504255301 03/03/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
RAJEEV BALASUBRAMONIAN	03/06/2015
NAVEEN MURALIMANOHAR	03/04/2015
GREGG B. LESARTRE	03/04/2015
PAOLO FARABOSCHI	03/04/2015
JISHEN ZHAO	03/04/2015

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:	15500460

CORRESPONDENCE DATA

Fax Number:

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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Correspondent Name: HEWLETT PACKARD ENTERPRISE
Address Line 1: 3404 E. HARMONY ROAD MS 79
Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER: 90352192

NAME OF SUBMITTER: KATHY HUNGSBERG

SIGNATURE: /Kathy Hungsberg/
DATE SIGNED: 03/03/2017

Total Attachments: 6

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

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RECORD ID:	700220128

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 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, agree to assign and transfer and hereby assign and transfer to HPOC, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Patent entitled:

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divisionals, and	d renewals of and	substitutes for said app	lication for said Pater	inuations, continuations-in-part (C-I-P's), it, and any and all other Patent of any or reexaminations, or extensions of said
by HPDC, its s Patent respect	successors, assign: ively may be grant	s, nominees or legal repr	esentatives, to the full, , as fully and entirely.	nt in any country, to be held and enjoyed end of the term or terms for which said as the same would have been held and
executed and vime a request perfect the title nominees or le said invention(: papers, to exerightful oaths a and legal repre improvement(s	will not execute any is made, and without to said invention(sigal representatives) or improvement(soute all disclaimer and declarations, as sentatives to obtain	agreement in conflict he ut undue delay, execute a d) or improvement(s), said d, and I/we agree to comm s), said application and s s and divisionals, continu and generally to do everyth and enforce, for its or the countries provided the e	rewith, and I/we furthe, and deliver all such pap application and said F nunicate to HPDC, or traid Patent, to testify in uations, C-I-P's, reissuhing possible to aid Heir own benefit, proper	It herein assigned, and that I/we have not a covenant and agree that I/we will, each pers as may be necessary or desirable to latent, to HPDC, its successors, assigns, to its nominee, all known facts respecting any legal proceedings, to sign all lawful le 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 an	of the entire right, title	ies whose duty it is to issue patents on and interest, any and all Patent for said result of the application aforesaid, in
	Patent, now identifi			g date and application number of said soon as the same shall have been made
IN WITNE	ESS WHEREOF, I/w	re hereunto set my/our	hand(s) and seal(s):	
	RUS			2///2015
Inventor's Signal	ture T		Date -	3/6/2015
Rajeev		Balasubramonian		
First/Middle Name		Last Name		
Inventor's Signat	lure	\$	Date	,
Naveen		Muralimanohar		
First/Middle Name	E ⁴	Last Name	No.	
Rev 8/2014 (Assignment	ent)	Page	1 of 2	

HEWLETT PACKARO COMPANY Intellectual Property Administrator 3404 E. Harmony Road Mail Stop 35 Fort Collins, Coloredo 80528

PATENT APPLICATION

RECORD ID:	700220128
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ASSIGNMENT OF PATENT APPLICATION (cont.)

Inventor's Signature		Clate
Gregg 8	Lesartre	
First/Michibe Name	Last Name	
Jalo R	Ž.	9/4/5
Inventor's Signature		Date
Paolo	Faraboschi	···
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Inventor's Signature		Oate
Jishen	Zhao	
First/Middle Name	Last Name	
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inventor's Signature		Date
First/Middle Name	Last Name	
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Inventor's Signature		Date
First/Middle Name	Last Name	

Page 2 of 2

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

	PATENT APPLICATION
RECORD ID:	700220128

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 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, 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.

assigns, the entire entitled:	right, title and interest, including	ng the right of priority, in,	to and under an application for Patent
DATA WRITE TO	SUBSET OF MEMORY DEVICE	Es	
Filing Date: 01/3	30/2017	Application No	: 15/500460
divisionals, and rer	newals of and substitutes for sai	d application for said Pate	ntinuations, continuations-in-part (C-I-P's), ent, and any and all other Patent of any , or reexaminations, or extensions of said
by HPDC, its succe Patent respectively	essors, assigns, nominees or lega	al representatives, to the fu ended, as fully and entirely	ent in any country, to be held and enjoyed ill end of the term or terms for which said as the same would have been held and
executed and will natime a request is magnetic the title to sometimes or legal resaid invention(s) or papers, to execute rightful oaths and cand legal represent improvement(s) in cooperation and assignations as afor invention(s) or impaccordance with the	ot execute any agreement in contact, and without undue delay, execute invention(s) or improvement(s) epresentatives, and I/we agree to improvement(s), said application all disclaimers and divisionals, leclarations, and generally to do atives to obtain and enforce, for it any and all countries provided sistance are paid by HPDC; why authorize and request the offices it is united to issue to HPDC, as assistence of this assignment.	flict herewith, and I/we furth scute and deliver all such parts), said application and said communicate to HPDC, or and said Patent, to testify continuations, C-I-P's, reist everything possible to aid is or their own benefit, proporthe expenses which may icial of any country or cour gnee of the entire right, title ed and granted on or as	est herein assigned, and that I/we have not er covenant and agree that I/we will, each apers as may be necessary or desirable to Patent, to HPDC, its successors, assigns, to its nominee, all known facts respecting in any legal proceedings, to sign all lawful sue and foreign applications, to make all HPDC, its successors, assigns, nominees er patent protection for said invention(s) or be incurred by me/us in lending such atries whose duty it is to issue patents on e and interest, any and all Patent for said a result of the application aforesaid, in
			ing date and application number of said s soon as the same shall have been made
IN WITNESS \	VHEREOF, I/we hereunto set m	y/our hand(s) and seal(s):	
Inventor's Signature			
Rajeev	, Balasubramoniai	3	
First/Middle Name	/ Last Name	,	
	there		3/4/2015
Inventor's Signature	······	Date	
Naveen	Muralimanohar		
First/Middle Name	Last Name	•••••	
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HEWLETT-PACKARD COMPA Intellectual Property Administra 3404 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528		RECORD ID:	PATENT APPLICATION 700220128
	ASSIGNMENT OF PAT	ENT APPLICATION (cont	A >-
B. B	44	1	2015
inventor's Signature		Date / /	
Greg g B	Lesartre		
First/Middle Name	Last Name		
inventor's Signature			·····
mala	Faraboschi		
Pao lo First/Middle Name	Last Name	· · · · · · · · · · · · · · · · · · ·	
A Security States			
pventor's Signature		Date	
Jishen	Zhao		
First/Middle Name	Last Name	-	
inventor's Si gnature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Mid dle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		

Page 2 of 2

Rev 8/2014 (Assignment)

HEWLETT-PACKARD COMPANY 3404 E. Harmony Road Mail Stop 79 Fort Collins, Colorado 80528

PATENT APPLICATION

RECORD ID:	700220	12	8	_		_		

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 HEWLETT-PACKARD DEVELOPMENT COMPANY, L.P., a Texas

Limited Partne subsidiaries an	ership having its nd affiliates, agre	e to assign and transfer a	iness in Houston, Te and hereby assign and	exas, (hereinafter HPDC), and to its transfer to HPDC, its successors and o and under an application for Paten
DATA WRITE	TO SUBSET OF	MEMORY DEVICES		
Filing Date: _	01/30/2017		Application No.:	15/500460
divisionals, and	d renewals of and	d substitutes for said app	olication for said Paten	inuations, continuations-in-part (C-I-P's) t, and any and all other Patent of any or reexaminations, or extensions of said
by HPDC, its s Patent respecti	uccessors, assigr vely may be grar	ns, nominees or legal repr	resentatives, to the full d, as fully and entirely a	nt in any country, to be held and enjoyed end of the term or terms for which said as the same would have been held and
executed and w time a request i perfect the title nominees or leg said invention(s papers, to exe- rightful oaths a and legal repre- improvement(s)	vill not execute ar is made, and with to said invention(gal representative) or improvement cute all disclaimend declarations, a sentatives to obta	ny agreement in conflict he out undue delay, execute s) or improvement(s), said s, and I/we agree to complet(s), said application and sers and divisionals, continuand generally to do every in and enforce, for its or the countries provided the	erewith, and I/we further and deliver all such paper application and said Perminicate to HPDC, or to said Patent, to testify in the paper all possible to aid Hilber own benefit, proper	t herein assigned, and that I/we have not covenant and agree that I/we will, each ers as may be necessary or desirable to atent, to HPDC, its successors, assigns to its nominee, all known facts respecting any legal proceedings, to sign all lawfue and foreign applications, to make a PDC, its successors, assigns, nominees patent protection for said invention(s) of the incurred by me/us in lending such
applications as invention(s) or	aforesaid, to issu	ie to HPDC, as assignee which may be issued ar	of the entire right, title	ies whose duty it is to issue patents or and interest, any and all Patent for said result of the application aforesaid, in
		•		g date and application number of said soon as the same shall have been made
IN WITNE	SS WHEREOF, I/	we hereunto set my/our	hand(s) and seal(s):	
Inventor's Signat	ure		Date	
Rajeev		Balasubramonian		
First/Middle Name	2	Last Name		
Inventor's Signat	ure		Date	
Naveen		Muralimanohar		
First/Middle Name	2	Last Name		
Rev 8/2014 (Assignme	ent)	Pag	e 1 of 2	

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PATENT APPLICATION

Mail Stop 35		RECORD ID:	700220128
Fort Collins, Colorado 80528	ASSIGNMENT OF PAT	TENT APPLICATION (cont.)
Inventor's Signature		Date	
Gregg 8	Lesartre		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Paolo	Faraboschi		
First/Middle Name	Last Name		
Juh Th		3/4/2015	
Inventor's Signature		Date	
Jishen	Zhao		
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
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Inventor's Signature		Date	
First/Middle Name	Last Name		

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RECORDED: 03/03/2017

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