PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT2913424

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUN ZENG	04/26/2012
QING DUAN	04/27/2012
KRISHNENDU CHAKRABARTY	04/27/2012
I-JONG LIN	04/27/2012
GARY J DISPOTO	04/26/2012

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:	14364752

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 using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Correspondent Name: HEWLETT-PACKARD COMPANY **Address Line 1:** 3404 E. HARMONY ROAD MS 35

Address Line 2: INTELLECTUAL PROPERTY ADMINISTRATION

Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER:	83972738
NAME OF SUBMITTER:	DEBBIE SYRMIS
SIGNATURE:	/Debbie Syrmis/
DATE SIGNED:	06/25/2014

Total Attachments: 5

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

Rev 09/11 (Assignment)

PATENT APPLICATION

(83972738)82963032 RECORD ID:

ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each) have agreed and hereby agree to assign to HEWLETT-PACKARD

Texas, (hereinafter HPDC), in furtherance of my/ou	rtnership having its principal place of business in Houston, ir obligations to the Hewlett-Packard Company and its nsfer to HPDC, its successors and assigns, the entire right, under an application for Letters Patent of the United States
Filing Date: June 12, 2014	Application No.: 14/364752
P's), divisionals, and renewals of and substitutes for sai Patent of the United States and of countries foreign the reissues, or reexaminations, or extensions of said Letter I/we additionally authorize HPDC to file applications and enjoyed by HPDC, its successors, assigns, not terms for which said Letters Patent respectively may be same would have been held and enjoyed by me/us had AND I/we hereby covenant that I/we have full we have not executed and will not execute any agreem that I/we will, each time a request is made, and without necessary or desirable to perfect the title to said invertigation. HPDC, or to its nominee, all known facts respecting satcetters Patent, to testify in any legal proceedings, to sig continuations, C-I-P's, reissue and foreign applications, do everything possible to aid HPDC, its successors, enforce, for its or their own benefit, proper patent protocountries provided the expenses which may be incurred paid by HPDC; AND I/we hereby authorize and request the Countries provided the expenses which may be incurred applications as aforesaid, to issue to HPDC, as assig Patent for said invention(s) or improvement(s), including the further authorize and direct the applications.	minees or legal representatives, to the full end of the term or e granted, reissued or extended, as fully and entirely as the this assignment, and transfer not been made; right to convey the entire interest herein assigned, and that I/ ent in conflict herewith, and I/we further covenant and agree undue delay, execute and deliver all such papers as may be atton(s) or improvement(s), said application and said Letters or legal representatives, and I/we agree to communicate to aid invention(s) or improvement(s), said application and said in all lawful papers, to execute all disclaimers and divisionals, to make all rightful oaths and declarations, and generally to assigns, nominees and legal representatives to obtain and ection for said invention(s) or improvement(s) in any and all ed by me/us in lending such cooperation and assistance are commissioner of Patents and Trademarks of the United States to the United States whose duty it is to issue patents on nee of the entire right, title and interest, any and all Letters any and all Letters pay any and all Letters Patent of the United States which may a foresaid, in accordance with the terms of this assignment, so frecord to insert the serial number and filing date of said set forth above as soon as the same shall have been made
M	04/26/042
Inventor's Signature	Date Assignment Signed
Jun Zeng	04/26/2012
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
Qing Duan Inventor's Typed Name	Date Application Signed

Page 1 of 2

HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harm Mail Stop 35 Fort Collins,

PATENT APPLICATION

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nony Road i		(02072720)
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Colorado 80528		

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 title and interest, including the right of priority, in, to and under an app	C, its successors and assigns, the entire right,
entitled:	median for Letters I aten of the office office
PRINT PRODUCTION SCHEDULING	
June 12, 2014	
Application	
and the invention(s) and improvement(s) set forth therein, and any a P's), divisionals, and renewals of and substitutes for said application application of the United States and of countries foreign thereto which reissues, or reexaminations, or extensions of said Letters Patent. I/we additionally authorize HPDC to file applications in my/outheld and enjoyed by HPDC, its successors, assigns, nominees or legaterms for which said Letters Patent respectively may be granted, reissame would have been held and enjoyed by me/us had this assignme. AND I/we hereby covenant that I/we have full right to convey we have not executed and will not execute any agreement in conflict that I/we will, each time a request is made, and without undue delay, necessary or desirable to perfect the title to said invention(s) or imp Patent, to HPDC, its successors, assigns, nominees or legal representant, to HPDC, its successors, assigns, nominees or legal representant, to testify in any legal proceedings, to sign all lawful pay continuations, C-I-P's, reissue and foreign applications, to make all right of everything possible to aid HPDC, its successors, assigns, nominenforce, for its or their own benefit, proper patent protection for said countries provided the expenses which may be incurred by me/us in paid by HPDC; AND I/we hereby authorize and request the Commissioner or and any official of any country or countries foreign to the United applications as aforesaid, to issue to HPDC, as assignee of the ent Patent for said invention(s) or improvement(s), including any and all libe issued and granted on or as a result of the application aforesaid, in I/we further authorize and direct the attorneys of record to application now identified by the Record ID and title set forth above the pay to them by the United States Patent and Trademark Office.	for said Letters Patent, and any and all Letters hay be granted thereon or therefore; and any are name for Letters Patent in any country, to be all representatives, to the full end of the term or issued or extended, as fully and entirely as the int, and transfer not been made; the entire interest herein assigned, and that I/ herewith, and I/we further covenant and agree execute and deliver all such papers as may be rovement(s), said application and said Letters tentatives, and I/we agree to communicate to or improvement(s), said application and said bers, to execute all disclaimers and divisionals, ghtful oaths and declarations, and generally to nees and legal representatives to obtain and invention(s) or improvement(s) in any and all lending such cooperation and assistance are of Patents and Trademarks of the United States States whose duty it is to issue patents on ire right, title and interest, any and all Letters Letters Patent of the United States which may accordance with the terms of this assignment.
known to them by the United States Patent and Trademark Office.	
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Jun Zeng	
Inventor's Typed Name	Date Application Signed
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Inventor's Signature	Date Assignment Signed
Qing Duan	04/27/2012
Inventor's Typed Name	Date Application Signed

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

PATENT APPLICATION

RECORD ID:	82963032 (839	72738
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ASSIGNMENT OF PATENT APPLICATION (cont.) Krishnendu Chakrabarty Inventor's Typed Name Inventor's Signature Date Assignment Signed I-Jong Lin Inventor's Typed Name **Date Application Signed** Inventor's Signature Date Assignment Signed Gary J Dispoto 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 Date Application Signed

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Krishnendu Chakrabarty		•		
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J. Jon Ton	<i>z</i> 	Date Assignment	7/2012	
Inventor's Signature			7/2012	
I-Jong Lin Inventor's Typed Name		Date Application		
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Gary J Dispoto				
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PATENT APPLICATION

RECORD ID:	82963032 (83972738)	

ASSIGNMENT OF PATENT APPLICATION (cont.)

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nventor's Typed Name	Date Application Signed
nventor's Signature	Date Assignment Signed
i-Jong Lin Inventor's Typed Name	Date Application Signed
Gary Unp C	4/26/12 Date Assignment Signed
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Gary J Dispoto Inventor's Typed Name	Date Application Signed
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Rev 09/11 (Assignment) Page 2 of 2