05/13/2014 502805686

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2852281

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date | |
|------------------------|----------------|--|
| RAYMOND G BEAUSOLEIL | 01/18/2012 | |
| PAUL KESSLER ROSENBERG | 01/19/2012 | |
| DAVID A FATTAL | 01/19/2012 | |
| TERREL MORRIS | 01/18/2012 | |
| MARCO FIORENTINO | 01/19/2012 | |

RECEIVING PARTY DATA

| Name: | HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P. |
|-----------------|---|
| Street Address: | 11445 COMPAQ CENTER DRIVE WEST |
| City: | HOUSTON |
| State/Country: | TEXAS |
| Postal Code: | 77070 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14357781 |

CORRESPONDENCE DATA

Fax Number: (970)778-4063

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

US Mail.

Phone: 5417158443 Email: ipa.mail@hp.com

Correspondent Name: **HEWLETT-PACKARD COMPANY** 3404 E. HARMONY ROAD, M/S 35 Address Line 1:

Address Line 2: INTELLECTUAL PROPERTY ADMINISTRATION

Address Line 4: FORT COLLINS, COLORADO 80528

| ATTORNEY DOCKET NUMBER: | 83930310 |
|-------------------------|-------------------------|
| NAME OF SUBMITTER: | DENISE HENNING-WILSON |
| SIGNATURE: | /Denise Henning-Wilson/ |
| DATE SIGNED: | 05/13/2014 |

Total Attachments: 4

source=83930310 Executed Assignment#page1.tif

PATENT REEL: 032875 FRAME: 0034 502805686

source=83930310 Executed Assignment#page2.tif
source=83930310 Executed Assignment#page3.tif
source=83930310 Executed Assignment#page4.tif

PATENT REEL: 032875 FRAME: 0035 HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

PATENT APPLICATION

RECORD ID: ____

82839822

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPDC), in furtherance of my/our obligations to the Hewlett-Packard Company and its subsidiaries and affiliates, and do hereby assign and transfer to HPDC, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Letters Patent of the United States entitled:

Optical Connections

| Filing Date: 12/9/2011 | Application No.: PCT/US11/64126 |
|---|--|
| and the invention(s) and improvement(s | s) set forth therein, and any and all continuations, continuations-in-part (C-I- |
| P's), divisionals, and renewals of and su | ibstitutes for said application for said Letters Patent, and any and all Letters |
| Patent of the United States and of cou | ntries foreign thereto which may be granted thereon or therefore; and any |
| eissues, or reexaminations, or extension | ns of said Letters Patent. |
| Inve additionally authorize HDD | C to file applications in mulaur name for Latters Detect in any country to be |

I/we additionally authorize HPDC to file applications in my/our name for Letters Patent in any country, to be held and enjoyed by HPDC, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Letters Patent respectively may be granted, reissued or extended, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, and transfer not been made;

AND I/we hereby covenant that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/we will, each time a request is made, and without undue delay, execute and deliver all such papers as may be necessary or desirable to perfect the title to said invention(s) or improvement(s), said application and said Letters Patent, to HPDC, its successors, assigns, nominees or legal representatives, and I/we agree to communicate to HPDC, or to its nominee, all known facts respecting said invention(s) or improvement(s), said application and said Letters Patent, to testify in any legal proceedings, to sign all lawful papers, to execute all disclaimers and divisionals, continuations, C-I-P's, reissue and foreign applications, to make all rightful oaths and declarations, and generally to do everything possible to aid HPDC, its successors, assigns, nominees and legal representatives to obtain and enforce, for its or their own benefit, proper patent protection for said invention(s) or improvement(s) in any and all countries provided the expenses which may be incurred by me/us in lending such cooperation and assistance are paid by HPDC:

AND I/we hereby authorize and request the Commissioner of Patents and Trademarks of the United States and any official of any country or countries foreign to the United States whose duty it is to issue patents on applications as aforesaid, to issue to HPDC, as assignee of the entire right, title and interest, any and all Letters Patent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may be issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment.

I/we further authorize and direct the attorneys of record to insert the serial number and filing date of said application now identified by the Record ID and title set forth above as soon as the same shall have been made known to them by the United States Patent and Trademark Office.

| Mayurel Gracesole | 2012-01-18 |
|------------------------|-------------------------|
| Inventor's Signature | Date Assignment Signed |
| Raymond G. Beausoleil | 2012-01-18 |
| Inventor's Typed Name | Date Application Signed |
| | |
| Inventor's Signature | Date Assignment Signed |
| Paul Kessler Rosenberg | |
| Inventor's Typed Name | Date Application Signed |

Rev 09/11 (Assignment)

Page 1 of 2

| PATENT APP | LICATION |
|------------|----------|
|------------|----------|

| Intellectual Property Administrato 3404 E. Harmony Road Mail Stop 35 | | RECORD ID: | PATENT APPLICATION 82839822 |
|---|--|--|--|
| Fort Collins, Colorado 80528 | | | Walled Resident College College |
| DEVELOPMENT COMPANY, Texas, (hereinafter HPDC), subsidiaries and affiliates, and | IP., a Texas Limited Partne in furtherance of my/our do hereby assign and transf | and hereby agree to a ership having its principa obligations to the Hewl fer to HPDC, its successo | ssign to HEWLETT-PACKARE al place of business in Houston lett-Packard Company and its ors and assigns, the entire light tters Patent of the United States |
| Filing Date: 12/9/2011 | | Application No.: PCT/ | US11/64126 |
| and the invention(s) and impr P's), divisionals, and renewals Patent of the United States a reissues, or reexaminations, c I/we additionally auth held and enjoyed by HPDC, it terms for which said Letters I same would have been held a AND I/we hereby cowe have not executed and will that I/we will, each time a requinecessary or desirable to per Patent, to HPDC, its success HPDC, or to its nominee, all Letters Patent, to testify in any continuations, C-I-P's, reissue do everything possible to aid enforce, for its or their own b countries provided the expenipaid by HPDC; | of and substitutes for said and of countries foreign there extensions of said Letters Porize HPDC to file application successors, assigns, nominatent respectively may be good enjoyed by me/us had this enant that I/we have full right not execute any agreement est is made, and without uncert the title to said inventioners, assigns, nominees or le nown facts respecting said it egal proceedings, to sign all and foreign applications, to it if PDC, its successors, assimelit, proper patent protections which may be incurred by | and any and all continual application for said Letters beto which may be granted attent. In sin my/our name for Letters as in my/our name for Letters assignment, and transfer to convey the entire interior in conflict herewith, and leduced delay, execute and den(s) or improvement(s), siegal representatives, and invention(s) or improvement il lawful papers, to execute make all rightful oaths and igns, nominees and legation for said invention(s) or me/us in lending such | tions, continuations-in-part (C-I- patent, and any and all Letters of thereon or therefore; and any ters Patent in any country, to be yes, to the full end of the term of ded, as fully and entirely as the |
| and any official of any coun applications as aforesaid, to Patent for said invention(s) or be issued and granted on or a | ry or countries foreign to the sue to HPDC, as assignee improvement(s), including an a result of the application af | he United States whose of the entire right, title a ny and all Letters Patent foresaid, in accordance wi | duty it is to issue patents or and interest, any and all Letters of the United States which may tith the terms of this assignment. |

I/we further authorize and direct the attorneys of record to insert the serial number and filing date of said application now identified by the Record ID and title set forth above as soon as the same shall have been made known to them by the United 5 tates Patent and Trademark Office.

| Inventor's Signature | Annah San | Date Assignment Signed | |
|------------------------|---|-------------------------|--|
| Raymond G. Beausoleil | | | |
| Inventor's Typed Name | | Date Application Signed | |
| Paul Kossl | ulse 4 | 1/19/12 | |
| Inventor's Signature | | Date Assignment Signed | |
| Paul Kessler Rosenberg | | 1/19/12 | |
| Inventor's Typed Name | | Date Application Signed | |
| | | | |

Rev 09/11 (Assignment)

Page 1 of 2

HEWLETT-PACKARD COMPANY

Rev 09/11 (Assignment)

PATENT APPLICATION

| 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528 | | RECO | ORD ID: | 82839822 | |
|--|---|--------------------------------------|---|--|-------------|
| A | SIGNMENT OF PAT | ENT APPLIC | ATION (cont | .) | - Company |
| | | g Warring haid Learning a control | Am (grade i la bylle) Oliverpad Nobole A | (Amerikan 1975) ligarii Ligarii 1988 - Amerikan | |
| Javac | | | 419 | 112 | |
| Inventor's Signature | | Hansell Iville 24 | Date Assignmer | nt Signed | overiţ. |
| David A. Fattal | 로 밝아 크루에게 되는 사이 가입니다. 그래요 하는 문항 | | 1 /19 | 112 | |
| Inventor's Typed Name | | | Date Application | n Signed | |
| | | | | | |
| ing distribution of the second | | | | · Afrika ensi / Livio | |
| | | | i de la companya de La companya de la companya de | arigi a Naik, sejan ekstari | |
| Inventor's Signature | | | Date Assignmen | nt Signed | |
| | g 180 km 2 harring och skalle hallet bet det. I det | | | RK Marking dae dae dae Geografia | |
| Terrel Morris | | <u> </u> | | | |
| Inventor's Typed Name | Paranas, a esperar es | ka tawa bisata | Date Application | Signed | ter ĝe |
| | | | gentletjeren in miljer | and and with a light of the con- and a state with the con- | |
| | | | | | |
| 16881.04 | | | 1/19/2 | 02 | i di kilika |
| Inventor's Signature | | | Date Assignmen | nt Signed | |
| | | | 111012 | -0. -7 | |
| Marco Fiorentino Inventor's Typed Name | | | Date Application | Signed | |
| | | | | i Tiidida yisinsa oo baada aa aa | |
| | | | | | |
| Britania (C. Altronomia) (C. Sa | Material Control | ic, george, Pres | eti ola ne prosen | en de la servició de la companya de | |
| | fragilytester opråktivsekt i kristisk kl Si | | | | |
| Inventor's Signature | | i. Pirkan cerbitan | Date Assignmen | it Signed | |
| de grand in som in star god | Berlin Base Lie, 19 | | artikaran ji jiji y | reformation of the contraction | |
| Inventor's Typed Name | | | Date Application | n Signed | |
| gramma arabe a araban kanalah dalah dalah salah sa Salah dalah dalah salah sa | | | nga yannin kilonyi makelik. Kilongga Bayaran kalendar | energia de la companya del companya del companya de la companya de | |
| aka aliku jiritu . Wali | | | | Company of the Company of the Company | |
| Mangel of the Control | | Marian W | av 1996 gental plut in di Selas manasasi in selas | The transfer of the transfer of the second s | |
| | | | (2000 (2000)) | The second secon | |
| Inventor's Signature | | | Date Assignmen | nt Signed | |
| | | | | | |
| Inventor's Typed Name | | | Date Application | Signed | |
| | | | | | |
| | | | | er og er | |
| | | | | | Ž. |
| nventor's Signature | | | Data Assignmen | t Cianad | |
| machini a oldinarnia | | | Date Assignmen | ı, olgiled | |
| | | | | gradina sakaban bara Marana | |
| Inventor's Typed Name | | | Date Application | Signed | |
| | | | | | |
| | and the first of the second of the first of | and the state of the state of | | | 1,500 |

Page 2 of 2

HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

PATENT APPLICATION

| RECORD ID: | 82839822 | |
|------------|----------|------|
| | | |

ASSIGNMENT OF PATENT APPLICATION (cont.)

| Inventor's Signature | Date Assignment Signed |
|---------------------------------------|--|
| | Date / Addignition Cognica |
| David A. Fattal Inventor's Typed Name | Date Application Signed |
| JAJM = | 1-18-2012 |
| Inventor's Signature | Date Assignment Signed |
| Terrel Morris | 7-18-2012 Date Application Signed |
| Inventor's Typed Name | Date Application Signed |
| | |
| | |
| | |
| Inventor's Signature | Date Assignment Signed |
| Marco Fiorentino | |
| Inventor's Typed Name | Date Application Signed |
| | |
| | |
| | and the second s |
| Inventor's Signature | Date Assignment Signed |
| | • |
| Inventor's Typed Name | Date Application Signed |
| | |
| | |
| | |
| Inventor's Signature | Date Assignment Signed |
| | |
| Inventor's Typed Name | Date Application Signed |
| | |
| | |
| | |
| Inventor's Signature | Date Assignment Signed |
| | Sets / congranging organica |
| Inventor's Typed Name | Date Application Council |
| niveriors i ypeu ivame | Date Application Signed |

Rev 09/11 (Assignment)

Page 2 of 2

PATENT

REEL: 032875 FRAME: 0039