#### 506306417 10/16/2020

## PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
CHIEH-HAO CHEN	07/31/2018
YI-HSUAN HUANG	09/14/2018
TAO-SHENG CHU	09/14/2018

#### **RECEIVING PARTY DATA**

Name:	Hewlett-Packard Development Company, L.P.
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State/Country:	TEXAS
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#### **PROPERTY NUMBERS Total: 1**

Property Type	Number
Application Number:	17048148

#### CORRESPONDENCE DATA

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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.

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**Correspondent Name:** HP INC.

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ATTORNEY DOCKET NUMBER:	85933123
NAME OF SUBMITTER:	TRACY J. KIMMEL
SIGNATURE:	/Tracy J. Kimmel/
DATE SIGNED:	10/16/2020

#### **Total Attachments: 4**

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> **PATENT REEL: 054073 FRAME: 0840** 506306417

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

#### PATENT APPLICATION

RECORD ID:	84976723	

#### ASSIGNMENT OF PATENT APPLICATION

and in furtherance of my/our Limited Partnership having its subsidiaries and affiliates, agre	obligations to principal place to assign and and interest, inc	HEWLETT-PACKARD te of business in Hou transfer and hereby as duding the right of prio	DEVELC iston, Tex ssign and	sipt of which is hereby acknowledged DPMENT COMPANY, L.P., a Texas kas, (hereinafter HPDC), and to its transfer to HPDC, its successors and and under an application for Paten
Filing Date: 31 Jul 2018		Applicat	ion No.:	PCT/US2018/044514
and the invention(s) and improvidivisionals, and renewals of an	d substitutes for	r said application for sa	aid Patent,	nuations, continuations-in-part (C-I-P's, and any and all other Patent of an or reexaminations, or extensions of sai
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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 disclaime rightful oaths and declarations, a legal representatives to obtain a improvement(s) in any and all coland assistance are paid by HPDG AND I/we hereby authorize applications as aforesaid, to issi	ny agreement in out undue delay (s) or improvements, and I/we agreet (s), said applicators and divisional generally to distinct the provided (c);  and request the use to HPDC, as	conflict herewith, and I/A  c, execute and deliver all ent(s), said application a set to communicate to HI ation and said Patent, to als, continuations, C-I-P to everything possible to its or their own benefit the expenses which may e official of any country assignee of the entire r	we further such paper nd said Paper nd said Paper nd testify in a paper nd	herein assigned, and that I/we have no covenant and agree that I/we will, eacers as may be necessary or desirable tatent, to HPDC, its successors, assigns its nominee, all known facts respectin any legal proceedings, to sign all lawfit and foreign applications, to make a strength of the applications of the successors, assigns, nominees an atent protection for said invention(s) of the deby me/us in lending such cooperations whose duty it is to issue patents of and interest, any and all Patent for said result of the application aforesaid, in
invention(s) or improvement(s) accordance with the terms of this		issued and granted or	orasa	result of the application aloresaid, i
		•	_	date and application number of sai soon as the same shall have been mad
IN WITNESS WHEREOF, I/	we hereunto se	et my/our hand(s) and	seal(s):	
clash Hao	Gleh.	SECTION ASSESSMENT		2018.7.31
Inventor's Signature	***************************************	gh	Date	
Chieh-Hao	Chen			
First/Middle Name	Last Name			
Inventor's Signature			Date	
First/Middle Name	Last Name			
Day 9/004 A (April annual)		Poss 1 of 1		

**PATENT** REEL: 054073 FRAME: 0841 HP inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins. Colorado 80528

## PATENT APPLICATION

Fort Collins, Colorado 80528		RECORD ID:	84976723	·
	ASSIGNMENT OF P.	ATENT APPLICATION (cont	3.)	
nventor's Signature		Date		on the same
Tao-Sheng	Chu			
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nventor's Signature		Daie		
First/Middle Name	East Name			
nventor's Signature		Date		<del></del>
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Page 2 of 2

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

Patent.

PATEN	IT ADDI I	CATION

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RECORD ID:	84976723	

# 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:

# AUDIO OUTPUTS BASED ON POSITIONS OF DISPLAYS

Filing Date: 31 Jul 2018	Application No.: PCT/US2018/044514
divisionals, and renewals of and substitutes for said app	, and any and all continuations, continuations-in-part (C-I-P's), dication for said Patent, and any and all other Patent of any ore; and any reissues, or 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 I/we hereby covenant that I/we have full right to convey the entire interest herein assigned, and that I/we have not executed and will not execute any agreement in conflict herewith, and I/we further covenant and agree that I/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 I/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 WHEREOF, I/we hereunto set my/our hand(s) and seal(s):

Inventor's Signature		Date
Chieh-Hao	Chen	
First/Middle Name	Last Name	
1. Howan Hung	; <b>1</b> 1 1	7/14 /18
	. <b>€</b>	Date
Yi-Hsuan	Huang	
First/Middle Name	Last Name	
Rev 8/2014 (Assignment)	Page 1 of 2	

HP Inc. 3390 E. Harmony Road Mail Stop 35			PATENT APPLICATION
Fort Collins, Colorado 80528		RECORD ID:	043/0/23
٨ ٧.	ASSIGNMENT OF PA	TENT APPLICATION (cont.)	
The state of the s		9/14/18	
Inventor's Signature		Date	
Tao-Sheng	Chu		
First/Middle Name	Last Name		
Inventor's Signature		Date	
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First/Middle Name	Last Name		
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Inventor's Signature		2 4.0	
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Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	

Rev 8/2014 (Assignment)

First/Middle Name

Page 2 of 2

Last Name

PATENT REEL: 054073 FRAME: 0844