505374919 03/14/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

rsion v1.1 EPAS ID: PAT5421712

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
PAUL H MAZURKIEWICZ	10/18/2016
NING GE	10/18/2016
HELEN A HOLDER	10/19/2016

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:	16332813	

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.

Correspondent Name: HP INC.

Address Line 1: 3390 E. HARMONY ROAD MS 35
Address Line 2: INTELLECTUAL PROPERTY

Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER:	85703169
NAME OF SUBMITTER:	DEBBIE BORLAND
SIGNATURE:	/Debbie Borland/
DATE SIGNED:	03/14/2019

Total Attachments: 3

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PATENT 505374919 REEL: 048598 FRAME: 0893

HP Inc.	
3390 E. Harmony Road	1
Mail Stop 35	- 1
Fort Cotlins, Colorado 6052	8

PATENT APPLICATION

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:

MARKER WITH INFORMATION

Filing Date: _	March	13, 2019	Application No.:	16/332813
divisionals, and	renewals	of and substitutes for said applic	cation for said Patent,	nuations, continuations-in-part (C.I-Ps), , and any and all other Patent of any r reexaminations, or extensions of said

I/we additionally authorize HPDC 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, reissued 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 t/we hereby covenant that t/we have full right to convey the entire interest herein assigned, and that t/we have not executed and will not execute any agreement in conflict herewith, and t/we further covenant and agree that t/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 t/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:

AND I/we hereby authorize and request the official of any country or countries whose duty it is to issue patents 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.

I/we further authorize and direct the attorneys of record to insert the filing date and application number of said application for Patent, now identified by the Record ID and title set forth above, as soon as the same shall have been made known to them.

IN WITNESS WHERE	OF, I/we hereunto set n	ny/our hand(s) an	d seal(s): 10/18/2016
Inventor's Signature	1 1		Date
Paul H.	Mazurkiewicz		
First/Middle Name	Last Name		
Inventor's Signature			Date
Ning	Ge		
First/Middle Name	Last Name		
Rev 8/7014 (Assignment)		Page 1 of 2	

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Fort Collins, Colorado 80528

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RECORD ID:	84519325

ASSIGNMENT OF PATENT APPLICATION

I/Ne, the undersigned (each), for good and valuable consideration, the receipt of which is hereby acknowledged, Q

Limited Partnership having it subsidiaries and affiliates, agre	s principal place of busing se to assign and transfer an	ess in Houston, Texa d hereby assign and tr	PMENT COMPANY, L.P., a Texas is, (hereinafter HPDC), and to its ansier to HPDC, its successors and and under an application for Patent
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Filing Date: March 13, 2	2019	Application No.:	16/332813
divisionals, and renewals of an	d substitutes for said applic	ation for said Patent,	iations, continuations-in-part (C-LP's), and any and all other Patent of any reexaminations, or extensions of said
by HPDC, its successors, assig	ns, nominees or legal repres nted, reissued or extended, i	entatives, to the full er as fully and entirely as	n any country, to be held and enjoyed id of the ferm or terms for which said the same would have been held and
executed and will not execute as time a request is made, and with perfect the title to said invention nominees or legal representative said invention(s) or improvement papers, to execute all disclaims rightful paths and declarations, a legal representatives to obtain	ny agreement in conflict here tout undue delay, execute an (s) or improvement(s), said a se, and I/we agree to commut(s), said application and sai are and divisionals, continuated generally to do everything and enforce, for its or their cuntries provided the expense	with, and I/we further of dideliver all such paper pplication and said Pati nicate to HPDC, or to it di Patent, to testify in ar dions, C-I-P's, reissue possible to aid HPDC, own benefit, proper pat	erein assigned, and that I/we have not overlant and agree that I/we will, each is as may be necessary or desirable to ent, to HPDC, its successors, assigns, is nomines, all known facts respecting by legal proceedings, to sign all lawful and foreign applications, to make all its successors, assigns, nominees and ent protection for said invention(s) or the by me/us in lending such cooperation
applications as aforesaid, to issue	ue to HPDC, as assignee of which may be issued and	the entire right, title an	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 WHEREOF, I/	we hereunto set my/our h	and(s) and seal(s):	
		•	
Inventor's Signature		Date	
Paul H.	Mazurkiewicz		
First/Middle Name	Last Name		
			Drelland
Inventor's Signature		Dale	
Ning	Ge		
First/Middle Name	Last Name		
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HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528		RECORD ID:	PATENT APPLICATION 84519325
Auf A F	ASSIGNMENT OF PA	SIGNMENT OF PATENT APPLICATION (cont.)	
Helen A. First/Middle Name	Holder Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name	THE AMERICAN CONTROL CONTROL CONTROL CONTROL CONTROL	
Inventor's Signature		Date	
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Inventor's Signature		Date	
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