#### PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

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

#### **CONVEYING PARTY DATA**

| Name               | Execution Date |
|--------------------|----------------|
| Randall W. Martin  | 10/12/2012     |
| Matthew G. Leck    | 10/29/2012     |
| Marcus A. Hoggarth | 10/29/2012     |

#### **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: | 29436056 |

# **CORRESPONDENCE DATA**

**Fax Number**: 9707784063

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: (541)715-8443

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Correspondent Name: Hewlett-Packard Company

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Address Line 2: Intellectual Property Administration

Address Line 4: Fort Collins, COLORADO 80528

NAME OF SUBMITTER: Todd A. Rathe

Total Attachments: 3

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

Rev 10/09 (Assignment)

PATENT APPLICATION

ATTORNEY DOCKET NO.

83094820

## **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,

| subsidiaries and affiliates, and do hereby title and interest, including the right of pr  | ance of my/our obligations to the Hewlett-Packard Company and it<br>assign and transfer to HPDC, its successors and assigns, the entire righ<br>fority, in, to and under an application for Letters Patent of the United State   |
|---|--|
| entitled:<br>DISPLAY  | 그렇게 하시아 바꾸게 하시고요. 그는 이 이번 되는 것으로 생각하였다. 그는 것으로 가장 보다.<br>그는 물론에는 그릇한 사람이 가장 하시고 있는 것으로 하시는 것으로 되었다.  |
|   |  |
| Filing Date:  | Application No •   |
| P's), divisionals, and renewals of and su Patent of the United States and of cour reissues, or reexaminations, or extension I/we additionally authorize HPD: held and enjoyed by HPDC, its successor terms for which said Letters Patent resp same would have been held and enjoyed. AND I/we hereby covenant that we have not executed and will not executed that I/we will, each time a request is mad necessary or desirable to perfect the titl Patent, to HPDC, its successors, assign HPDC, or to its nominee, all known fact Letters Patent, to testify in any legal procontinuations, C-I-P's, reissue and foreig do everything possible to aid HPDC, its enforce, for its or their own benefit, procountries provided the expenses which paid by HPDC;  AND I/we hereby authorize and and any official of any country or cour applications as aforesaid, to issue to HI Patent for said invention(s) or improvem be issued and granted on or as a result of I/we further authorize and directions. | C to file applications in my/our name for Letters Patent in any country, to bors, assigns, nominees or legal representatives, to the full end of the term of ectively may be granted, reissued or extended, as fully and entirely as the laby me/us had this assignment, and transfer not been made; I/we have full right to convey the entire interest herein assigned, and that are any agreement in conflict herewith, and I/we further covenant and agree de, and without undue delay, execute and deliver all such papers as may be interest invention(s) or improvement(s), said application and said Letter as respecting said invention(s) or improvement(s), said application and said seedings, to sign all lawful papers, to execute all disclaimers and divisionals are patent protection for said invention(s) or improvement(s) in any and a may be incurred by me/us in lending such cooperation and assistance are request the Commissioner of Patents and Trademarks of the United States of the United States whose duty it is to issue patents of PDC, as assignee of the entire right, title and interest, any and all Letter pent(s), including any and all Letters Patent of the United States which may fit the application aforesaid, in accordance with the terms of this assignment of the attorneys of record to insert the serial number and filing date of said y docket number and title set forth above as soon as the same shall hav States Patent and Trademark Office. |
| Inventor's Signature  | Date Assignment Signed   |
| Matthew G. Leck Inventor's Typed Name   | Date Application Signed  |
| inventor > ypeu (valite   | υαιο Αμβικαιιοί οίβιτοι  |

Page 1 of 2

**PATENT REEL: 029232 FRAME: 0079**  HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

PATENT APPLICATION

ATTORNEY DOCKET NO. \_\_\_

83094820

## **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,

| 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 opplications as aforesaid, to issue to HPDC, as assignee of the entire right, title and interest, any and all Letters atent for said invention(s) or improvement(s), including any and all Letters Patent of the United States which may a issued and granted on or as a result of the application aforesaid, in accordance with the terms of this assignment. If we further authorize and direct the attorneys of record to insert the serial number and filling date of said opplication now identified by the attorney docket number 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.  In a superior of Patents whose duty it is to issue patents or patents and interest, any and all Letters patent of the entire right, title and interest, any and all Letters patents of the united States which may be issued and the terms of this assignment.  If a superior is superior is a superior is superior in the superior is superior is superior is superior in the superior is superior in the superior is superior in the superior in the superior is superior in the superior in the superior is superior in the superior in th |   |
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| Filing Date.   |   |
| and the invention(s) and improvement(s) set forth therein, a P's), divisionals, and renewals of and substitutes for said ap Patent of the United States and of countries foreign theret reissues, or reexaminations, or extensions of said Letters Pall/we additionally authorize HPDC to file applications held and enjoyed by HPDC, its successors, assigns, nomine terms for which said Letters Patent respectively may be grassame would have been held and enjoyed by me/us had this AND I/we hereby covenant that I/we have full right we have not executed and will not execute any agreement it that I/we will, each time a request is made, and without undencessary or desirable to perfect the title to said inventione Patent, to HPDC, its successors, assigns, nominees or ley HPDC, or to its nominee, all known facts respecting said in Letters Patent, to testify in any legal proceedings, to sign all continuations, C-I-P's, reissue and foreign applications, to indo everything possible to aid HPDC, its successors, assign enforce, for its or their own benefit, proper patent protectio countries provided the expenses which may be incurred by paid by HPDC;  AND I/we hereby authorize and request the Comm and any official of any country or countries foreign to the applications as aforesaid, to issue to HPDC, as assignee Patent for said invention(s) or improvement(s), including an be issued and granted on or as a result of the application afor application now identified by the attorney docket number a   | and any and all continuations, continuations-in-part (C-I- polication for said Letters Patent, and any and all Letters to which may be granted thereon or therefore; and any tatent.  In my/our name for Letters Patent in any country, to be sets or legal representatives, to the full end of the term of the anted, reissued or extended, as fully and entirely as the the assignment, and transfer not been made; to convey the entire interest herein assigned, and that I the conflict herewith, and I/we further covenant and agree the delay, execute and deliver all such papers as may be the delay, execute and deliver all such papers as may be the delay, execute and I/we agree to communicate to the delay or improvement(s), said application and said the lawful papers, to execute all disclaimers and divisionals to hake all rightful oaths and declarations, and generally to the delay in lending such cooperation and assistance are the united States whose duty it is to issue patents or the of the entire right, title and interest, any and all Letters they and all Letters Patent of the United States the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, title and interest, any and all Letters the entire right, and the terms of this assignment. |
| Inventor's Signature   | Date Assignment Signed  |
| Randall W, Martin  | D.A.A.A. S.   |
| Inventor's Typed Name  Inventor's Signature  | < 29 oct 17   |
| Matthew G. Leck  |   |
| Inventor's Typed Name  | Date Application Signed   |

Rev 10/09 (Assignment)

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HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35

# PATENT APPLICATION

| Mail Stop 35 Fort Collins, Colorado 80528  | ATTORNEY DOCKET NO. 8309482 | <u>20</u>          |
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| nventor's Signature  | Date Assignment Signed      |                    |
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| Marcus A. Hoggarth   |                             |                    |
| inventor's Typed Name  | Date Application Signed     |                    |
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| nventor's Signature  | Date Assignment Signed      |                    |
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| nventor's Typed Name   | Date Application Signed     |                    |

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