PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4294921

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	PATENT SECURITY INTEREST (NOTES)

CONVEYING PARTY DATA

Name	Execution Date
DELL INTERNATIONAL L.L.C.	02/27/2017
DELL PRODUCTS L.P.	02/27/2017
EMC CORPORATION	02/27/2017
EMC IP HOLDING COMPANY LLC	02/27/2017
MOZY, INC.	02/27/2017
WYSE TECHNOLOGY L.L.C.	02/27/2017

RECEIVING PARTY DATA

Name:	THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., AS COLLATERAL AGENT
Street Address:	601 TRAVIS STREET
Internal Address:	16TH FLOOR
City:	HOUSTON
State/Country:	TEXAS
Postal Code:	77002

PROPERTY NUMBERS Total: 172

Property Type	Number
Patent Number:	9547590
Patent Number:	9524355
Patent Number:	9021200
Patent Number:	8707035
Patent Number:	7412452
Application Number:	15343436
Application Number:	15416371
Application Number:	15416423
Application Number:	15416525
Application Number:	15339329
Application Number:	15339867
Application Number:	15341237
Application Number:	15342343
Application Number:	15342593

PATENT

504248243 REEL: 041829 FRAME: 0873

Property Type	Number
Application Number:	15342931
Application Number:	15344302
Application Number:	15345119
Application Number:	15345388
Application Number:	15346657
Application Number:	15346784
Application Number:	15347250
Application Number:	15347251
Application Number:	15347278
Application Number:	15347286
Application Number:	15347304
Application Number:	15347337
Application Number:	15347361
Application Number:	15348119
Application Number:	15348433
Application Number:	15348457
Application Number:	15348953
Application Number:	15349186
Application Number:	15349656
Application Number:	15349945
Application Number:	15350633
Application Number:	15350902
Application Number:	15350936
Application Number:	15351284
Application Number:	15352356
Application Number:	15352826
Application Number:	15353542
Application Number:	15353566
Application Number:	15354361
Application Number:	15355889
Application Number:	15357005
Application Number:	15361263
Application Number:	15362431
Application Number:	15362440
Application Number:	15362593
Application Number:	15362702
Application Number:	15362994
Application Number:	15363690

Property Type	Number
Application Number:	15363082
Application Number:	15363483
Application Number:	15364529
Application Number:	15365302
Application Number:	15365337
Application Number:	15365347
Application Number:	15365359
Application Number:	15366180
Application Number:	15366328
Application Number:	15366784
Application Number:	15367077
Application Number:	15367841
Application Number:	15368190
Application Number:	15368601
Application Number:	15370932
Application Number:	15372007
Application Number:	15373870
Application Number:	15373968
Application Number:	15375486
Application Number:	15375449
Application Number:	15376966
Application Number:	15377261
Application Number:	15378999
Application Number:	15378634
Application Number:	15379456
Application Number:	15379480
Application Number:	15380242
Application Number:	15380813
Application Number:	15381326
Application Number:	15381550
Application Number:	15382733
Application Number:	15383383
Application Number:	15383453
Application Number:	15384685
Application Number:	15384951
Application Number:	15385820
Application Number:	15388634
Application Number:	15389358

Property Type	Number
Application Number:	15389367
Application Number:	15389491
Application Number:	15389624
Application Number:	15391571
Application Number:	15392785
Application Number:	15395921
Application Number:	15397003
Application Number:	15397428
Application Number:	15397551
Application Number:	15398173
Application Number:	15398280
Application Number:	15399691
Application Number:	15400344
Application Number:	15401931
Application Number:	15402494
Application Number:	15403387
Application Number:	15403688
Application Number:	15405010
Application Number:	15405023
Application Number:	15406369
Application Number:	15407636
Application Number:	15407779
Application Number:	15407786
Application Number:	15408218
Application Number:	15411258
Application Number:	15411270
Application Number:	15411292
Application Number:	15411532
Application Number:	15411615
Application Number:	15411646
Application Number:	15411746
Application Number:	15413725
Application Number:	15413854
Application Number:	15414018
Application Number:	15414105
Application Number:	15414152
Application Number:	15414159
Application Number:	15414887

Property Type	Number
Application Number:	15415117
Application Number:	15415615
Application Number:	15415825
Application Number:	15416866
Application Number:	15417004
Application Number:	15417127
Application Number:	15417498
Application Number:	15418120
Application Number:	15418232
Application Number:	15418355
Application Number:	15418908
Application Number:	15419582
Application Number:	15420196
Application Number:	15420216
Application Number:	15420805
Application Number:	29583655
Application Number:	29584816
Application Number:	29585221
Application Number:	29589572
Application Number:	29591656
Application Number:	29591460
Application Number:	29592890
Application Number:	15208427
Application Number:	15180423
Application Number:	15190483
Application Number:	15215216
Application Number:	15227518
Application Number:	15227532
Application Number:	15229297
Application Number:	15341182
Application Number:	15348043
Application Number:	15381504
Application Number:	15410917
Application Number:	15412990
Application Number:	15413027
Application Number:	15413068
Application Number:	15413089
Application Number:	15413619

Property Type	Number
Application Number:	15417914
Application Number:	15418011
Application Number:	15418074
Application Number:	15418131
Application Number:	15422012
Application Number:	15423715

CORRESPONDENCE DATA

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

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ATTORNEY DOCKET NUMBER:	001909/0002
NAME OF SUBMITTER:	J. JASON MULL
SIGNATURE:	/J. Jason Mull/
DATE SIGNED:	02/28/2017

Total Attachments: 13

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PATENT SECURITY AGREEMENT dated as of February 27, 2017 (this "Agreement") among Dell International L.L.C., a Delaware limited liability company ("Dell International"), Dell Products L.P., a Texas limited partnership, EMC Corporation, a Massachusetts corporation ("EMC"), EMC IP Holding Company LLC, a Delaware limited liability company, Mozy, Inc., a Delaware corporation, and Wyse Technology L.L.C., a Delaware limited liability company, (each, a "Grantor" and collectively, the "Grantors") and The Bank of New York Mellon Trust Company, N.A., as Collateral Agent (in such capacity, the "Notes Collateral Agent").

Reference is made to (a) the Indenture dated as of June 1, 2016 among Diamond 1 Finance Corporation, a Delaware corporation ("Finco 1", which, in connection with the Dell-EMC Merger, has merged with and into Dell International, with Dell International continuing as the surviving corporation and which, following the consummation of the Dell-EMC Merger, on or about the Business Day following the Effective Date, will merge with and into New Dell International LLC, a Delaware limited liability company ("New Dell International"), with New Dell International continuing as the surviving corporation), Diamond 2 Finance Corporation, a Delaware corporation ("Finco 2", which, in connection with the Dell-EMC Merger, has merged with and into EMC, with EMC continuing as the surviving corporation), and The Bank of New York Mellon Trust Company, N.A., in its capacity as Trustee on behalf of the holders (the "Holders") of the Notes (as defined below) and Notes Collateral Agent (as from time to time amended, restated, supplemented or otherwise modified, the "Indenture") and (b) the Security Agreement dated as of September 7, 2016 (as amended, supplemented or otherwise modified from time to time, the "Security Agreement") among the Issuers, the other grantors from time to time party thereto and the Notes Collateral Agent. The Grantors are Affiliates of the Issuers, and will derive substantial benefits from the execution, delivery and performance of the obligations under the Indenture and the Notes and each is, therefore, willing to enter into this Agreement. Accordingly, the parties hereto agree as follows:

SECTION 1. <u>Terms</u>. Capitalized terms used in this Agreement and not otherwise defined herein have the meanings specified in the Security Agreement or the Indenture, as applicable. The rules of construction specified in Section 1.01(b) of the Security Agreement also apply to this Agreement.

SECTION 2. <u>Grant of Security Interest</u>. As security for the payment or performance, as the case may be, in full of the Secured Obligations, each Grantor hereby grants to the Notes Collateral Agent, its successors and assigns, for the benefit of the Secured Parties, a security interest (the "<u>Security Interest</u>") in all of such Grantor's right, title and interest in, to and under any Patents now owned or at any time hereafter acquired by such Grantor, including those listed on Schedule I (the "<u>Patent Collateral</u>").

SECTION 3. Security Agreement. The Security Interest granted to the Notes Collateral Agent herein is granted in furtherance, and not in limitation, of the security interests granted to the Notes Collateral Agent pursuant to the Security Agreement. Each Grantor hereby acknowledges and affirms that the rights and remedies of the Notes Collateral Agent with respect to the Patent Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are hereby incorporated herein by reference as if fully set forth herein. In

the event of any conflict between the terms of this Agreement and the Security Agreement, the terms of the Security Agreement shall govern.

SECTION 4. <u>Counterparts</u>. This Agreement may be executed in counterparts (and by different parties hereto on 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 signature page to this Agreement by facsimile or other electronic transmission shall be effective as delivery of a manually signed counterpart of this Agreement.

SECTION 5. <u>Governing Law</u>. This Agreement shall be construed in accordance with and governed by the law of the State of New York.

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IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement as of the day and year first above written.

DELL INTERNATIONAL L.L.C. DELL PRODUCTS L.P. EMC CORPORATION EMC IP HOLDING COMPANY LLC MOZY, INC. WYSE TECHNOLOGY L.L.C.

By:

Name: Janet B. Wright

Title: Senior Vice President and Assistant Secretary

REEL: 041829 FRAME: 0881

Schedule I

U.S. Patent Applications

Owner	Title	Date	App. No.
Dell International L.L.C.	ON-DEMAND SNAPSHOT AND PRUNE IN	11/4/2016	15/343436
	A DATA STORAGE SYSTEM		
Dell International L.L.C.	PAGE ALLOCATION AND RAID PARITY	1/26/2017	15/416371
	STRIPE WRITES FOR SMALL PAGES		
Dell International L.L.C.	A SCALABLE HIGHLY AVAILABLE	1/26/2017	15/416423
	MODULAR BATTERY SOLUTION		
Dell International L.L.C.	MANAGING FRACTIONAL QUEUE DEPTH	1/26/2017	15/416525
	FOR TRAFFIC SHAPING		
Dell Products L.P.	SYSTEMS AND METHODS FOR ADAPTIVE	10/31/2016	15/339329
	TUNING BASED ON ADJUSTABLE		
	ENCLOSURE VOLUMES	10/01/00/	15/220075
Dell Products L.P.	REDUCING THE POWER CONSUMPTION	10/31/2016	15/339867
	OF AN INFORMATION HANDLING		
	SYSTEM CAPABLE OF HANDLING BOTH		
	DYNAMIC AND STATIC DISPLAY		
Dall Day days I. D.	APPLICATIONS MECHANISM TO DOOT MILL TIPLE HOSTS	11/2/2016	15/241227
Dell Products L.P.	MECHANISM TO BOOT MULTIPLE HOSTS FROM A SHARED PCIE DEVICE	11/2/2016	15/341237
Dell Products L.P.	SYSTEM AND METHOD FOR RECOVERY	11/3/2016	15/342343
Dell Products L.P.	KEY MANAGEMENT	11/3/2010	13/342343
Dell Products L.P.	REGULATION OF AIRFLOW AND	11/3/2016	15/342593
Dell Products L.P.	PERFORMANCE IN INFORMATION	11/3/2010	13/342393
	HANDLING SYSTEMS AFTER FAN		
	FAILURE		
Dell Products L.P.	BASIC INPUT/OUTPUT SYSTEM (BIOS)	11/3/2016	15/342931
Den i foddets E.i .	SECURITY DISPLAY	11/3/2010	13/342931
Dell Products L.P.	MAGNETIC ALIGNMENT CONNECTOR	11/4/2016	15/344302
Den i foddets E.i .	WITH L-SHAPED SHUNT	11/4/2010	13/344302
Dell Products L.P.	SYSTEM AND METHOD FOR JITTER	11/7/2016	15/345119
Den i Toddets E.i .	NEGATION IN A HIGH SPEED SERIAL	11/7/2010	13/343117
	INTERFACE		
Dell Products L.P.	TRANSPORTATION PALLET AND	11/7/2016	15/345388
Don't roducts En .	METHOD FOR DEPALLETIZING LOAD	11,7,2010	15/5 15500
Dell Products L.P.	SYSTEM AND METHOD FOR	11/8/2016	15/346657
	POSITIONING AN APPLICATION WINDOW		
	BASED ON USAGE CONTEXT FOR DUAL		
	SCREEN DISPLAY DEVICE		
Dell Products L.P.	SYSTEMS AND METHODS FOR	11/9/2016	15/346784
	TRANSLOOP IMPEDANCE MATCHING OF		
	AN ANTENNA		
Dell Products L.P.	SYSTEM AND METHOD OF CANCELLING	11/9/2016	15/347250
	FLOQUET MODE RESONANCE AND FAR		
	END CROSSTALK, AND MITIGATING		
	CROSSTALK IN A PRINTED CIRCUIT		
	BOARD		
Dell Products L.P.	INFORMATION HANDLING SYSTEM	11/9/2016	15/347251
	CAPACITIVE TOUCH TOTEM		
	MANAGEMENT		

Owner	Title	Date	App. No.
Dell Products L.P.	INFORMATION HANDLING SYSTEM TOTEM TRACKING MANAGEMENT	11/9/2016	15/347278
Dell Products L.P.	SYSTEM AND METHOD OF CROSSTALK MITIGATION IN MICROSTRIP SERIAL LINKS IN A PRINTED CIRCUIT BOARD	11/9/2016	15/347286
Dell Products L.P.	INFORMATION HANDLING SYSTEM VARIABLE CAPACITANCE TOTEM INPUT MANAGEMENT	11/9/2016	15/347304
Dell Products L.P.	INFORMATION HANDLING SYSTEM CAPACITIVE TOUCH TOTEM WITH OPTICAL COMMUNICATION SUPPORT	11/9/2016	15/347337
Dell Products L.P.	INFORMATION HANDLING SYSTEM CAPACITIVE TOUCH TOTEM WITH OPTICAL COMMUNICATION SUPPORT UNDERNEATH	11/9/2016	15/347361
Dell Products L.P.	"AUTO-SCROLLING INPUT IN A DUAL- DISPLAY COMPUTING DEVICE"	11/10/2016	15/348119
Dell Products L.P.	MEMBER REPLACEMENT IN AN ARRAY OF INFORMATION STORAGE DEVICES	11/10/2016	15/348433
Dell Products L.P.	FIBRE CHANNEL AUTOMATIC MODE DETECTION AND CONFIGURATION (NPIV OR DIRECT ATTACH FC)	11/10/2016	15/348457
Dell Products L.P.	STRUCTURE AND METHOD FOR SECURING AND TRANSPORTING EQUIPMENT RACKS	11/10/2016	15/348953
Dell Products L.P.	SYSTEM AND METHOD FOR RENDERING VIDEO DATA	11/11/2016	15/349186
Dell Products L.P.	REINFORCEMENT RIGHT-ANGLE TYPE BOARD EDGE CONNECTOR	11/11/2016	15/349656
Dell Products L.P.	SYSTEM AND METHOD FOR CONTEXTUALLY MANAGING DIGITAL DISPLAY BLUE LIGHT INTENSITY	11/11/2016	15/349945
Dell Products L.P.	INFORMATION HANDLING SYSTEM HINGE AND FLEXIBLE COVER	11/14/2016	15/350633
Dell Products L.P.	BACKPLANE TESTING SYSTEM	11/14/2016	15/350902
Dell Products L.P.	SYSTEM AND METHOD FOR CENTRALIZED MANAGEMENT OF SOFTWARE SERVICES	11/14/2016	15/350936
Dell Products L.P.	AUTOMATIC ESTABLISHMENT OF BASE NETWORK TOPOLOGY IN SDN	11/14/2016	15/351284
Dell Products L.P.	FIRMWARE UPDATE CONTROL MECHANISM USING ORGANIZATIONAL GROUPS	11/15/2016	15/352356
Dell Products L.P.	"AUTOMATICALLY MODIFYING AN INPUT AREA BASED ON A PROXIMITY TO ONE OR MORE EDGES"	11/16/2016	15/352826
Dell Products L.P.	SYSTEM AND METHOD FOR PROVISIONING A USER INTERFACE FOR SCALING AND TRACKING	11/16/2016	15/353542
Dell Products L.P.	SYSTEM AND METHOD FOR PROVISIONING A USER INTERFACE FOR SHARING	11/16/2016	15/353566

Owner	Title	Date	App. No.
Dell Products L.P.	METHOD AND APPARATUS FOR CONNECTION CONTEXT AWARE RADIO COMMUNICATION MANAGEMENT WITH PREDICTIVE MOBILE PATH	11/17/2016	15/354361
Dell Products L.P.	SNAKE TEST APPARATUS FOR COPPER SWITCHES	11/18/2016	15/355889
Dell Products L.P.	SYSTEMS AND METHODS FOR PROTECTED LOCAL BACKUP	11/21/2016	15/357005
Dell Products L.P.	POLICY SETTING FOR CONTENT SHARING OF A PLURALITY OF REMOTELY CONNECTED COMPUTING DEVICES IN PHYSICAL OR VIRTUALIZED SPACE	11/25/2016	15/361263
Dell Products L.P.	SYSTEM AND METHOD FOR DEVICE ASSEMBLY BASED ON COMPONENT CHARACTERISTICS STORED WITH THE COMPONENTS	11/28/2016	15/362431
Dell Products L.P.	SYSTEM AND METHOD FOR COMMUNICATING OVER A CONNECTOR DEVICE BASED ON COMPONENT CHARACTERISTICS STORED WITH THE COMPONENTS OF THE CONNECTOR DEVICE	11/28/2016	15/362440
Dell Products L.P.	SYSTEM AND METHOD FOR DISPLAY AUTO-CORRECTION IMPEDANCE MISMATCH CONTROL	11/28/2016	15/362593
Dell Products L.P.	METHOD AND APPARATUS FOR CONCURRENT RADIO COMMUNICATION IN SHARED SPECTRUM	11/28/2016	15/362702
Dell Products L.P.	METHOD AND APPARATUS FOR PREDICTING MOBILE DEVICE WIRELESS LINK QUALITY OF SERVICE REQUIREMENTS ALONG A PREDICTED PATH	11/29/2016	15/362994
Dell Products L.P.	SYSTEMS AND METHODS TO CONTROL TRANSMIT POWER AND SPECIFIC ABSORPTION RATE (SAR) FOR WIRELESS DEVICES	11/29/2016	15/363,690
Dell Products L.P.	MECHANISM TO CONTROL TEMPERATURE BASED ON TEMPERATURE TREND	11/29/2016	15/363082
Dell Products L.P.	METHOD FOR EXTRACTING BIOS ATTRIBUTES FOR BIOS MANAGEMENT AND SYSTEM THEREFOR	11/29/2016	15/363483
Dell Products L.P.	BACKLIGHT COMPENSATION FOR A COMPUTING DEVICE WITH TWO OR MORE DISPLAY DEVICES	11/30/2016	15/364529
Dell Products L.P.	SYSTEM AND METHOD FOR POLICY BASED MANAGEMENT OF A COMMUNICATION DEVICE CONFIGURATION PERSISTENCE	11/30/2016	15/365302
Dell Products L.P.	POWER AWARE RECEIVER/TRANSMITTER ADAPTATION	11/30/2016	15/365337

Owner	Title	Date	App. No.
	FOR HIGH SPEED SERIAL INTERFACES		
Dell Products L.P.	SYSTEM AND METHOD FOR PROVIDING PERSONALITY SWITCHING IN A SOLID STATE DRIVE DEVICE	11/30/2016	15/365347
Dell Products L.P.	SYSTEM AND METHOD OF CELL BLOCK VOLTAGE ANALYTICS TO IMPROVE BALANCING EFFECTIVENESS AND IDENTIFY SELF-DISCHARGE RATE	11/30/2016	15/365359
Dell Products L.P.	SYSTEM AND METHOD FOR UPDATING A UEFI IMAGE IN AN INFORMATION HANDLING SYSTEM	12/1/2016	15/366180
Dell Products L.P.	DISPLAY BASE WIRELESS CHARGING PAD AND INTEGRATED CHARGER CONTROL	12/1/2016	15/366328
Dell Products L.P.	SYSTEMS AND METHODS FOR MANAGEMENT OF AN INFORMATION HANDLING SYSTEM HAVING NO ALTERNATING CURRENT POWER SOURCE	12/1/2016	15/366784
Dell Products L.P.	METHOD AND APPARATUS FOR CONTEXT AWARE CONCURRENT RADIO COMMUNICATION WITH CO-EXISTING WWAN AND WLAN RADIOS IN SHARED SPECTRUM	12/1/2016	15/367077
Dell Products L.P.	SYSTEM AND METHOD TO EXPOSE REMOTE VIRTUAL MEDIA PARTITIONS TO VIRTUAL MACHINES	12/2/2016	15/367841
Dell Products L.P.	DYNAMICALLY COOLING SYSTEM	12/2/2016	15/368190
Dell Products L.P.	LEDGER-CHAINED DISTRIBUTED INFORMATION HANDLING SYSTEMS AND METHODS	12/3/2016	15/368601
Dell Products L.P.	SEAMLESS DATA MIGRATION IN A CLUSTERED ENVIRONMENT	12/6/2016	15/370932
Dell Products L.P.	LEVER RELEASE MECHANISM FOR INFORMATION HANDLING SYSTEM CHASSIS SLED	12/7/2016	15/372007
Dell Products L.P.	INFORMATION HANDLING SYSTEM COMPONENT TEMPERATURE REGULATION BASED ON RELIABILITY AND MAXIMUM TEMPERATURE REQUIREMENTS	12/9/2016	15/373870
Dell Products L.P.	SYSTEM AND METHOD FOR INCREASING CURRENT MONITOR POWER TELEMETRY ACCURACY	12/9/2016	15/373968
Dell Products L.P.	METHOD AND APPARATUS FOR OPTIMIZING SELECTION OF RADIO CHANNEL FREQUENCY AND ADAPTIVE CLEAR CHANNEL ASSESSMENT THRESHOLD FOR UNLICENSED SMALL CELL WWAN BASE STATION	12/12/2016	15/375,486
Dell Products L.P.	METHOD AND APPARATUS FOR CONTEXT AWARE CONCURRENT DATA TRANSMISSION SCHEDULING FOR PAN	12/12/2016	15/375449

Owner	Title	Date	App. No.
	RADIO TECHNOLOGY		
Dell Products L.P.	MULTICAST OPTIMIZATION-IGMP	12/13/2016	15/376966
Dell'i Toddets E.i .	SNOOPING-ON-DEMAND	12,13,2010	13/3/0900
Dell Products L.P.	SYSTEMS AND METHODS FOR CONTROL	12/13/2016	15/377261
	OF A CLOSED-LOOP SYSTEM		
Dell Products L.P.	SYSTEMS AND METHODS FOR	12/14/2016	15/378,999
	RELIABILITY CONTROL OF		
	INFORMATION HANDLING SYSTEM		
Dell Products L.P.	CONFIGURABLE PCIE BANDWIDTH	12/14/2016	15/378634
	UTILIZATION BETWEEN PCI RISER AND		
	OTHER INTERNAL FUNCTIONS		
Dell Products L.P.	SYSTEM AND METHOD FOR	12/14/2016	15/379456
	AUTOMATED ON-DEMAND CREATION OF		
	AND EXECUTION OF A CUSTOMIZED		
	DATA INTEGRATION SOFTWARE		
	APPLICATION		
Dell Products L.P.	METHOD AND APPARATUS FOR	12/14/2016	15/379480
	OPTIMIZING MULTI-PROTOCOL RADIO		
	TECHNOLOGY USING LOCAL QOS		
	ADVERTISING		
Dell Products L.P.	METHOD FOR AUTOMATIC CORRECTION	12/15/2016	15/380,242
	OF NONVOLATILE MEMORY IN		
	INFORMATION HANDLING SYSTEMS		
Dell Products L.P.	SYSTEMS AND METHODS FOR	12/15/2016	15/380813
	PRIORITIZED MULTI-NODE SERVER AND		
	INFRASTRUCTURE AVAILABILITY		
	DURING POWER CAPACITY LOSS		
Dell Products L.P.	FLEXIBLE INFORMATION HANDLING	12/16/2016	15/381326
	SYSTEM DISPLAY RESOLUTION SCALING		
Dell Products L.P.	SYSTEMS AND METHODS FOR ENABLING	12/16/2016	15/381550
	MULTIPLE BATTERY BACKUP UNITS IN A		
	SYSTEM		
Dell Products L.P.	METHOD AND APPARATUS FOR	12/18/2016	15/382733
	OPTIMIZING SELECTION OF RADIO		
	CHANNEL FREQUENCY AND ADAPTIVE		
	CLEAR CHANNEL ASSESSMENT		
	THRESHOLD FOR WLAN ACCESS POINTS		
Dell Products L.P.	LICENSE MANAGEMENT USING A BASIC	12/19/2016	15/383383
	INPUT/OUTPUT SYSTEM (BIOS)	12/10/2016	17/202/72
Dell Products L.P.	METHOD FOR AUTHENTICATING	12/19/2016	15/383453
	FIRMWARE VOLUME AND SYSTEM		
	THEREFOR	10/00/00/0	15/201505
Dell Products L.P.	NETWORK ELEMENT REACHABILITY	12/20/2016	15/384685
Dell Products L.P.	SYSTEMS AND METHODS FOR	12/20/2016	15/384951
	CONFIGURATION OF HOT-INSERTED		
	DEVICE PRIOR TO OPERATING SYSTEM		
	CONTROL OF DEVICE		
Dell Products L.P.	SWITCH DEPENDENT TEAMING FOR	12/20/2016	15/385820
	HIGH AVAILABILITY OF VIRTUAL		
	NETWORK FUNCTIONS		
Dell Products L.P.	SYSTEM AND METHOD FOR PAM-4	12/22/2016	15/388634
	TRANSMITTER BIT EQUALIZATION FOR		

Owner	Title	Date	App. No.
	IMPROVED CHANNEL PERFORMANCE		
Dell Products L.P.	METHOD AND APPARATUS FOR SELECTING AMONG MULTI-PROTOCOL RADIO TECHNOLOGY USING LOCAL QOS ADVERTISEMENT	12/22/2016	15/389358
Dell Products L.P.	METHOD AND APPARATUS FOR OPTIMIZING SELECTION OF RADIO CHANNEL FREQUENCY AND GEOGRAPHIC LOCATION FOR WLAN ACCESS POINTS	12/22/2016	15/389367
Dell Products L.P.	ALIENWARE EXTERNAL GRAPHICS ORCHESTRATION SOFTWARE SYSTEM AND PROCESS	12/23/2016	15/389491
Dell Products L.P.	MECHANICALLY MANAGED NETWORK SWITCH APPLIANCE FOR SMALL BUSINESS	12/23/2016	15/389624
Dell Products L.P.	SYSTEM AND METHOD OF SUPPORTING A POINTING DEVICE	12/27/2016	15/391571
Dell Products L.P.	METHOD AND APPARATUS FOR OPTIMIZING MULTI-PROTOCOL RADIO TECHNOLOGY USING DEVICE TO DEVICE SPECTRAL COORDINATION WITH LOCAL QOS ADVERTISING	12/28/2016	15/392785
Dell Products L.P.	SYSTEM AND METHOD FOR REDUCING BOOT TIME OF A WORKLOAD CONFIGURATION ON A TARGET SERVER	12/30/2016	15/395921
Dell Products L.P.	SYSTEM AND METHOD FOR IMPROVING PERIPHERAL COMPONENT INTERFACE EXPRESS BUS PERFORMANCE IN AN INFORMATION HANDLING SYSTEM	1/3/2017	15/397003
Dell Products L.P.	SYSTEM AND METHOD FOR COORDINATING IMAGE CAPTURE IN A CAMERA HIDDEN BEHIND A DISPLAY DEVICE	1/3/2017	15/397428
Dell Products L.P.	SYSTEM AND METHOD FOR REDEFINING DEPTH-BASED EDGE SNAPPING FOR THREE-DIMENSIONAL POINT SELECTION	1/3/2017	15/397551
Dell Products L.P.	LIQUID COOLING SYSTEM WITH A DISPLACEMENT APPENDAGE FOR AN INFORMATION HANDLING SYSTEM	1/4/2017	15/398173
Dell Products L.P.	SYSTEM AND METHOD FOR DIRECTORY SERVICE AUTHENTICATION ON A SERVICE PROCESSOR	1/4/2017	15/398280
Dell Products L.P.	DECENTRALIZED CODE MANAGEMENT OF CODE LOCATED IN NETWORKED DEVICES	1/5/2017	15/399691
Dell Products L.P.	INFORMATION HANDLING SYSTEM PHYSICAL COMPONENT INVENTORY TO AID OPERATIONAL MANAGEMENT THROUGH NEAR FIELD COMMUNICATION DEVICE INTERACTION	1/6/2017	15/400344

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Dell Products L.P.	NON-DISRUPTIVE SYNCHRONIZED CONFIGURATION SYSTEM FOR SECURE DEPLOYMENT AND MANAGEMENT OF DEPENDENT DEVICES	1/9/2017	15/401,931
Dell Products L.P.	SEAMLESS METHOD FOR BOOTING FROM A DEGRADED SOFTWARE RAID VOLUME ON UEFI SYSTEM	1/10/2017	15/402494
Dell Products L.P.	WIRELESSLY TRANSMITTING POWER FROM A FIRST TRANSCEIVER TO A SECOND TRANSCEIVER IN A COMPUTING DEVICE	1/17/2017	15/403387
Dell Products L.P.	CONTACT GEOMETRY FOR CONTACTS IN HIGH SPEED DATA CONNECTORS	1/11/2017	15/403688
Dell Products L.P.	DYNAMIC POWER BUDGET ALLOCATION	1/12/2017	15/405010
Dell Products L.P.	CHASSIS EXTERNAL WALL LIQUID COOLING SYSTEM	1/12/2017	15/405023
Dell Products L.P.	SYSTEMS AND METHODS FOR FLEXIBLE POWER TOPOLOGY FOR DISPLAY ASSEMBLY IN AN INFORMATION HANDLING SYSTEM	1/13/2017	15/406369
Dell Products L.P.	WIRELESSLY COMMUNICATING DATA BETWEEN TWO HOUSING OF A COMPUTING DEVICE	1/17/2017	15/407636
Dell Products L.P.	SYSTEM AND METHOD FOR MULTIPLE SEQUENTIAL FACTOR AUTHENTICATION FOR DISPLAY DEVICES	1/17/2017	15/407779
Dell Products L.P.	SYSTEM AND METHOD FOR COLLABORATIVE PURCHASING IN AN INFORMATION HANDLING SYSTEM	1/17/2017	15/407786
Dell Products L.P.	EXPANDABLE DISTRIBUTED CORE ARCHITECTURES HAVING RESERVED INTERCONNECT BANDWIDTHS	1/17/2017	15/408218
Dell Products L.P.	FLEXIBLE INFORMATION HANDLING SYSTEM AND DISPLAY CONFIGURATION MANAGEMENT	1/20/2017	15/411258
Dell Products L.P.	FLEXIBLE INFORMATION HANDLING SYSTEM DISPLAY USER INTERFACE CONFIGURATION AND PROVISIONING	1/20/2017	15/411270
Dell Products L.P.	FLEXIBLE INFORMATION HANDLING SYSTEM DISPLAY USER INTERFACE PERIPHERAL KEYBOARD CONFIGURATION	1/20/2017	15/411292
Dell Products L.P.	SYSTEM AND METHOD FOR WIRELESS HANDHELD DEVICE SECURITY IN A DATA CENTER ENVIRONMENT	1/20/2017	15/411532
Dell Products L.P.	METHOD FOR GENERATING AND EXECUTING ENCRYPTED BIOS FIRMWARE AND SYSTEM THEREFOR	1/20/2017	15/411615
Dell Products L.P.	HIGH CAPACITY POWER DISTRIBUTION PANEL FOR A MODULAR DATA CENTER	1/20/2017	15/411646
Dell Products L.P.	NARROW BORDER PLASTIC COVER WITH OPTIMAL OPTO-MECHANICAL PROPERTIES	1/20/2017	15/411746

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Dell Products L.P.	SYSTEM AND METHOD FOR DEBUGGING IN AN INFORMATION HANDLING SYSTEM	1/24/2017	15/413725
Dell Products L.P.	DYNAMICALLY CONTROLLED DISTRIBUTED WORKLOAD EXECUTION	1/24/2017	15/413854
Dell Products L.P.	SYSTEM AND METHOD FOR A MULTI- COIL WIRELESS POWER TRANSFER	1/24/2017	15/414018
Dell Products L.P.	MANAGEMENT OF NETWORK CONNECTIONS AND PRIORITIES BASED ON DEVICE PROFILES	1/24/2017	15/414105
Dell Products L.P.	UNIFIED EXTENSIBLE FIRMWARE INTERFACE SYSTEM MANAGEMENT MODE INITIALIZATION PROTECTIONS WITH SYSTEM MANAGEMENT INTERRUPT TRANSFER MONITOR SANDBOXING	1/24/2017	15/414152
Dell Products L.P.	METHOD TO FACILITATE RAPID DEPLOYMENT AND RAPID REDEPLOYMENT OF AN INFORMATION HANDLING SYSTEM	1/24/2017	15/414159
Dell Products L.P.	SYSTEM AND METHOD FOR INTERCEPT OF UEFI BLOCK I/O PROTOCOL SERVICES FOR BIOS BASED HARD DRIVE ENCRYPTION SUPPORT	1/25/2017	15/414887
Dell Products L.P.	APPARATUS AND METHOD FOR ENABLING FINGERPRINT-BASED SECURE ACCESS TO A USER-AUTHENTICATED OPERATIONAL STATE OF AN INFORMATION HANDLING SYSTEM	1/25/2017	15/415117
Dell Products L.P.	MODULAR SYSTEM AWARENESS IN VIRTUALIZED INFORMATION SYSTEMS	1/25/2017	15/415615
Dell Products L.P.	HYBRID THERMAL FOOT AND PEN STORAGE WELL	1/25/2017	15/415825
Dell Products L.P.	HEURISTIC LEARNING FOR SETTING AUTOMATIC DISPLAY BRIGHTNESS BASED ON AN AMBIENT LIGHT SENSOR	1/26/2017	15/416866
Dell Products L.P.	MULTICAST ROUTING VIA NON- MINIMAL PATHS	1/26/2017	15/417004
Dell Products L.P.	FAIL-ON COOLING SYSTEM	1/26/2017	15/417127
Dell Products L.P.	ENHANCING PEAK POWER CAPABILITY AND HOLD UP TIME IN LLC TOPOLOGY APPLICATION	1/27/2017	15/417498
Dell Products L.P.	CONFIGURABLE KEYBOARD WITH RETRACTION PER KEY CONTROL VIA GAME PROFILE	1/27/2017	15/418120
Dell Products L.P.	ELECTRICAL METHODS FOR GAME PROFILE CONFIGURABLE RETRACTABLE KEYBOARD KEYS	1/27/2017	15/418232
Dell Products L.P.	NEW FEATURE THAT WILL ALLOW A SWITCH WITH A GUI TO EASILY COPY INTERFACES (PORTS) FROM ONE TO ANOTHER OR MULTIPLES WITHOUT INTER-SWITCH CONNECTION.	1/27/2017	15/418355

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Dell Products L.P.	A METHOD AND SYSTEM TO CONVERT GLOBALLY UNIQUE IDENTIFIERS TO ELECTRONIC DATA INTERCHANGE DOCUMENT IDENTIFIERS	1/30/2017	15/418908
Dell Products L.P.	PARALLEL DIAGNOSTIC/SOFTWARE INSTALLATION SYSTEM	1/30/2017	15/419582
Dell Products L.P.	SYSTEM AND METHOD FOR THERMAL CONTROL OF AN INFORMATION HANDLING SYSTEM	1/31/2017	15/420196
Dell Products L.P.	ADAPTIVE MICROPHONE SIGNAL PROCESSING FOR A FOLDABLE COMPUTING DEVICE	1/31/2017	15/420216
Dell Products L.P.	SYSTEM AND METHOD FOR SMART AND SECURE E-MAIL USING PER-RECIPIENT ATTRIBUTES	1/31/2017	15/420805
Dell Products L.P.	INFORMATION HANDLING SYSTEM	11/8/2016	29/583655
Dell Products L.P.	INFORMATION HANDLING SYSTEM	11/17/2016	29/584816
Dell Products L.P.	INFORMATION HANDLING SYSTEM	11/22/2016	29/585221
Dell Products L.P.	INFORMATION HANDLING SYSTEM	1/3/2017	29/589572
Dell Products L.P.	INFORMATION HANDLING SYSTEM HOUSING	1/23/2017	29/591,656
Dell Products L.P.	INFORMATION HANDLING SYSTEM HOUSING	1/20/2017	29/591460
Dell Products L.P.	INFORMATION HANDLING SYSTEM	2/3/2017	29/592890
EMC Corporation	CROSS SITE RECOVERY OF A VM	7/12/2016	15/208427
EMC Corporation	DETERMINING SERVER LOCATION IN A DATA CENTER	6/23/2016	15/180423
EMC Corporation	SOFT-SWITCH IN STORAGE SYSTEM	6/13/2016	15/190483
EMC Corporation	EXPRESSION BASED DECLARATIVE DATA SERVICE EXECUTION CHAINING	7/20/2016	15/215216
EMC Corporation	PARALLEL PROCESSING DATABASE SYSTEM WITH A SHARED METADATA STORE	8/3/2016	15/227518
EMC Corporation	LARGE SCALE VIDEO ANALYTICS ARCHITECTURE	8/3/2016	15/227532
EMC Corporation	SYSTEM AND METHOD FOR CACHE MANAGEMENT	8/5/2016	15/229297
Wyse Technology L.L.C.	ISOLATING A REDIRECTED SMART CARD READER TO A REMOTE SESSION	11/2/2016	15/341182
Wyse Technology L.L.C.	PROVIDING MULTIPLE USER PROFILES TO A SINGLE USER	11/10/2016	15/348043
Wyse Technology L.L.C.	SYNCHRONIZATION OF USER DATA IN A VIRTUAL DESKTOP ENVIRONMENT	12/16/2016	15/381504
Wyse Technology L.L.C.	STATE-BASED IRP MANAGEMENT FOR REDIRECTED DEVICE	1/20/2017	15/410917
Wyse Technology L.L.C.	ENABLING REDIRECTION POLICIES TO BE APPLIED BASED ON THE WINDOWS CLASS OF A USB DEVICE	1/23/2017	15/412990
Wyse Technology L.L.C.	ENABLING SESSION LEVEL	1/23/2017	15/413027

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	RESTRICTIONS FOR DEVICES HAVING DISJOINT STACKS		
Wyse Technology L.L.C.	ENABLING WPD DEVICES TO BE MANAGED AT THE CAPABILITY LEVEL	1/23/2017	15/413068
Wyse Technology L.L.C.	OPTIMIZING DATA TRANSFER FOR REDIRECTED UASP DEVICES	1/23/2017	15/413089
Wyse Technology L.L.C.	ENABLING SCSI COMMANDS THAT ARE NOT SUPPORTED BY A CLIENT TERMINAL	1/24/2017	15/413619
Wyse Technology L.L.C.	ATTACHING A WINDOWS FILE SYSTEM TO A REMOTE NON-WINDOWS DISK STACK	1/27/2017	15/417914
Wyse Technology L.L.C.	RESTRICTING APPLICATIONS AND USERS THAT CAN MAKE PERSISTENT CHANGES TO ARTIFACTS	1/27/2017	15/418,011
Wyse Technology L.L.C.	SECURING ACCESS TO FUNCTIONALITY OF A FILE-BASED WRITE FILTER	1/27/2017	15/418,074
Wyse Technology L.L.C.	ENABLING REDIRECTION OF MASS STORAGE DEVICES OF ANY INTERFACE	1/27/2017	15/418,131
Wyse Technology L.L.C.	MECHANISM TO FREE UP THE OVERLAY OF A FILE-BASED WRITE FILTER	2/1/2017	15/422012
Wyse Technology L.L.C.	AUTHENTICATION ON THIN CLIENTS USING INDEPENDENT DEVICES	2/3/2017	15/423715

Granted U.S. Patents

Owner	Title	Granted Date	Patent Number
EMC IP Holding Company	MANAGING MEMORY	1/17/2017	9547590
LLC			
Mozy, Inc.	METHODS FOR DELIVERING TASK-	12/20/2016	9524355
	RELATED DIGITAL CONTENT BASED ON		
	TASK-ORIENTED USER ACTIVITY		
Mozy, Inc.	DATA STORAGE SYSTEM WITH	4/28/2015	9021200
	PREDICTIVE MANAGEMENT OF		
	PHYSICAL STORAGE USE BY VIRTUAL		
	DISKS		
Mozy, Inc.	HIGH PRIVACY OF FILE	4/22/2014	8707035
	SYNCHRONIZATION WITH SHARING		
	FUNCTIONALITY		
Mozy, Inc.	DATA STORAGE AND RETRIEVAL	8/12/2008	7412452
	SYSTEM WITH INTENTIONAL CATEGORY		
	REPRESENTATIONS TO PROVIDE		
	DYNAMIC CATEGORIZATION OF		
	INFORMATION ITEMS		

PATENT REEL: 041829 FRAME: 0891

RECORDED: 02/28/2017