505821822 12/16/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5868652

| SUBMISSION TYPE: | NEW ASSIGNMENT |
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| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------|----------------|
| DROR KELLA | 12/07/2019 |
| EYAL NEGREANU | 12/08/2019 |
| GIDEON AMIR | 12/08/2019 |
| MARK SANDLER | 12/08/2019 |
| YARON GRINWALD | 12/09/2019 |

RECEIVING PARTY DATA

| Name: | HP INDIGO B.V. |
|-------------------|--------------------|
| Street Address: | Startbaan 16 |
| Internal Address: | 1187 XR Amstelveen |
| City: | Amstelveen |
| State/Country: | NETHERLANDS |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14436829 |

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)715-8443 **Email:** ipa.mail@hp.com

Correspondent Name: HP INC.

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

ATTORNEY DOCKET NUMBER: 84212719

NAME OF SUBMITTER: HEATHER MULKEY

SIGNATURE: /Heather Mulkey/

DATE SIGNED: 12/16/2019

Total Attachments: 5

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PATENT REEL: 051289 FRAME: 0184

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PATENT REEL: 051289 FRAME: 0185 HP Inc. 3390 E. Harmony Road Mail Stop 35 Fort Collins, Colorado 80528

Dror

Given (First and Middle) Name(s)

Kella

Family Name

| RECORD ID: | 83011212 |
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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 HP INDIGO B.V., having its registered offices in Amstelveen,

| The Netherlands, (hereinafter, HP-INI all rights of priority, in, to, and under application for patent is in another lan | an application fo | | | | |
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| METHOD AND APPARATUS FO | OR FORMING C | ON A SUBSTR | ATE A P | ATTERN OF A | A MATERIAL |
| Filing Date: 31 October 2012 | Application No.: | PCT/EP2012 | <u>/071638</u> | Patent Offi | ce: <u>EP</u> ; |
| the subject matter, including any and all used herein "patent" refers to any form patent rights, design rights, and utility my patent of any country or region or unde said application for patent, any and all apfor patent for any of said Inventions, an Inventions directly or indirectly claims applications (hereinafter CIPs) of, divis renewals of, and substitutes for any applications (hereinafter CIPs) and all patents which may be granted or reissues, reexaminations, and extension | of intellectual propodel rights) (herei rany international eplications for pater y and all application priority or benefit, ional applications ication for patent for or as a result of second result results result of second results resu | perty protection in nafter "Inventions agreement for ar at directly or indire ans for patent fror and any and all of, national-phas or any of said Inves said Applications | ncluding, wand and any of said ctly claiming which and continuation applications) (he for Patent | vithout limitation, d all existing and Inventions (including priority to or be ny application for on applications or ons of, regional- ereinafter "Applicat (hereinafter "Patication") | invention rights, utility future applications for ling, without limitation, nefit of any application patent for any of said of, continuation-in-partiphase applications of ations for Patent"); any |
| I HEREBY represent that I convey rentire right, title, and interest herein assign conflict herewith; | | - | | | - |
| AND I HEREBY authorize HP-INDI Applications for Patent in its name or in authorize HP-INDIGO, its successors, its number, and patent office of said applicato them; | my name in any c assigns, its nomin | ountry or region ees, and its legal | or under å representa | ny international a atives to insert the | greement, and further filing date, application |
| AND I HEREBY authorize and req whose duty it is to issue patents, to issue interest, said Patents, in accordance with | e to HP-INDIGO, its | successors, or it | s assigns, | | |
| AND I HEREBY covenant and agree all such papers as may be necessary or HP-INDIGO, its successors, or its assign representatives, all known facts respendaministrative proceedings and sign applications, CIPs, and reissue applicating rightful oaths and declarations and genominees, and its legal representatives to protection for said Inventions, Application lending such cooperation and assistant representatives. | desirable to perfecting said Inventional lawful papers (tions) relating to sentently to do every to obtain, maintain, ons for Patent, and | t the title in said I o HP-INDIGO, its ins, Applications including, withou aid Inventions, Ap thing possible to and enforce, for I Patents, provide | nventions, successor for Paten it limitation oplications aid HP-II its or their ed the expensions. | Applications for Frs, its assigns, its t, and Patents; tn, divisional app for Patent, and NDIGO, its succeown benefit, propenses which may | Patent, and Patents, to nominees, or its legal sestify in any legal or lications, continuation Patents; and make all essors, its assigns, its er intellectual property be incurred by me in |
| IN WITNESS WHEREOF, I here | unto set my hand | and seal: | | | |
| Inventore Signature | | | 7 | 12 Month | <u>2019</u> |
| Inventor's Signature | | | Day | IVIONIN | rear |

| HP Inc. | |
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| 3390 E. Harmony | Road |
| Mail Stop 35 | |
| Fort Collins, Colo | rado 80528 |

| RECORD ID: | 83011212 |
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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 HP INDIGO 8.V., having its registered offices in Amstelveen, The Natherlands, (hereinafter, HP-INDIGO), 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).

| all rights of priority, in, to, and under an application for patent entitled (English-language title in parentheses if said application for patent entitled (English-language title in parentheses if said application for patent is in another language). |
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| METHOD AND APPARATUS FOR FORMING ON A SUBSTRATE A PATTERN OF A MATERIAL |
| Filling Date: 31 October 2012 Application No.: PCT/EP2012/071638 Patent Office: EP |
| the subject matter, including any and all inventions, improvements, and discoveries, set forth in said application for patent (a 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 to 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 desiming 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-pal applications (hereinafter CIPs) of, divisional applications of, national phase applications of, regional-phase applications of renewals of, and substitutes for any application for patent for any of said Inventions) (hereinafter "Applications for Patent"); and any and a reissues, reexaminations, and extensions of said Applications for Patent (hereinafter "Patents"); and any and a reissues, reexaminations, and extensions of said Applications for Patent or said Patents. |
| 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 HP-INDIGO, its successors, its assigns, its nominees, and its legal representatives to file sal Applications for Patent in its name or in my name in any country or region or under any international agreement, and furthe authorize HP-INDIGO, 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 toth above, when know to them; |
| AND I HEREBY authorize and request the officials of all countries and regions and under all international agreement whose duty it is to issue patents, to issue to HP-INDIGO, its successors, or its assigns, as assignes of my entire right, title, an 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 is HP-INDIGO, its successors, or its essigns; communicate to HP-INDIGO, its successors, its assigns, its nominees, or its legal content of the successors and seed as a sign and inventions. Applications for Patent, and Patents, testify in any legal conditions are proceedings and sign all lawful papers (including, without limitation, divisional applications, continuated applications, corporated applications, corporated applications, corporated applications, and release applications relating to said inventions, Applications for Patent, and Patents, and make a rightful caths and declarations and generally to do everything possible to aid HP-INDIGO, its successors, its assigns, it nominees, and its legal representatives to obtain, maintain, and enforce, for its or their own benefit, proper interlectual property protection for said inventions. Applications for Patent, and Patents, provided the expenses which may be incurred by me is landing such cooperation and assistance are paid by HP-INDIGO, its successors, its assigns, its nominees, or its legal representatives. |
| IN WITNESS WHEREOF, I hereunto set my hand and seal. |

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

| RECORD ID: | 83011212 |
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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 HP INDI The Netherlands, (hereinafter, HP-INDIGO), its successors, and all rights of priority, in, to, and under an application for patent application for patent is in another language): | GO B.V., havin its assigns, my | g its registered off entire right, title, an | ices in Amstelveen, nd interest, including |
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| METHOD AND APPARATUS FOR FORMING ON A SU | JBSTRATE A | PATTERN OF A | MATERIAL |
| Filing Date: 31 October 2012 Application No.: PCT/E | P2012/07163 | 8 Patent Offi | ce: <u>EP</u> ; |
| the subject matter, including any and all inventions, improvements, a used herein "patent" refers to any form of intellectual property prot patent rights, design rights, and utility model rights) (hereinafter "Inventent of any country or region or under any international agreeme said application for patent, any and all applications for patent directly for patent for any of said Inventions, any and all applications for patent inventions directly or indirectly claims priority or benefit, and any applications (hereinafter CIPs) of, divisional applications of, nation renewals of, and substitutes for any application for patent for any of and all patents which may be granted on or as a result of said Applications for Patents of Paten | ection including ventions"); any a nt for any of sai or indirectly clair tent from which and all continual-phase applications for Pate | without limitation, and all existing and dinventions (includ ning priority to or berany application for ation applications of the anions of, regional-pations of, the control of the contr | invention rights, utility future applications fo ing, without limitation nefit of any application patent for any of said, continuation-in-parohase applications of itions for Patent"); any |
| I HEREBY represent that I convey my full rights in all countries entire right, title, and interest herein assigned and transferred, and th in conflict herewith; | | | |
| AND I HEREBY authorize HP-INDIGO, its successors, its assig Applications for Patent in its name or in my name in any country or authorize HP-INDIGO, its successors, its assigns, its nominees, and number, and patent office of said application for patent, now identified to them; | region or under its legal represe | any international a | greement, and furthe filing date, applicatior |
| AND I HEREBY authorize and request the officials of all coun whose duty it is to issue patents, to issue to HP-INDIGO, its success interest, said Patents, in accordance with the terms of this assignme | ors, or its assign | | • |
| AND I HEREBY covenant and agree that I will, each time a requall such papers as may be necessary or desirable to perfect the title HP-INDIGO, its successors, or its assigns; communicate to HP-IND administratives, all known facts respecting said Inventions, Applicationistrative proceedings and sign all lawful papers (including applications, CIPs, and reissue applications) relating to said Inventightful oaths and declarations and generally to do everything posnominees, and its legal representatives to obtain, maintain, and enforprotection for said Inventions, Applications for Patent, and Patents, lending such cooperation and assistance are paid by HP-INDIGO representatives. | in said Invention IGO, its success cations for Pate, without limitate cions, Application scible to aid HP rce, for its or the provided the ex | s, Applications for P sors, its assigns, its ent, and Patents; to ion, divisional appl ns for Patent, and F -INDIGO, its succe ir own benefit, propogenses which may | atent, and Patents, to nominees, or its lega estify in any legal or ications, continuation Patents; and make al ssors, its assigns, its er intellectual property be incurred by me ir |
| IN WITNESS WHEREOF, I hereunto set my hand and seal: | | | |
| ریم' <i>ک</i> | 8 | Dec | 2019 |
| Inventor's Signature | Day | Month | Year |
| Gideon Amir | _ | | |
| Given (First and Middle) Name(s) Family Name | | | |

| HP Inc. | 3 |
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| 9390 E. Harmony Road | |
| Mail Stop 35 | |
| Fort Collins, Colorado 80528 | Ì |

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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 HP INDIGO B.V., having its registered offices in Amstelveen. The Netherlands, (hereinafter, HP-INDIGO), 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):

METHOD AND APPARATUS FOR FORMING ON A SUBSTRATE A PATTERN OF A MATERIAL

| Filing Date: | 31 October 2012 | Application No.: | PCT/EP2012/071638 | Patent Office: | <u> </u> |
|--------------|-----------------|------------------|-------------------|----------------|----------|

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 tuture 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, continuations 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 resissues, 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 HP-INDIGO, its successors, its assigns, its nominees, and its legal representatives to file said Applications for Peteri in its name or in my name in any country or region or under any international agreement, and further authorize HP-INDIGO, 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:

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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 HP-INDIGO, its successors, or its assigns; communicate to HP-INDIGO, 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 lewful papers (including, without limitation, divisional applications, continuation applications, CIPs, and relisaue applications) relating to said Inventions, Applications for Patent, and Patents; and make all rightful daths and declarations and generally to do everything possible to aid HP-INDIGO, 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 HP-INDIGO, its successors, its assigns, its nominees, or its legal representatives.

| IN WITNESS WHEREOF | hereunto set my hand and | seal. | | |
|----------------------------------|--------------------------|--------|-------|------|
| | and a | 08 | 12 | 2019 |
| Inventor's Signature | | Day | Month | Year |
| Mark | Sandler | | | |
| Given (First and Middle) Name(s) | Family Name | ······ | | |

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

| RECORD ID: | 83011212 |
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| iling Date: 31 October 2012 Application No.: PCT/EP2012/071638 Patent Office: EP | |
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| METHOD AND APPARATUS FOR FORMING ON A SUBSTRATE A PATTERN OF A MATERI | <u>AL</u> |

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| IN WITNESS WHEREOF, | I hereunto set my hand and seal: | | | |
|----------------------------------|----------------------------------|-----|-------|------|
| 20491 | | 9 | 12 | 2019 |
| Inventor's Signature | | Day | Month | Year |
| Yaron | Grinwald | | | |
| Given (First and Middle) Name(s) | Family Name | | | |

PATENT REEL: 051289 FRAME: 0190