# 504668913 12/04/2017 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4715635

SUBMISSION TYPE:		NEW ASSIGNMENT	
NATURE OF CONVEYAN	CE:	ASSIGNMENT	
CONVEYING PARTY DA	TA		
		Name	Execution Date
GERARD ALZONA			04/30/2015
DAVID MAXFIELD			04/29/2015
DUSTIN W. BLAIR			05/04/2015
STERLING CHAFFINS			04/29/2015
ANDREW L. VAN BROCH	KLIN		04/30/2015
RECEIVING PARTY DAT	Г <b>А</b>		
Name:	Hewlet	tt-Packard Development Company, L.P.	
Street Address:		Compaq Center Drive West	
City:	Housto	on	
State/Country:	TEXAS	6	
Postal Code:	77070		
<b>PROPERTY NUMBERS</b>	i otali i		
Property Type		Number	
Property Type Application Number:		<b>Number</b> 15547393	
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Application Number: CORRESPONDENCE DA	ATA	15547393	
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HEVILE IT-PACKARD COMPARY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528 PATENT APPLICATION

RECORD ID: 84171387

#### ASSIGNMENT OF PATENT APPLICATION

I/We, the undersigned (each), for good and valuable consideration, the receipt of which is hereby acknowledged, and in furtherance of my/our obligations to MEWLETT-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, agree to assign and transfer and hereby 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;

PRINTER FLUID IMPEDANCE SENSING IN A PRINTHEAD

## Filing Date: April 30, 2015

Application No.: PCT/US2015/028611

and the invention(s) and improvement(c) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for seid application for said Patent, and any end all other Patent of any countries thereto which may be granted thereon or therefore; and any reliasues, or reexaminations, or extensions of said Patent.

I/we additionally authorize HPOC 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, reliciued 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 l/we hereby opvenant that l/we have full right to convey the entire interest herein assigned, and that l/we have not executed and will not execute any agreement in conflict herewith, and l/we further opvenant and agree that l/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 tille to said invention(s) or improvement(s), said application and said Patent, to HPDC, its successors, assigns, nominees or legal representatives, and l/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, relissue 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 baid by HPDC;

AND live hereby authorize and request the official of any country or countries whose duty it is to issue patients 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

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Inventor's Signature			Detr		
Gerard	Alzona				
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Inventor's Signature			Data		
David	Maxfield				
First/Middle Name	Cast Name				
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HEWLETT-PACKARD COMPANY Intellectual Property Administrator				PATENT APPLICATION
3404 E. Harmony Road Mail Stop 35		REC	DRD ID:	84171387
Fort Collins, Colorado 80528		PATENT APPLIC		
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Inventor's Signature			Date	
Dustin W.	Blair			
First/Middle Name	Last Name			
Inventor's Signature			Date	
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Sterling First/Middle Name	Chaffins Last Name			
	Last Name			
Inventor's Signature			Date	
Andy L.	Van Brocklin			
First/Middle Name	Last Name			
Inventor's Signature			Date	
First/Middle Name	Last Name			
Inventor's Signature			Date	
First/Middle Name	Last Name			
Inventor's Signature			Date	
First/Middle Name	Last Name			
Rev 8/2014 (Assignment)		Page 2 of 2		
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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;

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

Inventor's Signature		Date
Gerard	Aizona	
First/Middle Name	Last Name	4/29/2015
inventor's Signature *	27	Date
David	Maxfield	
First/Middle Name	Last Name	

Rev 8/2014 (Assignment)

Page 1 of 2

HEWLETT-PACKARD COMPANY Intellectual Property Administrator				PATENT APPLICATION
3404 E. Harmony Road Mail Stop 35		RECO	RD ID:	84171387
Fort Collins, Colorado 80528	SSIGNMENT OF	PATENT APPLIC		t.)
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Inventor's Signature			Date	
Dustin W.	Blair			
First/Middle Name	Last Name			
Inventor's Signature			Date	
	Chaffins			
Sterling First/Middle Name	Last Name			
Inventor's Signature			Date	
Andy L.	Van Brocklin			
First/Middle Name	Last Name			
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Rev 8/2014 (Assignment)		Page 2 of 2		

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inventor's Signature	······		Date
Gerard	Aizona		
First/Midtile Name	Last Name		
inventor's Signature			Date
David	Maxfield		
First/Middle Name	Last Name		
Rev 8/2014 (Assignment)		Page 1 of 2	

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First/Middle Name	Last Name		
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Andy L.	Van Brocklin		
First/Middle Name	Last Name		
Inventor's Signature		Daie	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
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Rev 8/2014 (Assignment)	Page 2	of 2	

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Intellectual Property Administrator
3404 E. Harmony Road
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Gerard	Alzona			
First/Middle Name	Last Name			
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Inventor's Signature			Date	
Dustin W.	Blair			
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	ASSIGNMENT OF I	PATENT APPLI	CATION (cont.)	
Inventor's Signature			Date	
Dustin W.	Blair			
First/Middle Name	Last Name			
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Sterling	Chaffins			
First/Middle Name	Last Name			
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Andrews L	🗤 , 🛛 Van Brocklin			
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## RECORDED: 12/04/2017