505722503 10/15/2019

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE: NEW ASSIGNMENT

NATURE OF CONVEYANCE: ASSIGNMENT

EPAS ID: PAT5769314

CONVEYING PARTY DATA

Name	Execution Date
MOHAMMED S SHAARAWI	05/09/2018
JAMES MCKINNELL	05/09/2018
DAVID A CHAMPION	05/09/2019
VLADEK P KASPERCHIK	05/09/2018

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:	16605247

CORRESPONDENCE DATA

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Correspondent Name: HP INC.

Address Line 1: 3390 E. HARMONY ROAD MS 35
Address Line 4: FORT COLLINS, COLORADO 80528

ATTORNEY DOCKET NUMBER: 85793569

NAME OF SUBMITTER: TRACY J. KIMMEL

SIGNATURE: /Tracy J. Kimmel/

DATE SIGNED: 10/15/2019

Total Attachments: 3

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PATENT 505722503 REEL: 050712 FRAME: 0106

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

PATENT APPLICATION

RECORD ID:	84945265
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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	affiliates, agree to assign and to	ansfer and hereby assign a	Texas, (hereinafter HPDC), and to its and transfer to HPDC, its successors and to and under an application for Patent
Creating a Brea	kaway Region		
Filing Date:	10 May 2018	Application N	PCT/US2018/032020
divisionals, and i	renewals of and substitutes for s	said application for said Pa	ontinuations, continuations-in-part (C-I-P's), tent, and any and all other Patent of any s, or reexaminations, or extensions of said
by HPDC, its suc Patent respective	ccessors, assigns, nominees or le	egal representatives, to the textended, as fully and entire	stent in any country, to be held and enjoyed ull end of the term or terms for which said by as the same would have been held and
executed and will time a request is perfect the title to nominees or lega said invention(s) papers, to execu- rightful oaths and legal representati	I not execute any agreement in commade, and without undue delay, expression said invention(s) or improvement if representatives, and I/we agree or improvement(s), said application and divisionals declarations, and generally to do ives to obtain and enforce, for its nany and all countries provided the	onflict herewith, and I/we furtexecute and deliver all such parties, said application and said to communicate to HPDC, con and said Patent, to testify continuations, C-I-P's, release to their own benefit, proper	rest herein assigned, and that I/we have not her covenant and agree that I/we will, each papers as may be necessary or desirable to d Patent, to HPDC, its successors, assigns, or to its nominee, all known facts respecting in any legal proceedings, to sign all lawful saue and foreign applications, to make all PDC, its successors, assigns, nominees and er patent protection for said invention(s) or curred by me/us in lending such cooperation
applications as a invention(s) or in	foresaid, to issue to HPDC, as as	ssignee of the entire right, ti	intries whose duty it is to issue patents on the and interest, any and all Patent for said is a result of the application aforesaid, in
			iling date and application number of said as soon as the same shall have been made
» IN WITNESS	S WHEREOF, I/we hereunto set	my/our hand(s) and seal(s)	;
1/4 Sl	· ·		5/ <i>09</i> /18
Inventor's Signatur	<u>Reformance</u>		<u>>/ U </u>
Mohammed S. First/Middle Name	Shaarawi Last Name	 	
1	Milarie		911
Inventor's Signatur	· ·	Date	9 May 2018
machini a Signatul	Ç	Date	
James	McKinnell	***************************************	
First/Middle Name	Last Name		
Rev 8/2014 (Assignmen	tj	Page 1 of 2	

PATENT REEL: 050712 FRAME: 0107

HP Inc. 3390 E. Harmony Road		PATENT APPLICATION
Mail Stop 35 Fort Collins, Colorado 80528	RECORD ID: _	84945265
I/We, the undersigned (each), for good and valuable and in furtherance of my/our obligations to HEWLET Limited Partnership having its principal place of bus subsidiaries and affiliates, agree to assign and transfer assigns, the entire right, title and interest, including the entitled:	T-PACKARD DEVELOF iness in Houston, Texa and hereby assign and tr	ot of which is hereby acknowledged, PMENT COMPANY, L.P., a Texas as, (hereinafter HPDC), and to its cansfer to HPDC, its successors and
Creating a Breakaway Region 10 May 2018 Filing Date:		DCT/LIS2019/022020
Filing Date:	Application No.:	PCT/US2018/032020
and the invention(s) and improvement(s) set forth therein divisionals, and renewals of and substitutes for said apprountries thereto which may be granted thereon or therefor Patent.	lication for said Patent,	and any and all other Patent of any
I/we additionally authorize HPDC to file applications in by HPDC, its successors, assigns, nominees or legal repr Patent respectively may be granted, reissued or extended enjoyed by me/us had this assignment, and transfer not bee	esentatives, to the full er I, as fully and entirely as	nd of the term or terms for which said
AND I/we hereby covenant that I/we have full right to consecuted and will not execute any agreement in conflict he time a request is made, and without undue delay, execute a perfect the title to said invention(s) or improvement(s), said nominees or legal representatives, and I/we agree to communication said invention(s) or improvement(s), said application and spapers, to execute all disclaimers and divisionals, continuing training to declarations, and generally to do everythic legal representatives to obtain and enforce, for its or their improvement(s) in any and all countries provided the expension and assistance are paid by HPDC;	rewith, and I/we further cand deliver all such paper application and said Patenunicate to HPDC, or to it aid Patent, to testify in an uations, C-I-P's, reissueing possible to aid HPDC, rown benefit, proper pat	ovenant and agree that I/we will, each is as may be necessary or desirable to ent, to HPDC, its successors, assigns its nominee, all known facts respecting legal proceedings, to sign all lawful and foreign applications, to make all its successors, assigns, nominees and ent protection for said invention(s) or
AND I/we hereby authorize and request the official of applications as aforesaid, to issue to HPDC, as assigned invention(s) or improvement(s) which may be issued an accordance with the terms of this assignment.	of the entire right, title an	d interest, any and all Patent for said
I/we further authorize and direct the attorneys of reapplication for Patent, now identified by the Record ID and known to them.		
IN WITNESS WHEREOF, I/we hereunto set my/our	hand(s) and seal(s):	

Inventor's Signature

Mohammed S. Shaarawi

First/Middle Name Last Name

Inventor's Signature

Date

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McKinnell

Last Name

James

First/Middle Name

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

PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID:	84945265
	ASSIGNMENT OF PAT	ENT APPLICATION (cont	t.)
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Inventor's Signature		Date //	<u> </u>
David A.	Champion		
First/Middle Name	Last Name	,,,	
Macdella Inventor's Signature	P. K		n/18
		Date .	
Vladek P.	Kasperchik	na majanja papata kana nina matangan kana mina matan	
First/Middle Name	Last Name		
Inventor's Signature		Date	
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Inventor's Signature		Date	

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