## PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

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

#### **CONVEYING PARTY DATA**

| Name                 | Execution Date |
|----------------------|----------------|
| Doe Hyun Yoon        | 11/29/2012     |
| Jichuan Chang        | 11/29/2012     |
| Naveen Muralimanohar | 11/29/2012     |

## **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: | 13689814 |  |

## **CORRESPONDENCE DATA**

9707784063 Fax Number:

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

Phone: (541)715-8443

Email: pto.assignments@hp.com Correspondent Name: **Hewlett-Packard Company** 3404 E. Harmony Road MS 35 Address Line 1: Address Line 2: Intellectual Property Administration Fort Collins, COLORADO 80528 Address Line 4:

NAME OF SUBMITTER: Maureen Capozzi

Total Attachments: 3

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PATENT

REEL: 029624 FRAME: 0738

| RECORDATION FORM COVER SHEET   |  |  |  |  |
|--|--|--|--|--|
| PATENTS ONLY   |  |  |  |  |
| Name of conveying party(ies):  | 2. Name and address of receiving party(ies):             |  |  |  |
| Doe Hyun Yoon  | HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P.                |  |  |  |
| Jichuan Chang  | 11445 Compaq Center Drive West                           |  |  |  |
| Naveen Muralimanohar   | Houston, TX 77070  |  |  |  |
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|  |  |  |  |  |
| Additional name(s) of conveying party(ies) attached? Yes No  | Additional name(s) and address(es) attached? Yes No      |  |  |  |
| 3. Nature of Conveyance:   |  |  |  |  |
| ■ Assignment   | f Name Security Agreement Joint                          |  |  |  |
| Other  |  |  |  |  |
|  |  |  |  |  |
| Execution Date(s):11/29/2012   |  |  |  |  |
| 4. Application number(s) or patent number(s):  |  |  |  |  |
| If this document is being filed together with a new application  | on, execution date of the application is:                |  |  |  |
| A. Patent Application No.(s)   |  |  |  |  |
| Application No.: 13/689814 Date Filed:   | Nov 30, 2012   |  |  |  |
| Confirmation No.: 1025 B. Patent No.(s):   |  |  |  |  |
| Additional numbers attached? NO  |  |  |  |  |
| Name and address of party to whom correspondence   | Total number of applications and patents involved:     1 |  |  |  |
| concerning document should be mailed:  | 7. Total Fee (37 CFR 3.41):\$40.00                       |  |  |  |
| Records Manager  |  |  |  |  |
| Intellectual Property Administration   | Enclosed   |  |  |  |
| HEWLETT-PACKARD COMPANY 3404 E. Harmony Road   | X_Authorization to be charged to deposit account.        |  |  |  |
| Mail Stop 35<br>Fort Collins, Colorado 80528   | 8. Deposit Account Number: <u>08-2025</u>                |  |  |  |
|  |  |  |  |  |
| 9. Statement and signature.  |  |  |  |  |
| To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.   |  |  |  |  |
| Aaron S. Ward/Aaron S. Ward  | l, Reg. No. 52,342/ January 11, 2013                     |  |  |  |
| Name of Person Signing Signature Date  |  |  |  |  |
| Total number of pages including coversheet, attachments, and documents:3   |  |  |  |  |
| Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to: Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, V.A. 22313-1450 |  |  |  |  |
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Rev 09/11 (RecdAsgn)

PATENT REEL: 029624 FRAME: 0739

HEWLETT-PACKARD COMPANY in 34 M F

#### PATENT APPLICATION

| tellectual Property Administrator |  |            |          |
|-----------------------------------|--|------------|----------|
| 04 E. Harmony Road                |  |            |          |
| ail Stop 35                       |  | RECORD ID: | 83086483 |
| ort Collins, Colorado 80528       |  |            |          |
|                                   |  |            |          |

#### ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree, that for good and valuable consideration, the receipt of which is hereby acknowledged, and in furtherance of my/our obligations to HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas Limited Partnership having its principal place of business in Houston. Texas, (hereinafter HPDC), and to its subsidiaries and affiliates, to 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 Patent entitled:

MEMORY ERROR IDENTIFICATION BASED ON CORRUPTED SYMBOL PATTERNS

November 30, 2012 13/689814 Filing Date: Application No.: and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for said Patent, and any and all other Patent of any countries thereto which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said I/we additionally authorize HPDC to file applications in my/our name for 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 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 tive further covenant and agree that tive 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 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 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 paths 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 official of any country or countries 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 Patent for said invention(s) or improvement(s) 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 filing date and application number of said application for Patent, now identified by the Record ID and title set forth above, as soon as the same shall have been made IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s): 11/29/2012 Date Assignment Signed Inventor's Signature U/29/2012

Date Application Signed Doe Hyun Yoon

Rev 10/2012 (Assignment)

Jichuan Chang Inventor's Typed Name

Inventor's Signature

Inventor's Typed Name

Page 1 of 2

1/25/242 Date Application Signed

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

## PATENT APPLICATION

| Mail Stop 35<br>Fort Cellins, Colorado 80528 | RECORDIO                      | 83086483                       |
|--|-------------------------------|--------------------------------|
| ***************************************      | SIGNMENT OF PATENT APPLICATIO | IN (cont.)                     |
| There-                                       |                               |                                |
| Inventor's Signature                         | Date                          | ///29//12<br>Assignment Signed |
| Naveen Muralimanohar                         |                               | 1/20/                          |
| 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              |
|  |                               |                                |
| inventor's Typed Name                        | Date                          | Application Signed             |
|  |                               |                                |
| Inventor's Signature                         | Date                          | Assignment Signed              |
|  |                               |                                |
| Inventor's Typed Name                        | Uate:                         | Application Signed             |
| 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             |

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