identity Manager  System and method of interfacing a workload manager and scheduler with an identity Manager  System and method of managing job preemption  System and method of performing a 14/106,254 12/13/13	***************************************
workload manager and scheduler with an identity Manager  System and method of interfacing a workload manager and scheduler with an identity Manager  System and method of managing job preemption  13/466,499  8,176,490  05/08/12  11/207,438  11/207,438  07/24/13	
with an identity  Manager  System and method of interfacing a workload manager and scheduler with an identity  Manager  System and method of managing job preemption	
System and method of interfacing a 8,176,490 05/08/12  workload manager and scheduler vith an identity  Manager  System and method of managing job 13/949,845 07/24/13  preemption	
workload manager and scheduler with an identity Manager  System and method of managing job preemption	
with an identity  Manager  System and method of managing job preemption 13/949,845 07/24/13	
Manager  System and method of managing job 13/949,845 07/24/13 preemption	
System and method of managing job 13/949,845 07/24/13 preemption	
preemption	
<u> </u>	
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pre-reservation analysis to yield and	
improved fit of workload with the	
compute enivornment	
System and method of providing a 8,739,173 05/27/14	
fixed time offset based dedicated co-	
13417-0-537-1648 F.1.3 C	
Common resource set	
System and method of providing a 8,341,634 12/25/12	
fixed time offset based dedicated co- allocation of a 12/987,631	
Common resource set	
System and method of providing a 7,870,552 01/11/11	
fixed time offert hased dedicated ex-	
allocation of a	
Common resource set	
System and method of providing a 14/228,454 03/28/14	~~~~~~
fixed time offset based dedicated co-	
allocation of a common resource set	
System and method of providing \$,150,972 04/03/12	
reservation masks within a compute environment 13/024,772	
System and method of providing 7,890,629 02/15/[1	
reservation masks within a compute	
environment 11/629,940	
System and method of providing 8,271,980 09/18/12	
greatern inhe writing a government	
environment 11/718,867	
System and method of providing 13/621,987 09/18/12	
system jobs within a compute	
environment	
System and method of using 8,321,871 11/27/12	
transaction IDS for managing 11/155,090	
Resources within a compute	
environment	
System and method of using 13/686,045 11/27/12	**********
transactions IDS for managing	
reservations of compute resources	
within a compute environment	
System and method providing object 10/530,580 03/11/05	Manananagy
messages in a compute environment	
Virtual private cluster 11/276,852 03/16/06	

4

111561562 v2

# EXHIBIT C

# Trademarks

DESCRIPTION	Serial / Registration Number	Filing / Registration Date
BIG WORKFLOW	86/103,941	10/29/13
MOAB	3,218,599	03/13/07
ADAPTIVE COMPUTING	3,786,426	05/04/10

EXHIBIT D

Mask Works

None.

111561562 v2

PATENT REEL: 035634 FRAME: 0966

**RECORDED: 05/11/2015**