# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4269142

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
LISA BAOCHYN LIU	02/07/2017
SONALI SOMYALIPI	01/31/2017
ROBERT RAYMOND NEAL-JOSLIN	01/31/2017
NATHANIEL ROGERS	01/31/2017
SUJATHA MUDUPALLI	02/08/2017

#### RECEIVING PARTY DATA

Name:	Hewlett Packard Enterprise Development LP
Street Address:	11445 Compaq Center Drive West
City:	Houston
State/Country:	TEXAS
Postal Code:	77070

## **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	15421149

## **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.

Phone: (970) 898-7444 Email: hpe.ip.mail@hpe.com

**Correspondent Name:** HEWLETT PACKARD ENTERPRISE Address Line 1: 3404 E. HARMONY ROAD MS 79

Address Line 4: FORT COLLINS, COLORADO 80528

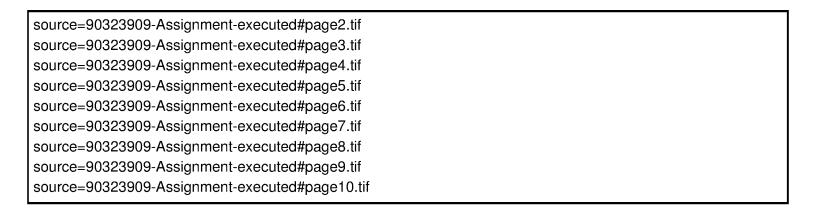
ATTORNEY DOCKET NUMBER:	90323909
NAME OF SUBMITTER:	BE HENRY
SIGNATURE:	/Be Henry/
DATE SIGNED:	02/10/2017

**Total Attachments: 10** 

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**PATENT** REEL: 041223 FRAME: 0529

504222465



PATENT REEL: 041223 FRAME: 0530

Rev 06/15

#### **PATENT APPLICATION**

RECORD ID:	90323909

#### **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 Enterprise Development LP, a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPED), and to its subsidiaries and affiliates, agree to assign and transfer and hereby assign and transfer to HPED, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Patent entitled:

	r assign and transfer to HPED, its s in, to and under an application for Pa		ntire right, title and interest, including
VOLUME AND SN	IAPSHOT REPLICATION		
Filing Date:	January 31, 2017	Application No.:	15/421149
divisionals, and re-	newals of and substitutes for said	application for said Patent, a	ations, continuations-in-part (C-I-P's), and any and all other Patent of any reexaminations, or extensions of said
by HPED, its succe Patent respectively	essors, assigns, nominees or legal	representatives, to the full enneded, as fully and entirely as	n any country, to be held and enjoyed d of the term or terms for which said the same would have been held and
executed and will n time a request is m perfect the title to s nominees or legal r said invention(s) or papers, to execute rightful oaths and c and legal represent improvement(s) in	ot execute any agreement in conflict ade, and without undue delay, executed invention(s) or improvement(s), representatives, and I/we agree to confirm improvement(s), said application at all disclaimers and divisionals, confectarations, and generally to do exatives to obtain and enforce, for its	ct herewith, and I/we further coute and deliver all such papers said application and said Pater communicate to HPED, or to it and said Patent, to testify in an ontinuations, C-I-P's, reissue a verything possible to aid HPE or their own benefit, proper pa	erein assigned, and that I/we have not ovenant and agree that I/we will, each as as may be necessary or desirable to ent, to HPED, its successors, assigns, as nominee, all known facts respecting y legal proceedings, to sign all lawful and foreign applications, to make all D, its successors, assigns, nominees tent protection for said invention(s) or incurred by me/us in lending such
applications as afor invention(s) or imp	resaid, to issue to HPED, as assign	nee of the entire right, title and	whose duty it is to issue patents on d interest, any and all Patent for said esult of the application aforesaid, in
			date and application number of said on as the same shall have been made
IN WITNESS WH	HEREOF, I/we hereunto set my/our han	d(s) and seal(s):	
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Inventor's Signature		Date	7.110011
Lisa Baochyn	Liu		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Sonali	Somyalipi		
First/Middle Name	Last Name		

Page 1 of 2

## PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID:	90323909
	ASSIGNMENT OF PATEN	T APPLICATION (cont.	)
Inventor's Signature		Date	
Robert Raymond	Neal-Joslin		
First/Middle Name	Last Name	<del></del>	
Inventor's Signature		Date	
Nathaniel	Rogers		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Sujatha	Mudupalli		
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		

Page 2 of 2

Rev 88/35

#### PATENT APPLICATION

RECORDIO:	90323909

#### **ASSIGNMENT OF PATENT APPLICATION**

Whe, 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 Enterprise Development LP, a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPED), and to its subsidiaries and affiliates, agree to assign and transfer and hereby assign and transfer to HPED, its successors and assigns, the entire right, title and interest, including the right of priority, in, to and under an application for Patent entitled:

## VOLUME AND SNAPSHOT REPLICATION

Filing Date:	January 31, 2017	Application No.:	15/421149
divisionals, and	n(s) and improvement(s) set forth theorenewals of and substitutes for said which may be granted thereon or the	application for said Palent, a	nd any and all other Patent of any
by HPED, its sur Patent respective	nally authorize HPEO to file application xessors, assigns, nominees or legal r rly may be granted, reissued or exten s had this assignment, and transfer not	epresentatives, to the full end ded, as fully and entirely as t	of the term or terms for which said
executed and will time a request is perfect the title to nominees or legs said invention(s) papers, to execu- rightful caths and and legal repressi- improvement(s) cooperation and	treiby covenant that I/we have full right in the execute any agreement in conflict made, and without undue delay, execute said invention(s) or improvement(s), at representatives, and I/we agree to comprovement(s), said application at the still disclaimers and divisionals, cold declarations, and generally to do eventiatives to obtain and enforce, for its contain and all countries provided the assistance are paid by HPEO;	t herewith, and live further co- ite and deliver all such papers said application and said Pater immunicate to HPED, or to its id said Patent, to testify in any intinuations, C-LPs, reissue a erything possible to aid HPEI or their own benefit, proper pat- iee expenses which may be	venant and agree that tive will, each as may be necessary or desirable to not to HPED, its successors, assigns nominee, all known facts respecting legal proceedings, to sign all lawfund foreign applications, to make all its successors, assigns, nominees ent protection for said invention(s) o incurred by metus in lending such
applications as a invention(s) or it	ereby authorize and request the officis foresaid, to issue to HPED, as assign improvement(s) which may be issued the terms of this assignment.	ee of the entire right, title and	interest, any and all Patent for sax
l/we further application for Paknown to them.	authorize and direct the attorneys of dent, now identified by the Record ID a	f record to insert the filing d and title set forth above, as soo	ate and application number of sain in as the same shall have been made
IN WITNESS	WHEXEOF, I/we bereanto set my/our bans	XS) and seal(s):	
Inventor's Signatu	8	Date	
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Lisa Baochyn	Liu	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
First/Middle Name	Last Name	01/3	1/2017
Inventor's Signatu	8	Date	
Sonali	Somyalipi		
Enct/Minister Manne	Last Name	***************************************	

Page 1 of 2

PATENT REEL: 041223 FRAME: 0533

## PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID:	90323909
	ASSIGNMENT OF PATEN	IT APPLICATION (cont.	)
Inventor's Signature		Date	
Robert Raymond	Neal-Joslin		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Nathaniel	Rogers		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Sujatha	Mudupalli		
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		

Page 2 of 2

First/Middle Name

Rev 06/15

Hewlett Packard Enterprise 3404 E. Harmony Road			PATENT APPLICATION
Mail Stop 79 Fort Collins, Colorado 8052	8	RECORD ID:	90323909
	ASSIGNMENT OF P	ATENT APPLICATION	
furtherance of my/our obligation principal place of business i transfer and hereby assign	each), for good and valuable cor ations to Hewlett Packard Enter n Houston, Texas, (hereinafter H	nsideration, the receipt of whi prise Development LP, a Te IPED), and to its subsidiaries essors and assigns, the entir	ch is hereby acknowledged, and in xas Limited Partnership having its and affiliates, agree to assign and e right, title and interest, including
VOLUME AND SNAPSHO	T REPLICATION		
Filing Date: Jan	uary 31, 2017	Application No.:	15/421149
divisionals, and renewals	of and substitutes for said app	lication for said Patent, and	ons, continuations-in-part (C-I-P's), any and all other Patent of any xaminations, or extensions of said
by HPED, its successors, a Patent respectively may be	ssigns, nominees or legal repre	esentatives, to the full end o , as fully and entirely as the	ny country, to be held and enjoyed f the term or terms for which said same would have been held and
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applications as aforesaid, to invention(s) or improvement accordance with the terms of	o issue to HPED, as assignee out(s) which may be issued and f this assignment.	of the entire right, title and in d granted on or as a resul	terest, any and all Patent for said t of the application aforesaid, in
			e and application number of said as the same shall have been made
IN WITNESS WHEREOF, I,	we hereunto set my/our hand(s) a	nd seal(s):	
Inventor's Signature		Date	
Lisa Baochyn	Liu		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Sonali	Somyalipi		

**PATENT REEL: 041223 FRAME: 0535** 

Last Name

## PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID:	90323909
	ASSIGNMENT OF PATENT AP	PLICATION (cont.)	
Robert Ray	mond Neal-Jol	1/31/2	017
Inventor's Signature		Date ' '	
Robert Raymond	Neal-Joslin		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Nathaniel	Rogers		
First/Middle Name	Last Name	·····	
Inventor's Signature		Date	
Sujatha	Mudupalli		
First/Middle Name	Last Name	·	
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
nventor's Signature		Date	
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Page 2 of 2

Rev 06/15

#### PATENT APPLICATION

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lo 80528	RECORD ID:	90323909

## **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 Enterprise Development LP, a Texas Limited Partnership having its principal place of business in Houston, Texas, (hereinafter HPED), and to its subsidiaries and affiliates, agree to assign and transfer and hereby assign and transfer to HPED, 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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VOLUME AND S	NAPSHOT REPLICATION		
Filing Date:	January 31, 2017	Application No.:	15/421149
divisionals, and re	(s) and improvement(s) set forth the enewals of and substitutes for said which may be granted thereon or the	application for said Patent, ar	nd any and all other Patent of any
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applications as afe invention(s) or im	reby authorize and request the officion oresaid, to issue to HPED, as assign aprovement(s) which may be issued the terms of this assignment.	ee of the entire right, title and	interest, any and all Patent for said
	authorize and direct the attorneys o ent, now identified by the Record ID a		
IN WITNESS W	/HEREOF, I/we hereunto set my/our hand	d(s) and seal(s):	
Inventor's Signature	)	Date	· · · · · · · · · · · · · · · · · · ·
Lisa Baochyn	Liu		
First/Middle Name	Last Name		
Inventor's Signature		Date	
Sonali	Somyalipi		
First/Middle Name	Last Name	······································	

Page 1 of 2

PATENT

## PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID: 90323909
•	ASSIGNMENT OF PATEN	T APPLICATION (cont.)
Inventor's Signature		Date
Robert Raymond	Neal-Joslin	
First/Middle Name	Last Name	
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Inventor's Signăture  Nathaniel	√   Rogers	Dare
First/Middle Name	Last Name	
Inventor's Signature		Date
Sujatha	Mudupalli	
First/Middle Name	Last Name	<del></del>
Inventor's Signature		Date
First/Middle Name	Last Name	
Inventor's Signature		Date
First/Middle Name	Last Name	
Inventor's Signature		Date

Page 2 of 2

Last Name

First/Middle Name

First/Middle Name

Rev 06/15

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## **ASSIGNMENT OF PATENT APPLICATION**

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VOLUME AND S	SNAPSHOT REPLICATION		
Filing Date:	January 31, 2017	Application No.:	15/421149
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by HPED, its suc Patent respective	ally authorize HPED to file applicatio ccessors, assigns, nominees or legal ly may be granted, reissued or extended this assignment, and transfer no	representatives, to the full end nded, as fully and entirely as the	of the term or terms for which said
executed and will time a request is a perfect the title to nominees or legal said invention(s) of papers, to execu- rightful oaths and and legal represes improvement(s) in	reby covenant that I/we have full right not execute any agreement in conflimade, and without undue delay, execute said invention(s) or improvement(s), I representatives, and I/we agree to corrimprovement(s), said application at all disclaimers and divisionals, continuously to do entatives to obtain and enforce, for its not any and all countries provided the assistance are paid by HPED;	ot herewith, and I/we further covoute and deliver all such papers said application and said Pater communicate to HPED, or to its and said Patent, to testify in any partinuations, C-I-P's, reissue are verything possible to aid HPED or their own benefit, proper pate	venant and agree that I/we will, each as may be necessary or desirable to nt, to HPED, its successors, assigns, nominee, all known facts respecting legal proceedings, to sign all lawful nd foreign applications, to make all its successors, assigns, nominees ent protection for said invention(s) or
applications as af invention(s) or in	ereby authorize and request the offic foresaid, to issue to HPED, as assig nprovement(s) which may be issue he terms of this assignment.	nee of the entire right, title and	interest, any and all Patent for said
I/we further application for Pat known to them.	authorize and direct the attorneys tent, now identified by the Record ID	of record to insert the filing date and title set forth above, as soon	ate and application number of said n as the same shall have been made
IN WITNESS W	VHEREOF, I/we hereunto set my/our har	nd(s) and seal(s):	
nventor's Signature	<del></del>	Date	
Lisa Baochyn	Liu		
First/Middle Name	Last Name		
nventor's Signature		Date	
Sonali			
JUHAH	Somyalipi		

PATENT REEL: 041223 FRAME: 0539

Last Name

## **PATENT APPLICATION**

For Collins, Colorado 805	228	RECORD ID: 90323909	
	ASSIGNMENT OF PATE	NT APPLICATION (cont.)	
Inventor's Signature		Date	
Robert Raymond	Neal-Joslin		
First/Middle Name	Last Name		
Inventor's Signature			
		Date	
Nathaniel	Rogers		
First/Middle Name	Last Name		
Late	p	02/08/17	
Inventor's Signature		Date	
Sujatha	Mudupalli		
First/Middle Name	Last Name		
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Inventor's Signature		Date	
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First/Middle Name	Last Name		

Page 2 of 2

Rev 06/15

**RECORDED: 02/10/2017** 

PATENT REEL: 041223 FRAME: 0540