505017188 07/24/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5063936

| SUBMISSION TYPE: | NEW ASSIGNMENT | |
|--|----------------|--|
| NATURE OF CONVEYANCE: NUNC PRO TUNC ASSIGNMENT | | |
| EFFECTIVE DATE: | 07/25/2017 | |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------------|----------------|
| MORGAN C. MACINNIS | 07/16/2018 |
| DIANA DRENNAN | 07/16/2018 |
| TONGXIANG LU | 07/16/2018 |
| DANIEL W. SILVERSTEIN | 07/23/2018 |
| HSIAO-FAN CHEN | 07/16/2018 |
| GEORGE FITZGERALD | 07/16/2018 |
| JASON BROOKS | 07/16/2018 |
| PAUL M. LAHTI | 07/18/2018 |

RECEIVING PARTY DATA

| Name: | UNIVERSAL DISPLAY CORPORATION | |
|-----------------|-------------------------------|--|
| Street Address: | 375 PHILLIPS BOULEVARD | |
| City: | EWING | |
| State/Country: | NEW JERSEY | |
| Postal Code: | 08618 | |

PROPERTY NUMBERS Total: 2

| Property Type | Number |
|---------------------|----------|
| Application Number: | 16038878 |
| Application Number: | 62537058 |

CORRESPONDENCE DATA

Fax Number: (215)979-1020

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: 215-979-1581

Email: smhewitt@duanemorris.com

Correspondent Name: WON JOON KOUH

Address Line 1: 30 SOUTH 17TH STREET

Address Line 4: PHILADELPHIA, PENNSYLVANIA 19103

ATTORNEY DOCKET NUMBER: F7059-29802/-29801

PATENT REEL: 046440 FRAME: 0420

505017188

| NAME OF SUBMITTER: WON JOON KOUH, USPTO REG. # 42763 | | |
|--|-------------------------------------|--|
| NAME OF SOMMITTER. | WON 300N ROOM, 031 TO TIEG. # 42703 | |
| SIGNATURE: /Won Joon Kouh/ | | |
| DATE SIGNED: | 07/24/2018 | |
| Total Attachments: 3 | | |
| source=F7059-29802FULLYexecutedAssignment#page1.tif | | |

source=F7059-29802FULLYexecutedAssignment#page1.tif source=F7059-29802FULLYexecutedAssignment#page2.tif

source = F7059 - 29802 FULL Y executed Assignment # page 3.t if

PATENT REEL: 046440 FRAME: 0421

ASSIGNMENT

WHEREAS, We, Morgan C. MACINNIS, Diana DRENNAN, Tongxiang LU, Daniel W. SILVERSTEIN, Hsiao-Fan CHEN, George FITZGERALD, Jason BROOKS, and Paul M. LAHTI (hereinafter referred to as ASSIGNORS) have invented certain inventions or improvements relating to ORGANIC ELECTROLUMINESCENT MATERIALS AND DEVICES, for which a United States patent application, bearing Attorney Docket No. F7059-29802 UDC-1273US is being filed herewith.

WHEREAS, Universal Display Corporation, a corporation having a place of business at 375 Phillips Boulevard, Ewing, NJ 08618 (hereinafter referred to as ASSIGNEE) is desirous of acquiring the entire right, title and interest in, to and under said inventions or improvements, said application and any and all patents to be obtained therefor or granted as a result thereof;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by ASSIGNEE of valuable consideration to ASSIGNORS, the receipt and adequacy of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNORS hereby sell, assign, and transfer to ASSIGNEE and the successors, assigns and legal representatives of the ASSIGNEE all of ASSIGNORS' rights, title and interest in, to, and under said inventions or improvements and said application and to any and all inventions described in said application for the United States, its territorial possessions and all foreign countries, and all of ASSIGNORS' rights, title and interest in, to, and under any and all Letters Patent which may be granted therefor in the United States, its territorial possessions and all foreign countries, and in, to, and under any and all continuations-in-part, continuations, divisions, substitutes, reissues, extensions, renewals, and reexaminations thereof, and all other applications for Letters Patent relating thereto which have been or shall be filed in the United States, its territorial possessions and/or any foreign countries, and all rights, together with all priority rights, under any of the international conventions, unions, agreements, acts, and treaties, including all future conventions, unions, agreements, acts, and treaties.

ASSIGNORS request that any and all patents for said inventions or improvements be issued to said ASSIGNEE, its successors, assigns and legal representatives, or to such nominees as it may designate.

ASSIGNORS authorize and empower the said ASSIGNEE, its successors, assigns and legal representatives to invoke and claim for any application for patent or other form of protection for said inventions filed by it or them, the benefit of the right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it, and to invoke and claim such right of priority without further written or oral authorization from ASSIGNORS.

ASSIGNORS hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any assignment, consent to file or like document which may be required in any country for any purpose and more particularly in proof of the right of the said ASSIGNEE, its successors, assigns, and legal representatives, to claim the aforesaid benefit of the

DM2\9007927.1

right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

ASSIGNORS agree that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said ASSIGNEE, its successors, assigns and legal representatives, the ASSIGNORS will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions, renewals, and reexamination thereof and any legal equivalent thereof in a foreign country, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings and any legal equivalent thereof in a foreign country; communicate to said ASSIGNEE, its successors, assigns, and legal representatives, all facts known to the ASSIGNORS relating to said inventions and the history thereof; and generally do everything possible which said ASSIGNEE, its successors, assigns or legal representatives, shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents on said inventions in said ASSIGNEE, its successors, assigns and legal representatives.

For all legal purposes, this assignment shall be effective nunc pro tunc as of July 25, 2017.

ASSIGNORS covenant with said ASSIGNEE, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that ASSIGNORS have full right to convey the same as herein expressed.

| Signed at | |
|--|-----------------|
| Lyn ha si | July 16, 2018 |
| Morgan C. MACINNIS | (Date) |
| <u> Dagoula de la composição de la composi</u> | July 16, 2018 |
| Diana DRENNAN | (Date) |
| 70202000 Lu | <u>7/4/2018</u> |
| Tongxiang/LU | (Date) |
| | |
| Daniel W. SILVERSTEIN | (Date) |
| M | 3/16/18 |
| Hsiao-Fan CHEN | (Date) |
| Store a freely | 7/10/2018 |
| George FITZGERALD | (Date) |
| <u> </u> | 4/4/18 |
| Jason BROOKS | (Date) |
| V Paul M Lati | 18 July 2018 |
| PAUL M. LAHTI | (Date) |

2

right of priority provided by the International Convention for the Protection of Industrial Property, as amended, or by any convention which may henceforth be substituted for it.

ASSIGNORS agree that, when requested to carry out in good faith the intent and purpose of this assignment, at the expense of said ASSIGNEE, its successors, assigns and legal representatives, the ASSIGNORS will execute all continuations-in-part, continuations, divisions, substitutes, reissues, extensions, renewals, and reexamination thereof and any legal equivalent thereof in a foreign country, execute all rightful oaths, assignments, powers of attorney and other papers, testify in any legal or quasi legal proceedings and any legal equivalent thereof in a foreign country; communicate to said ASSIGNEE, its successors, assigns, and legal representatives, all facts known to the ASSIGNORS relating to said inventions and the history thereof; and generally do everything possible which said ASSIGNEE, its successors, assigns or legal representatives, shall consider desirable for aiding in securing, maintaining and enforcing proper patent protection for said inventions and for vesting title to said inventions and all applications for patents on said inventions in said ASSIGNEE, its successors, assigns and legal representatives.

For all legal purposes, this assignment shall be effective nunc pro tunc as of July 25, 2017.

ASSIGNORS covenant with said ASSIGNEE, its successors, assigns and legal representatives, that the rights and property herein conveyed are free and clear of any encumbrance, and that ASSIGNORS have full right to convey the same as herein expressed.

| Signed at | | |
|--|------------|--|
| Morgan C. MACINNIS | (Date) | |
| Diana DRENNAN | (Date) | |
| Tongxiang LU Danuel S- Griesilverstein Daniel W. SILVERSTEIN | (Date) | |
| Hsiao-Fan CHEN | (Date) | |
| George FITZGERALD | (Date) | |
| Jason BROOKS | (Date) | |
| PAUL M. LAHTI | (Date) | |

2

DMZ9007927.1

RECORDED: 07/24/2018