

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

Assignment ID: PATI355114

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	COMPOUND PHOTONICS LIMITED	01/06/2022
<b>RECEIVING PARTY DATA</b>		
<b>Company Name:</b>	Snap Inc.	
<b>Street Address:</b>	3000 31st Street	
<b>City:</b>	Santa Monica	
<b>State/Country:</b>	CALIFORNIA	
<b>Postal Code:</b>	90405	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	11713773
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>		
<i>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.</i>		
<b>Phone:</b>	(612)373-6900	
<b>Email:</b>	request@slwip.com	
<b>Correspondent Name:</b>	Schwegman Lundberg & Woessner, P.A.	
<b>Address Line 1:</b>	P.O. Box 2938	
<b>Address Line 4:</b>	Minneapolis, MINNESOTA 55402	
<b>ATTORNEY DOCKET NUMBER:</b>	4218.G21US1	
<b>NAME OF SUBMITTER:</b>	Cheryl Breyfogle	
<b>SIGNATURE:</b>	Cheryl Breyfogle	
<b>DATE SIGNED:</b>	07/11/2024	
<b>Total Attachments: 19</b>		
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RECORDATION FORM COVER SHEET  
PATENTS ONLY

Form PTO-1595 (Rev. 6-18)  
OMB No. 0651-0027 (exp. 10/31/2024)

U.S. Department of Commerce  
United States Patent and Trademark Office

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies):

COMPOUND PHOTONICS LIMITED

Additional name(s) of conveying party(ies) attached?

☐ Yes ☒ No

3. Nature of conveyance/Execution Date(s):

Execution Date(s): January 6, 2022

- ☒ Assignment ☐ Merger  
☐ Security Agreement ☐ Change of Name  
☐ Joint Research Agreement  
☐ Government Interest Assignment  
☐ Executive Order 9424, Confirmatory License  
☐ Other

2. Name and address of receiving party(ies):

Name: Snap Inc.

Street 3000 31st Street  
Address:

City: Santa Monica

State/Province: CA

Zip: 90405

Country: United States of America

Additional name(s) & address(es) attached?  
☐ Yes ☒ No

4. Application number(s) or patent number(s): ☐ This document serves as an Oath/Declaration (37 CFR 1.63)

A. Patent Application No.(s)

B. Patent No.(s)

Serial No. 11/713,773

Additional numbers attached? ☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Matthew R. Norwood

Address:  
Schwegman Lundberg & Woessner, P.A.  
P.O. Box 2938  
Minneapolis, Minnesota 55402

Phone Number: (612) 373-6900

Docket Number: 4218.G21US1

Email Address: request@slwip.com

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 1.21(h) & 3.41): \$0.00

☐ Authorized to be charged to deposit account 19-0743

☐ Enclosed

☐ None required (government interest not affecting title)

8. Payment Information

Deposit Account No.: 19-0743

Authorized User Name: Matthew R. Norwood

9. Signature:

Matthew R. Norwood / Matthew Norwood / Jul 3, 2024

Matthew R. Norwood/Reg. No. 75,730

Name of Person Signing

Signature

Date

Total number of pages including cover sheet, attachments, and documents: 19

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:

Mail Stop Assignment Recordation Services, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

**PATENT**  
**REEL: 067959 FRAME: 0769**

**INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT**

THIS INTELLECTUAL PROPERTY ASSIGNMENT AGREEMENT (this “Assignment”) is entered into on January 6, 2022 (the “Effective Date”), by and between Snap, Inc., a Delaware corporation (“Assignee”) and Compound Photonics Group Limited, a private company limited by shares organized under the laws of England and Wales under the Companies Act with registered number 06917133, Compound Photonics Limited, a private company limited by shares organized under the law of England and Wales under the Companies Act with registered number 05574885, and Compound Photonics U.S. Corporation, a Delaware corporation (collectively, “Assignors” and each, an “Assignor”). Capitalized terms used but not defined in this Assignment have the meanings set forth in the Purchase Agreement (as defined below).

WHEREAS, Assignors and Assignee are parties to the Asset Purchase Agreement dated December 10, 2021 (the “Purchase Agreement”), pursuant to which each Assignor has agreed, *inter alia*, to sell, assign, convey, transfer and deliver to Assignee all Company Intellectual Property owned by such Assignor, free and clear of all Encumbrances (other than Permitted Encumbrances), including the Intellectual Property listed on Schedule 1 (collectively, “Transferred Intellectual Property”);

WHEREAS, this Assignment is being delivered pursuant to Section 2.2(a)(ii) of the Purchase Agreement; and

WHEREAS, Assignors and Assignee now seek to consummate the sale, assignment, conveyance and transfer of the Transferred Intellectual Property.

NOW, THEREFORE, the parties, intending to be legally bound, agree as follows:

1. Assignment of Transferred Intellectual Property. Effective as of the Closing, each Assignor hereby irrevocably transfers, assigns and conveys to Assignee, free and clear of all Encumbrances (other than Permitted Encumbrances), all right, title and interest in and to the Transferred Intellectual Property, together with the goodwill associated therewith (collectively, “Assigned Intellectual Property Rights”), which includes:
  - (a) the Intellectual Property set forth on Schedule 1 and all issuances, extensions, renewals, reissues, reexaminations, continuations, continuations in part, continuing prosecution applications, requests for continuing examinations, divisions and registrations thereof;
  - (b) all rights of any kind whatsoever of such Assignor accruing under any of the foregoing provided by applicable Legal Requirement of any jurisdiction, by international treaties and conventions and otherwise throughout the world;
  - (c) any and all royalties, fees, income, payments and other proceeds now or hereafter due or payable with respect to any and all of the foregoing;
  - (d) all related rights of priority and protection of interests of any of the foregoing; and
  - (e) any and all claims and causes of action, with respect to any of the foregoing, whether accruing before, on or after the date hereof, including all rights to and

claims for damages, restitution and injunctive and other legal and equitable relief for past, present and future infringement, dilution, misappropriation, violation, misuse, breach or default, with the right but no obligation to sue for such legal and equitable relief and to collect, or otherwise recover, any such damages.

Furthermore, the parties have agreed to execute the attached short form assignment instruments attached hereto as Annex A (with regard to the trademark assignment), Annex B (with regard to the domain name assignment) and Annex C (with regard to assignment of patent rights) for the purpose of recording the assignments with the proper authorities.

2. Further Assurances. From time to time following the Effective Date, each Assignor will, at Assignee's request and expense, execute and deliver such documents and other papers and perform any other actions as may be reasonably required to carry into effect and perfect the assignments and transfers in this Assignment (including the Annexes attached hereto) or to enable Assignee to obtain the full benefits of this Assignment. In addition, Assignor will deliver to Assignee within five (5) Business Days of the Effective Date, complete and accurate copies of all applications, registrations, prosecution files, correspondence with a Governmental Body and other documents related to the Assigned Intellectual Property Rights.
3. Moral Rights. Any assignment of copyright under this Assignment includes all rights of paternity, attribution, integrity, disclosure and withdrawal and any other rights that may be known as or referred to as *droit moral* or "moral rights" (collectively, "Moral Rights"). To the extent Moral Rights cannot be transferred or assigned under applicable Legal Requirement and to the extent allowed by applicable Legal Requirement, each Assignor hereby waives all Moral Rights with respect to all copyrights and copyrightable works included in the Assigned Intellectual Property Rights, and all uses thereof, and consents to any action of Assignee that would violate such Moral Rights in the absence of such waiver or consent.
4. Successors and Assigns; No Third-Party Beneficiaries. This Assignment is binding on and inures to the benefit of the parties hereto and their respective successors and permitted assigns. Nothing herein expressed or implied is intended or will be construed to confer upon or give to any person or entity any rights or remedies under or by reason of this Assignment nor be relied upon other than the parties hereto and their permitted successors or assigns.
5. Entire Agreement. This Assignment and all other documents executed in connection with the consummation of the transactions contemplated herein, including the Purchase Agreement, contain the entire agreement between the parties with respect to the Assigned Intellectual Property Rights and related transactions, and supersedes all prior agreements, written or oral, with respect thereto. In the event that any of the terms of this Assignment conflict with the terms of the Purchase Agreement, the terms of the Purchase Agreement shall prevail. All matters relating to the transfer of the Assigned Intellectual Property Rights to the Assignee and not expressly governed hereunder, shall be deemed to be governed by the Purchase Agreement.


6. Governing Law. This Assignment will be deemed to be made and in all respects will be interpreted, construed and governed by and in accordance with the Legal Requirements of the State of Delaware without regard to the conflicts of laws principles thereof.
7. Jurisdiction. The parties irrevocably submit to the exclusive jurisdiction of the Chancery Court of the State of Delaware and any state appellate court therefrom within the State of Delaware (or, if the Chancery Court of the State of Delaware declines to accept jurisdiction over a particular matter, any state or federal court within the State of Delaware) solely in respect of the interpretation and enforcement of the provisions of this Assignment and the documents referred to in this Assignment, and waive, and agree not to assert, as a defense in any Action for the interpretation or enforcement of this Assignment, that it is not subject thereto or that such Action may not be brought or is not maintainable in said courts or that the venue thereof may not be appropriate or that this Assignment or any such other document may not be enforced in or by such courts. The parties consent to and grant any such court jurisdiction over the Person of such parties and over the subject matter of such dispute and agree that mailing of process or other papers in connection with any such Action in the manner provided in Section 9.12 of the Purchase Agreement as permitted by applicable Legal Requirement, will be valid and sufficient service thereof. Nothing in this Agreement shall affect the right of any party hereto to serve process or notices in any other manner permitted by applicable Legal Requirement.
8. Severability. If any term, provision, covenant or restriction of this Assignment is held by a court of competent jurisdiction or other Governmental Body to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Assignment will remain in full force and effect and will in no way be affected, impaired or invalidated so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to either party. Upon such a determination, the parties will negotiate in good faith to modify this Assignment so as to effect the original intent of the parties as closely as possible in an acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the fullest extent possible.
9. Amendment, Waiver and Termination. This Assignment cannot be amended, waived or terminated except by a writing signed by the parties hereto and that identifies itself as an amendment to this Assignment.
10. Headings; Irrevocability; Effectiveness. The section headings and captions contained herein are for convenience of reference only and will not control or affect the meaning or construction of any provision hereof. This Assignment is irrevocable and effective upon the applicable Assignor's signature to and delivery of a manually signed copy of this Assignment or facsimile or email transmission of the signature to this Assignment in connection with the Closing.

[SIGNATURE PAGE FOLLOWS]


IN WITNESS WHEREOF, each of the undersigned has executed this Intellectual Property Assignment Agreement as of the Effective Date.

**ASSIGNORS:**

**COMPOUND PHOTONICS GROUP LIMITED**

By:   
Name: RICHARD JACKSON  
Title: DIRECTOR

**COMPOUND PHOTONICS U.S.  
CORPORATION**

By:   
Name: RICHARD JACKSON  
Title: SECRETARY

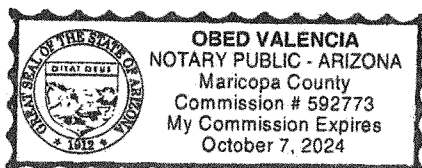
*[Signature Page to Intellectual Property Assignment Agreement]*

STATE OF Arizona )  
COUNTY OF Maricopa ) ss.

On this January 4, 2022, before me, Obed Valencia, Notary Public  
Date Name and Title of the Notary  
personally appeared Richard Jackson  
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence to the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Arizona that the foregoing paragraph is true and correct.



WITNESS my hand and official seal.

[Signature]  
Signature of Notary Public



IN WITNESS WHEREOF, each of the undersigned has executed this Intellectual Property Assignment Agreement as of the Effective Date.

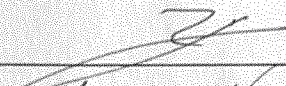
ASSIGNORS:

COMPOUND PHOTONICS LIMITED

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

  
Yaron Valler  
Director

STATE OF  
COUNTY OF

)  
) ss.

On this January 3, 2022, before me,

**Orenstein Shlomo Yizhak**

Date

Name and Title of the Notary

personally appeared **Yaron Valler**

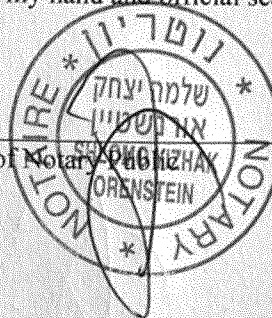
Name(s) of Signer(s)

proved to me on the basis of satisfactory evidence to the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of Israel that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature of Notary **SHLOMO YIZHAK ORENSTEIN**



PATENT

REEL: 067959 FRAME: 0776

**PATENT**  
**REEL: 067959 FRAME: 0777**

Schedule 1  
*Transferred Intellectual Property*

Patents

Issued Patents:

Title	Number	Country
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	8013820	US
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	BRPI0712687C8	Brazil
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Switzerland
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	200780026293.9	China
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	DK2033076T3	Denmark
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	EP2033076B1	Europe
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	France
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Germany
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	UK
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	HK1133315B	Hong Kong
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	IL195621A	Israel
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Ireland
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	IN323898B	India

PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	5275980	Japan
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Netherlands
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	SG148357B	Singapore
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	1435305	Taiwan
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	1413127	Korea
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	MY-149552-A	Malaysia
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	8724059	US
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	9551901	US
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	1599758	Switzerland
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	200480009806.1	China
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	1599758	Germany
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	1599758	France
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	1599758	UK
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	1599758	Ireland
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	5210517	Japan
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	5722713	Japan
VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	1169401	Korea

VERTICALLY ALIGNED NEMATIC MODE LIQUID CRYSTAL DISPLAY HAVING LARGE TILT ANGLES AND HIGH CONTRAST	I364608	Taiwan
IMAGE QUALITY IMPROVEMENT FOR LIQUID CRYSTAL DISPLAY	6727872	US
IMAGE QUALITY IMPROVEMENT FOR LIQUID CRYSTAL DISPLAYS	6972745	US
IMAGE QUALITY IMPROVEMENT FOR LIQUID CRYSTAL DISPLAYS	6731257	US
LIQUID CRYSTAL ON SILICON DEVICE	6686977	US
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	7440157	US
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	CN101421664B	China
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	EP1989586B1	Europe
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	IN200807476P1	India
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	IL193789A	Israel
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	KR1059919B1	Korea
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	MY142754A	Malaysia
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	SG145518B	Singapore
OPTICALLY ADDRESSED SPATIAL LIGHT MODULATOR AND METHOD	TW1428659B	Taiwan
TRANSMISSIVE, OPTICALLY ADDRESSED, PHOTONSENSITIVE SPATIAL LIGHT MODULATORS AND COLOR DISPLAY SYSTEMS INCORPORATING SAME	7990600	US
PIXEL CIRCUIT TO ELECTRODE TRANSLATION	8072670	US
PIXEL CIRCUIT WITH SHARED ACTIVE REGIONS	6762738	US
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	9368074	US
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	CN101523284B	China
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	EP2033046B1	Europe

OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	EP2653915B1	Europe
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	HK1190466A	Hong Kong
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	IL195548A	Israel
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	IN200810459P1	India
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	KR1413171B1	Korea
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	MY157840A	Malaysia
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	SG148335B	Singapore
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	TW1543141B	Taiwan

Pending Patent Applications:

Title	Number	Country
LASER ILLUMINATION SYSTEM WITH REDUCED SPECKLE ILLUMINATION SYSTEMS AND METHODS	16494086	US
ILLUMINATION SYSTEMS AND METHODS	2019-7029968	Korea
ILLUMINATION SYSTEMS AND METHODS	PI2019005212	Malaysia
LASER ILLUMINATION SYSTEM WITH REDUCED SPECKLE	18716032.0	EPO
LASER ILLUMINATION SYSTEM WITH REDUCED SPECKLE	201880018417.7	China
ILLUMINATION SYSTEMS AND METHODS	2019-551323	Japan
IMAGING SYSTEMS AND METHODS	16493598	US
IMAGING SYSTEMS AND METHODS	20188001814.2	China
IMAGING SYSTEMS AND METHODS	18729744.5	EPO
LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	17252324	US
LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	201980053127.0	China
LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	19734638.0	EPO
LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	2021-519524	Japan



LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	10-2021-7000006	Korea
LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	P12020006702	Malaysia
LIQUID CRYSTAL MIXTURES, METHODS OF MAKING THE SAME, AND DEVICES INCLUDING THE SAME	108120617	Taiwan
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	17057796	US
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	108118029	Taiwan
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	19730636.8	EPO
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	201980034984.6	China
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	10-2020-7036708	Korea
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	P12020006161	Malaysia
SYSTEMS AND METHOD FOR IMPROVING OPERATING CHARACTERISTICS OF DISPLAYS	2020-565472	Japan
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	17413621	US
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	PCT/US2020/040468	WIPO
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	109122278.0	Taiwan
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	2021-553140	Japan
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	113632160	China
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	10-2021-7036379	Korea
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	P12021005087	Malaysia
SYSTEMS AND METHODS FOR LOW POWER COMMON ELECTRODE VOLTAGE GENERATION FOR DISPLAYS	2020745387.9	EPO
LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	17297811	US
LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	108144770.0	Taiwan
LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	2021-53174	Japan

LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	201980080785.9	China
LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	10-2021-7021377	Korea
LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	P12021002907	Malaysia
LIQUID CRYSTAL DISPLAY WITH EXTERNAL RETARDER	19908888.1	EPO
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	17057993	US
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	108118114.0	Taiwan
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	201980034652.8	China
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	19731830.6	EPO
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	2021-516541	Japan
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	10-2020-7037290	Korea
SYSTEMS AND METHODS FOR DRIVING A DISPLAY	P12020006096	Malaysia
DYNAMIC PIXEL MODULATION	PCT/US2021/012262	WIPO
DYNAMIC PIXEL MODULATION	110100493	Taiwan
SYSTEMS AND METHODS OF DRIVING A DISPLAY WITH HIGH BIT DEPTH	PCT/US2021/012472	WIPO
SYSTEMS AND METHODS OF DRIVING A DISPLAY WITH HIGH BIT DEPTH	110100674	Taiwan
SYSTEMS AND METHODS FOR UPDATING AN IMAGE DISPLAYED ON A DISPLAY DEVICE	PCT/US202/012678	WIPO
SYSTEMS AND METHODS FOR UPDATING AN IMAGE DISPLAYED ON A DISPLAY DEVICE	110100839	Taiwan
DUAL-VOLTAGE PIXEL CIRCUITRY FOR LIQUID CRYSTAL DISPLAY	PCT/US2020/64153	WIPO
DUAL-VOLTAGE PIXEL CIRCUITRY FOR LIQUID CRYSTAL DISPLAY	109144233	Taiwan
INTEGRATED DISPLAY MODULE OR APPARATUS AND METHODS FOR OPERATING AND MANUFACTURING SAME	PCT/US2021/031281	WIPO
INTEGRATED DISPLAY MODULE OR APPARATUS AND METHODS FOR OPERATING AND MANUFACTURING SAME	110116628	Taiwan
SYSTEMS, METHODS AND DEVICES FOR PROVIDING SEQUENCE BASED DISPLAY DRIVERS	PCT/US2021/032477	WIPO
SYSTEMS, METHODS AND DEVICES FOR PROVIDING SEQUENCE BASED DISPLAY DRIVERS	110117546	Taiwan
OPTICAL SYSTEMS FOR MICRO LED DISPLAYS IN AUGMENTED REALITY AND NEAR-EYE HEADSETS	PCT/US21/54516	WIPO
OPTICAL SYSTEMS AND DISPLAY ENGINES FOR AUGMENTED REALITY AND NEW-EYE HEADSETS	110137675	Taiwan
SYSTEM AND METHOD FOR DRIVING A PIXEL WITH OPTIMIZED POWER AND AREA	PCT/US2021/60477	WIPO
SYSTEM AND METHOD FOR DRIVING A PIXEL WITH OPTIMIZED POWER AND AREA	110143464	Taiwan
SYSTEMS AND METHODS FOR CONFIGURING A DISPLAY DEVICE AND DISPLAY SYSTEM - TILED MICRODISPLAY	63229642	US

DRIVE TECHNIQUES FOR MODULATION DEVICES	PCT/US18/31690	WIPO
DRIVE TECHNIQUES FOR MODULATION DEVICES	CN111033603A	China
DRIVE TECHNIQUES FOR MODULATION DEVICES	EP3622502A1	Europe
DRIVE TECHNIQUES FOR MODULATION DEVICES	JP2020519920A	Japan
DRIVE TECHNIQUES FOR MODULATION DEVICES	MY2019P1005947A0	Malaysia
SYSTEMS AND METHODS FOR DRIVING DISPLAY DEVICES	PCT/US18/39172	WIPO
SYSTEMS AND METHODS FOR DRIVING DISPLAY DEVICES	CN 201880024949.10	China
SYSTEMS AND METHODS FOR DRIVING DISPLAY DEVICES	JP2020525813A	Japan
SYSTEMS AND METHODS FOR DRIVING DISPLAY DEVICES	KR2020019179A	Korea
SYSTEMS AND METHODS FOR DRIVING DISPLAY DEVICES	MY2019006028	Malaysia
APPARATUS, SYSTEMS, AND METHODS FOR FOVEATED DISPLAY	TW 108128548	Taiwan
APPARATUS, SYSTEMS, AND METHODS FOR FOVEATED DISPLAY	PCT/US19/45975	WIPO
DEFORMABLE ELECTRICAL CONNECTORS AND METHODS OF MANUFACTURING THE SAME	TW 109107658	Taiwan
DEFORMABLE ELECTRICAL CONNECTORS AND METHODS OF MANUFACTURING THE SAME	PCT/US20/21375	WIPO

Patents and patent applications within grace period for revival:

Title	Number	Country
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	2033046	Belgium
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	2033046	France
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	2033046	Germany
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE – ACCUMULATING SPATIAL LIGHT MODULATOR	2033046	Netherlands

OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	2033046	UK
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	2653915	Belgium
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	2653915	France
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	2653915	Germany
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	2653915	Netherlands
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	2653915	UK
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	PI0712688.3	Brazil
OPTICALLY ADDRESSED GRAY SCALE ELECTRIC CHARGE - ACCUMULATING SPATIAL LIGHT MODULATOR	5385783	Japan
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Austria
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Belgium
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Denmark
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Finland

PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Italy
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Luxembourg
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Sweden
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	PI0712687-5	Brazil
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	2033076	Spain
PULSE WIDTH DRIVING METHOD USING MULTIPLE PULSE	1133315B	Hong Kong
SYSTEMS AND METHODS FOR DRIVING A DISPLAY DEVICE	18820391.3	EPO