

## PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Shih-Yuan Wang</td> <td>04/12/2013</td> </tr> <tr> <td>Jianhua Yang</td> <td>04/12/2013</td> </tr> <tr> <td>Alexandre M. Bratkovski</td> <td>04/12/2013</td> </tr> <tr> <td>R. Stanley Williams</td> <td>04/18/2013</td> </tr> </tbody> </table>		Name	Execution Date	Shih-Yuan Wang	04/12/2013	Jianhua Yang	04/12/2013	Alexandre M. Bratkovski	04/12/2013	R. Stanley Williams	04/18/2013
Name	Execution Date										
Shih-Yuan Wang	04/12/2013										
Jianhua Yang	04/12/2013										
Alexandre M. Bratkovski	04/12/2013										
R. Stanley Williams	04/18/2013										
RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Hewlett-Packard Development Company, L.P.</td> </tr> <tr> <td>Street Address:</td> <td>11445 Compaq Center Drive West</td> </tr> <tr> <td>City:</td> <td>Houston</td> </tr> <tr> <td>State/Country:</td> <td>TEXAS</td> </tr> <tr> <td>Postal Code:</td> <td>77070</td> </tr> </table>		Name:	Hewlett-Packard Development Company, L.P.	Street Address:	11445 Compaq Center Drive West	City:	Houston	State/Country:	TEXAS	Postal Code:	77070
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											
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13866625</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13866625						
Property Type	Number										
Application Number:	13866625										
CORRESPONDENCE DATA											
<p>Fax Number: 9707784063</p> <p><i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: (541)715-8443</p> <p>Email: pto.assignments@hp.com</p> <p>Correspondent Name: Hewlett-Packard Company</p> <p>Address Line 1: 3404 E. Harmony Road MS 35</p> <p>Address Line 2: Intellectual Property Administration</p> <p>Address Line 4: Fort Collins, COLORADO 80528</p>											
NAME OF SUBMITTER:	Steven L. Nichols										
Signature:	/Steven L. Nichols/										
Date:	04/23/2013										
<p>Total Attachments: 2</p> <p>source=83209867-A#page1.tif</p> <p>source=83209867-A#page2.tif</p>											

CH \$40.00 13866625

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

PATENT APPLICATION

RECORD ID: 83209867

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:

RESISTIVE MEMORY DEVICES

Filing Date: April 19, 2013

Application No.: 13/866,625

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 Patent.

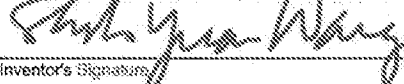
I/we additionally authorize HPDC to file applications in my/our name for Patent in any country, to be held and enjoyed by HPDC, its successors, assigns, nominees or legal representatives, to the full end of the term or terms for which said Patent respectively may be granted, reissued or extended, as 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 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 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 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 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.

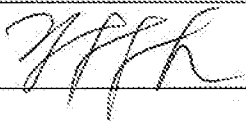
I/we further authorize and direct the attorneys of record to insert the filing date and application number of said application for Patent, now identified by the Record ID and title set forth above, as soon as the same shall have been made known to them.

IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

  
Inventor's Signature

April 12, 2013  
Date

Shih-Yuan Wang  
Inventor's Typed Name

  
Inventor's Signature

04/12/2013  
Date

Jianhua Yang  
Inventor's Typed Name

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

PATENT APPLICATION

RECORD ID: 83209867

ASSIGNMENT OF PATENT APPLICATION (cont.)

ABvafkorski Apr 12, 2013  
Inventor's Signature Date

Alexandre M. Bratkovski  
Inventor's Typed Name

R. Stanley Williams 09/18/2013  
Inventor's Signature Date

R. Stanley Williams  
Inventor's Typed Name

\_\_\_\_\_  
Inventor's Signature Date

\_\_\_\_\_  
Inventor's Typed Name

\_\_\_\_\_  
Inventor's Signature Date

\_\_\_\_\_  
Inventor's Typed Name

\_\_\_\_\_  
Inventor's Signature Date

\_\_\_\_\_  
Inventor's Typed Name

\_\_\_\_\_  
Inventor's Signature Date

\_\_\_\_\_  
Inventor's Typed Name