PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUNIL BHARITKAR	03/07/2017
MADHU SUDAN ATHREYA	03/07/2017
DAVID MURPHY	03/07/2017

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:	16473345

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: (541)360-4450 Email: ipa.mail@hp.com

Correspondent Name: HP INC.

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

ATTORNEY DOCKET NUMBER:	85753962
NAME OF SUBMITTER:	TRACY J. KIMMEL
SIGNATURE:	/Tracy J. Kimmel/
DATE SIGNED:	06/25/2019

Total Attachments: 3

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> **PATENT REEL: 049577 FRAME: 0204** 505542267

	HP Inc.
-	3390 E. Harmony Road
	Mail Stop 35
	Fort Collins, Colorado 80628

PATENT	80008	100	X853X

RECORD ID:	84572454
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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 a	nd affiliates, agree to assign a	nd transfer and hereby as	sign and t	as, (hereinafter HPDC), and to its ransfer to HPDC, its successors and and under an application for Patent
COMBINED A	NUDIO SIGNAL OUTPUT			
Filling Date:	08 March 2017	Applicati	on No.:	PCT/US2017/021370
divisionals, an-	d renewals of and substitutes :	for said application for sai	id Patent,	uations, continuations-in-part (C-t-P's) and any and all other Patent of an reexaminations, or extensions of sal
by HPDC, its s Patent respect	successors, assigns, nominees i	or legal representatives, to or extended, as fully and	the full e	in any country, to be held and enjoyed nd of the term or terms for which said the same would have been held and
executed and time a request perfect the title nominees or le said invention (papers, to exergitiful oaths a legal representimprovement(s	will not execute any agreement in is made, and without undue delay to said invention(s) or improver again representatives, and I/we again or improvement(s), said applicate all disclaimers and division declarations, and generally to tatives to obtain and enforce, fire	n conflict herewith, and I/w sy, execute and deliver all a nent(s), said application an ree to communicate to HP cation and said Patent, to rials, continuations, C-I-P ^o do everything possible to a or its or their own benefit,	re further of such paper of said Par DC, or to testify in a said HPDC, proper particular or per per said HPDC.	nerein assigned, and that I/we have no covenant and agree that I/we will, each is as may be necessary or desirable to tent, to HPDC, its successors, assigns lis nominee, all known facts respecting my legal proceedings, to sign all lawful and foreign applications, to make at its successors, assigns, nominees and itent protection for said invention(s) of d by me/us in lending such cooperation
applications as invention(s) or	aforesaid, to issue to HPDC, a	is assignee of the entire ri	ght, title a	s whose duly it is to issue patents on no interest, any and all Patent for sain result of the application aforesaid, in
	Patent, now identified by the Red			date and application number of sai oon as the same shall have been mad
IN WITNI	ESS WIFEREOF, I/we hereunto	set my/our hand(s) and s		
	5		Ma	J. 7, 2017
Inventora Signa	35.55		Date	i de la composición dela composición de la composición de la composición dela composición dela composición dela composición de la composición de la composición de la composición dela composición de la composición dela c
Sunil	BHARITKAF	?		
First/Middle Nam	te Last Name			
inventor's Signa	sture		Date	
Madhu Sud	ATHREYA			
First/Middle Nam	ne Last Name	***************************************		
Rev 8/2014 (Assigna	neál)	Page 1 of 2		

PATENT REEL: 049577 FRAME: 0205

HP Inc. 3390 E. Harmony Road		PATENT APPLICATION
Mail Stop 35		
Fort Collins, Colorado 80528	RECORD ID:	84572454
ASSIGNM	ENT OF PATENT APPLICATION	
I/We, the undersigned (each), for good ar		

and in furtherance of my/our Limited Partnership having its subsidiaries and affiliates, agre	obligations to HEWLETT principal place of busine to assign and transfer a	I-PACKARD DEVELO ness in Houston, Te. nd hereby assign and	eipt of which is hereby acknowledged, DPMENT COMPANY, L.P., a Texas was, (hereinafter HPDC), and to its transfer to HPDC, its successors and and under an application for Patent
COMBINED AUDIO SIGNAL C	UTPUT		
Filing Date: 08 March 201	17	Application No.:	PCT/US2017/021370
divisionals, and renewals of and	d substitutes for said appl	ication for said Patent	nuations, continuations-in-part (C-I-P's), , and any and all other Patent of any or reexaminations, or extensions of said
by HPDC, its successors, assign	ns, nominees or legal repre ited, reissued or extended,	esentatives, to the full a as fully and entirely a	t in any country, to be held and enjoyed and of the term or terms for which said is the same would have been held and
executed and will not execute ar 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 oaths and declarations, at legal representatives to obtain a	ny agreement in conflict her out undue delay, execute a (s) or improvement(s), said is, and I/we agree to comm ((s), said application and said irs and divisionals, continue and generally to do everythin and enforce, for its or their untries provided the expens	with, and I/we further and deliver all such pap- application and said Pa sunicate to HPDC, or to aid Patent, to testify in sations, C-I-P's, reissur g possible to aid HPDC own benefit, proper p	herein assigned, and that I/we have not covenant and agree that I/we will, each ers as may be necessary or desirable to atent, to HPDC, its successors, assigns, its nominee, all known facts respecting any legal proceedings, to sign all lawful e and foreign applications, to make all its successors, assigns, nominees and atent protection for said invention(s) or ed by me/us in lending such cooperation
applications as aforesaid, to issu	ie to HPDC, as assignee o which may be issued and	of the entire right, title a	es whose duty it is to issue patents on and interest, any and all Patent for said result of the application aforesaid, in
I/we further authorize and application for Patent, now identil known to them.	direct the attorneys of rec fied by the Record ID and ti	cord to insert the filing title set forth above, as t	g date and application number of said soon as the same shall have been made
IN WITNESS WHEREOF, IA	ve hereunto set my/our i	nand(s) and seal(s):	
inventor's Signature		Date	
Sunil	8HARITKAR		
First/Middle Name	Last Name	>	3/7/17
Inventor's Signature -		Date	
Madhu Sud an	ATHREYA		
First/Middle Name	Last Name		

Rev B/2014 (Assignment)

Page 1 of 2

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

PATENT APPLICATION

Mail Stop 35 Fort Collins, Colorado 80528		record ID:	84572454
	ASSIGNMENT OF PATE	NT APPLICATION (con	t)
A.J.M.	4	3/2/	, 2017
Inventor's Signature ///		Date	
David	MURPHY	**********************	
First/Middle Name	Last Name		
Inventor's Signature		Cate	
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		
Inventor's Signature		Date	
First/Middle Name	Last Name		

Page 2 of 2

Rev 8/2014 (Assignment)

RECORDED: 06/25/2019

PATENT REEL: 049577 FRAME: 0207