PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

v1.1 EPAS ID: PAT5671350

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DIMITRE MEHANDJIYSKY	10/13/2016
ZHENG CAO	10/12/2016
KEVIN L. MASSARO	10/13/2016

RECEIVING PARTY DATA

Name:	Hewlett-Packard Development Company, L.P.		
Street Address:	10300 Energy Drive		
City:	Spring		
State/Country:	TEXAS		
Postal Code:	77389		

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16342152

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.

Phone: 3602128500
Email: ipa.mail@hp.com

Correspondent Name: HP, INC.

Address Line 1: 3390 EAST HARMONY ROAD

Address Line 2: MS 35

Address Line 4: FORT COLLINS, COLORADO 80538

ATTORNEY DOCKET NUMBER:	85681607
NAME OF SUBMITTER:	ANGELA D. BOLTJES
SIGNATURE:	/Angela D. Boltjes/
DATE SIGNED:	08/15/2019

Total Attachments: 4

source=AssignmentExecutedFinal#page1.tif source=AssignmentExecutedFinal#page2.tif source=AssignmentExecutedFinal#page3.tif

PATENT 505624547 REEL: 050068 FRAME: 0621

source = Assignment Executed Final #page 4.t if

PATENT REEL: 050068 FRAME: 0622

HP Inc.
3390 E. Harmony Road
Mail Stop 35
Fort Collins, Colorado 80528

Rev 8/2014 (Assignment)

PATENT APPLICATION

	0 4 5 4 7 5 0 4
RECORD ID:	84517604

ASSIGNMENT OF PATENT APPLICATION

and in furtherance of my/our of Limited Partnership having its subsidiaries and affiliates, agree	obligations to HEWLETT-PACKARI principal place of business in Ho to assign and transfer and hereby a	on, the receipt of which is hereby acknowledged, D DEVELOPMENT COMPANY, L.P., a Texas buston, Texas, (hereinafter HPDC), and to its assign and transfer to HPDC, its successors and ority, in, to and under an application for Patent
ELECTRONIC DESK		
Filing Date:	Applica	ition No.:
divisionals, and renewals of and	substitutes for said application for s	nd all continuations, continuations-in-part (C-I-P's), said Patent, and any and all other Patent of any reissues, or reexaminations, or extensions of said
by HPDC, its successors, assigns	s, nominees or legal representatives, ed, reissued or extended, as fully an	e for Patent in any country, to be held and enjoyed to the full end of the term or terms for which said d entirely as the same would have been held and
executed and will not execute any time a request is made, and witho perfect the title to said invention(s nominees or legal representatives said invention(s) or improvement(; papers, to execute all disclaimer rightful oaths and declarations, and legal representatives to obtain an	agreement in conflict herewith, and is ut undue delay, execute and deliver a) or improvement(s), said application , and I/we agree to communicate to it s), said application and said Patent, t s and divisionals, continuations, C-I- d generally to do everything possible t ind enforce, for its or their own benef intries provided the expenses which ma	tire interest herein assigned, and that I/we have not /we further covenant and agree that I/we will, each Il such papers as may be necessary or desirable to and said Patent, to HPDC, its successors, assigns, /IPDC, or to its nominee, all known facts respecting o testify in any legal proceedings, to sign all lawful P's, reissue and foreign applications, to make all o aid HPDC, its successors, assigns, nominees and it, proper patent protection for said invention(s) or ay be incurred by me/us in lending such cooperation
applications as aforesaid, to issue	e to HPDC, as assignee of the entire which may be issued and granted of	or countries whose duty it is to issue patents on right, title and interest, any and all Patent for said on or as a result of the application aforesaid, in
		rt the filing date and application number of said above, as soon as the same shall have been made
IN WITNESS WHEREOF, I/w	e hereunto set my/our hand(s) and	l seal(s):
THUBOTONO		10/13/2016
Inventor's Signature		Date
Dimitre	Mehandjiysky	
First/Middle Name	Last Name	-
Inventor's Signature		Date
Zheng	Cao	
First/Middle Name	Last Name	_

Page 1 of 2

HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID:	84517604
	ASSIGNMENT OF PA	ATENT APPLICATION (cont.)
Inventor's Signature		Date	
Kevin L.	Massaro		
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature			
First/Middle Name	Last Name		
Inventor's Signature			
First/Middle Name	Last Name		
Inventor's Signature			
First/Middle Name	Last Name		
Inventor's Signature		 Date	
First/Middle Name	Last Name		

Page 2 of 2

HP Inc. 3390 E. Harmony Road
3390 E. Harmony Road
Mail Stop 35
Fort Collins, Colorado 80528

Rev 8/2014 (Assignment)

200		-			PP4 5P4 5			REF 25 5
100	ω	5 0	(V) }	- 52	P- 1-2	111	43	TION

l Stop 35			
•	DOLDOLAR ARE DOLDO.	84517604	
t Collins, Colorado 805281	RECORD ID:	04011004	

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

subsidiaries and affiliate	s, agree to assign and transfe	usiness in Houston, Texas, (hereinafter HPDC), and to its or and hereby assign and transfer to HPDC, its successors and the right of priority, in, to and under an application for Paten
ELECTRONIC DESK		
Filing Date:		Application No.:
divisionals, and renewals	s of and substitutes for said a	ein, and any and all continuations, continuations-in-part (C-I-P's) pplication for said Patent, and any and all other Patent of any efore; and any reissues, or reexaminations, or extensions of said
by HPDC, its successors Patent respectively may	, assigns, nominees or legal re	in my/our name for Patent in any country, to be held and enjoyed presentatives, to the full end of the term or terms for which said ed, as fully and entirely as the same would have been held and een made;
executed and will not exe time a request is made, a perfect the title to said in nominees or legal repres said invention(s) or impro papers, to execute all d rightful oaths and declara legal representatives to	ecute any agreement in conflict and without undue delay, execut vention(s) or improvement(s), so entatives, and I/we agree to convernent(s), said application and isclaimers and divisionals, contions, and generally to do every betain and enforce, for its or the dall countries provided the expe	convey the entire interest herein assigned, and that I/we have no herewith, and I/we further covenant and agree that I/we will, each e and deliver all such papers as may be necessary or desirable to aid application and said Patent, to HPDC, its successors, assigns municate to HPDC, or to its nominee, all known facts respecting I said Patent, to testify in any legal proceedings, to sign all lawful tinuations, C-I-P's, reissue and foreign applications, to make a thing possible to aid HPDC, its successors, assigns, nominees and heir own benefit, proper patent protection for said invention(s) overses which may be incurred by me/us in lending such cooperation
applications as aforesaid	, to issue to HPDC, as assigne nent(s) which may be issued	of any country or countries whose duty it is to issue patents or e 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
		record to insert the filing date and application number of said dittle set forth above, as soon as the same shall have been made
IN WITNESS WHER	EOF, I/we hereunto set my/o	ur hand(s) and seal(s):
Inventor's Signature		Date
Dimitre	Mehandjiysky	
 First/Middle Name	Last Name	
100		10/12/2016
Inventor's Signature		Date
Zheng	Cao	
Eirst/Middle Name	Last Name	

Page 1 of 2

HP Inc. 3390 E. Harmony Road Mail Stop 35

PATENT APPLICATION

Mail Stop 35 Fort Collins, Colorado 80528		RECORD ID:84517604	
\mathcal{M}_{2}	ASSIGNMENT OF PA	ATENT APPLICATION (cont.)	
(MM	^	10/13/2016	
Inventor's Signature		Date	
Kevin L.	Massaro		
First/Middle Name	Last Name		
Inventor's Signature		Date Date	
First/Middle Name	Last Name		
Inventor's Signature		Date Date	
First/Middle Name	Last Name		
Inventor's Signature			
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature			
First/Middle Name	Last Name		

Page 2 of 2

Rev 8/2014 (Assignment)