505131656 10/09/2018 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5178418

SUBMISSION TYPE:		NEW ASSIGNMENT		
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PARTY D	ΑΤΑ			
		Name	Execution Date	
NING GE			01/30/2017	
STEVEN J. SIMSKE			01/31/2017	
ANDREW E. FITZHUG	Η		01/31/2017	
LIHUA ZHAO			01/31/2017	
RECEIVING PARTY DA				
Name:		t-Packard Development Company, L.P		
Street Address:		11445 Compag Center Drive West		
City:	Housto	Houston		
State/Country:	TEXAS	TEXAS		
	77070			
Postal Code: PROPERTY NUMBERS Property Type	6 Total: 1	Number		
PROPERTY NUMBERS	6 Total: 1	Number		
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number:	S Total: 1	Number 16075672 (970)778-4063	nsuccessful, it will be sent	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i>	S Total: 1 DATA	Number 16075672 (970)778-4063 o the e-mail address first; if that is un d; if that is unsuccessful, it will be se		
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	S Total: 1 DATA	Number 16075672 (970)778-4063 o the e-mail address first; if that is un d; if that is unsuccessful, it will be se (541)715-8443	ent via US Mail.	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will k</i> <i>using a fax number, if</i> Phone: Email:	S Total: 1	Number 16075672 (970)778-4063 o the e-mail address first; if that is un d; if that is unsuccessful, it will be se	ent via US Mail.	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone:	S Total: 1	Number 16075672 (970)778-4063 o the e-mail address first; if that is und; if that is unsuccessful, it will be set (541)715-8443 ipa.mail@hp.com, khoellger@anaqua.	ent via US Mail.	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2:	S Total: 1	Number 16075672 (970)778-4063 o the e-mail address first; if that is und; if that is unsuccessful, it will be set (541)715-8443 ipa.mail@hp.com, khoellger@anaqua. HP INC. 3390 E. HARMONY ROAD MS 35 INTELLECTUAL PROPERTY	<i>ent via US Mail.</i> .com	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will b</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1:	S Total: 1	Number 16075672 (970)778-4063 o the e-mail address first; if that is un d; if that is unsuccessful, it will be se (541)715-8443 ipa.mail@hp.com, khoellger@anaqua. HP INC. 3390 E. HARMONY ROAD MS 35	<i>ent via US Mail.</i> .com	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will &</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	S Total: 1	Number 16075672 (970)778-4063 o the e-mail address first; if that is und d; if that is unsuccessful, it will be set (541)715-8443 ipa.mail@hp.com, khoellger@anaqua. HP INC. 3390 E. HARMONY ROAD MS 35 INTELLECTUAL PROPERTY FORT COLLINS, COLORADO 80528 84994927	<i>ent via US Mail.</i> .com	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: Correspondence will & using a fax number, if Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4: ATTORNEY DOCKET N NAME OF SUBMITTER:	S Total: 1	Number16075672(970)778-4063 o the e-mail address first; if that is unsuccessful, it will be set (541)715-8443ipa.mail@hp.com, khoellger@anaqua.HP INC.3390 E. HARMONY ROAD MS 35INTELLECTUAL PROPERTYFORT COLLINS, COLORADO 8052884994927JOHN E. NEMAZI	<i>ent via US Mail.</i> .com	
PROPERTY NUMBERS Property Type Application Number: CORRESPONDENCE I Fax Number: <i>Correspondence will &</i> <i>using a fax number, if</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 2: Address Line 4:	S Total: 1	Number 16075672 (970)778-4063 o the e-mail address first; if that is und d; if that is unsuccessful, it will be set (541)715-8443 ipa.mail@hp.com, khoellger@anaqua. HP INC. 3390 E. HARMONY ROAD MS 35 INTELLECTUAL PROPERTY FORT COLLINS, COLORADO 80528 84994927	<i>ent via US Mail.</i> .com	

source=16075672_84994927_Assignment#page2.tif

source=16075672_84994927_Assignment#page3.tif source=16075672_84994927_Assignment#page4.tif

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

PATENT APPLICATION

RECORD ID: 84571818

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;

BUILD MATERIAL PARTICLE FUSING IN A CHAMBER CONTAINING VAPOR

Filing Date: 06-AUG-2018 Application No.: 16/075,672

and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and renewals of and substitutes for said application for said Patent, and any and all other Patent of any countries thereto which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Patent.

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 tegal 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 two 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 ma/us in lending such cooperation and assistance are paid by HPDC;

AND l/we hereby authorize and request the official of any country or countries whose duty it is to issue patents on applications as aloresaid, to issue to HPDC, as assignee of the entire right, tille 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 filling 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):

JAN 55		
Ning	GE	
First/Middle Name	Last Name	
Inventor's Signature		Dete
Steven 3.	SIMSKE	
First/Middle Name	Last Name	

Rev 8/2014 (Assignment)

Page 1 of 2

HP Inc. 3390 E. Harmony Road			PATENT APPLICATION
Mail Stop 35			
Fort Collins, Colorado 80528		RECORD ID:	84571818
	ASSIGNMENT OF PA	TENT APPLICATION (con	* 1
1.11 91	n composition consistent and a second		
all all			131/2017
Inventor's Signature	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Date	
Andrew B.	FITZHUGH		
Pirst/Middle Name	Last Name		
A NOCTIMUM C. VERTIE	Cast Marrie		
Inventor's Signature		Dete	
Lihua	ZHAO		
First/Middle Name	Last Name		
e pourse reactioning to a type para	Listic Charles		
Inventor's Signature		Date	
First/Middle Name	Last Name		
Inventor's Signature		Date	
First/Middle Name	1		
rasumaaae name	Last Name		
Inventor's Signature		Date	
		÷ 118	
	······································	******************	
First/Middle Name	Last Name		
Inventor's Signature		Date	
nen er men en ender tekterine.		51014	
First/Middle Name	Last Name		
	<u>ب</u>		
Rev 8/2014 (Assignment)	Page 1	ige 2 of 2	

....

HP Inc. 3390 E, Harmony Road		PATENT APPLICATION
Mail Stop 35 Fort Collins, Colorado 80528	RECORD ID:	84571818

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:

BUILD MATERIAL PARTICLE FUSING IN A CHAMBER CONTAINING VAPOR

Filing Date: 06-AUG-2018 Application No.: 16/075,672

and the invention(s) and improvement(s) set forth therein, and any and all continuations, continuations-in-part (C-I-P's), divisionals, and ranewals of and substitutes for said application for said Patent, and any and all other Patent of any countries thereto which may be granted thereon or therefore; and any reissues, or reexaminations, or extensions of said Patent.

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 l/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 filling 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 WITHVESS WITEREUP, I/We hereumo set my/our hand(s) and seal(s):

Inventor's Signature		Date
Ning	GE	
First/Middle Name	Last Name	
Steven 9.	Sinhe	31 January 2017
Inventor's Signature		Date
Steven J.	SIMSKE	
First/Middle Name	Last Name	

Rev 9/2014 (Assignment)

Page 1 of 2

PATENT APPLICATION 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528 84571818 RECORD ID: **ASSIGNMENT OF PATENT APPLICATION (cont.)** Date Inventor's Signature Andrew E. FITZHUGH First/Middle Name Last Name 1/31/2017 Inventor's Signature Date Lihua ZHAO First/Middle Name Last Name Date Inventor's Signature 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 5/2014 (Assignment)

RECORDED: 10/09/2018

HP Inc.