#### 506357687 11/17/2020

# PATENT ASSIGNMENT COVER SHEET

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EPAS ID: PAT6404441

SUBMISSION TYPE:	RESUBMISSION
NATURE OF CONVEYANCE:	ASSIGNMENT
RESUBMIT DOCUMENT ID:	506294436

### **CONVEYING PARTY DATA**

Name	Execution Date
CHIA-MING TSAI	10/15/2018
CHEN-HAN TSAI	10/15/2018
JOHN J. GRODEN	10/15/2018
HUI LENG LIM	10/14/2018

### **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:	17046085

### **CORRESPONDENCE DATA**

(970)778-4063 Fax Number:

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HP INC. **Correspondent Name:** 

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

ATTORNEY DOCKET NUMBER: 85941302 NAME OF SUBMITTER: **DEBBIE BORLAND SIGNATURE:** /DEBBIE BORLAND/ **DATE SIGNED:** 11/17/2020

**Total Attachments: 4** 

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**PATENT REEL: 054384 FRAME: 0968**  source=Assignment Executed#page2.tif
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PATENT REEL: 054384 FRAME: 0969

RECORD	m·	85005205

#### ASSIGNMENT OF PATENT APPLICATION

I, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, agree to assign and transfer and hereby assign and transfer to

HEWLETT-PACKARD DEVELOPMENT COMPANY L.P, a Texas Limited Partnership, having its principal place of business in Spring, Texas, USA (hereinafter "HPDC"),

its successors, and its assigns, my entire right, title, and interest, including all rights of priority, in, to, and under an application for patent entitled (English-language title in parentheses if said application for patent is in another language):

Title: COMPUTER DEVICE INNER PANEL HAVING DIFFERENT OPENING ARRAYS Application No.: 17/046085 Filing Date: October 8, 2020 Patent Office: US the subject matter, including any and all inventions, improvements, and discoveries, set forth in said application for patent (as used herein "patent" refers to any form of intellectual property protection including, without limitation, invention rights, utility patent rights, design rights, and utility model rights) (hereinafter "Inventions"); any and all existing and future applications for patent of any country or region or under any international agreement for any of said Inventions (including, without limitation, said application for patent, any and all applications for patent directly or indirectly claiming priority to or benefit of any application for patent for any of said Inventions, any and all applications for patent from which any application for patent for any of said Inventions directly or indirectly claims priority or benefit, and any and all continuation applications of, continuation-in-part applications (hereinafter "CIPs") of, divisional applications of, national-phase applications of, regionalphase applications of, renewals of, and substitutes for any application for patent for any of said Inventions) (hereinafter "Applications for Patent"); any and all patents which may be granted on or as a result of said Applications for Patent (hereinafter "Patents"); and any and all reissues, reexaminations, and extensions of said Applications for Patent or said Patents. I HEREBY represent that I convey my full rights in all countries and regions and under all international agreements to the entire right, title, and interest herein assigned and transferred, and that I have not executed and will not execute any agreement in conflict herewith; AND I HEREBY authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to file said Applications for Patent in its name or in my name in any country or region or under any international agreement, and further authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to insert the filing date, application number, and patent office of said application for patent, now identified by the Record ID and title set forth above, when known to them; AND I HEREBY authorize and request the officials of all countries and regions and under all international agreements whose duty it is to issue patents, to issue to HPDC, its successors, or its assigns, as assignee of my entire right, title, and interest, said Patents, in accordance with the terms of this assignment and transfer; AND I HEREBY covenant and agree that I 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 in said Inventions, Applications for Patent, and Patents, to HPDC, its successors, or its assigns; communicate to HPDC, its successors, its assigns, its nominees, or its legal representatives, all known facts respecting said Inventions, Applications for Patent, and Patents; testify in any legal or administrative proceedings and sign all lawful papers (including, without limitation, divisional applications, continuation

applications, CIPs, and reissue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful oaths and declarations and generally to do everything possible to aid HPDC, its successors, its assigns, its nominees, and its legal representatives to obtain, maintain, and enforce, for its or their own benefit, proper intellectual property protection for said Inventions, Applications for Patent, and Patents, provided the expenses which may be incurred by me in lending such

cooperation and assistance are paid by HPDC, its successors, its assigns, its nominees, or its legal representatives.

IN WITNESS WHEREOF, I hereunto set my hand and seal:

-Ming Sai

Chia-Ming Tsai
Inventor's Legal Name

PATENT REEL: 054384 FRAME: 0970

Rev 8/2020

RECORD ID:	85005205	

#### ASSIGNMENT OF PATENT APPLICATION

I, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, agree to assign and transfer and hereby assign and transfer to

HEWLETT-PACKARD DEVELOPMENT COMPANY L.P, a Texas Limited Partnership, having its principal place of business in Spring, Texas, USA (hereinafter "HPDC"),

its successors, and its assigns, my entire right, title, and interest, including all rights of priority, in, to, and under an application for patent entitled (English-language title in parentheses if said application for patent is in another language):

Title: COMPUTER DEVICE INNER PANEL HAVING DIFFERENT OPENING ARRAYS

Filing Date: October 8, 2020 Application No.: 17/046085 Patent Office: US

the subject matter, including any and all inventions, improvements, and discoveries, set forth in said application for patent (as used herein "patent" refers to any form of intellectual property protection including, without limitation, invention rights, utility patent rights, design rights, and utility model rights) (hereinafter "Inventions"); any and all existing and future applications for patent of any country or region or under any international agreement for any of said Inventions (including, without limitation, said application for patent, any and all applications for patent directly or indirectly claiming priority to or benefit of any application for patent for any of said Inventions directly or indirectly claims priority or benefit, and any and all continuation applications of, continuation-in-part applications (hereinafter "CIPs") of, divisional applications of, national-phase applications of, regional-phase applications of, and substitutes for any application for patent for any of said Inventions) (hereinafter "Applications for Patent"); any and all patents which may be granted on or as a result of said Applications for Patent (hereinafter "Patents"); and any and all reissues, reexaminations, and extensions of said Applications for Patent or said Patents.

I HEREBY represent that I convey my full rights in all countries and regions and under all international agreements to the entire right, title, and interest herein assigned and transferred, and that I have not executed and will not execute any agreement in conflict herewith:

AND I HEREBY authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to file said Applications for Patent in its name or in my name in any country or region or under any international agreement, and further authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to insert the filing date, application number, and patent office of said application for patent, now identified by the Record ID and title set forth above, when known to them;

AND I HEREBY authorize and request the officials of all countries and regions and under all international agreements whose duty it is to issue patents, to issue to HPDC, its successors, or its assigns, as assignee of my entire right, title, and interest, said Patents, in accordance with the terms of this assignment and transfer;

AND I HEREBY covenant and agree that I 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 in said Inventions, Applications for Patent, and Patents, to HPDC, its successors, or its assigns; communicate to HPDC, its successors, its assigns, its nominees, or its legal representatives, all known facts respecting said Inventions, Applications for Patent, and Patents; testify in any legal or administrative proceedings and sign all lawful papers (including, without limitation, divisional applications, continuation applications, CIPs, and reissue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful oaths and declarations and generally to do everything possible to aid HPDC, its successors, its assigns, its nominees, and its legal representatives to obtain, maintain, and enforce, for its or their own benefit, proper intellectual property protection for said Inventions, Applications for Patent, and Patents, provided the expenses which may be incurred by me in lending such cooperation and assistance are paid by HPDC, its successors, its assigns, its nominees, or its legal representatives.

IN WITNESS WHEREOF, I hereunto set my hand and seal:



Cheng-Han Tsai

Inventor's Legal Name

RECORD ID:	85005205

### ASSIGNMENT OF PATENT APPLICATION

I, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, agree to assign and transfer and hereby assign and transfer to

HEWLETT-PACKARD DEVELOPMENT COMPANY L.P, a Texas Limited Partnership, having its principal place of business in Spring, Texas, USA (hereinafter "HPDC"),

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Title: COMPUTER DEVICE INNER PAN	IEL HAVING DIFFEREN	T OPENING ARRAY	/S
Filing Date: October 8, 2020	Application No.:	17/046085	Patent Office: US
the subject matter, including any and a (as used herein "patent" refers to any form utility patent rights, design rights, and utili applications for patent of any country or rewithout limitation, said application for patent benefit of any application for patent for any for patent for any of said Inventions direct continuation-in-part applications (hereinal phase applications of, renewals of, and si "Applications for Patent"); any and all pate (hereinafter "Patents"); and any and all repatents.	m of intellectual property ity model rights) (hereina egion or under any interrent, any and all application of said Inventions, any try or indirectly claims prifter "CIPs") of, divisional ubstitutes for any applicaents which may be granter.	protection including, fifter "Inventions"); any national agreement for patent directly and all applications to ority or benefit, and a applications of, nation for patent for any ed on or as a result or	without limitation, invention rights, y and all existing and future or any of said Inventions (including, or indirectly claiming priority to or for patent from which any application any and all continuation applications of, nal-phase applications of, regionally of said Inventions for Patent
I HEREBY represent that I convey my tentire right, title, and interest herein assig agreement in conflict herewith;	•		· • • • • • • • • • • • • • • • • • • •
AND I HEREBY authorize HPDC, its st Applications for Patent in its name or in mauthorize HPDC, its successors, its assig number, and patent office of said applicat to them;	ny name in any country o ins, its nominees, and its	r region or under any legal representatives	vinternational agreement, and further sto insert the filing date, application
AND I HEREBY authorize and request whose duty it is to issue patents, to issue interest, said Patents, in accordance with	to HPDC, its successors	i, or its assigns, as as	
AND I HEREBY covenant and agree th	nat I will, each time a reg	uest is made, and wit	hout undue delay, execute and deliver

all such papers as may be necessary or desirable to perfect the title in said Inventions, Applications for Patent, and Patents, to HPDC, its successors, or its assigns; communicate to HPDC, its successors, its assigns, its nominees, or its legal representatives, all known facts respecting said Inventions, Applications for Patent, and Patents; testify in any legal or administrative proceedings and sign all lawful papers (including, without limitation, divisional applications, continuation applications, CIPs, and reissue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful oaths and declarations and generally to do everything possible to aid HPDC, its successors, its assigns, its nominees, and its legal representatives to obtain, maintain, and enforce, for its or their own benefit, proper intellectual property protection for said Inventions, Applications for Patent, and Patents, provided the expenses which may be incurred by me in lending such

cooperation and assistance are paid by HPDC, its successors, its assigns, its nominees, or its legal representatives.

IN WITNESS WHEREOF, I hereunto set my hand and seal:

John J. Groden
Inventor's Legal Name

5 0 2018
Day Month Year

PATENT REEL: 054384 FRAME: 0972

RECORD	ID:	85005205

#### ASSIGNMENT OF PATENT APPLICATION

I, the undersigned, for good and valuable consideration, the receipt of which is hereby acknowledged, agree to assign and transfer and hereby assign and transfer to

HEWLETT-PACKARD DEVELOPMENT COMPANY L.P., a Texas Limited Partnership, having its principal place of

business in Spring, Texas, USA (hereinafter "HPDC"), its successors, and its assigns, my entire right, title, and interest, including all rights of priority, in, to, and under an application for patent entitled (English-language title in parentheses if said application for patent is in another language): Title: COMPUTER DEVICE INNER PANEL HAVING DIFFERENT OPENING ARRAYS Application No.: 17/046085 Filing Date: October 8, 2020 Patent Office: US the subject matter, including any and all inventions, improvements, and discoveries, set forth in said application for patent (as used herein "patent" refers to any form of intellectual property protection including, without limitation, invention rights, utility patent rights, design rights, and utility model rights) (hereinafter "Inventions"); any and all existing and future applications for patent of any country or region or under any international agreement for any of said Inventions (including, without limitation, said application for patent, any and all applications for patent directly or indirectly claiming priority to or benefit of any application for patent for any of said Inventions, any and all applications for patent from which any application for patent for any of said Inventions directly or indirectly claims priority or benefit, and any and all continuation applications of, continuation-in-part applications (hereinafter "CIPs") of, divisional applications of, national-phase applications of, regionalphase applications of, renewals of, and substitutes for any application for patent for any of said Inventions) (hereinafter "Applications for Patent"); any and all patents which may be granted on or as a result of said Applications for Patent (hereinafter "Patents"); and any and all reissues, reexaminations, and extensions of said Applications for Patent or said Patents. I HEREBY represent that I convey my full rights in all countries and regions and under all international agreements to the entire right, title, and interest herein assigned and transferred, and that I have not executed and will not execute any agreement in conflict herewith; AND I HEREBY authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to file said Applications for Patent in its name or in my name in any country or region or under any international agreement, and further authorize HPDC, its successors, its assigns, its nominees, and its legal representatives to insert the filing date, application number, and patent office of said application for patent, now identified by the Record ID and title set forth above, when known AND I HEREBY authorize and request the officials of all countries and regions and under all international agreements whose duty it is to issue patents, to issue to HPDC, its successors, or its assigns, as assignee of my entire right, title, and interest, said Patents, in accordance with the terms of this assignment and transfer; AND I HEREBY covenant and agree that I 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 in said Inventions, Applications for Patent, and Patents, to HPDC, its successors, or its assigns; communicate to HPDC, its successors, its assigns, its nominees, or its legal representatives, all known facts respecting said Inventions, Applications for Patent, and Patents; testify in any legal or administrative proceedings and sign all lawful papers (including, without limitation, divisional applications, continuation applications, CIPs, and reissue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful oaths and declarations and generally to do everything possible to aid HPDC, its successors, its assigns, its nominees, and its legal representatives to obtain, maintain, and enforce, for its or their own benefit, proper intellectual property protection for said Inventions, Applications for Patent, and Patents, provided the expenses which may be incurred by me in lending such cooperation and assistance are paid by HPDC, its successors, its assigns, its nominees, or its legal representatives. IN WITNESS WHEREOF, I hereunto set my hand and seal: 14 10 201 Day Month Year HUI (FAG LIM Inventor's Signature

> **PATENT** REEL: 054384 FRAME: 0973

RECORDED: 10/08/2020

Inventor's Legal Name

Hui Leng Lim