

## PATENT ASSIGNMENT COVER SHEET

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<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.	10/27/2015
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	Hewlett Packard Enterprise Development LP
<b>Street Address:</b>	11445 Compaq Center Drive West
<b>City:</b>	Houston
<b>State/Country:</b>	TEXAS
<b>Postal Code:</b>	77070
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15469285
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<b>NAME OF SUBMITTER:</b>	LAURA M. ZAVALA
<b>SIGNATURE:</b>	/Laura M. Zavala/
<b>DATE SIGNED:</b>	05/22/2018
<b>Total Attachments: 3</b>	
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PATENT ASSIGNMENT Hewlett-Packard Development Company, L.P. TO  
Hewlett Packard Enterprise Development LP

**PATENT ASSIGNMENT**  
**FROM**  
**Hewlett-Packard Development Company, L.P.**  
**TO**  
**Hewlett Packard Enterprise Development LP**

This Patent Assignment, together with the attached Schedule A, is effective as of October 2, 2015.

WHEREAS, **Hewlett-Packard Development Company, L.P.**, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, Texas 77070, U.S .A. (hereinafter referred to as "Assignor"), is the legal title holder of the patents and patent applications identified in the attached Schedule A (collectively referred to as "Assigned Patents and Patent Applications");

WHEREAS, **Hewlett Packard Enterprise Development LP**, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, Texas 77070, U.S .A. (hereinafter referred to as "Assignee") desires to acquire Assignor's entire right, title and interest, including the right of priority, in, to and under the Assigned Patents and Patent Applications; and

NOW THEREFORE, for good and valuable consideration, the adequacy of which is hereby acknowledged, Assignor and Assignee agree as follows:

Assignor hereby assigns, transfers, conveys and delivers to Assignee the entirety of Assignor's right, title and interest, including without limitation the right of priority, in, to and under the Assigned Patents and Patent Applications, and any inventions and improvements set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for any of the Assigned Patents and Patent Applications, and any and all patents and patent applications of the United States and of foreign countries thereto that may be granted thereon or therefor, and any reissues, or reexaminations, or extensions thereof and any goodwill of the business symbolized by the Assigned Patents and Patent Applications, and the registration thereof. Assignee shall have the right to sue, counterclaim and recover for past, present, and future

PATENT ASSIGNMENT Hewlett-Packard Development Company, L.P. TO  
Hewlett Packard Enterprise Development LP

infringement and collect any royalties to third parties, damages (including past damages), or other income relating to the Assigned Patents and Patent Applications.

In connection with the foregoing, Assignor hereby authorizes the respective patent office or governmental agency in each jurisdiction to record the transfer of the Assigned Patents to Assignee as assignee of Assignor's right, title and interest therein, and to issue any and all patents or certificates of invention or equivalent which may be granted upon any of the Assigned Patents in the name of Assignee, as the assignee to the entire interest therein.

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be executed by their authorized representatives.

**FOR HEWLETT-PACKARD DEVELOPMENT  
COMPANY, L.P.**

By: HPQ Holdings, LLC, its General Partner

By: Robert Wasson  
Sigr DocuSigned by:  
F13BF673837B481...

Robert D. Wasson  
Name

Chief Patent Counsel  
Title

October 27, 2015  
Date

**FOR HEWLETT PACKARD  
ENTERPRISE DEVELOPMENT LP**

By: Enterprise DC Holdings LLC, its General  
Partner

By: Curtis G. Rose  
Sigr DocuSigned by:  
8C016629078F4D3...

Curtis G. Rose  
Name

Chief Intellectual Property Counsel  
Title

October 27, 2015  
Date

## Schedule A of Patent Assignment

HP Record ID	Status	Patent Number	Filing Date	Grant Date	Application Number	CC	Title
82931446	Granted	8678600	3/19/2010	3/25/2014	13/387010	US	OPTICAL STAR COUPLER
83099529	Granted	9082745	4/30/2010	7/14/2015	13/640290	US	CIRCUIT MODULE
83242125	Granted	8821033	10/29/2010	9/2/2014	13/881087	US	OPTICAL CONNECTOR
83254989	Granted	8805189	5/20/2013	41863	13/898111	US	Two-phase Optical Communication Methods And Optical Bus Systems For Implementing The Same
83278378	Published		1/21/2011		13/991853	US	WAVEFRONT SYNTHESIZER SYSTEMS
83821222	Published		8/31/2011		14/342098	US	MULTIMODE FIBER FOR MODULATABLE SOURCE
83852065	Published		9/30/2011		14/347366	US	OPTICAL POWER SPLITTER INCLUDING A ZIG-ZAG
83883386	Published		10/28/2011		14/353995	US	DEVICES INCLUDING A DIAMOND LAYER
83930310	Published		12/9/2011		14/357781	US	Optical Connections
83948796	Published		1/10/2012		14/364082	US	OPTICAL CONNECTORS
83959822	Published		1/31/2012		14/371537	US	COMBINATION UNDERFILL-DAM AND ELECTRICAL-INTERCONNECT STRUCTURE FOR AN OPTO-ELECTRONIC ENGINE
83987018	Granted	9130342	2/29/2012	9/8/2015	14/373385	US	UNIDIRECTIONAL RING LASERS
83992351	Allowed		4/11/2012		14/373457	US	ROUTING OPTICAL SIGNALS
84113029	Published		7/30/2012		14/416781	US	COMPACT PHOTONIC PLATFORMS
84121874	Published		1/14/2015		14/596790	US	OPTICAL DEVICES BASED ON NON-PERIODIC SUB-WAVELENGTH GRATINGS
90017936	Application		1/30/2013		14/763577	US	DIRECTIONAL GRATING-BASED BACKLIGHTING
82242926	Application		10/30/2008		12/261405	US	REFINING A CONSTRAINT OF A COMPUTER EXECUTABLE SERVICE
82837277	Published		10/28/2011		13/283981	US	PROVISIONING IAAS SERVICES
82901665	Granted	9158568	1/30/2012	42290	13/360956	US	INPUT/OUTPUT OPERATIONS AT A VIRTUAL BLOCK DEVICE OF A STORAGE SERVER
83184693	Published		7/30/2010		13/812585	US	INFORMATION TECHNOLOGY SERVICE MANAGEMENT
84265114	Application		8/7/2015		14/820926	US	CLOUD MODELS BASED ON NETWORK DEFINITION DATA
82168508	Granted	5765024	4/26/1996	6/9/1998	08/639881	US	SYSTEM FOR REQUESTING ACCESS TO DMA CHANNEL HAVING ADDRESS NOT IN DMA REGISTERS BY REPLACING ADDRESS OF DMA REGISTER WITH ADDRESS OF REQUESTED DMA CHANNEL
82168511	Granted	5875351	6/9/1998	2/23/1999	09/094218	US	SYSTEM FOR REQUESTING ACCESS TO DMA CHANNEL HAVING ADDRESS NOT IN DMA REGISTERS BY REPLACING ADDRESS OF DMA REGISTER WITH ADDRESS OF REQUESTED DMA CHANNEL
82267835	Granted	6128194	8/5/1997	10/3/2000	08/906026	US	PC CARD WITH ELECTROMAGNETICAND THERMAL MANAGEMENT
84152843	Application		2/4/2015		14/613843	US	ENDPOINT POLICY CHANGE
82002872	Granted	6854065	7/30/2001	2/8/2005	09/918767	US	Loadshedding Uninterruptible Power Supply

PATENT

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