504109012 11/23/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4155681

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SHENG LI	08/18/2016
JISHEN ZHAO	07/12/2016
JICHUAN CHANG	07/13/2016
PARTHASARATHY RANGANATHAN	07/11/2016
ALISTAIR VEITCH	07/18/2016
KEVIN T. LIM	07/24/2016
MARK LILLIBRIDGE	07/11/2016

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:	15113824

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 3404 E. HARMONY ROAD MS 79
Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER: 90232554

NAME OF SUBMITTER: KATHY HUNGSBERG

SIGNATURE: /Kathy Hungsberg/

DATE SIGNED: 11/23/2016

PATENT 504109012 REEL: 040408 FRAME: 0255

Total Attachments: 10 source=90232554AssignmentExecutedAll#page1.tif source=90232554AssignmentExecutedAll#page2.tif source=90232554AssignmentExecutedAll#page3.tif source=90232554AssignmentExecutedAll#page4.tif source=90232554AssignmentExecutedAll#page5.tif source=90232554AssignmentExecutedAll#page6.tif source=90232554AssignmentExecutedAll#page7.tif source=90232554AssignmentExecutedAll#page8.tif source=90232554AssignmentExecutedAll#page8.tif source=90232554AssignmentExecutedAll#page9.tif source=90232554AssignmentExecutedAll#page9.tif

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RECORD ID:	83629337

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 subsidiari	es and affiliates, to assign and transfer to HPDC, its successors and iding the right of priority, in, to and under an application for Patent
	OMMITTING WRITE REQUESTS
Filing Date: 07/23/2016	Application No.: 15/113824
divisionals, and renewals of and substitutes for	In therein, and any and all continuations, continuations-in-part (C-I-P's), said application for said Patent, and any and all other Patent of any or therefore; and any reissues, or reexaminations, or extensions of said
by HPDC, its successors, assigns, nominees or I	cations in my/our name for Patent in any country, to be held and enjoyed egal representatives, to the full end of the term or terms for which said extended, as fully and entirely as the same would have been held and er not been made;
executed and will not execute any agreement in citime a request is made, and without undue delay, perfect the title to said invention(s) or improvement nominees or legal representatives, and I/we agreesaid invention(s) or improvement(s), said applicate papers, to execute all disclaimers and divisional rightful oaths and declarations, and generally to and legal representatives to obtain and enforce, for	right to convey the entire interest herein assigned, and that I/we have not conflict herewith, and I/we further covenant and agree that I/we will, each execute and deliver all such papers as may be necessary or desirable to tit(s), said application and said Patent, to HPDC, its successors, assigns, to communicate to HPDC, or to its nominee, all known facts respecting ion and said Patent, to testify in any legal proceedings, to sign all lawful is, continuations, C-I-P's, reissue and foreign applications, to make all do everything possible to aid HPDC, its successors, assigns, nominees or its or their own benefit, proper patent protection for said invention(s) or led the expenses which may be incurred by me/us in lending such
applications as aforesaid, to issue to HPDC, as a	official of any country or countries whose duty it is to issue patents on assignee of the entire right, title and interest, any and all Patent for said assued and granted on or as a result of the application aforesaid, in
	eys of record to insert the filing date and application number of said d ID and title set forth above, as soon as the same shall have been made
IN WITNESS WHEREOF, I/we hereunto set	my/our hand(s) and seal(s):
Sengel	0/40/0040
Inventor's Signature	8/18/2016 Date
Sheng Li Inventor's Typed Name	
Inventor's Signature	Date
Jishen Zhao	
Inventor's Typed Name	
Rev 1/2013 (Assignment)	Page 1 of 2

HEWLETT-PACKARD COMPANY Intellectual Property Administrator 3404 E. Hamony Road Mail Stop 35

PATENT APPLICATION

Mail Stop 35 Fort Callins, Colorado 80528	RECORD ID: 83629337
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Charles Commence	07/13/2016
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Jichuan Chang	
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Irventor's Signature	Date
Parthasarathy Ranganathan	
Inventor's Typed Name	
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Allstair Veilch	
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Kevin T Llin	
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entitled:	any, m, to and under an application for materit
ATOMICALLY COMMITTING WR	TE REQUESTS
Filing Date: 07/23/2016 Applicat	tion No.: 15/113824
and the invention(s) and improvement(s) set forth therein, and any and divisionals, and renewals of and substitutes for said application for succountries thereto which may be granted thereon or therefore; and any a Patent.	d all continuations, continuations-in-part (C-I-P's), aid Patent, and any and all other Patent of any
I/we additionally authorize HPDC to file applications in my/our name by HPDC, its successors, assigns, nominees or legal representatives, t Patent respectively may be granted, reissued or extended, as fully and enjoyed by me/us had this assignment, and transfer not been made;	o the full end of the term or terms for which said
AND I/we hereby covenant that I/we have full right to convey the enti- executed and will not execute any agreement in conflict herewith, and I/i time a request is made, and without undue delay, execute and deliver all perfect the title to said invention(s) or improvement(s), said application a nominees or legal representatives, and I/we agree to communicate to HI said invention(s) or improvement(s), said application and said Patent, to papers, to execute all disclaimers and divisionals, continuations, C-I-F rightful oaths and declarations, and generally to do everything possible and legal representatives to obtain and enforce, for its or their own bene improvement(s) in any and all countries provided the expenses whi cooperation and assistance are paid by HPDC;	we further covenant and agree that I/we will, each such papers as may be necessary or desirable to nd said Patent, to HPDC, its successors, assigns, PDC, or to its nominee, all known facts respecting testify in any legal proceedings, to sign all lawful Ps, reissue and foreign applications, to make all to aid HPDC, its successors, assigns, nominees fit, proper patent protection for said invention(s) or
AND I/we hereby authorize and request the official of any country applications as aforesaid, to issue to HPDC, as assignee of the entire invention(s) or improvement(s) which may be issued and granted or accordance with the terms of this assignment.	ight, title and interest, any and all Patent for said
I/we further authorize and direct the attorneys of record to inser application for Patent, now identified by the Record ID and title set forth a known to them.	t the filing date and application number of said bove, as soon as the same shall have been made
IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and	seal(s):
Inventor's Signature	Date
Sheng Li	
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Inventor's Signature	Date
Jishen Zhao	
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Rev 1/2013 (Assignment) Page 1 of 2	

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PATENT APPLICATION

Mail Stop 35 Fort Collins, Colorado 80528	RECORD ID: 83629337
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Inventor's Signature	July 11, 2016
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Paribasarathy Kanganathan Inventor's Typed Name	
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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 antified:

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ATOMICALLY COMMITTING WR	ITE REQUESTS				
Filing Date: 07/23/2016 Applica	tion No.: 15/113824				
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 ar countries thereto which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of sa Patent.					
I/we additionally authorize HPDC to file applications in my/our name by HPDC, its successors, assigns, nominees or legal representatives, the Patent respectively may be granted, reissued or extended, as fully and enjoyed by me/us had this assignment, and transfer not been made;	to the full end of the term or terms for which said				
AND I/we hereby covenant that I/we have full right to convey the ent executed and will not execute any agreement in conflict herewith, and I/ time a request is made, and without undue delay, execute and deliver all perfect the title to said invention(s) or improvement(s), said application a nominees or legal representatives, and I/we agree to communicate to H said invention(s) or improvement(s), said application and said Patent, to papers, to execute all disclaimers and deplicationals, continuations, C-I-rightful oaths and declarations, and generally to do everything possible and legal representatives to obtain and enforce, for its or their own bene improvement(s) in any and all countries provided the expenses wh cooperation and assistance are paid by HPDC;	we further covenant and agree that I/we will, each I such papers as may be necessary or desirable to and said Patent, to HPDC, its successors, assigns, PDC, or to its nominee, all known facts respecting testify in any legal proceedings, to sign all lawful eto aid HPDC, its successors, assigns, nominees offt, proper patent protection for said invention(s) or				
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I/we further authorize and direct the attorneys of record to inser application for Patent, now identified by the Record ID and title set forth a known to them.					
IN WITNESS WHEREOF, I/we hereunto set my/our hand(s) and	l seal(s):				
Inventor's Signature	Date				
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Sheng Li Inventor's Typed Name					
Inventor's Signature	Date				
Jishen Zhao Inventor's Typed Name					
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PATENT APPLICATION

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Jichuan Chang	
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Parthasarathy Ranganathan	
Inventor's Typed Name	
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i . worth	5nl 18, 2016
Inventor's Signature	Date Date
Allstair Veltch	
Inventor's Typed Name	
Inventor's Signature	Date
Kevin T Lim	
Inventor's Typed Name	
inventor's Signature	Date
Mark Lillibridge	
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Page 2 of 2

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ASSIGNMENT OF PATENT APPLICATION

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ATOMICALLY COM	MITTING WRITE REQUESTS
Filing Date: 07/23/2016	Application No.: <u>15/113824</u>
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	s in my/our name for Patent in any country, to be held and enjoyed epresentatives, to the full end of the term or terms for which said ded, as fully and entirely as the same would have been held and been made;
time a request is made, and without undue delay, execu- perfect the title to said invention(s) or improvement(s), s nominees or legal representatives, and I/we agree to co said invention(s) or improvement(s), said application an papers, to execute all disclaimers and divisionals, cor rightful oaths and declarations, and generally to do eve and legal representatives to obtain and enforce for its or	to convey the entire interest herein assigned, and that I/we have not the herewith, and I/we further covenant and agree that I/we will, each the and deliver all such papers as may be necessary or desirable to said application and said Patent, to HPDC, its successors, assigns, immunicate to HPDC, or to its nominee, all known facts respecting disaid Patent, to testify in any legal proceedings, to sign all lawful attinuations, C-I-P's, reissue and foreign applications, to make all arything possible to aid HPDC, its successors, assigns, nominees in their own benefit, proper patent protection for said invention(s) or expenses which may be incurred by me/us in lending such
	of any country or countries whose duty it is to issue patents on se of 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 an known to them.	record to insert the filing date and application number of said at title set forth above, as soon as the same shall have been made
IN WITNESS WHEREOF, I/we hereunta set my/o	ur hand(s) and seal(s):
Inventor's Signature	Date
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Inventor's Signature	Date
Jishen Zhao	
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Filing Date: 07/23/2016	Application No.: 15/113824
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	of record to insert the filing date and application number of said and title set forth above, as soon as the same shall have been made
IN WITNESS WHEREOF, I/we hereunto set my/	our hand(s) and seal(s):
Inventor's Signature	Date
Sheng Li Inventor's Typed Name	
Inventor's Signature	Date
Jishen Zhao Inventor's Typed Name	
Rev 1/2013 (Assignment)	Page 1 of 2

HEWLETT-PACKARD COMPANY Intellectual Property Administrator

PATENT APPLICATION

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Fort Callins, Colorado 80528	record id:	83629337
ASSIGNME	NT OF PATENT APPLICATION (c	cont)
Inventor's Signature	Date	
Jichuan Crang		
Inventor's Typed Name	**************************************	
Inventor's Signature	Date	
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Parthasarathy Ranganathan Inventor's Typed Name		
Inventor's Signature	Date	
Alistati Veltch Irwentor's Typed Name		
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Kevin T Lim	•	
Inventor's Typed Name	**************************************	
Mas Alluday	~~~~ ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	11(7016
inventor's Signature	Date	
Mark Litibridge Inventor's Typed Name	Vindalidakaanaanaanaanaanaanaanaanaanaanaanaanaa	
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