PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4615107

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ATLANTIS COMPUTING, INC.	07/26/2017
INSOLVENCY SERVICES GROUP, INC.	07/26/2017

RECEIVING PARTY DATA

Name:	ATLANTIS COMPUTING HOLDINGS, LLC
Street Address:	2525 EAST CHARLESTON ROAD
City:	MOUNTAIN VIEW
State/Country:	CALIFORNIA
Postal Code:	94043

PROPERTY NUMBERS Total: 27

Property Type	Number
Patent Number:	8732401
Patent Number:	8996800
Patent Number:	9277010
Patent Number:	9069472
Patent Number:	9372865
Patent Number:	9250946
Patent Number:	9471590
Patent Number:	8874877
Patent Number:	8868884
Patent Number:	8874851
Application Number:	61036409
Application Number:	61049331
Application Number:	61051311
Application Number:	61052608
Application Number:	61056266
Application Number:	12433843
Application Number:	61505524
Application Number:	61938487
Application Number:	62305839

Property Type	Number
Application Number:	14177899
Application Number:	14815482
Application Number:	14815494
Application Number:	14815507
Application Number:	15453710
Application Number:	15514816
PCT Number:	US2013076683
PCT Number:	US2013076704

CORRESPONDENCE DATA

Fax Number: (612)492-7077

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: 612-492-7000

Email: smunson@fredlaw.com

Correspondent Name: DAVE C. WEST

Address Line 1: 200 SOUTH SIXTH STREET

Address Line 2: SUITE 4000

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	078490.0001
NAME OF SUBMITTER:	DAVID C. WEST
SIGNATURE:	/David C. West/
DATE SIGNED:	09/27/2017

Total Attachments: 13
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INTELLECTUAL PROPERTY ASSIGNMENT

This INTELLECTUAL PROPERTY ASSIGNMENT (this "Assignment") is entered into as of August 16, 2017 to be effective as of July 26, 2017, by Atlantis Computing, Inc., a Delaware corporation ("Atlantis"), and Insolvency Services Group, Inc., a California corporation, solely in its capacity as assignee under a general assignment for the benefit of creditors of Atlantis Computing, Inc., a Delaware corporation ("ISG"), (Atlantis and ISG each an "Assignor", and collectively, "Assignors"), in favor of Atlantis Computing Holdings, LLC, a Delaware limited liability company ("Assignee").

Atlantis represented to ISG that it owned the patents, patent applications, trademark registrations, trademark applications and other intellectual property identified on the attached Schedule 1 (the "Scheduled IP"). Atlantis transferred to ISG all of its rights in and to its intellectual property, including the Scheduled IP. Pursuant to an Asset Purchase Agreement dated July 26, 2017 between ISG and Assignee, (the "Purchase Agreement"), ISG has agreed to assign to Assignee, among other assets, all of its right, title and interest in the Scheduled IP, and has agreed to execute and deliver this Assignment for recording with governmental authorities including, but not limited to, the United States Patent and Trademark Office. Assignors desire to assign to Assignee all of the rights in and to the intellectual property owned by Atlantis and transferred to ISG, including the Scheduled IP.

NOW, THEREFORE, in exchange for good and valuable consideration, the receipt of which is hereby acknowledged, each Assignor hereby assigns to Assignee, and its successors and assigns the following:

(1)   The entire right, title and interest in and to: (a) the patents and patent applications included in the Scheduled IP; (b) any other U.S. or foreign patent and patent application owned by either Assignor; (c) each U.S. and foreign patent application and patent to which the patents or patent applications in subparts (a) or (b) above claim priority, in whole or in part, or that claim priority, in whole or in part, to the patents or patent applications in subparts (a) or (b) above (all such patents and patent applications in subparts (a), (b) and (c) above, collectively, "Patents"); (d) the inventions disclosed or claimed in any Patent; (e) the entire right, title and interest to any continuations, continuations-in-part, divisions, renewals, reissues, extensions, and substitutions of the Patents; (f) the right to apply for patents based on the Patents in the U.S. and foreign countries in its own name and to claim any priority rights to which such applications are entitled under international conventions, treaties or otherwise; and (g) the right to enforce patent rights to the Patents as fully and entirely as the same would have been held and enjoyed by the Assignors if this assignment had not been made; together with all claims by Assignors for damages by reason of past infringement or for provisional rights and including the right to sue for, and collect the same for its own use and benefit, and for the use and benefit of its successors, assigns, and other legal representatives;

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(2)   The entire right, title and interest in and to (a) the trademarks, trademark registrations, trademark applications, service marks, service mark registrations and service mark applications included in the Scheduled IP; (b) any other U.S. or foreign trademarks, trademark registrations, trademark applications, service marks, service mark registrations and service mark applications owned by either Assignor; and (c) all associated goodwill associated with the trademarks, service marks, registrations and applications in subparts 2(a) and (b) above;

(3)   The entire right title and interest in and to (a) all copyrights, copyright registrations, copyright applications, domain names and other intellectual property included in the Scheduled IP; and (b) any other all copyrights, copyright registrations, copyright applications, domain names and other intellectual property owned by either Assignor;

(4)   All income, royalties, or payments now or hereafter due or payable with respect to any of the intellectual property in parts (1) – (3) above; and

(5)   The right to enforce the intellectual property rights assigned under this Assignment, including rights, interests, claims, and demands recoverable in law or equity that an Assignor has or may have in profits and damages for past, present and future infringements of the intellectual property rights assigned under this Assignment, including the right to compromise, sue for, and collect such profits and damages.

Each Assignor hereby authorizes the Commissioner of Patents and the Commission of Trademarks in the United States Patent and Trademark Office and the officials of corresponding entities or agencies in any applicable jurisdictions to record and register this Assignment upon request by Assignee, and to issue to Assignee any patents or trademarks that may be granted in accordance with this Assignment. Following the date hereof, each Assignor shall take such steps and actions, and provide such cooperation and assistance to Assignee and its successors, assigns and legal representatives, including the execution and delivery of any affidavits, declarations, oaths, exhibits, assignments, powers of attorney, or other documents, as may be necessary to effect, evidence or perfect the assignment of the assigned intellectual property to Assignee, or any assignee or successor thereto.

This Assignment is subject to the terms, conditions, representations and covenants as set forth in the Purchase Agreement, all of which to the extent applicable are incorporated herein by reference. Nothing in this Assignment, express or implied, is intended or shall be construed to expand or defeat, impair or limit in any way the rights, obligations, claims or remedies of the parties as set forth in the Purchase Agreement.

We hereby authorize attorneys associated with Customer No. 22859, of Fredrikson & Byron, P.A., of 200 South Sixth Street, Suite 4000, Minneapolis, Minnesota, 55402-1425, to insert the application numbers, filing dates, and other identifying information on Schedule 1 when known.

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**PATENT
REEL: 043716 FRAME: 0769**

This Assignment shall be binding upon and inure to the benefit of the parties to this Assignment and their successors and assigns

This Assignment may be executed in multiple counterparts, all of which shall be considered one and the same agreement and shall become effective when one or more counterparts have been signed by each of the parties delivered to the other party, it being understood that all parties need not sign the same counterpart. Copies of this Assignment with signatures transmitted by facsimile or electronically (e.g., pdf) shall be deemed to be original signed versions of this Assignment.

[*Signature Page Follows*]

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IN WITNESS WHEREOF, the parties have executed this instrument as of the date first written above.

Atlantis Computing, Inc., a Delaware corporation, by Insolvency Services Group, Inc., solely in its capacity as assignee and pursuant to the authority of a power of attorney under a general assignment for the benefit of creditors of Atlantis Computing, Inc., a Delaware corporation

Date: _____

By:_____
Name: Joel B. Weinberg
Title: President

Subscribed to and sworn to before me this ___ day of _____, 201_.

_____
Notary Public

Notary Seal

Insolvency Services Group, Inc., solely in its capacity as assignee under a general assignment for the benefit of creditors of Atlantis Computing, Inc., a Delaware corporation

Date: _____

By:_____
Name: Joel B. Weinberg
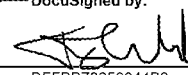Title: President

Subscribed to and sworn to before me this ___ day of _____, 201_.

_____
Notary Public

Notary Seal

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Atlantis Computing Holdings, LLC

Date: _____

By: _____

Name:

Title:

Subscribed to and sworn to before
me this ___ day of _____, 201_.

_____
Notary Public

Notary Seal

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SCHEDULE 1

US Patents

Patent No.	Filing Date	Title	Status
8732401	2011-10-07	Method And Apparatus For Cache Replacement Using A Catalog	Issued
8996800	2011-10-07	Deduplication Of Virtual Machine Files In A Virtualized Desktop Environment	Issued
9277010	2012-12-21	Systems And Apparatuses For Aggregating Nodes To Form An Aggregated Virtual Storage For A Virtualized Desktop Environment	Issued
9069472	2012-12-21	Method For Dispersing And Collating I/O's From Virtual Machines For Parallelization Of I/O Access And Redundancy Of Storing Virtual Machine Data	Issued
9372865	2013-02-12	Deduplication Metadata Access In Deduplication File System	Issued
9250946	2013-02-12	Efficient Provisioning Of Cloned Virtual Machine Images Using Deduplication Metadata	Issued
9471590	2013-02-12	Method And Apparatus For Replicating Virtual Machine Images Using Deduplication Metadata	Issued
8874877	2014-04-25	Method And Apparatus For Preparing A Cache Replacement Catalog	Issued
8868884	2014-04-25	Method And Apparatus For Servicing Read And Write Requests Using A Cache Replacement Catalog	Issued
8874851	2014-04-25	Systems And Methods For Intelligent Content Aware Caching	Issued

US Patent Applications

Application No.	Publication No.	Filing Date	Title	Status
61/036,409	–	2008-03-13	Mechanism To Separate A Virtual Machine Into OS Image, Application Image(s) And User Data Image(s)	Unpublished/ Expired
61/049,331	–	2008-04-30	Mechanism To Allow Sharing Of A Common Operating System Image And Its Applications While Allowing User Specific Configurations And Changes	Unpublished/ Expired
61/051,311	–	2008-05-07	Mechanism For Displaying An Application's Access Modes On A Web Page	Unpublished/ Expired
61/052,608	–	2008-05-12	Mechanism For Providing Graphical Window Management Of Application Windows And Forms For An Operating System Environment Via A Web Browser Interface	Unpublished/ Expired
61/056,266	–	2008-05-27	Mechanism to inspect a personal computer to create a custom plug-in to run on that environment	Unpublished/ Expired
12/433,843	–	2009-04-30	Method And Apparatus For Allowing Sharing Of A Common Operating System Image And Its Applications While Allowing User Specific Configuration And Changes	Unpublished/Aba ndoned
61/505,524	–	2011-07-07	Deduplication Of Virtual Machine Files In A Virtualized Desktop Environment	Unpublished/ Expired

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Application No.	Publication No.	Filing Date	Title	Status
61/938,487	–	2014-02-11	Aggregating Memory To Create A Network Addressable Storage Volume For Storing Virtual Machine Files	Unpublished/ Expired
14/177,899	2015/0227543	2014-02-11	Method And Apparatus For Replication Of Files And File Systems Using A Deduplication Key Space	Published
14/815,482	2017/0031945	2015-07-31	Method And Apparatus For On-Disk Deduplication Metadata For A Deduplication File System	Published
14/815,494	2017/0031768	2015-07-31	Method And Apparatus For Reconstructing And Checking The Consistency Of Deduplication Metadata Of A Deduplication File System	Published
14/815,507	2017/0031946	2015-07-31	Method And Apparatus For Maintaining Data Consistency In An In-Place-Update File System With Data Deduplication	Published
62/305,839	–	2016-03-09	Method And Apparatus For Conversion Of Virtual Machine Formats Utilizing Deduplication Metadata	Unpublished/ Expired
15/453,710	–	2017-03-08	Method And Apparatus For Conversion Of Virtual Machine Formats Utilizing Deduplication Metadata	Unpublished
15/514,816	–	2017-03-27	Aggregating Memory To Create A Network Addressable Storage Volume For Storing Virtual Machine Files	Unpublished

Foreign Patents and Applications

Country	Application No.	Publication No.	Filing Date	Title	Status
EP	13864394.5	2936314	2013-12-19	Method For Dispersing And Collating I/O's From Virtual Machines For Parallelization Of I/O Access And Redundancy Of Storing Virtual Machine Data	Withdrawn
EP	13865153.4	2936316	2013-12-19	Systems And Apparatuses For Aggregating Nodes To Form An Aggregated Virtual Storage For A Virtualized Desktop Environment	Withdrawn
EP	15154632.2	2905709	2015-11-02	Method And Apparatus For Replication Of Files And File Systems Using A Deduplication Key Space	Withdrawn
WO	PCT/US2013/076683	2014/100472	2013-12-19	Systems And Apparatuses For Aggregating Nodes To Form An Aggregated Virtual Storage For A Virtualized Desktop Environment	Expired
WO	PCT/US2013/076704	2014/100485	2013-12-19	Method For Dispersing And Collating I/O's From Virtual	Expired

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Country	Application No.	Publication No.	Filing Date	Title	Status
				Machines For Parallelization Of I/O Access And Redundancy Of Storing Virtual Machine Data	
WO	PCT/US2015/0 15285	2015/123225	2015-10-02	Aggregating Memory To Create A Network Addressible Storage Volume For Storing Virtual Machine Files	Expired

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U.S. Trademark Registrations and Applications

Application Number	Registration Number	Trademark
86367587		Storage is Software
86308791	4774104	Hyperdup
86370630	4719711	Atlantis USX
86248712	4637127	Atlantis ILIO USX
85879579		In-Memory Storage
85826697		In-Memory VDI
85539820	4444469	Atlantis ILIO Diskless VDI
85150855	4093022	ILIO
85150853	4093021	Atlantis Computing
85150850		VSCALER

Other IP

Atlantis Asset	Description	Delivery Point
Private github repository	Access to code base in AC	Hard Drive
Private SLACK	Access to Development/ Support Slack	Hard Drive
Test automation framework	Any testing tools used by development, qa and business administration	Hard Drive
TEST Results	Any and all testing results and reports	Hard Drive
Documentation	Reference Architecture, Build Guides, Test Guides, Best Practices, white papers, customer specific guides and User Guides	Hard Drive
Contact Lists	List of all employees, contact info, job function and organizational charts	Physical Asset
Customer Contact Lists	List of customers, technical contacts, management contacts and relevant details about accounts	Hard Drive
Amazon Access	Access to all AWS/ Amazon and associated account management	N/A
VMWARE Access	Access to all VMWARE Licenses and technology used by engineering and test	As present on servers
Citrix Access	Access to all Citrix Licenses and technology used by engineering and test	As present on servers
Partner Contact List	Access to Partner Contact lists and any notes related	Hard Drive - Salesforce Backup
Helpdesk Ticket Forensics	Access to all reports (timeline based, contact based , problem space based and resolution based)	Hard Drive - Salesforce Backup
Architecture Plan	Next 6, 18 and 24 month plan	Hard Drive - Document store
Engineering Plan	Next 6, 18 and 24 month plan	Hard Drive - JIRA
QA Plan	Next 6, 18 and 24 month plan	Hard Drive - JIRA
Sales Plan	Next 6, 18 and 24 month plan	Hard Drive - Salesforce Backup
Customer Escalation Call Info	Where does a customer call and what is the process to resolution	Hard Drive - Salesforce Backup
List of Failed and Lost Customers	who, what where and why	Hard Drive - Salesforce Backup
OEM Contact List	Access to OEM Contact lists and any notes related	Hard Drive - Salesforce Backup
Customer Post Sales Support notes	Access to any notes and details from SME/ Support dealing with customers post sales	Hard Drive - Document store
Customer Pre Sales Support notes	Access to any notes and details from SME/ Support dealing with customers Pre sales	Hard Drive - Document store
Active Marketing		
Scheduled Demand Gen Campaigns		None
Upcoming Events or User Groups		None
Planned PR (Releases, Press Outreach, Awards, Speaking, Articles)		None Sales
Support Requests		None
Customer Communications		None
Website Updates		Hard Drive
Overall Marketing Plan/Schedule		Hard Drive
Active Third Party Marketing		
Online Resources (TechTarget, SpiceWorks, etc.)		None
Trade or Business Publications (online, print, sponsored programs)		None
Partners		
PR		None
Advertising		None
Web Development		None
Lead Generation		Hard Drive - Salesforce Backup

**PATENT
REEL: 043716 FRAME: 0777**

Atlantis Asset	Description	Delivery Point
Active Marketing Collateral		
Case Studies		Hard Drive - Marketing Dropbox
Brochures/Sales Kit		Hard Drive - Marketing Dropbox
White Papers		Hard Drive - Marketing Dropbox
Trade Show Booth Properties		Hard Drive - Marketing Dropbox
eBooks		Hard Drive - Marketing Dropbox
Other		Hard Drive - Marketing Dropbox
Active Partner Marketing		
Contacts		Hard Drive - Salesforce Backup
Co-Op Programs		Hard Drive - Salesforce Backup
PR		
Newswire Services		None
Press Lists		None
Press Clipping Services		None
Search/Social		
Blog		Hard-Drive - website backup
Google AdWords (for PPC)		None
Social Media Accounts:		
Twitter		Hard Drive - Spreadsheet
LinkedIn		Hard Drive - Spreadsheet
YouTube or Other Video Hosting		Hard Drive - Spreadsheet
Other Social Media		Hard Drive - Spreadsheet
Social Media Mgmt. Tools		Hard Drive - Spreadsheet
Website		
CMS Passcodes or FTP Access		Hard-Drive - website backup
Hosting Company		Rackspace
Domain Registration Services		Hard Drive - Spreadsheet
Google Analytics or Other		None
Email		
Email Management Tool (Marketo)		None
Marketing Automation Tool (if not part of Email or CRM)		Salesforce
List subscriptions (DiscoverOrg)		None
CRM		
Salesforce.com or Other (typically, marketing will have its own login)		Hard Drive - Salesforce Backup
Or DBs: Customers, Prospects, Channels, Influencers (Press/Analysts)		Hard Drive - Salesforce Backup

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Atlantis Asset	Description	Delivery Point
Subscriptions		
Business Research (i.e. Hoovers)		No subscriptions other than data.com above through salesforce
Analyst Research/Consulting (i.e. Gartner)		No subscriptions other than data.com above through salesforce

Trademarks

Any and all trademarks, tradenames and service marks affiliated with Atlantis

URLs

Atlantis computing.com
atlantiscomputing.info
atlantiscomputing.net
disklessvdi.com
Any other domains and/or domain names that are affiliated with Atlantis

Software

ILIO (all versions released, in production, beta and in development)
USX (all versions released, in production, beta and in development) + eco system
All VMWARE, HyperV and ZEN Drivers developed by Atlantis(all versions released, in production, beta and in development)
All Hyperconverged packaging/ software (all versions released, in production, beta and in development)

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