PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	

CONVEYING PARTY DATA

Name	Execution Date
PETER JAMES FRICKE	10/22/2014
MICHAEL W CUMBIE	10/22/2014
SCOTT A LINN	10/23/2014

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:	15518306

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.

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HEWLETT-PACKARD COMPANY Correspondent Name: Address Line 1: 3390 E. HARMONY ROAD MS 35

Address Line 2: INTELLECTUAL PROPERTY ADMINISTRATION

Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER: 84610461 NAME OF SUBMITTER: **KUBAE KIM** /Kubae Kim/ SIGNATURE: **DATE SIGNED:** 08/18/2017

Total Attachments: 2

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> **PATENT** REEL: 043333 FRAME: 0800 504509980

	ACCIONISSENT OF DATENT ADDITION	a .
Fort Collins, Colorado 80528		
Mail Stop 35	RECORD ID:	840421/3
3404 E. Harmony Road		A 45 154 75
Intellectual Property Administrator		
HEWLETT-PACKARD COMPANY		PATENT APPLICATION

		ASSIGNMENT OF PA		
and in further Limited Partne subsidiaries ar	ance of my/our o ership having its ad affiliates, agree	bligations to HEWLETT principal place of busin to assign and transfer an	PACKARD DEVELC ess in Houston, Tex d hereby assign and	eipt of which is hereby acknowledged, DPMENT COMPANY, L.P., a Texas cas, (hereinafter HPDC), and to its transfer to HPDC, its successors and and under an application for Patent
WIDE ARRAY	PRINTHEAD MO	DULE		
Filing Date:	04-11-2017		Application No.:	15/518,306
divisionals, and	I renewals of and	substitutes for said appli-	cation for said Patent	nuations, continuations-in-part (C-I-P's), , and any and all other Patent of any r reexaminations, or extensions of said
by HPDC, its s Patent respecti	wccessors, assignatively may be grant	s, nominees or legal repre	sentatives, to the full of as fully and entirely a	t in any country, to be held and enjoyed and of the term or terms for which said is the same would have been held and
executed and vime a request perfect the title nominees or le said invention(spapers, to exerightful paths a and legal represimprovement(s	will not execute any is made, and withon to said invention (signal representatives s) or improvement cute all disclaimer and declarations, a sentatives to obtain	r agreement in conflict hen ut undue delay, execute and or improvement(s), said in and I/we agree to comming s), said application and said is and divisionals, continue and generally to do everythe and enforce, for its or the countries provided the said	ewith, and I/we further and deliver all such paper application and said Paulicate to HPDC, or to id Patent, to testify in ations, C-I-P's, reissueing possible to aid HF is own benefit, proper	herein assigned, and that I/we have not- covenant and agree that I/we will, each ers as may be necessary or desirable to stent to HPDC, its successors, assigns, its nominee, all known facts respecting any legal proceedings, to sign all lawful e and foreign applications, to make all PDC, its successors, assigns, nominees patent protection for said invention(s) or be incurred by me/us in lending such
applications as invention(s) or	aforesaid, to issue	e to HPDC, as assignee o which may be issued and	f the entire right, title a	es whose duty it is to issue patents on and interest, any and all Patent for said result of the application aforesaid, in
			and the second of the second o	g date and application number of said soon as the same shall have been made
IN WITHE	ESS WHEREOF, I/v	ve hereunto set my/our l	nand(s) and seal(s):	
inventors Signal	James.	Fiel	Date (1/22/14-
Peter James		Fricke		
First/Middle Nam	* /2 /) Last Name		
A. 1	1. IN []		101	22/14
Inventor's Signa	ture CAL	£	Date	-77
Michael W.		Cumbie		
First/Middle Nam	♦	Last Name		
Rex 8/2014 (Assignm	%n()	Page	1 of 2:	

Page 1 of 2.

HEWLETT-PACKARD COMPANY

Intellectual Property Administrate			PATENT APPLICATION
3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528		RECORD ID:	84042173
	 ASSIGNMENT OF PA	ATENT APPLICATION (con	t.)
	ar.	10/2	3/14
Inventor's Signature		Date	
Scott A.	Linn.		
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Nanse	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
inventor's Signature		Date	

Rev 8/2014 (Assignment)

First/Middle Name

Page 2 of 2

Last Name

PATENT REEL: 043333 FRAME: 0802