502165601 12/17/2012

PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Peter K Lee	11/29/2012
Stacy L Wolff	11/28/2012
Kenneth Douglas Wood	11/20/2012
In Shr Tseng	12/03/2012
Sangyong Park	11/19/2012

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:	29431726

CORRESPONDENCE DATA

Fax Number: 9707784063

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

Address Line 1: 3404 E. Harmony Road MS 35

Address Line 2: Intellectual Property Administration

Address Line 4: Fort Collins, COLORADO 80528

NAME OF SUBMITTER:	odd A. Rathe
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Total Attachments: 5

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PATENT REEL: 029483 FRAME: 0273 29431726

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

Rev 10/2012 (Assignment)

PATENT APPLICATION

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 **Computing Device Display** Filing Date: Sep 10, 2012 Application No.: 29/431726 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 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): 11 (29 /2012 Date Assignment Signed 11 /29 /2012 Inventor's Signature Peter K Lee Inventor's Typed Name Date Assignment Signed Inventor's Signature Stacy L Wolff **Date Application Signed** Inventor's Typed Name

Page 1 of 2

HEWLETT-PACKAR	D COMPANY
Intellectual Property	Administrator
3404 E. Harmony Ro	ad
Mail Stop 35	
Fort Collins, Colorad	o 80528

TENT		

RECORD ID:	83111976

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 Texas, (hereinafter HPDC), and to its subsidiaries and	Partnership having its principal place of business in Houston defiliates, to assign and transfer to HPDC, its successors and the right of priority, in, to and under an application for Paten
Filing Date: Sep 10, 2012	Application No.: 29/431726
divisionals, and renewals of and substitutes for said a	ein, and any and all continuations, continuations-in-part (C-I-P's) pplication for said Patent, and any and all other Patent of any efore; and any reissues, or reexaminations, or extensions of said
by HPDC, its successors, assigns, nominees or legal re-	in my/our name for Patent in any country, to be held and enjoyed presentatives, to the full end of the term or terms for which saidled, as fully and entirely as the same would have been held and been made;
executed and will not execute any agreement in conflict time a request is made, and without undue delay, execut perfect the title to said invention(s) or improvement(s), so nominees or legal representatives, and I/we agree to consaid invention(s) or improvement(s), said application and papers, to execute all disclaimers and divisionals, con rightful oaths and declarations, and generally to do ever and legal representatives to obtain and enforce, for its or	convey the entire interest herein assigned, and that I/we have no herewith, and I/we further covenant and agree that I/we will, each te and deliver all such papers as may be necessary or desirable to aid application and said Patent, to HPDC, its successors, assigns mmunicate to HPDC, or to its nominee, all known facts respecting a said Patent, to testify in any legal proceedings, to sign all lawfut tinuations, C-I-P's, reissue and foreign applications, to make all rything possible to aid HPDC, its successors, assigns, nomineer their own benefit, proper patent protection for said invention(s) of expenses which may be incurred by me/us in lending sucle
applications as aforesaid, to issue to HPDC, as assigned	of any country or countries whose duty it is to issue patents or the entire right, title and interest, any and all Patent for said and granted on or as a result of the application aforesaid, in
I/we further authorize and direct the attorneys of application for Patent, now identified by the Record ID ar known to them.	record to insert the filing date and application number of said title set forth above, as soon as the same shall have been made
IN WITNESS WHEREOF, I/we hereunto set my/o	ur hand(s) and seal(s):
Inventor's Signature	Date Assignment Signed
Peter K Lee Inventor's Typed Name	Date Application Signed
My	11-28-12
Invertor Signature	Date Assignment Signed
Stacy L Wolff Inventor's Typed Name	Date Application Signed
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Page 1 of 2

HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Harmony Road	PATENT APPLICATION
Mail Stop 35 Fort Collins, Colorado 80528	RECORD ID: 83111976
	PATENT APPLICATION (cont.)
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Inventor's Signature	Date Assignment Signed
Kenneth Douglas Wood	
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
in Shr Tseng	
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
Carriera Bode	
Sangyong Park Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
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Rev 10/2012 (Assignment)

Page 2 of 2

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PATENT APPLICATION

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ASSIGNMENT OF PATENT APPLICATION (cont.)

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Kenneth Douglas Wood	
Inventor's Typed Name	Date Application Signed
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Inventor's Signature	Date Assignment Signed
In Shr Tseng	
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
Sangyong Park	
Inventor's Typed Name	Date Application Signed
Inventor's Signature	Date Assignment Signed
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Inventor's Typed Name	Date Application Signed
Sangyong Park	11/19/2012
Inventor's Signature	Date Assignment Signed
Sangyong Park	11/19/2012
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Inventor's Signature	Date Assignment Signed
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Inventor's Signature	Date Assignment Signed

RECORD ID:

Date Application Signed

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Date Application Signed

Rev 10/2012 (Assignment)

RECORDED: 12/17/2012

Inventor's Signature

Inventor's Typed Name

Inventor's Typed Name

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PATENT REEL: 029483 FRAME: 0278