

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
Stylesheet Version v1.2

EPAS ID: PAT4132302

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
VCE COMPANY, LLC	09/06/2016
RECEIVING PARTY DATA	
Name:	VCE IP HOLDING COMPANY LLC
Street Address:	1500 N. GREENVILLE AVENUE
Internal Address:	SUITE 1100
City:	RICHARDSON
State/Country:	TEXAS
Postal Code:	75081
PROPERTY NUMBERS Total: 150	
Property Type	Number
Patent Number:	9251033
Patent Number:	9363270
Patent Number:	8990807
Patent Number:	9075664
Patent Number:	9170845
Patent Number:	8904388
Patent Number:	9304793
Patent Number:	9065746
Patent Number:	9007465
Patent Number:	9083625
Patent Number:	9256509
Patent Number:	9342784
Patent Number:	9389991
Patent Number:	9325688
Patent Number:	9280646
Patent Number:	9342349
Patent Number:	9386042
Application Number:	14557045
Application Number:	14574124

PATENT

Property Type	Number
Application Number:	13597125
Application Number:	13786047
Application Number:	13786070
Application Number:	14104423
Application Number:	14715017
Application Number:	14015324
Application Number:	13843262
Application Number:	13731337
Application Number:	14078233
Application Number:	14085549
Application Number:	14078300
Application Number:	14079561
Application Number:	14134403
Application Number:	14101186
Application Number:	14134958
Application Number:	14088997
Application Number:	14132565
Application Number:	14143979
Application Number:	14135095
Application Number:	14134543
Application Number:	14137398
Application Number:	14289019
Application Number:	14109172
Application Number:	14109350
Application Number:	14175445
Application Number:	14140845
Application Number:	14219717
Application Number:	14262072
Application Number:	14134739
Application Number:	14193060
Application Number:	14109754
Application Number:	14174577
Application Number:	14250928
Application Number:	14293377
Application Number:	14249098
Application Number:	14249148
Application Number:	14299846
Application Number:	14460695

Property Type	Number
Application Number:	14460677
Application Number:	14460729
Application Number:	14460713
Application Number:	14285525
Application Number:	14290733
Application Number:	14285022
Application Number:	14464375
Application Number:	14468767
Application Number:	14467556
Application Number:	14481369
Application Number:	14479050
Application Number:	14479028
Application Number:	14575532
Application Number:	14526045
Application Number:	14548230
Application Number:	14521789
Application Number:	14537437
Application Number:	14536447
Application Number:	14539642
Application Number:	14536448
Application Number:	14553367
Application Number:	14576664
Application Number:	14577149
Application Number:	14579258
Application Number:	14587847
Application Number:	14573544
Application Number:	14587924
Application Number:	14572281
Application Number:	14580574
Application Number:	14584139
Application Number:	14587974
Application Number:	14575716
Application Number:	14588021
Application Number:	14581228
Application Number:	14978050
Application Number:	14631218
Application Number:	14626629
Application Number:	14668751

Property Type	Number
Application Number:	14665836
Application Number:	14626358
Application Number:	14671389
Application Number:	14710080
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Application Number:	14718902
Application Number:	14703696
Application Number:	14709103
Application Number:	14717797
Application Number:	14723006
Application Number:	14919789
Application Number:	14727370
Application Number:	14719006
Application Number:	14731820
Application Number:	14801363
Application Number:	14827122
Application Number:	14740207
Application Number:	14841145
Application Number:	14825074
Application Number:	14825085
Application Number:	14825094
Application Number:	14825101
Application Number:	14852970
Application Number:	14802645
Application Number:	14843871
Application Number:	14802733
Application Number:	14947306
Application Number:	14802785
Application Number:	14802830
Application Number:	14843808
Application Number:	14801485
Application Number:	14813516
Application Number:	14825105
Application Number:	14931447
Application Number:	14932306
Application Number:	14942332
Application Number:	14919917
Application Number:	14956376

Property Type	Number
Application Number:	14947413
Application Number:	14915514
Application Number:	14986278
Application Number:	14986297
Application Number:	14986320
Application Number:	14986356
Application Number:	14986372
Application Number:	14986400
Application Number:	14984692
Application Number:	14986269
Application Number:	15057451
Application Number:	15209580
Application Number:	15082570
Application Number:	15191087
Application Number:	15191080
Application Number:	15218480
Application Number:	15233358

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	202170/9
NAME OF SUBMITTER:	JONATHAN ASHTOR
SIGNATURE:	/jashtor/
DATE SIGNED:	11/08/2016

Total Attachments: 10

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PATENT ASSIGNMENT AGREEMENT

THIS PATENT ASSIGNMENT AGREEMENT ("Assignment") is made as of September 6, 2016 by and between VCE Company, LLC, a Delaware limited liability company, with its principal place of business at 1500 N. Greenville Avenue, Suite 1100, Richardson, TX 75081 ("Assignor") and VCE IP Holding Company LLC, a Delaware limited liability company, with its principal place of business at 1500 N. Greenville Avenue, Suite 1100, Richardson, TX 75081 ("Assignee"), each individually referred to as a "Party" and collectively referred to as "Parties."

WHEREAS, Assignor and Assignee are parties to the License Agreement effective as of the Effective Date between Assignor and Assignee ("Patent License");

WHEREAS, Assignor owns certain United States and foreign patents and patent applications, including which are listed on attached Schedule 1; and

WHEREAS, Assignee desires to receive from Assignor assignments to the Assigned Patents;

NOW THEREFORE, for good and valuable consideration, Assignor hereby assigns to Assignee, all of Assignor's entire right, title and interest, including the right to sue for and collect past damages and any other remedies, in and to all United States and foreign patents and patent applications owned by Assignor, including but not limited to those listed on attached Schedule 1 (the "Assigned Patents"), and any and all reissue, substitutions, division, continuation patents and re-examination certificates based on any of the foregoing patents or patent applications, and all pending applications therefor, which claim priority from any application from which Assigned Patents are derived, as well as, all foreign counterparts of Assigned Patents. Notwithstanding anything to the contrary herein, if and to the extent there are any immaterial transcription, typographical or other similar errors in the information provided on Schedule 1, any such errors shall not affect the assignment of the Assigned Patents hereunder.

Assignor hereby authorizes the Commissioner of Patents and Trademarks of the United States Patent and Trademark Office, and the empowered officials of any other applicable offices, authorities, authorized agents, and governments to issue or transfer all said Assigned Patents to Assignee, as assignee thereof, or otherwise as Assignee may direct.

Assignor hereby agrees to execute all documents and take all other actions as may be necessary to effect the assignments and transfers set forth in this Assignment.

Without limiting the foregoing, during the term of the License Agreement, the Parties hereby agree that Assignee shall be the beneficial and record owner of any and all patents and patent applications claiming inventions made by or on behalf of Assignor, and Assignor shall and hereby does assign and transfer to Assignee all of its rights, title and interest in and to such inventions, and the Parties shall reasonably cooperate with respect to Assignee filing for patent applications claiming such inventions in its own name, in each case notwithstanding anything to the contrary in employee invention assignment agreements or similar agreements entered into by Assignor, it being understood and agreed that any such applications, and any patents issuing therefrom, shall be subject to the terms and conditions of the License Agreement.

[Signature Page Follows]

Signed by Assignor and Assignee on the date first written above:

VCE COMPANY, LLC

As Assignor

By: 

Name: Todd Pavone

Title: Chief Operating Officer

VCE IP HOLDING COMPANY LLC

By its sole member, VCE Company, LLC

As Assignee

By: 

Name: Todd Pavone

Title: Chief Operating Officer

COMMONWEALTH OF MASSACHUSETTS)

) ss.

COUNTY OF [])

Subscribed and sworn to before me on this _____ day of _____ 2016

Notary Public

Commission Expires:

SCHEDULE 1 TO PATENT ASSIGNMENT AGREEMENT**ASSIGNED PATENTS****UNITED STATES**

<u>TITLE</u>	<u>APP. NO.</u>	<u>REG. NO.</u>	<u>OWNER</u>
Automatic Monitoring & Just-in-Time Resource Provisioning System	13538910	9251033	VCE
Personas in Application Lifecycle Management	13538466	9363270	VCE
Unified Application Capacity Measurement & Operation on a Converged Infrastructure	13570683	8990807	VCE
Application Dependent DC Integration	13597104	9075664	VCE
Fast Path Factory Reset	13597150	9170845	VCE
Java Power Shell Message Queue	13738673	8904388	VCE
Virtual Template Service	13743224	9304793	VCE
Automated Configuration Mgmt. for Converged System	13729488	9065746	VCE
Obtaining Customer Support for Electronic System Using First and Second Cameras	14015357	9007465	VCE
Component Discovery Using Protocol-Specific Drivers	13731869	9083625	VCE
Intelligent Virtual Image Processor (IVIP) for Managing Virtual Images during Software Lifecycle and Beyond.	13959008	9256509	VCE
Intelligent Virtual Image Processor (IVIP) for Managing Virtual Images during Software Lifecycle and Beyond.	13959017	9342784	VCE
Automated Documentation Generation for Manual Remediation of Converged Infrastructure	14144025	9389991	VCE
Workflow Credential Mgmt. in a Converged Infrastructure	14145240	9325688	VCE
Abstracted and Distributed RBAC Control Method for Disparate Heterogeneous Entities	14109594	9280646	VCE
A System that Carries Out Complete Workload Physical & Logical Resources Profiling Analysis & Behavioral Prediction	14257225	9342349	VCE
GPS for Applications in Converged Infrastructure	14509387	9386042	VCE
Automation of De-dupe Storage Capacity Sizing	14557045		VCE

And Trending Analysis			
Data Protection Tiering	14574124		VCE
Packaged Application Delivery for Converged Infrastructure	13597125		VCE
A Method to Self-Manage Snapshots for Virtual Desktops w Centralized Portal	13786047		VCE
A Method to Embed Snapshot Mgmt. in to Virtual Machines	13786070		VCE
Machine Learning for Converged Infrastructure	14104423		VCE
Automated Configuration Mgmt. for Converged System	14715017		VCE
COMBINING DATA AND VIDEO COMMUNICATION FOR CUSTOMER SUPPORT OF ELECTRONIC SYSTEM	14015324		VCE
ACCESSING MULTIPLE CONVERGED IT INFRASTRUCTURES	13843262		VCE
MANAGING CONVERGED IT INFRASTRUCTURE WITH GENERIC OBJECT INSTANCES	13731337		VCE
Virtual Appliance Deployer	14078233		VCE
Capabilities API	14085549		VCE
Virtual Appliance Manager	14078300		VCE
Converged Infrastructure Straps	14079561		VCE
Large Scale vApp Deployment Using System Provisioning Tools	14134403		VCE
Optimized Shipping for Telephony Devices	14101186		VCE
System & Method to Manage a Group of Interrelated Devices in a Converged Infrastructure	14134958		VCE
Vision on a Stick	14088997		VCE
Converged Shell	14132565		VCE
Single Action for remediation across Converged Infrastructure	14143979		VCE
Scalable Input & Output Variable Rack Power Distribution Unit	14135095		VCE
Dynamic & Adaptive Programmatic Interface Selection (DAPIs)	14134543		VCE
APIs for Accessing Key Performance Indicator (KPI) Information	14137398		VCE
Overall Performance of Converged Infrastructure in Just One Single Metric. VPI (Vblock Performance Indicator)	14289019		VCE
Documentation Compiler Website Creator Excel Add-On	14109172		VCE

Vblock Automation & Scripting Tool (VAST)	14109350		VCE
Converged View for Physical & Virtual Data Ctr Infrastructures	14175445		VCE
Centralized Rotation & Mgmt. of Converged Infrastructure Credentials (Knights of Ni Idea Concept 2011)	14140845		VCE
Helper Resources for UI Clients	14219717		VCE
Scope Based System Mgmt.	14262072		VCE
Chassis Rail Stabilizer	14134739		VCE
Small System Equipment Carrier	14193060		VCE
vCO API for vCenter Storage Profile & Capabilities	14109754		VCE
Storage Tiering for Big Data Cloud Environments	14174577		VCE
A Method of Classifying and Tagging Datacenter Resources	14250928		VCE
Remote GPU Service	14293377		VCE
Dynamic Sizing in a MapReduce Cluster	14249098		VCE
A Method of Aggregating Storage Resources for Big Data Processing	14249148		VCE
A Method of Virtual Machine Storage Provisioning	14299846		VCE
Power Balancing Algorithm	14460695		VCE
Automatic Generation of an Elevation	14460677		VCE
Manual entry to an elevation	14460729		VCE
Network cabling plan generation	14460713		VCE
Workflow Execution Framework	14285525		VCE
Embedding Infrastructure Information on a vApp	14290733		VCE
Supply Chain Validation	14285022		VCE
Multiple Clip Assembly	14464375		VCE
Cloud Workload Deployment Optimization for Converged Infrastructure	14468767		VCE
Vblock Component Identification by Ethernet Frame	14467556		VCE
CSR1000 Vblock Reference Architecture	14481369		VCE
Framework to Alert Applications about Infrastructure Exceptions	14479050		VCE
Application Deployment Using a Mobile Device	14479028		VCE
Capacity Planning for Converged Infrastructure	14575532		VCE
CI Out-of-Box Provisioning through Modular Orchestration	14526045		VCE
Policies Based on Combinations of Atomic Constraints	14548230		VCE

Port Assignment Reference Template	14521789		VCE
Locking & Synchronization Service for Scripts	14537437		VCE
Automation Optimization in a Command Line Interface	14536447		VCE
Optimized Dynamic Matrixing of Software Environments for Application Test and Analysis	14539642		VCE
Converged Infrastructure Logical Build Optimization	14536448		VCE
Shippable VMWave Site Recovery Manager's Recovery Plan	14553367		VCE
Programmatic determination for workload placement on disparate systems based on policy	14576664		VCE
Interface for creation and management of networks and compute policies in a multi-tenant environment with capability recognition support	14577149		VCE
Method of predictive display of cloud offerings based on real time infrastructure data configurations	14579258		VCE
Policy for multi-tenancy using containers	14587847		VCE
Method and apparatus for logical remediation and initialization of non-quantified converged infrastructure systems to achieve quantified baseline converged infrastructure systems	14573544		VCE
Method of predictive display of cloud offerings based on real time infrastructure data configurations	14587924		VCE
“Vision Favorites (vFavs)”	14572281		VCE
Application Centric Compliance	14580574		VCE
Data Protection Mobility	14584139		VCE
Method to normalize service offerings data to enable policy based comparisons among disparate and multiple cloud end points in a market place	14587974		VCE
Authorization Router	14575716		VCE
An method to dynamically determine projected time period before more capacity is required	14588021		VCE
Free Form Search	14581228		VCE
Programmable Component Data Service	14978050		VCE
A Cloud Management Social Sharing System	14631218		VCE
A Cloud Management Optimization Mechanism and System Leveraging Admin User Activities	14626629		VCE
A method of Dynamically Selecting Provisioning Software	14668751		VCE
A Method of Ordering Script Execution	14665836		VCE

Geographic Redundancy as a Service	14626358		VCE
Automated Infrastructure Orchestration Layer Provisioning	14671389		VCE
Application Driven Anything as a Service Architecture	14710080		VCE
Presenting a converged infrastructure to a Cloud Portal	14719577		VCE
Pooling Resources from Any Cloud	14718902		VCE
Method and Apparatus of a command line based Action Target Framework (ATF) for Datacenter Management	14703696		VCE
Automated Ad-Hoc CI Configuration Backup System	14709103		VCE
An architecture for policy driven storage throughput control in a hyper-convergence data center	14717797		VCE
A method of aggregating logs for Converged Infrastructure	14723006		VCE
Corporate Driven Resource Allocation	14919789		VCE
C220C240 Server Adapter Block	14727370		VCE
Resource Pool Management Portal and SDK	14719006		VCE
Panorama Cloud	14731820		VCE
Avoid Version Conflict for Orchestrator Items	14801363		VCE
Generic Source Control for Orchestration Workflows	14827122		VCE
ORU Server Support Bracket	14740207		VCE
Test Framework for Orchestration	14841145		VCE
Recognition Rules Engine	14825074		VCE
Personality enabled multiple concurrent rules	14825085		VCE
Validation component abstraction	14825094		VCE
Automatic self-correction in a configuration compliance computing environment	14825101		VCE
Software Defined Compliance: System and method by which to automatically access and tag discovered entities	14852970		VCE
Correlation of element events at query time	14802645		VCE
Resource identification for application deployment	14843871		VCE
Incremental sub-graph clusters for time-invariant multi-domain correlation	14802733		VCE
Converged Infrastructure tenant foot-print	14947306		VCE
Search driven attachment of semi-structured content that itself becomes searchable	14802785		VCE

Computing pre-defined aggregations against an ad-hoc input set	14802830		VCE
Self-Optimizing Configuration Architecture	14843808		VCE
Meta data driven collection framework	14801485		VCE
A method to detect and deploy server chassis and rack level fault tolerance for storage resources in a hyper converged system	14813516		VCE
An integrated computing system validation and compliance management system	14825105		VCE
Equipment Carrier Cradle System	14931447		VCE
Power Box Conversion Concept	14932306		VCE
Eliminating default credentials	14942332		VCE
A method to optimize resource pools in a software defined storage system.	14919917		VCE
Assisted Converged Infrastructure Management in a cluster of VCE Systems	14956376		VCE
A method of injecting a task to a workflow dynamically	14947413		VCE
Workload genealogy and clustering with machine learning algorithms for Converged Infrastructure	14915514		VCE
Design Element Schema including dynamically determination of product alignment based on object corpus evaluated at run time	14986278		VCE
Triggers - Run Time Object Corpus evaluation Self-Healing Enforcement Dynamic and Multi-level	14986297		VCE
Polymorphic behavior	14986320		VCE
Structured technique for importing maintaining new vendor products for use in products sold by provider	14986356		VCE
Real Time guidance – polymorphic object behavior	14986372		VCE
Dynamic Iterative state free wizards	14986400		VCE
Troubleshooting Converged Infrastructure using Resource Chains and Machine Learning	14984692		VCE
Event Driven Framework for CI management	14986269		VCE
Dynamic template provisioning for Converged Infrastructure Management	15057451		VCE
Third Party Management Threat Analysis and Risk Mitigation	15209580		VCE
integrated configuration implemented by multiple chained wizards	15082570		VCE
Generation and persistence of network data for	15191087		VCE

simulation			
System for Randomized Network Simulation	15191080		VCE
VCE Custom Brackets for Cisco ASR-1004	15218480		VCE
USB 3.1 Type-C Service Port and 10Gbps Network port for VMAXVNXDSSDVPLEX Data Domain	15233358		VCE

NON-US

<u>COUNTRY</u>	<u>TITLE</u>	<u>APP. DATE</u>	<u>APP. NO.</u>	<u>OWNER</u>
Australia	Integrated Computing Platform Deployed in an Existing Computing Environment	12-Feb-15	2013308873	VCE
EPO	Integrated Computing Platform Deployed in an Existing Computing Environment	4-Mar-15		VCE
China	Integrated Computing Platform Deployed in an Existing Computing Environment	28-Apr-15	CN201380056418.8	VCE
Japan	Integrated Computing Platform Deployed in an Existing Computing Environment			VCE
PCT	Virtual Template Service	13-Jan-14	PCT/US2014/011332	VCE
Australia	Virtual Template Service	18-Jun-15	AU 2014207721	VCE
China	Virtual Template Service	13-Jul-15		VCE
EPO	Virtual Template Service	26-Jun-15	EP 14702156.2	VCE
Japan	Virtual Template Service	29-Jun-15		VCE
Australia	Compliance Testing Engine for Integrated Computing System	17-Feb-15		VCE
Canada	Compliance Testing Engine for Integrated Computing System	21-Feb-15		VCE
China	Compliance Testing Engine for Integrated Computing System	24-Apr-15		VCE
EPO	Compliance Testing Engine for Integrated Computing System	23-Aug-13	13766733.3 - EP2888665	VCE
Japan	Compliance Testing Engine for Integrated Computing System	24-Feb-15	2015 – 528695	VCE
Australia	ACCESSING MULTIPLE CONVERGED IT INFRASTRUCTURES	27-Aug-15	AU 2014237655	VCE

EPO	ACCESSING MULTIPLE CONVERGED IT INFRASTRUCTURES	4-Sep-15	14714051.1	VCE
Australia	Managing Converged IT Infrastructure with Generic Object Instances	17-Feb-15	AU 2013305596	VCE
Canada	Managing Converged IT Infrastructure with Generic Object Instances	23-Feb-15	2,882,660	VCE
China	Managing Converged IT Infrastructure with Generic Object Instances	24-Apr-15	2013800558153	VCE
EPO	Managing Converged IT Infrastructure with Generic Object Instances		13763343.5 - EP2888836	VCE
Japan	Managing Converged IT Infrastructure with Generic Object Instances	24-Feb-15	2015 – 528697	VCE
PCT	Converged Shell	20-Nov-14	PCT/US14/66603	VCE
PCT	Single Action for remediation across Converged Infrastructure	22-Jul-14	PCT/US2014/047585	VCE
PCT	Scalable, Input & Output Variable Rack Power Distribution Unit	12/15/2014	PCT/US2014/070381	VCE
PCT	A System that Carries Out Complete Workload Physical & Logical Resources Profiling, Analysis & Behavioral Prediction	26-Mar-15	PCT/US2015/022644	VCE
PCT	Converged View for Physical & Virtual Data Ctr Infrastructures	29-Jan-15	PCT/US2015/013579	VCE
PCT	Automatic Generation of an Elevation	31-Jul-15	PCT/US2015/043253	VCE
PCT	Network cabling plan generation	31-Jul-15	PCT/US2015/043265	VCE
PCT	Supply Chain Validation	18-Mar-15	PCT/US15/21193	VCE
PCT	Workload genealogy and clustering with machine learning algorithms for Converged Infrastructure	14-Dec-15		VCE