

## TRADEMARK ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

ETAS ID: TM529135

|                                   |                                |                       |                                     |
|-----------------------------------|--------------------------------|-----------------------|-------------------------------------|
| <b>SUBMISSION TYPE:</b>           | NEW ASSIGNMENT                 |                       |                                     |
| <b>NATURE OF CONVEYANCE:</b>      | Security Agreement             |                       |                                     |
| <b>CONVEYING PARTY DATA</b>       |                                |                       |                                     |
| <b>Name</b>                       | <b>Formerly</b>                | <b>Execution Date</b> | <b>Entity Type</b>                  |
| CURRENT LIGHTING SOLUTIONS, LLC   |                                | 04/01/2019            | Limited Liability Company: DELAWARE |
| <b>RECEIVING PARTY DATA</b>       |                                |                       |                                     |
| <b>Name:</b>                      | Ally Bank, as Collateral Agent |                       |                                     |
| <b>Street Address:</b>            | 300 Park Avenue, 4th Floor     |                       |                                     |
| <b>City:</b>                      | New York                       |                       |                                     |
| <b>State/Country:</b>             | NEW YORK                       |                       |                                     |
| <b>Postal Code:</b>               | 10022                          |                       |                                     |
| <b>Entity Type:</b>               | Utah State Bank: UTAH          |                       |                                     |
| <b>PROPERTY NUMBERS Total: 37</b> |                                |                       |                                     |
| <b>Property Type</b>              | <b>Number</b>                  | <b>Word Mark</b>      |                                     |
| <b>Serial Number:</b>             | 87195118                       | ACE                   |                                     |
| <b>Serial Number:</b>             | 72268042                       | ALGLAS                |                                     |
| <b>Serial Number:</b>             | 87582036                       | ALLSITES              |                                     |
| <b>Serial Number:</b>             | 87067695                       | ARIZE                 |                                     |
| <b>Serial Number:</b>             | 87549593                       | ARIZE ELEMENT         |                                     |
| <b>Serial Number:</b>             | 87350985                       | CITYIQ                |                                     |
| <b>Serial Number:</b>             | 74190883                       | CONSTANTCOLOR         |                                     |
| <b>Serial Number:</b>             | 75157145                       | ECOLUX                |                                     |
| <b>Serial Number:</b>             | 77375301                       | EVOLVE                |                                     |
| <b>Serial Number:</b>             | 87187373                       | EYES ON TRACK         |                                     |
| <b>Serial Number:</b>             | 73048566                       | E-Z LUX               |                                     |
| <b>Serial Number:</b>             | 73740531                       | GHB                   |                                     |
| <b>Serial Number:</b>             | 77306300                       | INFUSION              |                                     |
| <b>Serial Number:</b>             | 85554560                       | INTRINSX              |                                     |
| <b>Serial Number:</b>             | 85517916                       | LIGHTSWEEP            |                                     |
| <b>Registration Number:</b>       | 3603057                        | LUMINATION            |                                     |
| <b>Serial Number:</b>             | 87746579                       | LUMENCHOICE           |                                     |
| <b>Serial Number:</b>             | 73180988                       | MOD-U-LINE            |                                     |
| <b>Serial Number:</b>             | 72205278                       | MULTI-VAPOR           |                                     |
| <b>TRADEMARK</b>                  |                                |                       |                                     |

OP \$940.00 87195118

| Property Type  | Number   | Word Mark    |
|----------------|----------|--------------|
| Serial Number: | 73740530 | PERMA GARD   |
| Serial Number: | 72086958 | POWER GROOVE |
| Serial Number: | 78377097 | PROLINE      |
| Serial Number: | 78352339 | PROLINE      |
| Serial Number: | 75389493 | PRO-LINE     |
| Serial Number: | 76099257 | PROSYS       |
| Serial Number: | 75290545 | PULSEARC     |
| Serial Number: | 72091372 | QUARTZLINE   |
| Serial Number: | 87169040 | RADIANTRED   |
| Serial Number: | 73521391 | SBF          |
| Serial Number: | 87357843 | SELECT TX    |
| Serial Number: | 78078190 | SKYGARD      |
| Serial Number: | 75632103 | STARCOAT     |
| Serial Number: | 78435902 | STREETDREAMS |
| Serial Number: | 75817212 | ULC          |
| Serial Number: | 73308994 | UNIMOUNT     |
| Serial Number: | 78453794 | ULTRASTART   |
| Serial Number: | 73042671 | VERSAGLOW    |

**CORRESPONDENCE DATA**

**Fax Number:** 8009144240

*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:** 800-713-0755

**Email:** Michael.Violet@wolterskluwer.com

**Correspondent Name:** CT Corporation

**Address Line 1:** 4400 Easton Commons Way

**Address Line 2:** Suite 125

**Address Line 4:** Columbus, OHIO 43219

|                           |                 |
|---------------------------|-----------------|
| <b>NAME OF SUBMITTER:</b> | Corenda Lewis   |
| <b>SIGNATURE:</b>         | /Corenda Lewis/ |
| <b>DATE SIGNED:</b>       | 06/25/2019      |

**Total Attachments: 110**

source=USPTO - Term Loan Trademarks Coversheet & IP Security Agreement#page1.tif  
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source=USPTO - Term Loan Trademarks Coversheet & IP Security Agreement#page3.tif  
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## RECORDATION FORM COVER SHEET TRADEMARKS ONLY

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):**

CURRENT LIGHTING SOLUTIONS, LLC

- Individual(s)                       Association  
 Partnership                       Limited Partnership  
 Corporation- State: \_\_\_\_\_  
 Other LLC

Citizenship (see guidelines) Delaware

Additional names of conveying parties attached?  Yes  No

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

Execution Date(s) April 1, 2019

- Assignment                       Merger  
 Security Agreement                       Change of Name  
 Other \_\_\_\_\_

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

Additional names, addresses, or citizenship attached?  Yes  No

Name: Ally Bank, as Collateral Agent

Street Address: 300 Park Avenue, 4th Floor

City: New York

State: New York

Country USA Zip: 10022

- Individual(s) Citizenship \_\_\_\_\_  
 Association Citizenship \_\_\_\_\_  
 Partnership Citizenship \_\_\_\_\_  
 Limited Partnership Citizenship \_\_\_\_\_  
 Corporation Citizenship \_\_\_\_\_  
 Other Utah State Bank Citizenship Utah

If assignee is not domiciled in the United States, a domestic representative designation is attached:  Yes  No  
 (Designations must be a separate document from assignment)

**4. Application number(s) or registration number(s) and identification or description of the Trademark.**

A. Trademark Application No.(s) Text

See Schedule B attached

B. Trademark Registration No.(s)

See Schedule B attached

Additional sheet(s) attached?  Yes  No

C. Identification or Description of Trademark(s) (and Filing Date if Application or Registration Number is unknown):

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

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

Internal Address: \_\_\_\_\_

Street Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_ Zip: \_\_\_\_\_

Phone Number: \_\_\_\_\_

Docket Number: \_\_\_\_\_

Email Address: \_\_\_\_\_

**6. Total number of applications and registrations involved:**

37

**7. Total fee (37 CFR 2.6(b)(6) & 3.41) \$** \_\_\_\_\_

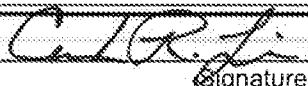
- Authorized to be charged to deposit account  
 Enclosed

**8. Payment Information:**

Deposit Account Number \_\_\_\_\_

Authorized User Name \_\_\_\_\_

**9. Signature:**

  
 \_\_\_\_\_  
 Signature

June 25, 2019

Date

Corenda R. Lewis

Name of Person Signing

Total number of pages including cover sheet, attachments, and document:

110

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:  
 Mail Stop Assignment Recordation Branch, Director of the USPTO, P.O. Box 1450, Alexandria, VA 22313-1450

## INTELLECTUAL PROPERTY SECURITY AGREEMENT

This **INTELLECTUAL PROPERTY SECURITY AGREEMENT** (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “IP Security Agreement”), dated as of April 1, 2019, is among the Persons listed on the signature pages hereof (collectively, the “Grantors”) and Ally Bank, as collateral agent (the “Collateral Agent”) for the Secured Parties (as defined in the Credit Agreement referred to below).

WHEREAS, CURRENT LIGHTING HOLDCO, INC., a Delaware corporation, and CURRENT LIGHTING HOLDCO INTERMEDIATE, INC., a Delaware corporation, have entered into the Term Loan Credit Agreement, dated as of April 1, 2019 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Credit Agreement”), with the lenders party thereto and ALLY BANK, as Administrative Agent and Collateral Agent. Capitalized terms defined in the Credit Agreement or in the Security Agreement (as defined below) and not otherwise defined herein are used herein as defined in the Credit Agreement or the Security Agreement, as the case may be (and in the event of a conflict, the applicable definition shall be the one given to such term in the Security Agreement).

WHEREAS, as a condition precedent to the making of the Loans by the Lenders from time to time, the entry into Secured Hedge Agreements by the Hedge Banks from time to time and the entry into Secured Cash Management Agreements by the Cash Management Banks from time to time, each Grantor has executed and delivered that certain Security Agreement, dated as of April 1, 2019 (as amended, restated, amended and restated, supplemented or otherwise modified from time to time, the “Security Agreement”), among the Grantors from time to time party thereto and the Collateral Agent.

WHEREAS, under the terms of the Security Agreement, the Grantors have granted to the Collateral Agent, for the benefit of the Secured Parties, a security interest in, among other property, certain intellectual property of the Grantors, and have agreed thereunder to execute this IP Security Agreement for recording with the USPTO and/or the USCO, as applicable.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor agrees as follows:

Section 1. Grant of Security. Each Grantor hereby collaterally assigns and pledges to the Collateral Agent (and its successors and permitted assigns), for the benefit of the Secured Parties, and each Grantor hereby grants to the Collateral Agent (and its successors and permitted assigns), for the benefit of the Secured Parties, a security interest in and to all of such Grantor’s right, title and interest in and to the following, whether now owned or hereafter acquired by the undersigned (the “Collateral”):

(i) all Patents, including the patents and patent applications set forth in Schedule A hereto;

(ii) all Trademarks, including the trademark and service mark registrations and applications set forth in Schedule B hereto (provided that no security interest shall be granted in United States intent-to-use trademark applications prior to the filing of a “Statement of Use” pursuant to Section 1(d) of the Lanham Act or an “Amendment to Allege Use” pursuant to Section 1(c) of the Lanham Act with respect thereto, to the extent that, and solely during the period, if any, in which, the grant of a security interest therein or the assignment thereof would impair the validity or enforceability of any registration that issues from such intent-to-use application under applicable federal law), together with the goodwill symbolized thereby;

(iii) all Copyrights, whether registered or unregistered, including, without limitation, the copyright registrations and applications set forth in Schedule C hereto;

(iv) all reissues, divisionals, continuations, continuations-in-part, extensions, renewals and reexaminations of any of the foregoing, all rights in the foregoing provided by international treaties or conventions, all rights corresponding thereto throughout the world and all other rights of any kind whatsoever of such Grantor accruing thereunder or pertaining thereto;

(v) any and all claims for damages and injunctive relief for past, present and future infringement, dilution, misappropriation, violation, misuse or breach with respect to any of the foregoing, with the right, but not the obligation, to sue for and collect, or otherwise recover, such damages; and

(vi) any and all proceeds of, collateral for, income, royalties and other payments now or hereafter due and payable with respect to, and supporting obligations relating to, any and all of the Collateral of or arising from any of the foregoing;

provided that notwithstanding anything to the contrary contained in the foregoing clauses (i) through (vi), the security interest created hereby shall not extend to, and the term "Collateral" shall not include, any Excluded Property.

Section 2. Security for Obligations. The grant of a security interest in the Collateral by each Grantor under this IP Security Agreement secures the payment of all Secured Obligations of such Grantor now or hereafter existing under or in respect of the Secured Documents (as such Secured Documents may be amended, restated, amended and restated, supplemented, replaced, refinanced or otherwise modified from time to time (including any increases of the principal amount outstanding thereunder)), whether direct or indirect, absolute or contingent, and whether for principal, reimbursement obligations, interest, premiums, penalties, fees, indemnifications, contract causes of action, costs, expenses or otherwise. Without limiting the generality of the foregoing, this IP Security Agreement secures, as to each Grantor, the payment of all amounts that constitute part of the Secured Obligations that would be owed by such Grantor to any Secured Party under the Secured Documents but for the fact that they are unenforceable or not allowable due to the existence of a bankruptcy, or reorganization or similar proceeding involving a Loan Party.

Section 3. Recordation. Each Grantor authorizes and requests that the Register of Copyrights, the Commissioner for Patents and the Commissioner for Trademarks record this IP Security Agreement.

Section 4. Execution in Counterparts. This IP Security Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

Section 5. Grants, Rights and Remedies. This IP Security Agreement has been entered into in conjunction with the provisions of the Security Agreement. Each Grantor does hereby acknowledge and confirm that the grant of the security interest hereunder to, and the rights and remedies of, the Collateral Agent with respect to the Collateral are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated herein by reference as if fully set forth herein. In the event of any conflict between the terms of this IP Security Agreement and the terms of the Security Agreement, the terms of the Security Agreement shall govern.

Section 6. Governing Law; Jurisdiction; Etc.

(a) THIS IP SECURITY AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK WITHOUT GIVING EFFECT TO THE CONFLICTS OF LAWS PRINCIPLES THEREOF, BUT INCLUDING SECTIONS 5-1401 AND 5-1402 OF THE NEW YORK GENERAL OBLIGATIONS LAW.

(b) EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY SUBMITS, FOR ITSELF AND ITS PROPERTY, TO THE EXCLUSIVE JURISDICTION OF THE COURTS OF THE STATE OF NEW YORK SITTING IN NEW YORK CITY IN THE BOROUGH OF MANHATTAN AND OF THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF NEW YORK SITTING IN THE BOROUGH OF MANHATTAN, AND ANY APPELLATE COURT FROM ANY THEREOF, IN ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS IP SECURITY AGREEMENT, OR FOR RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT, AND EACH OF THE PARTIES HERETO IRREVOCABLY AND UNCONDITIONALLY AGREES THAT ALL CLAIMS IN RESPECT OF ANY SUCH ACTION OR PROCEEDING MAY BE HEARD AND DETERMINED IN SUCH NEW YORK STATE COURT OR, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, IN SUCH FEDERAL COURT. EACH OF THE PARTIES HERETO AGREES THAT A FINAL JUDGMENT IN ANY SUCH ACTION OR PROCEEDING SHALL BE CONCLUSIVE AND MAY BE ENFORCED IN OTHER JURISDICTIONS BY SUIT ON THE JUDGMENT OR IN ANY OTHER MANNER PROVIDED BY LAW. NOTHING IN THIS IP SECURITY AGREEMENT SHALL AFFECT ANY RIGHT THAT THE COLLATERAL AGENT OR ANY LENDER MAY OTHERWISE HAVE TO BRING ANY ACTION OR PROCEEDING RELATING TO THIS IP SECURITY AGREEMENT OR THE RECOGNITION OR ENFORCEMENT OF ANY JUDGMENT AGAINST ANY LOAN PARTY OR ITS PROPERTIES IN THE COURTS OF ANY JURISDICTION.

(c) EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY OBJECTION THAT IT MAY NOW OR HEREAFTER HAVE TO THE LAYING OF VENUE OF ANY ACTION OR PROCEEDING ARISING OUT OF OR RELATING TO THIS IP SECURITY AGREEMENT IN ANY COURT REFERRED TO IN CLAUSE (b) OF THIS SECTION 6. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, THE DEFENSE OF AN INCONVENIENT FORUM TO THE MAINTENANCE OF SUCH ACTION OR PROCEEDING IN ANY SUCH COURT.

(d) EACH PARTY HERETO IRREVOCABLY CONSENTS TO SERVICE OF PROCESS IN THE MANNER PROVIDED FOR NOTICES IN SECTION 10.02 OF THE CREDIT AGREEMENT. NOTHING IN THIS IP SECURITY AGREEMENT WILL AFFECT THE RIGHT OF ANY PARTY HERETO TO SERVE PROCESS IN ANY OTHER MANNER PERMITTED BY APPLICABLE LAW.

(e) EACH PARTY TO THIS IP SECURITY AGREEMENT HEREBY EXPRESSLY WAIVES ANY RIGHT TO TRIAL BY JURY OF ANY CLAIM, DEMAND, ACTION OR CAUSE OF ACTION ARISING UNDER THIS IP SECURITY AGREEMENT OR IN ANY WAY CONNECTED WITH OR RELATED OR

**INCIDENTAL TO THE DEALINGS OF THE PARTIES HERETO OR ANY OF THEM WITH RESPECT TO THIS IP SECURITY AGREEMENT, OR THE TRANSACTIONS RELATED THERETO, IN EACH CASE WHETHER NOW EXISTING OR HEREAFTER ARISING, AND WHETHER FOUNDED IN CONTRACT OR TORT OR OTHERWISE; AND EACH PARTY HEREBY AGREES AND CONSENTS THAT ANY SUCH CLAIM, DEMAND, ACTION OR CAUSE OF ACTION SHALL BE DECIDED BY COURT TRIAL WITHOUT A JURY, AND THAT ANY PARTY TO THIS IP SECURITY AGREEMENT MAY FILE AN ORIGINAL COUNTERPART OR A COPY OF SECTION 10.17 OF THE CREDIT AGREEMENT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE SIGNATORIES HERETO TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.**

[Remainder of page intentionally left blank; signature page follows]

IN WITNESS WHEREOF, each Grantor and the Collateral Agent have caused this IP Security Agreement to be duly executed and delivered by its officer thereunto duly authorized as of the date first written above.

CURRENT LIGHTING HOLDCO, INC.

By: Maryrose Sylvester  
Name: Maryrose Sylvester  
Title: President & Chief Executive Officer

ALLY BANK, as Collateral Agent

By:   
Name: Justin Cosentino  
Title: Authorized Signatory



**Schedule A**  
**Patents**

See attached.

Schedule A

**TRADEMARK**  
**REEL: 006677 FRAME: 0482**

## Patents of Current Lighting Solutions, LLC

| CO | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | A LIGHTING ASSEMBLY FOR A REFRIGERATION APPLIANCE   | ORD-UTILITY PATENT FILING | 09/683062          | 11/14/2001       | 11/12/2002  | US6478445     |
| US | Issued      | ELECTRONIC DEVICES AND METHODS FOR MAKING SAME USING NANOTUBE REGIONS TO ASSIST IN THERMAL HEAT-SINKING     | ORD-UTILITY PATENT FILING | 10/614497          | 7/7/2003         | 3/8/2005    | US6864571     |
| JP | Issued      | ELECTRONIC DEVICES AND METHODS FOR MAKING SAME USING NANOTUBE REGIONS TO ASSIST IN THERMAL HEAT-SINKING     | ORD-UTILITY PATENT FILING | 2006-518865        | 7/7/2004         | 6/3/2011    | JP4754483     |
| US | Issued      | METHOD AND APPARATUS FOR NETWORKED LIGHTING SYSTEM CONTROL  | PRI-PRIORITY APPLICATION  | 10/435984          | 5/12/2003        | 3/15/2005   | US6867558     |
| US | Issued      | LED ILLUMINATION DEVICE WITH LAYERED PHOSPHOR PATTERN   | ORD-UTILITY PATENT FILING | 10/813338          | 3/30/2004        | 2/5/2008    | US7327078     |
| US | Issued      | ROUTING COST BASED NETWORK CONGESTION CONTROL FOR QUALITY OF SERVICE  | ORD-UTILITY PATENT FILING | 10/950149          | 9/24/2004        | 2/10/2009   | US7489635     |
| US | Issued      | GARNET PHOSPHOR MATERIALS HAVING ENHANCED SPECTRAL CHARACTERISTICS  | ORD-UTILITY PATENT FILING | 10/696637          | 10/29/2003       | 8/22/2006   | US7094362     |
| JP | Issued      | PHOSPHORS CONTAINING OXIDES OF ALKALINE-EARTH AND GROUP-13 METALS, AND LIGHT SOURCES INCORPORATING THE SAME | ORD-UTILITY PATENT FILING | 2005-131123        | 4/28/2005        | 1/24/2014   | JP5461752     |
| US | Issued      | GARNET PHOSPHOR MATERIALS HAVING ENHANCED SPECTRAL CHARACTERISTICS  | CIP-CONTINUATION IN PART  | 10/910991          | 8/4/2004         | 8/7/2007    | US7252787     |
| TW | Issued      | ORGANIC ILLUMINATION SOURCE AND METHOD FOR CONTROLLED ILLUMINATION  | ORD-UTILITY PATENT FILING | 96115929           | 5/4/2007         | 4/1/2018    | TW1620463     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description             | Application Number | Application Date | Patent Date | Patent Number    |
|----|-------------|--|--------------------------------|--------------------|------------------|-------------|------------------|
| CN | Issued      | ORGANIC ILLUMINATION SOURCE AND METHOD FOR CONTROLLED ILLUMINATION                           | PCT-PATENT COOPERATION TREATY  | 200780024535       | 12/29/2008       | 6/29/2011   | CN200780024535.0 |
| EP | Filed       | ORGANIC ILLUMINATION SOURCE AND METHOD FOR CONTROLLED ILLUMINATION                           | PCT-PATENT COOPERATION TREATY  | 7760633.3          | 12/16/2008       |             |                  |
| JP | Issued      | ORGANIC ILLUMINATION SOURCE AND METHOD FOR CONTROLLED ILLUMINATION                           | PCT-PATENT COOPERATION TREATY  | 2009-518411        | 4/13/2007        | 11/20/2015  | JP5840344        |
| KR | Filed       | ORGANIC ILLUMINATION SOURCE AND METHOD FOR CONTROLLED ILLUMINATION                           | PCT-PATENT COOPERATION TREATY  | 1020087031784      | 12/29/2008       |             |                  |
| TW | Issued      | COLOR TUNABLE OLED ILLUMINATION DISPLAY AND METHOD FOR CONTROLLED DISPLAY ILLUMINATIONS      | ORD-UTILITY PATENT FILING      | 96143596           | 11/16/2007       | 12/21/2014  | TW1466077        |
| CN | Issued      | COLOR TUNABLE OLED ILLUMINATION DISPLAY AND METHOD FOR CONTROLLED DISPLAY ILLUMINATION       | PCT-PATENT COOPERATION TREATY  | 200780050954.1     | 8/5/2009         | 7/3/2013    | CN200780050954.1 |
| KR | Issued      | COLOR TUNABLE OLED ILLUMINATION DISPLAY AND METHOD FOR CONTROLLED DISPLAY ILLUMINATIONS      | PCT-PATENT COOPERATION TREATY  | 1020097014092      | 7/6/2009         | 1/15/2015   | KR10-1485204     |
| US | Issued      | METHOD FOR PRODUCING A PALETTE OF COLORS FOR PERSISTENT PHOSPHORS AND PHOSPHORS MADE BY SAME | CIP-CONTINUATION IN PART       | 12/057496          | 3/28/2008        | 8/23/2011   | US8003012        |
| US | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER   | ORD-UTILITY PATENT FILING      | 11/986340          | 11/21/2007       | 1/11/2011   | US7868558        |
| PL | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER   | EPC-EUROPEAN PATENT CONVENTION | 8852217.2          | 9/30/2008        | 4/3/2013    | EP2213143        |
| CN | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER   | PCT-PATENT COOPERATION TREATY  | 200880117890.7     | 5/20/2010        | 10/2/2013   | CN200880117890.7 |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description             | Application Number | Application Date | Patent Date | Patent Number    |
|----|-------------|--|--------------------------------|--------------------|------------------|-------------|------------------|
| JP | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER         | ORD-UTILITY PATENT FILING      | 2010-534989        | 9/30/2008        | 6/6/2014    | JP5554243        |
| MX | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER         | PCT-PATENT COOPERATION TREATY  | MX/a/2010/005414   | 9/30/2008        | 2/1/2012    | MX295428         |
| AT | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER         | EPC-EUROPEAN PATENT CONVENTION | 8852217.2          | 9/30/2008        | 4/3/2013    | ATE605410        |
| DE | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER         | EPC-EUROPEAN PATENT CONVENTION | 8852217.2          | 9/30/2008        | 4/3/2013    | EP2213143        |
| FI | Issued      | ORGANIC LIGHT EMITTING DIODE POWER CONVERTER         | EPC-EUROPEAN PATENT CONVENTION | 8852217.2          | 9/30/2008        | 4/3/2013    | EP2213143        |
| US | Issued      | ULTRA-THIN MULTI-SUBSTRATE COLOR TUNABLE OLED DEVICE | ORD-UTILITY PATENT FILING      | 12/192262          | 8/15/2008        | 9/20/2011   | US8022623        |
| TW | Issued      | ULTRA-THIN MULTI-SUBSTRATE COLOR TUNABLE OLED DEVICE | ORD-UTILITY PATENT FILING      | 98126072           | 8/3/2009         | 6/11/2017   | TW1587740        |
| CN | Issued      | ULTRA-THIN MULTI-SUBSTRATE COLOR TUNABLE OLED DEVICE | PCT-PATENT COOPERATION TREATY  | 200980141553.6     | 4/15/2011        | 10/29/2014  | CN200980141553.6 |
| EP | Filed       | ULTRA-THIN MULTI-SUBSTRATE COLOR TUNABLE OLED DEVICE | PCT-PATENT COOPERATION TREATY  | 9790593.9          | 7/17/2009        |             |                  |
| JP | Issued      | ULTRA-THIN MULTI-SUBSTRATE COLOR TUNABLE OLED DEVICE | ORD-UTILITY PATENT FILING      | 2011-523025        | 7/17/2009        | 8/14/2015   | JP5793421        |
| KR | Issued      | ULTRA-THIN MULTI-SUBSTRATE COLOR TUNABLE OLED DEVICE | ORD-UTILITY PATENT FILING      | 1020117006052      | 7/17/2009        | 3/9/2016    | KR10-1603811     |
| CN | Issued      | Display light  | PRI-PRIORITY APPLICATION       | 200720001855.1     | 1/16/2007        | 2/27/2008   | CN200720001855.1 |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number    |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|------------------|
| US | Issued      | ORANGE-RED PERSISTENT PHOSPHORS                  | ORD-UTILITY PATENT FILING     | 12/606237          | 10/27/2009       | 7/3/2012    | US8211334        |
| US | Issued      | WHITE EMITTING PERSISTENT PHOSPHOR               | ORD-UTILITY PATENT FILING     | 12/971569          | 12/17/2010       | 8/13/2013   | US8506843        |
| DE | Filed       | WHITE EMITTING PERSISTENT PHOSPHOR               | PCT-PATENT COOPERATION TREATY | 102011104387.2     | 6/17/2013        |             |                  |
| CN | Issued      | WHITE EMITTING PERSISTENT PHOSPHOR               | PCT-PATENT COOPERATION TREATY | 201180060705.7     | 6/17/2013        | 6/17/2015   | CN201180060705.7 |
| JP | Issued      | WHITE EMITTING PERSISTENT PHOSPHOR               | PCT-PATENT COOPERATION TREATY | 2013-544664        | 6/13/2013        | 12/22/2016  | JP6063388        |
| US | Issued      | LED POWER SOURCE AND DC-DC CONVERTER             | PRI-PRIORITY APPLICATION      | 12/479312          | 6/5/2009         | 8/2/2011    | US7990070        |
| CN | Issued      | LED POWER SOURCE AND DC-DC CONVERTER             | PCT-PATENT COOPERATION TREATY | 201080025850.7     | 12/5/2011        | 12/24/2014  | CN201080025850.7 |
| EP | Filed       | LED POWER SOURCE AND DC-DC CONVERTER             | PCT-PATENT COOPERATION TREATY | 10719473           | 11/25/2011       |             |                  |
| US | Issued      | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT | PRI-PRIORITY APPLICATION      | 12/259492          | 10/28/2008       | 12/6/2011   | US8072164        |
| CA | Filed       | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT | ORD-UTILITY PATENT FILING     | 2740629            | 9/22/2009        |             |                  |
| CN | Issued      | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT | PCT-PATENT COOPERATION TREATY | 200980143735.7     | 4/28/2011        | 10/29/2014  | CN200980143735.7 |
| EP | Filed       | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT | PCT-PATENT COOPERATION TREATY | 9792828.7          | 9/22/2009        |             |                  |

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| IN | Filed       | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT         | ORD-UTILITY PATENT FILING      | 2729/DEL/NP/2011   | 9/22/2009        |             |                  |
| JP | Issued      | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT         | ORD-UTILITY PATENT FILING      | 2011-533208        | 9/22/2009        | 12/27/2013  | JP5444361        |
| MX | Issued      | UNIFIED 0-10V AND DALI DIMMING INTERFACE CIRCUIT         | ORD-UTILITY PATENT FILING      | MX/a/2011/004145   | 9/22/2009        | 8/24/2012   | MX302724         |
| US | Issued      | WHITE PERSISTENT PHOSPHOR BLEND OR LAYERED STRUCTURE     | ORD-UTILITY PATENT FILING      | 12/971504          | 12/17/2010       | 3/26/2013   | US8404153        |
| DE | Filed       | WHITE PERSISTENT PHOSPHOR BLEND OR LAYERED STRUCTURE     | PCT-PATENT COOPERATION TREATY  | 112011104395.3     | 6/3/2013         |             |                  |
| CN | Issued      | WHITE PERSISTENT PHOSPHOR BLEND OR LAYERED STRUCTURE     | PCT-PATENT COOPERATION TREATY  | 201180060653.3     | 6/17/2013        | 5/27/2015   | CN201180060653.3 |
| JP | Filed       | WHITE PERSISTENT PHOSPHOR BLEND OR LAYERED STRUCTURE     | PCT-PATENT COOPERATION TREATY  | 2013-544662        | 6/14/2013        |             |                  |
| JP | Filed       | Method for producing white long persisting phosphor      | DIV-DIVISIONAL FILING          | 2016-119508        | 6/16/2016        |             |                  |
| US | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS | PRI-PRIORITY APPLICATION       | 12/256142          | 10/22/2008       | 12/11/2012  | US8329060        |
| FR | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |
| GB | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |
| IT | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |

## Patents of Current Lighting Solutions, LLC

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| NL | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |
| SE | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |
| CN | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | ORD-UTILITY PATENT FILING      | 200910167355.9     | 8/21/2009        | 9/17/2014   | CN200910167355.9 |
| JP | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | ORD-UTILITY PATENT FILING      | 2009-188805        | 8/18/2009        | 5/9/2014    | JP5555548        |
| KR | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | ORD-UTILITY PATENT FILING      | 1020090076547      | 8/19/2009        | 5/2/2016    | KR101619520      |
| US | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES                                      | CIP-CONTINUATION IN PART       | 13/170615          | 6/28/2011        | 4/22/2014   | US8703016        |
| DE | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |
| ES | Issued      | BLUE-GREEN AND GREEN PHOSPHORS FOR LIGHTING APPLICATIONS                    | EPC-EUROPEAN PATENT CONVENTION | 9167926.6          | 8/14/2009        | 10/16/2013  | EP2180032        |
| US | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS | ORD-UTILITY PATENT FILING      | 12/273131          | 11/18/2008       | 5/17/2011   | US7944155        |
| GB | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS | EPC-EUROPEAN PATENT CONVENTION | 9747991.9          | 11/2/2009        | 1/8/2014    | EP2359666        |
| NL | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS | EPC-EUROPEAN PATENT CONVENTION | 9747991.9          | 11/2/2009        | 1/8/2014    | EP2359666        |
| FR | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS | EPC-EUROPEAN PATENT CONVENTION | 9747991.9          | 11/2/2009        | 1/8/2014    | EP2359666        |

## Patents of Current Lighting Solutions, LLC

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|----|-------------|---|--------------------------------|--------------------|------------------|-------------|------------------|
| CA | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS         | ORD-UTILITY PATENT FILING      | 2742843            | 11/2/2009        | 6/11/2013   | CA2742843        |
| CN | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS         | PCT-PATENT COOPERATION TREATY  | 200980146786.5     | 5/18/2011        | 7/10/2013   | CN200980146786.5 |
| IN | Filed       | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS         | ORD-UTILITY PATENT FILING      | 3274/DELNP/2011    | 11/2/2009        |             |                  |
| JP | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS         | ORD-UTILITY PATENT FILING      | 2011-536381        | 11/2/2009        | 8/1/2014    | JP5586622        |
| MX | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS         | PCT-PATENT COOPERATION TREATY  | MX/a/2011/005204   | 5/17/2011        | 9/10/2012   | MX303278         |
| DE | Issued      | LED DRIVER WITH SINGLE INVERTER CIRCUIT WITH ISOLATED MULTI-CHANNEL OUTPUTS         | EPC-EUROPEAN PATENT CONVENTION | 9747991.9          | 11/2/2009        | 1/8/2014    | EP2359666        |
| US | Issued      | WIRELESS BALLAST CONTROL UNIT   | ORD-UTILITY PATENT FILING      | 12/691798          | 1/22/2010        | 6/11/2013   | US8463454        |
| CN | Issued      | WIRELESS BALLAST CONTROL UNIT   | PCT-PATENT COOPERATION TREATY  | 201180015243.7     | 9/21/2012        | 2/25/2015   | CN201180015243.7 |
| EP | Appeal      | WIRELESS BALLAST CONTROL UNIT   | PCT-PATENT COOPERATION TREATY  | 11701415.9         | 7/17/2012        |             |                  |
| WO | Filed       | POST-MOUNTED LIGHT EMITTING DIODE (LED) DEVICE-BASED LAMP AND POWER SUPPLY FOR SAME | ORD-UTILITY PATENT FILING      | US11/49264         | 8/26/2011        |             |                  |
| US | Issued      | POST-MOUNTED LIGHT EMITTING DIODE (LED) DEVICE-BASED LAMP AND POWER SUPPLY FOR SAME | PCT-PATENT COOPERATION TREATY  | 13/878769          | 4/11/2013        | 8/1/2017    | US9723660        |
| CA | Filed       | POST-MOUNTED LIGHT EMITTING DIODE (LED) DEVICE-BASED LAMP AND POWER SUPPLY FOR SAME | PCT-PATENT COOPERATION TREATY  | 2813727            | 4/4/2013         |             |                  |



## Patents of Current Lighting Solutions, LLC

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| JP | Issued      | POST-MOUNTED LIGHT EMITTING DIODE (LED) DEVICE-BASED LAMP AND POWER SUPPLY FOR SAME | PCT-PATENT COOPERATION TREATY | 2013-533854        | 4/11/2013        | 12/2/2016   | JP6050755        |
| KR | Filed       | POST-MOUNTED LIGHT EMITTING DIODE (LED) DEVICE-BASED LAMP AND POWER SUPPLY FOR SAME | PCT-PATENT COOPERATION TREATY | 1020137009474      | 8/26/2011        |             |                  |
| US | Issued      | LED LIGHT FIXTURE   | DES-DESIGN                    | 29/350044          | 11/10/2009       | 9/28/2010   | USD624686        |
| US | Issued      | LED LIGHT FIXTURE   | ORD-UTILITY PATENT FILING     | 12/615967          | 11/10/2009       | 7/17/2012   | US8220961        |
| CA | Filed       | LED LIGHT FIXTURE   | PCT-PATENT COOPERATION TREATY | 2780510            | 9/16/2010        |             |                  |
| MX | Issued      | LED LIGHT FIXTURE   | PCT-PATENT COOPERATION TREATY | MX/a/2012/005483   | 9/16/2010        | 10/28/2013  | MX314669         |
| CN | Issued      | THREE-PHASE LED POWER SUPPLY  | PRI-PRIORITY APPLICATION      | 200910162218.6     | 7/29/2009        | 12/3/2014   | CN200910162218.6 |
| US | Issued      | THREE-PHASE LED POWER SUPPLY  | PCT-PATENT COOPERATION TREATY | 13/128936          | 5/12/2011        | 11/26/2013  | US8593070        |
| US | Issued      | KIMZEYITE GARNET PHOSPHORS  | ORD-UTILITY PATENT FILING     | 12/582969          | 10/21/2009       | 5/14/2013   | US8440104        |
| US | Issued      | HOSPITAL LIGHTING WITH SOLID STATE EMITTERS   | ORD-UTILITY PATENT FILING     | 12/818460          | 6/18/2010        | 3/26/2013   | US8405324        |
| US | Issued      | A DIMMING BRIDGE MODULE   | ORD-UTILITY PATENT FILING     | 12/634764          | 12/10/2009       | 7/3/2012    | US8212485        |
| EP | Filed       | A DIMMING BRIDGE MODULE   | PCT-PATENT COOPERATION TREATY | 10776039.9         | 6/13/2012        |             |                  |

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|----|-------------|--|-------------------------------|--------------------|------------------|-------------|------------------|
| US | Issued      | PRE-PROGRAMMED ENERGY MANAGEMENT BALLAST OR DRIVER                                     | ORD-UTILITY PATENT FILING     | 12/561645          | 9/17/2009        | 3/15/2011   | US7908037        |
| US | Filed       | PRE-PROGRAMMED ENERGY MANAGEMENT BALLAST OR DRIVER                                     | CON-CONTINUATION              | 13/034375          | 2/24/2011        |             |                  |
| BR | Filed       | PRE-PROGRAMMED ENERGY MANAGEMENT BALLAST OR DRIVER                                     | PCT-PATENT COOPERATION TREATY | PI 1006499-0       | 2/9/2010         |             |                  |
| CN | Issued      | PRE-PROGRAMMED ENERGY MANAGEMENT BALLAST OR DRIVER                                     | PCT-PATENT COOPERATION TREATY | 201080015646.7     | 9/27/2011        | 4/2/2014    | CN201080015646.7 |
| EP | Issued      | PRE-PROGRAMMED ENERGY MANAGEMENT BALLAST OR DRIVER                                     | PCT-PATENT COOPERATION TREATY | 10704062.8         | 9/15/2011        | 5/16/2018   | EP2412207        |
| MX | Issued      | PRE-PROGRAMMED ENERGY MANAGEMENT BALLAST OR DRIVER                                     | PCT-PATENT COOPERATION TREATY | MX/a/2011/010152   | 2/9/2010         | 4/2/2013    | MX308342         |
| US | Issued      | KNOWLEDGE-BASED DRIVER APPARATUS FOR HIGH LUMEN MAINTENANCE AND END-OF-LIFE ADAPTATION | PRI-PRIORITY APPLICATION      | 12/582864          | 10/21/2009       | 12/6/2011   | US8072163        |
| TW | Issued      | KNOWLEDGE-BASED DRIVER APPARATUS FOR HIGH LUMEN MAINTENANCE AND END-OF-LIFE ADAPTATION | ORD-UTILITY PATENT FILING     | 99135991           | 10/21/2010       | 4/21/2016   | TW1531279        |
| CN | Issued      | KNOWLEDGE-BASED DRIVER APPARATUS FOR HIGH LUMEN MAINTENANCE AND END-OF-LIFE ADAPTATION | PCT-PATENT COOPERATION TREATY | 201080049047.7     | 4/23/2012        | 11/5/2014   | CN201080049047.7 |
| EP | Filed       | KNOWLEDGE-BASED DRIVER APPARATUS FOR HIGH LUMEN MAINTENANCE AND END-OF-LIFE ADAPTATION | PCT-PATENT COOPERATION TREATY | 10762824           | 4/24/2012        |             |                  |
| JP | Issued      | KNOWLEDGE-BASED DRIVER APPARATUS FOR HIGH LUMEN MAINTENANCE AND END-OF-LIFE ADAPTATION | PCT-PATENT COOPERATION TREATY | 2012-535216        | 9/28/2010        | 10/2/2015   | JP5814924        |

## Patents of Current Lighting Solutions, LLC

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|    | Issued      | KNOWLEDGE-BASED DRIVER APPARATUS FOR HIGH LUMEN MAINTENANCE AND END-OF-LIFE ADAPTATION            | PCT-PATENT COOPERATION TREATY | 1020127012854      | 9/28/2010        | 6/8/2017    | KR10-1747471     |
| US | Issued      | ROADWAY LIGHT FIXTURE   | DES-DESIGN                    | 29/352443          | 12/21/2009       | 8/24/2010   | USD622433        |
| CN | Issued      | ROADWAY LIGHT FIXTURE   | DES-DESIGN                    | 201030223302.8     | 6/21/2010        | 1/12/2011   | CN201030223302.8 |
| US | Issued      | COATED PHOSPHORS, METHODS OF MAKING THEM, AND ARTICLES COMPRISING THE SAME                        | ORD-UTILITY PATENT FILING     | 12/646205          | 12/23/2009       | 2/19/2013   | US8377334        |
| CN | Issued      | OXYNITRIDE PHOSPHORS, METHOD OF PREPARATION, AND LIGHT EMITTING INSTRUMENT                        | PCT-PATENT COOPERATION TREATY | 201180035925.4     | 1/22/2013        | 1/27/2016   | CN103003390      |
| EP | Filed       | OXYNITRIDE PHOSPHORS, METHOD OF PREPARATION, AND LIGHT EMITTING INSTRUMENT                        | PCT-PATENT COOPERATION TREATY | 11730796.7         | 1/15/2013        |             |                  |
| JP | Issued      | OXYNITRIDE PHOSPHORS, METHOD OF PREPARATION, AND LIGHT EMITTING INSTRUMENT                        | PCT-PATENT COOPERATION TREATY | 2013-520709        | 1/18/2013        | 4/1/2016    | JP5909230        |
| KR | Filed       | OXYNITRIDE PHOSPHORS, METHOD OF PREPARATION, AND LIGHT EMITTING INSTRUMENT                        | PCT-PATENT COOPERATION TREATY | 1020137004344      | 2/21/2013        |             |                  |
| US | Issued      | COLOR MIXING USING THE REFLECTIVE PROPERTIES OF OLEDS   | PRI-PRIORITY APPLICATION      | 13/416400          | 3/9/2012         | 4/28/2015   | US9016894        |
| US | Issued      | ELECTRONIC DRIVER DIMMING CONTROL USING RAMPED PULSED MODULATION FOR LARGE AREA SOLID-STATE OLEDS | ORD-UTILITY PATENT FILING     | 12/634911          | 12/10/2009       | 12/18/2012  | US8334659        |
| TW | Issued      | ELECTRONIC DRIVER DIMMING CONTROL USING RAMPED PULSED MODULATION FOR LARGE AREA SOLID-STATE OLEDS | ORD-UTILITY PATENT FILING     | 99143323           | 12/10/2010       | 3/1/2018    | TW1617218        |

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| CN | Issued      | ELECTRONIC DRIVER DIMMING CONTROL USING RAMPED PULSED MODULATION FOR LARGE AREA SOLID-STATE OLEDs | PCT-PATENT COOPERATION TREATY        | 201080063556.5     | 8/10/2012        | 9/16/2015   | CN201080063556.5 |
| EP | Filed       | ELECTRONIC DRIVER DIMMING CONTROL USING RAMPED PULSED MODULATION FOR LARGE AREA SOLID-STATE OLEDs | PCT-PATENT COOPERATION TREATY        | 10779882.9         | 6/13/2012        |             |                  |
| JP | Issued      | ELECTRONIC DRIVER DIMMING CONTROL USING RAMPED PULSED MODULATION FOR LARGE AREA SOLIDSTATE OLEDs  | PCT-PATENT COOPERATION TREATY        | 2012-543117        | 11/9/2010        | 10/9/2015   | JP5819313        |
| KR | Issued      | ELECTRONIC DRIVER DIMMING CONTROL USING RAMPED PULSED MODULATION FOR LARGE AREA SOLID-STATE OLEDs | PCT-PATENT COOPERATION TREATY        | 1020127017822      | 11/9/2010        | 12/8/2017   | KR10-1809285     |
| US | Issued      | APPLIANCE WITH AN IMPROVED SOLID STATE DEVICE LIGHTING  | PRI-PRIORITY APPLICATION             | 12/818272          | 6/18/2010        | 3/5/2013    | US8388158        |
| US | Issued      | RAMP CONTROLLED DRIVER FOR SERIES/PARALLEL SOLID STATE LIGHTING DEVICES                           | ORD-UTILITY PATENT FILING            | 12/966184          | 12/13/2010       | 7/15/2014   | US8779689        |
| CN | Issued      | RAMP CONTROLLED DRIVER FOR SERIES/PARALLEL SOLID STATE LIGHTING DEVICES                           | PCT-PATENT COOPERATION TREATY        | 201180059837.8     | 6/13/2013        | 5/11/2016   | CN103250466      |
| JP | Issued      | RAMP CONTROLLED DRIVER FOR SERIES/PARALLEL SOLID STATE LIGHTING DEVICES                           | PCT-PATENT COOPERATION TREATY        | 2013-543170        | 6/10/2013        | 4/8/2016    | JP5911887        |
| KR | Filed       | RAMP CONTROLLED DRIVER FOR SERIES/PARALLEL SOLID STATE LIGHTING DEVICES                           | PCT-PATENT COOPERATION TREATY        | 1020137015077      | 6/12/2013        |             |                  |
| GB | Issued      | RAMP CONTROLLED DRIVER FOR SERIES/PARALLEL SOLID STATE LIGHTING DEVICES                           | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11779066.7         | 6/20/2013        | 4/26/2017   | EP2653010        |
| GB | Issued      | DIMMABLE OUTDOOR LUMINAIRES   | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11784848.1         | 6/17/2013        | 12/21/2016  | EP2646750        |

## Patents of Current Lighting Solutions, LLC

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|----|-------------|--|--------------------------------------|--------------------|------------------|-------------|---------------|
| WO | Filed       | DIMMABLE OUTDOOR LUMINAIRES  | PCT-PATENT COOPERATION TREATY        | PCT/US11/058234    | 10/28/2011       |             |               |
| KR | Filed       | DIMMABLE OUTDOOR LUMINAIRES  | PCT-PATENT COOPERATION TREATY        | 1020137014142      | 5/31/2013        |             |               |
| CA | Filed       | DIMMABLE OUTDOOR LUMINAIRES  | PCT-PATENT COOPERATION TREATY        | 2820596            | 5/23/2013        |             |               |
| MX | Issued      | DIMMABLE OUTDOOR LUMINAIRES  | PCT-PATENT COOPERATION TREATY        | MX/a/2013/0006183  | 5/31/2013        | 7/23/2015   | MX331826      |
| DE | Issued      | DIMMABLE OUTDOOR LUMINAIRES  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11784848.1         | 6/17/2013        | 12/21/2016  | EP2646750     |
| FR | Issued      | DIMMABLE OUTDOOR LUMINAIRES<br>SOLID STATE LIGHTING CONTROL METHODS AND APPARATUSES FOR SERIES COMBINATIONS OF LIGHT EMITTING DIODES | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11784848.1         | 6/17/2013        | 12/21/2016  | EP2646750     |
| WO | Filed       |  | ORD-UTILITY PATENT FILING            | US11/60148         | 11/10/2011       |             |               |
| US | Issued      | COLOR STABLE PHOSPHORS   | ORD-UTILITY PATENT FILING            | 13/080099          | 4/5/2011         | 11/26/2013  | US8593062     |
| TW | Issued      | COLOR STABLE PHOSPHORS   | ORD-UTILITY PATENT FILING            | 100114942          | 4/28/2011        | 11/21/2016  | TW1558788     |
| EP | Filed       | COLOR STABLE PHOSPHORS   | PCT-PATENT COOPERATION TREATY        | 11716144.8         | 2/22/2013        |             |               |
| US | Issued      | LIGHT EMITTING DESK LAMP   | DES-DESIGN                           | 29/359370          | 4/9/2010         | 9/21/2010   | USD624225     |
| US | Issued      | LIGHT EMITTING MOBILE  | DES-DESIGN                           | 29/359371          | 4/9/2010         | 4/5/2011    | USD635709     |

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|----|-------------|---|-------------------------------|--------------------|------------------|-------------|------------------|
| US | Issued      | LIGHT EMITTING SCULPTURE  | DES-DESIGN                    | 29/359372          | 4/9/2010         | 6/14/2011   | USD639987        |
| US | Issued      | LIGHTING SYSTEM COMMUNICATIONS APPARATUS AND METHOD   | PRI-PRIORITY APPLICATION      | 12/849400          | 8/3/2010         | 9/25/2012   | US8274232        |
| BR | Filed       | LIGHTING SYSTEM COMMUNICATIONS APPARATUS AND METHOD   | PCT-PATENT COOPERATION TREATY | BR112013001597-7   | 1/22/2013        |             |                  |
| CN | Issued      | LIGHTING SYSTEM COMMUNICATIONS APPARATUS AND METHOD   | PCT-PATENT COOPERATION TREATY | 201180038057.5     | 2/1/2013         | 12/3/2014   | CN103026796B     |
| KR | Filed       | LIGHTING SYSTEM COMMUNICATIONS APPARATUS AND METHOD   | PCT-PATENT COOPERATION TREATY | 1020137002835      | 2/1/2013         |             |                  |
| MX | Issued      | LIGHTING SYSTEM COMMUNICATIONS APPARATUS AND METHOD   | PCT-PATENT COOPERATION TREATY | MX/a/2013/001255   | 1/30/2013        | 12/23/2013  | MX316805         |
| EP | Filed       | LIGHTING SYSTEM COMMUNICATIONS APPARATUS AND METHOD   | PCT-PATENT COOPERATION TREATY | 11731578.8         | 1/31/2013        |             |                  |
| CN | Issued      | Power off communications system   | DIV-DIVISIONAL FILING         | 201410583522.9     | 10/27/2014       | 7/25/2017   | CN104363675      |
| US | Issued      | ALKALINE AND ALKALINE EARTH METAL PHOSPHATE HALIDES AND PHOSPHORS                                   | ORD-UTILITY PATENT FILING     | 12/873090          | 8/31/2010        | 11/13/2012  | US8308982        |
| CN | Issued      | GRID ELECTRODE DRIVING CONTROLLER CIRCUIT WITH ANTI-SATURATION CIRCUIT AND POWER-ON CIRCUIT THEREOF | PRI-PRIORITY APPLICATION      | 201010261079.5     | 7/5/2010         | 8/12/2015   | CN201010261079.5 |
| US | Issued      | GATE DRIVE CONTROLLER CIRCUIT WITH ANTI-SATURATION CIRCUIT AND POWER UP CIRCUIT THEREFOR            | ORD-UTILITY PATENT FILING     | 12/893584          | 9/29/2010        | 12/17/2013  | US8611118        |
| CA | Filed       | GATE DRIVE CONTROLLER CIRCUIT WITH ANTI-SATURATION CIRCUIT AND POWER UP CIRCUIT THEREFOR            | ORD-UTILITY PATENT FILING     | 2744784            | 6/29/2011        |             |                  |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number    |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|------------------|
| MX | Issued      | GATE DRIVE CONTROLLER CIRCUIT WITH ANTI-SATURATION CIRCUIT AND POWER UP CIRCUIT THEREFOR        | ORD-UTILITY PATENT FILING | MX/a/2011/007243   | 7/5/2011         | 1/6/2014    | MX316808         |
| MX | Issued      | Drive Transformer Anti-Saturation Circuit   | DIV-DIVISIONAL FILING     | MX/a/2013/011920   | 10/11/2013       | 5/12/2014   | MX320064         |
| US | Issued      | POWER LINE COMMUNICATION METHOD AND APPARATUS FOR LIGHTING CONTROL                              | ORD-UTILITY PATENT FILING | 12/907549          | 10/19/2010       | 11/19/2013  | US8587223        |
| US | Issued      | FIXTURE AND SOCKET ASSEMBLY FOR REPLACEMENT AND FLEXIBLE PANEL LIGHTING DEVICE                  | PRI-PRIORITY APPLICATION  | 13/086061          | 4/13/2011        | 1/7/2014    | US8624483        |
| CN | Issued      | MODULAR LED ROADWAY LAMP  | DES-DESIGN                | 201030552772.9     | 10/12/2010       | 4/13/2011   | CN201030552772.9 |
| AU | Issued      | MODULAR LED ROADWAY LAMP  | DES-DESIGN                | 11658/2011         | 4/12/2011        | 5/10/2011   | AU336389         |
| MX | Issued      | MODULAR LED ROADWAY LAMP  | DES-DESIGN                | MX/H/2011/001122   | 4/12/2011        | 8/14/2012   | MX37008          |
| EM | Filed       | ROADWAY LAMP  | DES-DESIGN                | 1270300            | 4/12/2011        |             |                  |
| AU | Issued      | MODULAR LED ROADWAY LAMP  | DES-DESIGN                | 11943/2011         | 4/12/2011        | 5/10/2011   | AU336390         |
| AU | Issued      | MODULAR LED ROADWAY LAMP  | DES-DESIGN                | 11944/2011         | 4/12/2011        | 5/10/2011   | AU226391         |
| AU | Issued      | MODULAR LED ROADWAY LAMP CONTROLLER AND SOLID STATE LIGHTING DEVICE FOR LARGE AREA APPLICATIONS | DES-DESIGN                | 11945/2011         | 4/12/2011        | 5/10/2011   | AU336392         |
| TW | Issued      | CONTROLLER AND SOLID STATE LIGHTING DEVICE FOR LARGE AREA APPLICATIONS                          | ORD-UTILITY PATENT FILING | 101116054          | 5/4/2012         | 3/21/2017   | TW1576004        |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------------|--------------------|------------------|-------------|---------------|
| EP | Filed       | CONTROLLER AND SOLID STATE LIGHTING DEVICE FOR LARGE AREA APPLICATIONS           | PCT-PATENT COOPERATION TREATY        | 12719888.5         | 10/23/2013       |             |               |
| CN | Issued      | CONTROLLER AND SOLID STATE LIGHTING DEVICE FOR LARGE AREA APPLICATIONS           | PCT-PATENT COOPERATION TREATY        | 201280022077.8     | 11/6/2013        | 5/18/2016   | CN103503565   |
| JP | Issued      | CONTROLLER AND SOLID STATE LIGHTING DEVICE FOR LARGE AREA APPLICATIONS           | PCT-PATENT COOPERATION TREATY        | 2014-509426        | 10/30/2013       | 9/2/2016    | JP5998205     |
| KR | Filed       | CONTROLLER AND SOLID STATE LIGHTING DEVICE FOR LARGE AREA APPLICATIONS           | PCT-PATENT COOPERATION TREATY        | 1020137029273      | 11/5/2013        |             |               |
| AU | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | PCT-PATENT COOPERATION TREATY        | 2011293537         | 1/2/2013         | 12/4/2014   | AU2011293537  |
| NL | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11761421.4         | 2/20/2013        | 10/12/2016  | EP2609367     |
| GB | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11761421.4         | 2/20/2013        | 10/12/2016  | EP2609367     |
| DE | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11761421.4         | 2/20/2013        | 10/12/2016  | EP2609367     |
| FR | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11761421.4         | 2/20/2013        | 10/12/2016  | EP2609367     |
| US | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | ORD-UTILITY PATENT FILING            | 13/212565          | 8/18/2011        | 8/13/2013   | US8506105     |
| BR | Filed       | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | PCT-PATENT COOPERATION TREATY        | 112013004175-7     | 2/22/2013        |             |               |
| MX | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | PCT-PATENT COOPERATION TREATY        | MX/a/2013/002057   | 2/20/2013        | 5/12/2014   | MX320061      |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------------|--------------------|------------------|-------------|---------------|
| CN | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | PCT-PATENT COOPERATION TREATY        | 201180041022.7     | 2/25/2013        | 5/11/2016   | CN103052846   |
| JP | Issued      | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | PCT-PATENT COOPERATION TREATY        | 2013-526078        | 2/13/2013        | 1/22/2016   | JP5873872     |
| IN | Filed       | THERMAL MANAGEMENT SYSTEMS FOR SOLID STATE LIGHTING AND OTHER ELECTRONIC SYSTEMS | PCT-PATENT COOPERATION TREATY        | 360/DELNP/2013     | 1/11/2013        |             |               |
| US | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | ORD-UTILITY PATENT FILING            | 13/047914          | 3/15/2011        | 6/11/2013   | US8461774     |
| GB | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12716103.2         | 10/3/2013        | 8/26/2015   | EP2686944     |
| NL | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12716103.2         | 10/3/2013        | 8/26/2015   | EP2686944     |
| CN | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | PCT-PATENT COOPERATION TREATY        | 201280013208.6     | 9/13/2013        | 8/17/2016   | CN103493348   |
| KR | Filed       | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | PCT-PATENT COOPERATION TREATY        | 1020137024404      | 9/13/2013        |             |               |
| JP | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | PCT-PATENT COOPERATION TREATY        | 2013-558024        | 9/6/2013         | 9/11/2017   | JP6200810     |
| MX | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | PCT-PATENT COOPERATION TREATY        | MX/a/2013/010567   | 9/13/2013        | 9/9/2014    | MX323549      |
| BR | Filed       | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | PCT-PATENT COOPERATION TREATY        | 112013021955-6     | 8/28/2013        |             |               |
| DE | Issued      | LIGHTING POWER CIRCUIT WITH PEAK CURRENT LIMITER FOR EMI FILTER                  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12716103.2         | 10/3/2013        | 8/26/2015   | EP2686944     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number      |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|--------------------|
| US | Issued      | SELF-DIMMING OLED LIGHTING SYSTEM AND CONTROL METHOD                             | ORD-UTILITY PATENT FILING     | 13/101452          | 5/5/2011         | 11/19/2013  | US8587215          |
| TW | Issued      | SELF-DIMMING OLED LIGHTING SYSTEM AND CONTROL METHOD                             | ORD-UTILITY PATENT FILING     | 101116066          | 5/4/2012         | 10/21/2016  | TW1555433          |
| EP | Filed       | SELF-DIMMING OLED LIGHTING SYSTEM AND CONTROL METHOD                             | PCT-PATENT COOPERATION TREATY | 12719887.7         | 10/23/2013       |             |                    |
| CN | Issued      | SELF-DIMMING OLED LIGHTING SYSTEM AND CONTROL METHOD                             | PCT-PATENT COOPERATION TREATY | 201280021925.3     | 11/5/2013        | 1/20/2016   | CNZL201280021925.3 |
| JP | Filed       | SELF-DIMMING OLED LIGHTING SYSTEM AND CONTROL METHOD                             | PCT-PATENT COOPERATION TREATY | 2014-509422        | 10/31/2013       | 4/28/2017   | JP6132834          |
| KR | Filed       | SELF-DIMMING OLED LIGHTING SYSTEM AND CONTROL METHOD                             | PCT-PATENT COOPERATION TREATY | 1020137029342      | 11/5/2013        |             |                    |
| US | Filed       | ISOLATED CAPACITOR DRIVE CIRCUIT FOR THIN-FILM SOLID-STATE LIGHTING              | PRI-PRIORITY APPLICATION      | 13/105328          | 5/11/2011        |             |                    |
| TW | Issued      | ISOLATED CAPACITOR DRIVE CIRCUIT FOR THIN-FILM SOLID-STATE LIGHTING              | ORD-UTILITY PATENT FILING     | 101116979          | 5/11/2012        | 5/1/2017    | TW1581659          |
| EP | Filed       | PHOSPHOR PRECURSOR COMPOSITION   | PCT-PATENT COOPERATION TREATY | 12737677           | 1/9/2014         |             |                    |
| KR | Filed       | PHOSPHOR PRECURSOR COMPOSITION   | PCT-PATENT COOPERATION TREATY | 2014-7001190       | 1/16/2014        |             |                    |
| US | Issued      | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PRI-PRIORITY APPLICATION      | 13/196124          | 8/2/2011         | 10/1/2013   | US8547019          |
| WO | Filed       | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST                                | ORD-UTILITY PATENT FILING     | PCT/US2012/046438  | 7/12/2012        |             |                    |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
|    |             | MISWIRING IN A LAMP CONTROLLER   |                               |                    |                  |             |               |
|    |             | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 2012290613         | 1/21/2014        | 1/7/2016    | AU2012290613  |
| AU | Issued      | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 2012290613         | 1/21/2014        | 1/7/2016    | AU2012290613  |
| BR | Filed       | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 112014002209-7     | 1/29/2014        |             |               |
| CA | Filed       | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 2843143            | 1/24/2014        |             |               |
| CN | Issued      | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 201280037912.5     | 1/28/2014        | 10/12/2016  | CN103733732   |
| EP | Filed       | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 12746156.4         | 2/3/2014         |             |               |
| KR | Filed       | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | 2014-7002449       | 1/28/2014        |             |               |
| MX | Issued      | LAMP ASSEMBLY AND CIRCUITS FOR PROTECTION AGAINST MISWIRING IN A LAMP CONTROLLER | PCT-PATENT COOPERATION TREATY | MX/a/2014/001340   | 1/31/2014        | 3/2/2015    | MX328196      |
| US | Issued      | HIGH VOLTAGE LED AND DRIVER  | PRI-PRIORITY APPLICATION      | 13/183879          | 7/15/2011        | 6/16/2015   | US9060397     |
| CN | Issued      | HIGH VOLTAGE LED AND DRIVER  | PCT-PATENT COOPERATION TREATY | 201280035190.X     | 1/15/2014        | 10/12/2016  | CN103650639   |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description              | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------------|--------------------|------------------|-------------|---------------|
| CA | Filed       | HIGH VOLTAGE LED AND DRIVER                   | PCT-PATENT COOPERATION TREATY   | 2841460            | 1/10/2014        |             |               |
| KR | Filed       | HIGH VOLTAGE LED AND DRIVER                   | PCT-PATENT COOPERATION TREATY   | 2014-7000990       | 1/14/2014        |             |               |
| MX | Issued      | HIGH VOLTAGE LED AND DRIVER                   | PCT-PATENT COOPERATION TREATY   | MX/a/2014/000618   | 1/15/2014        | 6/11/2015   | MX330747      |
| BR | Filed       | HIGH VOLTAGE LED AND DRIVER                   | PCT-PATENT COOPERATION TREATY   | 112014000628-8     | 1/10/2014        |             |               |
| AU | Issued      | HIGH VOLTAGE LED AND DRIVER                   | PCT-PATENT COOPERATION TREATY   | 2012284336         | 1/8/2014         | 11/19/2015  | AU2012284336  |
| US | Issued      | MULTIMODE DAYLIGHT SENSOR                     | PDS-PRIORITY DESIGN APPLICATION | 29/402501          | 9/23/2011        | 3/26/2013   | USD678793     |
| US | Issued      | MULTIMODE DAYLIGHT SENSOR                     | DDV-DESIGN DIVISIONAL           | 29/439301          | 12/10/2012       | 11/19/2013  | USD693717     |
| US | Issued      | LED LIGHT MODULE FOR BACKLIGHTING             | ORD-UTILITY PATENT FILING       | 13/434079          | 3/29/2012        | 6/16/2015   | US9057498     |
| CN | Issued      | LED LIGHT MODULE FOR BACKLIGHTING             | ORD-UTILITY PATENT FILING       | 201210289671.5     | 8/15/2012        | 7/6/2016    | CN102954406   |
| EP | Filed       | LED LIGHT MODULE FOR BACKLIGHTING             | ORD-UTILITY PATENT FILING       | 12179956.3         | 8/9/2012         |             |               |
| US | Issued      | LED POWER SOURCE WITH OVER-VOLTAGE PROTECTION | PRI-PRIORITY APPLICATION        | 13/299020          | 11/17/2011       | 5/13/2014   | US8723428     |
| CA | Filed       | LED POWER SOURCE WITH OVERVOLTAGE PROTECTION  | PCT-PATENT COOPERATION TREATY   | 2856221            | 5/16/2014        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description              | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------------|--------------------|------------------|-------------|---------------|
| CN | Issued      | LED POWER SOURCE WITH OVERVOLTAGE PROTECTION                                   | PCT-PATENT COOPERATION TREATY   | 201280067350.9     | 7/17/2014        | 2/22/2017   | CN104040860   |
| EP | Filed       | LED POWER SOURCE WITH OVERVOLTAGE PROTECTION                                   | PCT-PATENT COOPERATION TREATY   | 12788333.8         | 6/5/2014         |             |               |
| MX | Issued      | LED POWER SOURCE WITH OVERVOLTAGE PROTECTION                                   | PCT-PATENT COOPERATION TREATY   | MX/a/2014/006036   | 5/16/2014        | 3/23/2016   | MX337927      |
| US | Issued      | MULTIMODE SENSOR   | PDS-PRIORITY DESIGN APPLICATION | 29/402499          | 9/23/2011        | 7/31/2012   | USD664460     |
| US | Issued      | CONTROLLER DEVICE  | CIP-CONTINUATION IN PART        | 13/588492          | 8/17/2012        | 10/21/2014  | US8864514     |
| WO | Filed       | CONTROLLER DEVICE  | ORD-UTILITY PATENT FILING       | PCT/US13/050174    | 7/12/2013        |             |               |
| CN | Issued      | DEVICE FOR FAILURE PROTECTION IN LIGHTING DEVICES HAVING LIGHT EMITTING DIODES | PCT-PATENT COOPERATION TREATY   | 201180076237.2     | 7/10/2014        | 12/21/2016  | CN104025712   |
| CA | Filed       | DEVICE FOR FAILURE PROTECTION IN LIGHTING DEVICES HAVING LIGHT EMITTING DIODES | PCT-PATENT COOPERATION TREATY   | 2857527            | 5/30/2014        |             |               |
| EP | Filed       | DEVICE FOR FAILURE PROTECTION IN LIGHTING DEVICES HAVING LIGHT EMITTING DIODES | PCT-PATENT COOPERATION TREATY   | 11875405           | 6/4/2014         |             |               |
| US | Issued      | PHOSPHORS FOR LED LAMPS  | PRI-PRIORITY APPLICATION        | 13/432461          | 3/28/2012        | 8/13/2013   | US8506104     |
| US | Issued      | SOLUTION FOR DYNAMIC LIGHTING CONTROL  | PRI-PRIORITY APPLICATION        | 13/421357          | 3/15/2012        | 10/28/2014  | US8872432     |
| EP | Filed       | SOLUTION FOR DYNAMIC LIGHTING CONTROL  | PCT-PATENT COOPERATION TREATY   | 13707981           | 10/10/2014       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| AU | Issued      | SOLUTION FOR DYNAMIC LIGHTING CONTROL  | PCT-PATENT COOPERATION TREATY | 2013232622         | 10/1/2014        | 9/1/2016    | AU2013232622  |
| KR | Filed       | SOLUTION FOR DYNAMIC LIGHTING CONTROL  | PCT-PATENT COOPERATION TREATY | 1020147028646      | 10/13/2014       |             |               |
| CN | Issued      | SOLUTION FOR DYNAMIC LIGHTING CONTROL  | PCT-PATENT COOPERATION TREATY | 201380025253.8     | 11/14/2014       | 10/12/2016  | CN104285503   |
| US | Issued      | LIGHTING SYSTEM HAVING AN OLED LIGHT SENSOR  | PRI-PRIORITY APPLICATION      | 13/431639          | 3/27/2012        | 3/4/2014    | US8664865     |
| US | Issued      | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | PRI-PRIORITY APPLICATION      | 13/786768          | 3/6/2013         | 8/25/2015   | US9119258     |
| TW | Issued      | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | ORD-UTILITY PATENT FILING     | 103105712          | 2/20/2014        | 9/21/2017   | TW1600345     |
| EP | Filed       | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | PCT-PATENT COOPERATION TREATY | 14702739.5         | 9/3/2015         |             |               |
| CN | Issued      | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | PCT-PATENT COOPERATION TREATY | 201480012177.1     | 9/2/2015         | 5/31/2017   | CN105027675   |
| KR | Filed       | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | PCT-PATENT COOPERATION TREATY | 10-2015-7025323    | 9/15/2015        |             |               |
| MX | Issued      | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | PCT-PATENT COOPERATION TREATY | MX/A/2015/011495   | 9/21/2015        | 5/30/2017   | MX348235      |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | CURRENT SPLIT CIRCUIT FOR EQUALLY SPLITTING CURRENT BETWEEN PARALLEL CONNECTED LED LUMINAIRE STRINGS | PCT-PATENT COOPERATION TREATY | 112015021460-6     | 9/3/2015         |             |               |
| US | Issued      | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PRI-PRIORITY APPLICATION      | 13/649280          | 10/11/2012       | 11/10/2015  | US9185766     |
| BR | Filed       | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 112015008213-0     | 4/13/2015        |             |               |
| CA | Filed       | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 2890186            | 5/1/2015         |             |               |
| TW | Issued      | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | ORD-UTILITY PATENT FILING     | 102136834          | 10/11/2013       | 3/21/2018   | TW1619404     |
| EP | Filed       | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 13785981.5         | 4/17/2015        |             |               |
| JP | Filed       | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 2015-536823        | 4/13/2015        |             |               |
| CN | Issued      | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 201380064873.2     | 6/11/2015        | 9/14/2016   | CN104838726   |
| KR | Filed       | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 10-20157012348     | 5/11/2015        |             |               |
| AU | Issued      | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | 20133329535        | 4/29/2015        | 6/8/2017    | AU20133329535 |
| MX | Issued      | ROLLING BLACKOUT ADJUSTABLE COLOR LED ILLUMINATION SOURCE  | PCT-PATENT COOPERATION TREATY | MX/a/2015/004683   | 4/13/2015        | 6/20/2017   | MX348587      |
| US | Issued      | OVERHEAD OCCUPANCY SENSOR  | PRI-PRIORITY APPLICATION      | 13/528269          | 6/20/2012        | 12/2/2014   | US8901496     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| CN | Issued      | OVERHEAD OCCUPANCY SENSOR  | ORD-UTILITY PATENT FILING     | 201310245945.5     | 6/20/2013        | 9/1/2017    | CN103512594   |
| EP | Filed       | ANTENNA SENSOR   | PCT-PATENT COOPERATION TREATY | 13776899           | 5/13/2015        |             |               |
| CN | Issued      | ANTENNA SENSOR   | PCT-PATENT COOPERATION TREATY | 201380057505.5     | 4/30/2015        | 2/16/2018   | CN104885295   |
| KR | Filed       | ANTENNA SENSOR   | PCT-PATENT COOPERATION TREATY | 10-2015-7014529    | 6/1/2015         |             |               |
| MX | Issued      | ANTENNA SENSOR   | PCT-PATENT COOPERATION TREATY | MX/A/2015/005583   | 4/30/2015        | 8/2/2017    | MX349564      |
| BR | Filed       | ANTENNA SENSOR   | PCT-PATENT COOPERATION TREATY | 112015009907-6     | 4/30/2015        |             |               |
| US | Filed       | ANTENNA SENSOR   | CON-CONTINUATION              | 15/354551          | 11/17/2016       |             |               |
| US | Issued      | PIVOTING HEAT SINK FOR LED LUMINAIRE   | PRI-PRIORITY APPLICATION      | 13/899718          | 5/22/2013        | 10/27/2015  | US9170014     |
| EP | Filed       | PIVOTING HEAT SINK FOR LED LUMINAIRE   | ORD-UTILITY PATENT FILING     | 14170803.2         | 6/2/2014         |             |               |
| US | Filed       | COMPOSITE MATERIALS HAVING RED EMITTING PHOSPHORS  | PRI-PRIORITY APPLICATION      | 15/231026          | 8/8/2016         |             |               |
| WO | Filed       | COMPOSITE MATERIALS HAVING RED EMITTING PHOSPHORS STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT | ORD-UTILITY PATENT FILING     | PCT/US2017/051705  | 9/15/2017        |             |               |



**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
|    |             | COMPOSITE MATERIALS HAVING RED EMITTING PHOSPHORS STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH AND DEVELOPMENT | ORD-UTILITY PATENT FILING     |                    | 9/14/2017        |             |               |
| TW | Filed       | A LIGHTING ASSEMBLY, APPARATUS AND ASSOCIATED METHOD FOR MAINTAINING LIGHT INTENSITIES                             | ORD-UTILITY PATENT FILING     | 106131582          |                  |             |               |
| TW | Filed       | A LIGHTING ASSEMBLY, APPARATUS AND ASSOCIATED METHOD FOR MAINTAINING LIGHT INTENSITIES                             | ORD-UTILITY PATENT FILING     | 103119886          | 6/9/2014         |             |               |
| EP | Filed       | A LIGHTING ASSEMBLY, APPARATUS AND ASSOCIATED METHOD FOR MAINTAINING LIGHT INTENSITIES                             | PCT-PATENT COOPERATION TREATY | 14736521.7         | 1/13/2016        |             |               |
| CN | Filed       | A LIGHTING ASSEMBLY, APPARATUS AND ASSOCIATED METHOD FOR MAINTAINING LIGHT INTENSITIES                             | PCT-PATENT COOPERATION TREATY | 201480042654.9     | 1/28/2016        |             |               |
| US | Issued      | METHOD AND SYSTEM FOR CONTROLLING COLOR CHARACTERISTICS OF ONE OR MORE ILLUMINATION DEVICES                        | PRI-PRIORITY APPLICATION      | 14/087609          | 11/22/2013       | 9/29/2015   | US9147240     |
| US | Issued      | A LIGHT EMITTING DIODE (LED) LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS                                  | PRI-PRIORITY APPLICATION      | 13/939245          | 7/11/2013        | 6/28/2016   | US9380654B2   |
| TW | Issued      | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS                                    | ORD-UTILITY PATENT FILING     | 103123309          | 7/7/2014         | 4/1/2018    | TW1620464     |
| CN | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS                                    | PCT-PATENT COOPERATION TREATY | 201480039568.2     | 1/11/2016        |             |               |
| JP | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS                                    | PCT-PATENT COOPERATION TREATY | 2016-525440        | 1/6/2016         |             |               |
| CA | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS                                    | PCT-PATENT COOPERATION TREATY | 2917760            | 1/7/2016         |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS          | PCT-PATENT COOPERATION TREATY | 112016000425-6     | 1/8/2016         |             |               |
| EP | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT DRIVER FOR LINEAR FLUORESCENT LAMPS          | PCT-PATENT COOPERATION TREATY | 14744410.3         | 1/14/2016        |             |               |
| US | Issued      | A LIGHT EMITTING DIODE (LED) LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS | PRI-PRIORITY APPLICATION      | 13/721452          | 12/20/2012       | 10/14/2014  | US8858019     |
| BR | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | 112015013295-2     | 6/8/2015         |             |               |
| CA | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | 2893956            | 6/4/2015         |             |               |
| CN | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | 201380067619.8     | 6/23/2015        |             |               |
| EP | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | 13821541.3         | 6/10/2015        |             |               |
| JP | Issued      | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | 2015-549512        | 6/17/2015        | 1/5/2018    | JP6266649     |
| KR | Filed       | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | 10-2015-7019720    | 7/20/2015        |             |               |
| MX | Issued      | A LIGHT EMITTING DIODE LED LAMP REPLACEMENT SAFETY SWITCH FOR LINEAR FLUORESCENT LAMPS   | PCT-PATENT COOPERATION TREATY | MX/A/2015/008030   | 6/19/2015        | 8/29/2016   | MX341689      |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
|    |             | DIMMABLE LED WITH CONSTANT VOLTAGE AND ADDITIONAL CONSTANT CURRENT DRIVING CIRCUIT            | PRI-PRIORITY APPLICATION      | 201210511039       | 12/4/2012        | 1/9/2018    | CN103857127   |
| CN | Issued      | DIMMABLE LED WITH CONSTANT VOLTAGE PLUS CONSTANT CURRENT DRIVE CIRCUITRY                      | ORD-UTILITY PATENT FILING     | 102142724          | 11/22/2013       | 12/1/2017   | TW1607667     |
| TW | Issued      | BOOST CONVERTER OF DRIVER CIRCUIT WITH THERMAL COMPENSATION                                   | PRI-PRIORITY APPLICATION      | 13/652619          | 10/16/2012       | 12/8/2015   | US9210758     |
| US | Issued      | BOOST CONVERTER OF DRIVER CIRCUIT WITH THERMAL COMPENSATION                                   | ORD-UTILITY PATENT FILING     | 201310484695       | 10/16/2013       |             |               |
| CN | Filed       | BOOST CONVERTER OF DRIVER CIRCUIT WITH THERMAL COMPENSATION                                   | ORD-UTILITY PATENT FILING     | 2829235            | 10/3/2013        |             |               |
| CA | Filed       | BOOST CONVERTER OF DRIVER CIRCUIT WITH THERMAL COMPENSATION                                   | ORD-UTILITY PATENT FILING     | MX/a/2013/012081   | 10/16/2013       | 6/3/2016    | MX339672      |
| MX | Issued      | BOOST CONVERTER OF DRIVER CIRCUIT WITH THERMAL COMPENSATION                                   | ORD-UTILITY PATENT FILING     | 102013026569-1     | 10/15/2013       |             |               |
| BR | Filed       | Relay Soft-switching Methodology  | PRI-PRIORITY APPLICATION      | 13/975430          | 8/26/2013        | 8/23/2016   | US9425011B2   |
| US | Issued      | DIMMER WITH PHOTO SENSOR AND HIGH/LOW CLAMPING  | PCT-PATENT COOPERATION TREATY | 15/127048          | 9/19/2016        | 2/13/2018   | US9894742     |
| US | Issued      | A PROGRAMMABLE LIGHT EMITTING DIODE (LED) DRIVER TECHNIQUE BASED UPON AN INPUT VOLTAGE SIGNAL | PRI-PRIORITY APPLICATION      | 13/942727          | 7/16/2013        | 9/8/2015    | US9131578     |
| US | Issued      | A PROGRAMMABLE LIGHT EMITTING DIODE LED DRIVER TECHNIQUE BASED UPON AN INPUT VOLTAGE SIGNAL   | PCT-PATENT COOPERATION TREATY | 201480051030.3     | 3/16/2016        | 10/27/2017  | CN105519236   |
| CN | Issued      |   |                               |                    |                  |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | Programmable LED Driver   | PRI-PRIORITY APPLICATION      | 13/942728          | 7/16/2013        | 11/3/2015   | US9179527     |
| CN | Issued      | A PROGRAMMABLE LIGHT EMITTING DIODE LED DRIVER TECHNIQUE BASED UPON A PREFIX SIGNAL | PCT-PATENT COOPERATION TREATY | 201480051025.2     | 3/16/2016        | 2/23/2018   | CN105519238   |
| US | Filed       | LIGHTING AUDIT DOCKING STATION DEVICE AND METHOD THEREOF                            | CON-CONTINUATION              | 15/418648          | 1/27/2017        |             |               |
| US | Issued      | Lighting System with Improved Illumination Distribution                             | PRI-PRIORITY APPLICATION      | 13/969361          | 8/16/2013        | 6/2/2015    | US9046225     |
| US | Issued      | LIGHTING SYSTEM WITH IMPROVED ILLUMINATION DISTRIBUTION                             | CON-CONTINUATION              | 14/726058          | 5/29/2015        | 5/23/2017   | US9658385     |
| US | Issued      | SYSTEM AND METHOD OF COMPENSATING POWER FACTOR FOR ELECTRICAL LOADS                 | PRI-PRIORITY APPLICATION      | 14/164416          | 1/27/2014        | 5/2/2017    | US9641063     |
| CA | Filed       | SYSTEM AND METHOD OF COMPENSATING POWER FACTOR FOR ELECTRICAL LOADS                 | PCT-PATENT COOPERATION TREATY | 2937631            | 7/21/2016        |             |               |
| CN | Filed       | SYSTEM AND METHOD OF COMPENSATING POWER FACTOR FOR ELECTRICAL LOADS                 | PCT-PATENT COOPERATION TREATY | 201580006040       | 7/27/2016        |             |               |
| MX | Issued      | SYSTEM AND METHOD OF COMPENSATING POWER FACTOR FOR ELECTRICAL LOADS                 | PCT-PATENT COOPERATION TREATY | MX/A/2016/009714   | 7/26/2016        | 12/7/2017   | MX352790      |
| BR | Filed       | SYSTEM AND METHOD OF COMPENSATING POWER FACTOR FOR ELECTRICAL LOADS                 | PCT-PATENT COOPERATION TREATY | 112016015942-0     | 7/8/2016         |             |               |
| US | Issued      | TWO-STAGE LED DRIVER WITH BUCK PFC AND IMPROVED THD                                 | PRI-PRIORITY APPLICATION      | 14/042796          | 10/1/2013        | 2/17/2015   | US8957600     |
| US | Issued      | Arrangement for Switchable Output Current Flyback Converter                         | PRI-PRIORITY APPLICATION      | 14/042786          | 10/1/2013        | 3/29/2016   | US9301350B2   |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | SYSTEM AND METHOD FOR ACHIEVING PRECISE REGULATION OF MULTIPLE OUTPUTS IN A MULTI-RESONANT LED DRIVER STAGE | PRI-PRIORITY APPLICATION      | 14/328909          | 7/11/2014        | 2/28/2017   | US9585207B2   |
| CN | Filed       | CIRCUIT PROTECTION DEVICE   | PRI-PRIORITY APPLICATION      | 201410817141.2     | 12/19/2014       |             |               |
| US | Filed       | A DEVICE AND SYSTEM FOR LED LINEAR FLUORESCENT TUBE LAMP DRIVER   | PRI-PRIORITY APPLICATION      | 14/132059          | 12/18/2013       |             |               |
| EP | Filed       | A DEVICE AND SYSTEM FOR LED LINEAR FLUORESCENT TUBE LAMP DRIVER   | PCT-PATENT COOPERATION TREATY | 14809263.8         | 6/16/2016        |             |               |
| CN | Filed       | A DEVICE AND SYSTEM FOR LED LINEAR FLUORESCENT TUBE LAMP DRIVER   | PCT-PATENT COOPERATION TREATY | 201480069594.X     | 6/17/2016        |             |               |
| KR | Filed       | A DEVICE AND SYSTEM FOR LED LINEAR FLUORESCENT TUBE LAMP DRIVER   | PCT-PATENT COOPERATION TREATY | 10-2016-7018753    | 7/12/2016        |             |               |
| MX | Filed       | A DEVICE AND SYSTEM FOR LED LINEAR FLUORESCENT TUBE LAMP DRIVER   | PCT-PATENT COOPERATION TREATY | MX/A/2016/008129   | 6/17/2016        |             |               |
| BR | Filed       | A DEVICE AND SYSTEM FOR LED LINEAR FLUORESCENT TUBE LAMP DRIVER   | PCT-PATENT COOPERATION TREATY | 112016014160-1     | 6/17/2016        |             |               |
| TR | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING                                     | PCT-PATENT COOPERATION TREATY | 2016/11424         | 8/15/2016        |             |               |
| SA | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING                                     | PCT-PATENT COOPERATION TREATY | 516371169          | 5/19/2016        |             |               |
| MX | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING                                     | PCT-PATENT COOPERATION TREATY | MX/A/2016/006662   | 5/20/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 112016011508-2     | 5/20/2016        |             |               |
| US | Issued      | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | ORD-UTILITY PATENT FILING     | 14/546256          | 11/18/2014       | 5/9/2017    | US9646495     |
| CN | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 201480073799.5     | 7/21/2016        |             |               |
| AU | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 2014352751         | 5/20/2016        |             |               |
| SG | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 11201604028U       | 5/19/2016        |             |               |
| IN | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 201647019096       | 6/3/2016         |             |               |
| EP | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 14863711.9         | 6/6/2016         |             |               |
| AE | Filed       | METHOD AND SYSTEM FOR TRAFFIC FLOW REPORTING, FORECASTING, AND PLANNING           | PCT-PATENT COOPERATION TREATY | 620/2016           | 5/22/2016        |             |               |
| US | Issued      | CUSTOMIZABLE MODULAR LUMINAIRE  | PRI-PRIORITY APPLICATION      | 14/068672          | 10/31/2013       | 1/17/2017   | US9546776     |
| US | Issued      | Modular light fixture for outdoor lighting  | CON-CONTINUATION              | 15/368716          | 12/5/2016        | 3/27/2018   | US9927108     |
| US | Issued      | SYSTEMS AND METHODS FOR ATTACHING AND POSITIONING A SENSOR ON A LUMINAIRE FIXTURE | PRI-PRIORITY APPLICATION      | 14/513473          | 10/14/2014       | 9/13/2016   | US9442215B2   |
| US | Filed       | SYSTEMS AND METHODS FOR CREATING A CONFIGURABLE LUMINAIRE FIXTURE                 | PRI-PRIORITY APPLICATION      | 14/304046          | 6/13/2014        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | AUTOMATIC COMMISSIONING OF DIGITAL ADDRESSABLE LIGHTING CONTROL SYSTEMS             | PRI-PRIORITY APPLICATION      | 14/169885          | 1/31/2014        | 8/29/2017   | US9747196     |
| AU | Filed       | AN AUTOMATIC COMMISSIONING OF DIGITAL ADDRESSABLE LIGHTING CONTROL SYSTEMS          | PCT-PATENT COOPERATION TREATY | 2015211306         | 7/29/2016        |             |               |
| EP | Filed       | AN AUTOMATIC COMMISSIONING OF DIGITAL ADDRESSABLE LIGHTING CONTROL SYSTEMS          | PCT-PATENT COOPERATION TREATY | 15703186.5         | 8/9/2016         |             |               |
| US | Filed       | METHODS FOR TOPOLOGY AND AUTOMATIC NEIGHBORHOOD DETECTION IN LIGHTING SYSTEM        | PRI-PRIORITY APPLICATION      | 14/964486          | 12/9/2015        |             |               |
| US | Filed       | COMMUNICATION SYSTEM FOR ADAPTIVE LIGHTING CONTROL                                  | CON-CONTINUATION              | 15/581224          | 4/28/2017        |             |               |
| US | Issued      | DIGITAL CONTROL METHOD FOR LOW OUTPUT DIMMING OF LIGHT EMITTING DIODE (LED) DRIVERS | PRI-PRIORITY APPLICATION      | 14/519701          | 10/21/2014       | 7/5/2016    | US9386647B2   |
| CN | Filed       | LED DRIVING CIRCUIT   | PRI-PRIORITY APPLICATION      | 201410039919.1     | 1/27/2014        |             |               |
| US | Issued      | METHOD AND SYSTEM FOR LIGHTING INTERFACE MESSAGING WITH REDUCED POWER CONSUMPTION   | PRI-PRIORITY APPLICATION      | 14/541470          | 11/14/2014       | 8/22/2017   | US9743474     |
| CN | Filed       | METHOD AND SYSTEM FOR LIGHTING INTERFACE MESSAGING WITH REDUCED POWER CONSUMPTION   | PCT-PATENT COOPERATION TREATY | 201580073504.9     | 7/14/2017        |             |               |
| CN | Filed       | LED DRIVING CIRCUIT AND PROTECTION CIRCUIT FOR DC/DC CONVERTOR                      | PRI-PRIORITY APPLICATION      | 201410654736       | 11/17/2014       |             |               |
| US | Filed       | Protection circuit for a low cost LED driver.                                       | PCT-PATENT COOPERATION TREATY | 15/527206          | 5/16/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| US | Filed       | LUMINAIRE ASSOCIATE STATUS TRANSPONDER                        | ORD-UTILITY PATENT FILING     | 14/546408          | 11/18/2014       |             |               |
| MX | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | MX/A/2016/006666   | 5/20/2016        |             |               |
| SA | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 516371177          | 5/21/2016        |             |               |
| SG | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 11201604089W       | 5/20/2016        |             |               |
| TR | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 2016/11429         | 10/19/2016       |             |               |
| AU | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 2014352769         | 5/20/2016        |             |               |
| AE | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 624/2016           | 5/22/2016        |             |               |
| BR | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 112016011546-5     | 5/20/2016        |             |               |
| CN | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 201480073816.5     | 7/21/2016        |             |               |
| EP | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 14864958.5         | 6/6/2016         |             |               |
| IN | Filed       | STREET LIGHTING COMMUNICATIONS, CONTROL, AND SPECIAL SERVICES | PCT-PATENT COOPERATION TREATY | 201647018632       | 5/31/2016        |             |               |
| TR | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS                            | PCT-PATENT COOPERATION TREATY | 2016/11458         | 8/15/2016        |             |               |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| SA | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 516371173          | 5/21/2016        |             |               |
| MX | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | MX/A/2016/006669   | 5/20/2016        |             |               |
| BR | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 112016011563-5     | 5/20/2016        |             |               |
| US | Issued      | POWER LINE LUMINAIRE COMMUNICATIONS  | ORD-UTILITY PATENT FILING     | 14/546856          | 11/18/2014       | 9/6/2016    | US9439269B2   |
| CN | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 201480073801.9     | 7/21/2016        |             |               |
| AU | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 2014352774         | 5/20/2016        |             |               |
| SG | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 11201604087P       | 5/20/2016        |             |               |
| IN | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 201647019114       | 6/3/2016         |             |               |
| EP | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 14864061.8         | 6/6/2016         |             |               |
| AE | Filed       | POWERLINE LUMINAIRE COMMUNICATIONS   | PCT-PATENT COOPERATION TREATY | 619/2016           | 5/22/2016        |             |               |
| US | Issued      | SYSTEM AND METHOD FOR MONITORING STREET LIGHTING LUMINAIRES                    | ORD-UTILITY PATENT FILING     | 14/484300          | 9/12/2014        | 8/16/2016   | US9420674B2   |
| MX | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | MX/A/2016/006664   | 5/20/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| SA | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 516371178          | 5/21/2016        |             |               |
| SG | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 11201604085V       | 5/20/2016        |             |               |
| TR | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 2016/11445         | 8/15/2016        |             |               |
| US | Issued      | STREET LIGHTING CONTROL AND MONITORING SYSTEM AND METHOD                       | ORD-UTILITY PATENT FILING     | 14/546916          | 11/18/2014       | 4/11/2017   | US9621265     |
| AU | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 2014352755         | 5/20/2016        |             |               |
| AE | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 625/2016           | 5/22/2016        |             |               |
| BR | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 112016011521-0     | 5/20/2016        |             |               |
| CN | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 201480073817.X     | 7/21/2016        |             |               |
| EP | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 14863951.1         | 6/6/2016         |             |               |
| IN | Filed       | STREET LIGHTING CONTROL, MONITORING, AND DATA TRANSPORTATION SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 201647018622       | 5/31/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title                             | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|-----------------------------------|-------------------------------|--------------------|------------------|-------------|---------------|
| TR | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 2016/11442         | 8/15/2016        |             |               |
| SA | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 516371183          | 5/22/2016        |             |               |
| MX | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | MX/A/2016/006671   | 5/20/2016        |             |               |
| BR | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 112016011593-7     | 5/20/2016        |             |               |
| US | Issued      | GEOLOCATION AID SYSTEM AND METHOD | ORD-UTILITY PATENT FILING     | 14/546954          | 11/18/2014       | 4/11/2017   | US9622324     |
| CN | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 201480073800.4     | 7/21/2016        |             |               |
| AU | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 2014352775         | 5/20/2016        |             |               |
| SG | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 11201604076V       | 5/20/2016        |             |               |
| IN | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 201647019056       | 6/3/2016         |             |               |
| EP | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 14863466           | 6/6/2016         |             |               |
| AE | Filed       | GEOLOCATION AID SYSTEM AND METHOD | PCT-PATENT COOPERATION TREATY | 622/2016           | 5/22/2016        |             |               |
| TR | Filed       | EMERGENCY VEHICLE ALERT SYSTEM    | PCT-PATENT COOPERATION TREATY | 2016/11437         | 8/15/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| SA | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 516371185          | 5/22/2016        |             |               |
| MX | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | MX/A/2016/006660   | 5/20/2016        |             |               |
| BR | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 112016011543-0     | 5/20/2016        |             |               |
| US | Issued      | EMERGENCY VEHICLE ALERT SYSTEM   | ORD-UTILITY PATENT FILING     | 14/546982          | 11/18/2014       | 1/31/2017   | US9560720     |
| CN | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 201480073798       | 7/21/2016        |             |               |
| AU | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 2014352747         | 5/20/2016        |             |               |
| SG | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 11201604073Q       | 5/20/2016        |             |               |
| IN | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 201647019084       | 6/3/2016         |             |               |
| EP | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 14863718.4         | 6/6/2016         |             |               |
| AE | Filed       | EMERGENCY VEHICLE ALERT SYSTEM   | PCT-PATENT COOPERATION TREATY | 621/2016           | 5/22/2016        |             |               |
| US | Filed       | ILLUMINATION DEVICE HAVING A LIGHT EMITTING SOURCE OPERATED VIA A CLAMPED SERIES RESONATOR CONVERTER | CIP-CONTINUATION IN PART      | 15628774           | 6/21/2017        |             |               |
| TR | Filed       | LUMINAIRE ASSOCIATE  | PCT-PATENT COOPERATION TREATY | 2016/11453         | 8/15/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| SA | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 516371175          | 5/21/2016        |             |               |
| MX | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | MX/A/2016/006658   | 5/20/2016        |             |               |
| BR | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 112016011560-0     | 5/20/2016        |             |               |
| US | Issued      | LUMINAIRE ASSOCIATE                                 | CON-CONTINUATION              | 15/337582          | 10/28/2016       | 4/17/2018   | US9945960     |
| US | Issued      | LUMINAIRE ASSOCIATE                                 | ORD-UTILITY PATENT FILING     | 14/543892          | 11/18/2014       | 4/11/2017   | US9622323     |
| CN | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 201480073818.4     | 7/21/2016        |             |               |
| AU | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 2014353107         | 5/20/2016        |             |               |
| SG | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 11201604088Q       | 5/20/2016        |             |               |
| IN | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 201647018633       | 5/31/2016        |             |               |
| EP | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 14809562.3         | 6/6/2016         |             |               |
| AE | Filed       | LUMINAIRE ASSOCIATE                                 | PCT-PATENT COOPERATION TREATY | 623/2016           | 5/22/2016        |             |               |
| US | Issued      | TWO-STAGE LED DRIVER WITH BUCK PFC AND IMPROVED THD | PRI-PRIORITY APPLICATION      | 14/042791          | 10/1/2013        | 11/29/2016  | US9510403B2   |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | TWO-STAGE AC-DC POWER CONVERTER WITH SELECTABLE DUAL OUTPUT CURRENT                            | PRI-PRIORITY APPLICATION      | 14/042810          | 10/1/2013        | 5/3/2016    | US9332601B2   |
| US | Issued      | SINGLE-STAGE AC-DC POWER CONVERTER WITH FLYBACK PFC AND IMPROVED THD                           | PRI-PRIORITY APPLICATION      | 14/042794          | 10/1/2013        | 10/20/2015  | US9166483     |
| US | Issued      | SINGLE-STAGE AC-DC POWER CONVERTER WITH FLYBACK PFC AND SELECTABLE DUAL OUTPUT CURRENT         | PRI-PRIORITY APPLICATION      | 14/042802          | 10/1/2013        | 6/28/2016   | US9380655B2   |
| US | Issued      | DIGITAL ADDRESSABLE LIGHTING INTERFACE SHORT PROTECTION CIRCUIT                                | PRI-PRIORITY APPLICATION      | 14/469787          | 8/27/2014        | 4/18/2017   | US9629222     |
| WO | Filed       | DIGITAL ADDRESSABLE LIGHTING INTERFACE SHORT PROTECTION CIRCUIT                                | ORD-UTILITY PATENT FILING     | PCT/US2015/040678  | 7/16/2015        |             |               |
| EP | Filed       | DIGITAL ADDRESSABLE LIGHTING INTERFACE SHORT PROTECTION CIRCUIT                                | PCT-PATENT COOPERATION TREATY | 15742509.1         | 3/16/2017        |             |               |
| US | Issued      | MICROCONTROLLER BURST MODE TO MAINTAIN VOLTAGE SUPPLY DURING STANDBY MODE OF A LIGHTING SYSTEM | PRI-PRIORITY APPLICATION      | 14/519846          | 10/21/2014       | 6/28/2016   | US9380664B2   |
| US | Issued      | Gate voltage threshold turn off to maintain VDD during DALI RX/TX in sleep mode                | PRI-PRIORITY APPLICATION      | 14/537361          | 11/10/2014       | 1/10/2017   | US9544972     |
| US | Issued      | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                               | PRI-PRIORITY APPLICATION      | 14/322047          | 7/2/2014         | 5/10/2016   | US9335011B2   |
| JP | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                               | PCT-PATENT COOPERATION TREATY | 2016-575165        | 12/22/2016       |             |               |
| KR | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                               | PCT-PATENT COOPERATION TREATY | 1020177003039      | 2/2/2017         |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| MX | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | MX/A/2016/017072   | 12/19/2016       |             |               |
| MY | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | PI 2016704300      | 11/21/2016       |             |               |
| PL | Unfiled     | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| TH | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 1601007485         | 12/15/2016       |             |               |
| TW | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | ORD-UTILITY PATENT FILING     | 104121529          | 7/2/2015         |             |               |
| AU | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2015284080         | 12/23/2016       |             |               |
| BR | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 112016029275-8     | 12/14/2016       |             |               |
| CA | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2953561            | 12/22/2016       |             |               |
| CN | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 201580035979.9     | 12/30/2016       |             |               |
| EP | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 15744761.6         | 12/9/2016        |             |               |
| IN | Filed       | OXYFLUORIDE PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 201747002286       | 1/20/2017        |             |               |
| US | Issued      | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF             | PRI-PRIORITY APPLICATION      | 14/322076          | 7/2/2014         | 5/3/2016    | US9328878B2   |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 112016029420-3     | 12/15/2016       |             |               |
| AU | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2015284531         | 12/23/2016       |             |               |
| MY | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | PI 2016704516      | 12/5/2016        |             |               |
| IN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 201747002287       | 1/20/2017        |             |               |
| TH | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 1601007445         | 12/14/2016       |             |               |
| PH | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 12016502454        | 12/12/2016       |             |               |
| TW | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | ORD-UTILITY PATENT FILING     | 104120953          | 6/29/2015        |             |               |
| EP | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 15736109.8         | 12/9/2016        |             |               |
| CN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 201580035901.7     | 12/30/2016       |             |               |
| JP | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2016-574272        | 12/20/2016       |             |               |
| KR | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 1020177003040      | 2/2/2017         |             |               |
| CA | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2953501            | 12/22/2016       |             |               |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description              | Application Number | Application Date | Patent Date | Patent Number    |
|----|-------------|---|---------------------------------|--------------------|------------------|-------------|------------------|
| MX | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                            | PCT-PATENT COOPERATION TREATY   | MX/A/2016/017104   | 12/19/2016       |             |                  |
| US | Filed       | MODULAR METHOD OF MANUFACTURING WAVEGUIDE FOR LIGHTING SYSTEM                   | PRI-PRIORITY APPLICATION        | 14/955632          | 12/1/2015        |             |                  |
| CN | Filed       | CIRCUIT AND METHOD FOR A RESONANT TANK  | PRI-PRIORITY APPLICATION        | 201410528345.4     | 10/9/2014        |             |                  |
| US | Issued      | AN ELECTRONIC DRIVER FOR AN ILLUMINATION DEVICE AND METHOD OF OPERATING THEREOF | PRI-PRIORITY APPLICATION        | 14/949980          | 11/24/2015       | 12/20/2016  | US9526136B1      |
| WO | Filed       | AN ELECTRONIC DRIVER FOR AN ILLUMINATION DEVICE AND METHOD OF OPERATING THEREOF | ORD-UTILITY PATENT FILING       | PCT/US2016/057256  | 10/17/2016       |             |                  |
| IN | Filed       | AN ENERGY METERING SYSTEM AND AN ASSOCIATED METHOD THEREOF                      | PRI-PRIORITY APPLICATION        | 4209/CHE/2015      | 8/12/2015        |             |                  |
| US | Issued      | ELECTRONIC DRIVER FOR CONTROLLING AN ILLUMINATION DEVICE                        | PRI-PRIORITY APPLICATION        | 14/953451          | 11/30/2015       | 8/23/2016   | US9426854B1      |
| US | Issued      | form design of aesthetic outdoor luminaire                                      | PDS-PRIORITY DESIGN APPLICATION | 29/499514          | 8/15/2014        | 12/1/2015   | USD744688        |
| EM | Issued      | form design of aesthetic outdoor luminaire                                      | DES-DESIGN                      | 2639214            | 2/13/2015        | 2/13/2015   | EM002633214      |
| TR | Issued      | form design of aesthetic outdoor luminaire                                      | DES-DESIGN                      | 2015/01109         | 2/13/2015        | 2/13/2015   | TR201501109      |
| CN | Issued      | form design of aesthetic outdoor luminaire                                      | DES-DESIGN                      | 201530047966.6     | 2/16/2015        | 9/30/2015   | CN201530047966.6 |
| TW | Issued      | form design of aesthetic outdoor luminaire                                      | DES-DESIGN                      | 104300842          | 2/13/2015        | 11/21/2015  | TWD172016        |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number    |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|------------------|
| KR | Issued      | form design of aesthetic outdoor luminaire              | DES-DESIGN                    | 3020150007972      | 2/13/2015        | 1/21/2016   | KR30-0836867     |
| MX | Issued      | form design of aesthetic outdoor luminaire              | DES-DESIGN                    | MX/F/2015/000519   | 2/13/2015        | 2/8/2016    | MX46284          |
| BR | Issued      | form design of aesthetic outdoor luminaire              | DES-DESIGN                    | 302015000739-7     | 2/13/2015        | 6/14/2016   | BR302015000739-7 |
| US | Filed       | EXTENSION INTERFACE FOR LUMINAIRES                      | ORD-UTILITY PATENT FILING     | 14/809182          | 7/25/2015        |             |                  |
| WO | Filed       | EXTENSION INTERFACE FOR LUMINAIRES                      | ORD-UTILITY PATENT FILING     | PCT/US15/46481     | 8/24/2015        |             |                  |
| TW | Filed       | EXTENSION INTERFACE FOR LUMINAIRES                      | ORD-UTILITY PATENT FILING     | 104127803          | 8/25/2015        |             |                  |
| TW | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                   | ORD-UTILITY PATENT FILING     | 105115178          | 5/17/2016        |             |                  |
| US | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                   | PCT-PATENT COOPERATION TREATY | 15/566061          | 10/12/2017       |             |                  |
| US | Filed       | LED OUTDOOR FIXTURE IN PLASTIC HOUSING WITH OUTER FRAME | ORD-UTILITY PATENT FILING     | 14/934305          | 11/6/2015        |             |                  |
| CN | Filed       | LED OUTDOOR FIXTURE IN PLASTIC HOUSING WITH OUTER FRAME | PCT-PATENT COOPERATION TREATY | 201580067364.4     | 6/9/2017         |             |                  |
| JP | Filed       | LED OUTDOOR FIXTURE IN PLASTIC HOUSING WITH OUTER FRAME | PCT-PATENT COOPERATION TREATY | 2017-529324        | 6/1/2017         |             |                  |
| EP | Filed       | LED OUTDOOR FIXTURE IN PLASTIC HOUSING WITH OUTER FRAME | PCT-PATENT COOPERATION TREATY | 15798660.5         | 5/26/2017        |             |                  |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | SYSTEM AND PROCESSES FOR COMMISSIONING INDOOR INDUSTRIAL LIGHTING                      | PRI-PRIORITY APPLICATION  | 14/865350          | 9/25/2015        | 4/17/2018   | US9949347     |
| US | Filed       | LIGHTING SYSTEM WITH IMPROVED ILLUMINATION DISTRIBUTION AND OUTPUT LUMINANCE VARIATION | PRI-PRIORITY APPLICATION  | 14/736081          | 6/10/2015        |             |               |
| US | Issued      | IMAGE SENSOR CONTROLLED LIGHTING FIXTURE   | PRI-PRIORITY APPLICATION  | 14/937408          | 11/10/2015       | 3/27/2018   | US9930752     |
| AU | Filed       | IMAGE SENSOR CONTROLLED LIGHTING FIXTURE   | ORD-UTILITY PATENT FILING | 2016256752         | 11/10/2016       |             |               |
| BR | Filed       | IMAGE SENSOR CONTROLLED LIGHTING FIXTURE   | ORD-UTILITY PATENT FILING | 102016026186-4     | 11/9/2016        |             |               |
| CA | Filed       | IMAGE SENSOR CONTROLLED LIGHTING FIXTURE   | ORD-UTILITY PATENT FILING | 2947808            | 11/7/2016        |             |               |
| GB | Filed       | IMAGE SENSOR CONTROLLED LIGHTING FIXTURE   | ORD-UTILITY PATENT FILING | 1618724.7          | 11/7/2016        |             |               |
| MX | Filed       | IMAGE SENSOR CONTROLLED LIGHTING FIXTURE   | ORD-UTILITY PATENT FILING | MX/A/2016/014707   | 11/9/2016        |             |               |
| US | Filed       | METHOD AND SYSTEM FOR CONTROLLING AN ILLUMINATION DEVICE AND RELATED LIGHTING SYSTEM   | PRI-PRIORITY APPLICATION  | 14/940833          | 11/13/2015       |             |               |
| WO | Filed       | METHOD AND SYSTEM FOR CONTROLLING AN ILLUMINATION DEVICE AND RELATED LIGHTING SYSTEM   | ORD-UTILITY PATENT FILING | PCT/US2016/061804  | 11/14/2016       |             |               |
| US | Filed       | LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                                    | PRI-PRIORITY APPLICATION  | 14/883613          | 10/14/2015       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| TW | Filed       | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | ORD-UTILITY PATENT FILING     | 105131924          | 10/3/2016        |             |               |
| EP | Filed       | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | PCT-PATENT COOPERATION TREATY | 16782122.2         | 4/13/2018        |             |               |
| CA | Unfiled     | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| MX | Filed       | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | PCT-PATENT COOPERATION TREATY | MX/A/2018/004578   | 4/13/2018        |             |               |
| BR | Unfiled     | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| AU | Filed       | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | PCT-PATENT COOPERATION TREATY | 2016338498         | 4/13/2018        |             |               |
| CN | Unfiled     | A LUMINAIRE HAVING A BEACON AND A DIRECTIONAL ANTENNA                             | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| US | Issued      | COMMISIONING METHOD OF LIGHTING CONTROL SYSTEM USING VISUAL LIGHT COMMUNICATION   | PRI-PRIORITY APPLICATION      | 14/866825          | 9/25/2015        | 5/15/2018   | US9974146     |
| US | Issued      | SYSTEMS AND METHODS FOR CONTROLLING AND IMPROVING POWER CONVERTERS                | PRI-PRIORITY APPLICATION      | 14/975349          | 12/18/2015       | 8/29/2017   | US9748844     |
| US | Issued      | METHODS, APPARATUS, SYSTEM AND MEDIA FOR USE IN ASSOCIATION WITH LIGHTING SYSTEMS | PRI-PRIORITY APPLICATION      | 14/964107          | 12/9/2015        | 8/22/2017   | US9743493     |
| US | Issued      | DRIVER CIRCUIT AND SWITCH DRIVING METHOD  | PRI-PRIORITY APPLICATION      | 14/958411          | 12/3/2015        | 10/10/2017  | US9787303     |

## Patents of Current Lighting Solutions, LLC

| CG  | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|-----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| W/O | Filed       | DRIVER CIRCUIT AND SWITCH DRIVING METHOD  | ORD-UTILITY PATENT FILING     | PCT/US2016/062423  | 11/17/2016       |             |               |
| US  | Filed       | INDOOR POSITIONING SYSTEM USING BEACONS AND VIDEO ANALYTICS                       | PRI-PRIORITY APPLICATION      | 14/982584          | 12/29/2015       |             |               |
| US  | Filed       | MONITORING PARKING RULE VIOLATIONS  | ORD-UTILITY PATENT FILING     | 15/099351          | 4/14/2016        |             |               |
| EP  | Filed       | MONITORING PARKING RULE VIOLATIONS  | PCT-PATENT COOPERATION TREATY | 16719646.8         | 10/17/2017       |             |               |
| MX  | Filed       | MONITORING PARKING RULE VIOLATIONS  | PCT-PATENT COOPERATION TREATY | MX/A/2017/013401   | 10/17/2017       |             |               |
| CA  | Filed       | MONITORING PARKING RULE VIOLATIONS  | PCT-PATENT COOPERATION TREATY | 2984937            | 11/2/2017        |             |               |
| US  | Issued      | MULTI-FUNCTIONAL OPTICAL SENSOR FOR INDOOR LIGHTING SYSTEMS                       | PRI-PRIORITY APPLICATION      | 14/986022          | 12/31/2015       | 5/9/2017    | US9648701     |
| US  | Issued      | SYSTEMS AND METHODS FOR SAFETY AND PROXIMITY SENSING IN INDUSTRIAL ENVIRONMENTS   | PRI-PRIORITY APPLICATION      | 14/977036          | 12/21/2015       | 5/16/2017   | US9652962     |
| US  | Issued      | SYSTEMS FOR PROVIDING EMERGENCY POWER DURING A POWER INTERRUPTION                 | PRI-PRIORITY APPLICATION      | 14/946817          | 11/20/2015       | 3/13/2018   | US9917474     |
| W/O | Filed       | SYSTEMS FOR PROVIDING EMERGENCY POWER DURING A POWER INTERRUPTION                 | ORD-UTILITY PATENT FILING     | PCT/US2016/061736  | 11/14/2016       |             |               |
| US  | Filed       | CONTROLLED CONNECTING METHOD BETWEEN LUMINAIRE AND AUXILIARY DEVICE               | ORD-UTILITY PATENT FILING     | 14/852512          | 9/12/2015        |             |               |
| US  | Filed       | HIGH VOLTAGE RESISTANT TRANSMITTING CIRCUIT FOR DEVICES COMMUNICATING ON DALI BUS | PRI-PRIORITY APPLICATION      | 14/972032          | 12/16/2015       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | WIRELESS CONNECTION OF SENSORS TO OUTDOOR LIGHTING SYSTEM | PRI-PRIORITY APPLICATION  | 15/146927          | 5/5/2016         | 8/29/2017   | US9750110     |
| US | Filed       | WIRELESS CONNECTION OF SENSORS TO OUTDOOR LIGHTING SYSTEM | CON-CONTINUATION          | 15/660150          | 7/26/2017        |             |               |
| US | Filed       | CONTROL SYSTEM FOR AN OUTDOOR COMMUNICATION SYSTEM        | ORD-UTILITY PATENT FILING | 15/368711          | 12/5/2016        |             |               |
| CA | Filed       | CONTROL SYSTEM FOR AN OUTDOOR COMMUNICATION SYSTEM        | ORD-UTILITY PATENT FILING | 2951104            | 12/8/2016        |             |               |
| CN | Filed       | CONTROL SYSTEM FOR AN OUTDOOR COMMUNICATION SYSTEM        | ORD-UTILITY PATENT FILING | 201611167774.9     | 12/16/2016       |             |               |
| EP | Filed       | CONTROL SYSTEM FOR AN OUTDOOR COMMUNICATION SYSTEM        | ORD-UTILITY PATENT FILING | 16203318.7         | 12/9/2016        |             |               |
| US | Filed       | AUXILIARY POWER FOR LUMINAIRE NODE CONTROLLERS            | ORD-UTILITY PATENT FILING | 15/480399          | 4/6/2017         |             |               |
| US | Issued      | PROTECTION CIRCUIT ASSEMBLY AND METHOD                    | PRI-PRIORITY APPLICATION  | 14/960268          | 12/4/2015        | 10/31/2017  | US9807846     |
| AU | Filed       | PROTECTION CIRCUIT ASSEMBLY AND METHOD                    | ORD-UTILITY PATENT FILING | 2016266095         | 12/2/2016        |             |               |
| CA | Filed       | PROTECTION CIRCUIT ASSEMBLY AND METHOD                    | ORD-UTILITY PATENT FILING | 2950256            | 12/1/2016        |             |               |
| MX | Filed       | PROTECTION CIRCUIT ASSEMBLY AND METHOD                    | ORD-UTILITY PATENT FILING | MX/A/2016/015993   | 12/2/2016        |             |               |
| BR | Filed       | PROTECTION CIRCUIT ASSEMBLY AND METHOD                    | ORD-UTILITY PATENT FILING | 102016028334-5     | 12/2/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| CN | Filed       | PROTECTION CIRCUIT ASSEMBLY AND METHOD  | ORD-UTILITY PATENT FILING | 201611103335.1     | 12/5/2016        |             |               |
| US | Filed       | DATA INTERFACE WITH OVERVOLTAGE PROTECTION FOR TWO-WAY DIGITAL CONTROL BUS SYSTEM | ORD-UTILITY PATENT FILING | 15/201682          | 7/5/2016         |             |               |
| WO | Filed       | DATA INTERFACE WITH OVERVOLTAGE PROTECTION FOR TWO-WAY DIGITAL CONTROL BUS SYSTEM | ORD-UTILITY PATENT FILING | PCT/US2017/017711  | 2/13/2017        |             |               |
| US | Filed       | REVENUE GENERATING INTELLIGENT SYSTEM   | PRI-PRIORITY APPLICATION  | 15/490039          | 4/18/2017        |             |               |
| US | Filed       | POWER HANDLING SYSTEM AND METHOD  | PRI-PRIORITY APPLICATION  | 15/073991          | 3/18/2016        |             |               |
| US | Filed       | SYSTEMS AND METHODS FOR TRACKING LOCATION IN INDUSTRIAL FACILITIES                | PRI-PRIORITY APPLICATION  | 15/233641          | 8/10/2016        |             |               |
| US | Filed       | HEAT DISSIPATING REFLECTORS FOR LED LUMINAIRES                                    | PRI-PRIORITY APPLICATION  | 15/092239          | 4/6/2016         |             |               |
| CN | Filed       | HEAT DISSIPATING REFLECTORS FOR LED LUMINAIRES                                    | ORD-UTILITY PATENT FILING | 201710220740.X     | 4/6/2017         |             |               |
| JP | Filed       | HEAT DISSIPATING REFLECTORS FOR LED LUMINAIRES                                    | ORD-UTILITY PATENT FILING | 2017-066515        | 3/30/2017        |             |               |
| EP | Filed       | HEAT DISSIPATING REFLECTORS FOR LED LUMINAIRES                                    | ORD-UTILITY PATENT FILING | 17164348.9         | 3/31/2017        |             |               |
| US | Filed       | METHODS AND SYSTEMS FOR LOAD BALANCING IN MESH NETWORKS                           | PRI-PRIORITY APPLICATION  | 15/130971          | 4/16/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| CA | Filed       | METHODS AND SYSTEMS FOR LOAD BALANCING IN MESH NETWORKS                           | ORD-UTILITY PATENT FILING | 2963524            | 4/6/2017         |             |               |
| BR | Filed       | METHODS AND SYSTEMS FOR LOAD BALANCING IN MESH NETWORKS                           | ORD-UTILITY PATENT FILING | 102017007110-3     | 4/6/2017         |             |               |
| EP | Filed       | METHODS AND SYSTEMS FOR LOAD BALANCING IN MESH NETWORKS                           | ORD-UTILITY PATENT FILING | 17165367.8         | 4/6/2017         |             |               |
| AU | Filed       | METHODS AND SYSTEMS FOR LOAD BALANCING IN MESH NETWORKS                           | ORD-UTILITY PATENT FILING | 2017202463         | 4/13/2017        |             |               |
| MX | Filed       | METHODS AND SYSTEMS FOR LOAD BALANCING IN MESH NETWORKS                           | ORD-UTILITY PATENT FILING | MX/A/2017/004928   | 4/12/2017        |             |               |
| US | Filed       | TRACKING AND COMMISSIONING OF LIGHT ENGINES USING NEAR FIELD COMMUNICATION        | ORD-UTILITY PATENT FILING | 15/423906          | 2/3/2017         |             |               |
| CA | Filed       | TRACKING AND COMMISSIONING OF LIGHT ENGINES USING NEAR FIELD COMMUNICATION        | ORD-UTILITY PATENT FILING | 2978550            | 9/8/2017         |             |               |
| US | Issued      | OXY-BROMIDE PHOSPHORS AND USES THEREOF  | PRI-PRIORITY APPLICATION  | 15/086699          | 3/31/2016        | 3/28/2017   | US9605199     |
| TW | Filed       | OXY-BROMIDE PHOSPHORS AND USES THEREOF  | ORD-UTILITY PATENT FILING | 106108750          | 3/16/2017        |             |               |
| WO | Filed       | OXY-BROMIDE PHOSPHORS AND USES THEREOF  | ORD-UTILITY PATENT FILING | PCT/US2017/018611  | 2/21/2017        |             |               |
| US | Filed       | SINGLE-STAGE CURRENT-FED CLAMPED SERIES RESONANT POWER FACTOR CORRECTED CONVERTER | PRI-PRIORITY APPLICATION  | 15/154059          | 5/13/2016        |             |               |
| CN | Filed       | SINGLE-STAGE CURRENT-FED CLAMPED SERIES RESONANT                                  | ORD-UTILITY PATENT FILING | 201710339373.5     | 5/15/2017        |             |               |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
|    |             | POWER FACTOR CORRECTED CONVERTER  |                           |                    |                  |             |               |
| US | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHORS                           | PRI-PRIORITY APPLICATION  | 15/197891          | 6/30/2016        |             |               |
| WO | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHORS                           | ORD-UTILITY PATENT FILING | PCT/US17/051133    | 9/12/2017        |             |               |
| TW | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHORS                           | ORD-UTILITY PATENT FILING | 106131407          | 9/13/2017        |             |               |
| US | Filed       | POWER FACTOR CORRECTION OPTIMIZATION BY DIGITAL FEEDBACK                              | PRI-PRIORITY APPLICATION  | 15/354222          | 11/17/2016       |             |               |
| US | Filed       | SYSTEMS AND METHODS FOR WINDOW CONTAMINATION DETECTION                                | ORD-UTILITY PATENT FILING | 15/480008          | 4/5/2017         |             |               |
| CA | Filed       | SYSTEMS AND METHODS FOR WINDOW CONTAMINATION DETECTION                                | ORD-UTILITY PATENT FILING | 2979767            | 9/21/2017        |             |               |
| US | Filed       | EXTERNALLY VIEWABLE ORIENTATION INDICATION APPARATUS AND METHOD FOR AN OPTICAL SENSOR | ORD-UTILITY PATENT FILING | 15/459169          | 3/15/2017        |             |               |
| CN | Filed       | EXTERNALLY VIEWABLE ORIENTATION INDICATION APPARATUS AND METHOD FOR AN OPTICAL SENSOR | ORD-UTILITY PATENT FILING | 201710332778.6     | 5/11/2017        |             |               |
| CA | Filed       | EXTERNALLY VIEWABLE ORIENTATION INDICATION APPARATUS AND METHOD FOR AN OPTICAL SENSOR | ORD-UTILITY PATENT FILING | 2966113            | 5/4/2017         |             |               |
| MX | Filed       | EXTERNALLY VIEWABLE ORIENTATION INDICATION APPARATUS AND METHOD FOR AN OPTICAL SENSOR | ORD-UTILITY PATENT FILING | MX/A/2017/006072   | 5/9/2017         |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------|--------------------|------------------|-------------|---------------|
| ES | Filed       | EXTERNALLY VIEWABLE ORIENTATION INDICATION APPARATUS AND METHOD FOR AN OPTICAL SENSOR                | ORD-UTILITY PATENT FILING | P201730654         | 5/4/2017         |             |               |
| US | Filed       | ASSEMBLY AND METHOD FOR GLARE ELIMINATION  | ORD-UTILITY PATENT FILING | 15/705415          | 9/15/2017        |             |               |
| CA | Filed       | ASSEMBLY AND METHOD FOR GLARE ELIMINATION  | ORD-UTILITY PATENT FILING | 2979152            | 9/14/2017        |             |               |
| US | Issued      | SYSTEM FOR COLLECTION, ANALYTICS, AND DISPLAY OF INDOOR POSITIONING DATA                             | ORD-UTILITY PATENT FILING | 15/398239          | 1/4/2017         | 4/17/2018   | US9949085     |
| US | Filed       | PHOSPHOR MATERIALS FOR LIGHT SOURCES AND METHOD FOR MANUFACTURING THE SAME                           | ORD-UTILITY PATENT FILING | 15/411250          | 1/20/2017        |             |               |
| TW | Filed       | PHOSPHOR MATERIALS FOR LIGHT SOURCES AND METHOD FOR MANUFACTURING THE SAME                           | ORD-UTILITY PATENT FILING | 106112051          | 4/11/2017        |             |               |
| WO | Filed       | PHOSPHOR MATERIALS FOR LIGHT SOURCES AND METHOD FOR MANUFACTURING THE SAME                           | ORD-UTILITY PATENT FILING | PCT/US2017/026744  | 4/10/2017        |             |               |
| US | Filed       | SYSTEM AND METHOD FOR NONINTRUSIVE COMMISSIONING OF ELEMENTS TO AN INDOOR POSITIONING SYSTEM         | ORD-UTILITY PATENT FILING | 15/418793          | 1/30/2017        |             |               |
| US | Issued      | DIRECTIONAL IMAGING USING CAMERA POSITIONING IN LIGHT FIXTURES FOR MINIMIZING PROTECTIVE WINDOW SIZE | PRI-PRIORITY APPLICATION  | 15/168215          | 5/30/2016        | 8/22/2017   | US9742970     |
| US | Filed       | ANTI-DETACHMENT CAPPER FOR LED RETROFIT LAMPS  | ORD-UTILITY PATENT FILING | 15/373707          | 12/9/2016        |             |               |
| CA | Filed       | ANTI-DETACHMENT CAPPER FOR LED RETROFIT LAMPS  | ORD-UTILITY PATENT FILING | 2964656            | 4/20/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| MX | Filed       | ANTI-DETACHMENT CAPPER FOR LED RETROFIT LAMPS             | ORD-UTILITY PATENT FILING | MX/A/2017/005278   | 4/21/2017        |             |               |
| CN | Filed       | ANTI-DETACHMENT CAPPER FOR LED RETROFIT LAMPS             | ORD-UTILITY PATENT FILING | 201710269083.8     | 4/21/2017        |             |               |
| EP | Filed       | ANTI-DETACHMENT CAPPER FOR LED RETROFIT LAMPS             | ORD-UTILITY PATENT FILING | 17167270.2         | 4/20/2017        |             |               |
| US | Filed       | PACKAGING OF LUMINAIRE MOUNTED MICROPHONES                | ORD-UTILITY PATENT FILING | 15/275190          | 9/23/2016        |             |               |
| US | Filed       | MODULAR LIGHTING CONTROLLER AND DATA ACQUISITION PLATFORM | PRI-PRIORITY APPLICATION  | 15/334419          | 10/26/2016       |             |               |
| EP | Filed       | MODULAR LIGHTING CONTROLLER AND DATA ACQUISITION PLATFORM | ORD-UTILITY PATENT FILING | 17198303.4         | 10/25/2017       |             |               |
| US | Filed       | LED Design of Lower CCT Utilizing PFS Phosphor            | PRI-PRIORITY APPLICATION  | 15/428077          | 2/8/2017         |             |               |
| WO | Filed       | LED DESIGN OF LOWER CCT UTILIZING PFS PHOSPHOR            | ORD-UTILITY PATENT FILING | PCT/US2018/012442  | 1/5/2018         |             |               |
| TW | Filed       | LED DESIGN OF LOWER CCT UTILIZING PFS PHOSPHOR            | ORD-UTILITY PATENT FILING | 107102666          | 1/25/2018        |             |               |
| US | Filed       | GEOPENCING FOR WIRELESS COMMUNICATIONS                    | PRI-PRIORITY APPLICATION  | 15/245014          | 8/23/2016        |             |               |
| CA | Filed       | GEOPENCING FOR WIRELESS COMMUNICATIONS                    | ORD-UTILITY PATENT FILING | 2976942            | 8/22/2017        |             |               |
| US | Filed       | ANTENNA FOR LIGHTING CONTROL AT MESH NETWORKS NODES       | ORD-UTILITY PATENT FILING | 15/494644          | 4/24/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description              | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------------|--------------------|------------------|-------------|---------------|
| WO | Filed       | ANTENNA FOR LIGHTING CONTROL AT MESH NETWORKS NODES  | ORD-UTILITY PATENT FILING       | PCT/US2017/029231  | 4/25/2017        |             |               |
| US | Issued      | SENSOR HOUSING FOR OUTDOOR LUMINAIRE   | PDS-PRIORITY DESIGN APPLICATION | 29/563363          | 5/4/2016         | 9/5/2017    | USD796365     |
| CN | Issued      | SENSOR HOUSING FOR OUTDOOR LUMINAIRE   | DES-DESIGN                      | 201630533210.7     | 11/4/2016        | 9/26/2017   | CN304296833   |
| CA | Issued      | SENSOR HOUSING FOR OUTDOOR LUMINAIRE   | DES-DESIGN                      | 171304             | 11/3/2016        | 5/31/2017   | CA171304      |
| AU | Issued      | SENSOR HOUSING FOR OUTDOOR LUMINAIRE   | DES-DESIGN                      | 201616193          | 11/3/2016        | 1/10/2017   | AU201616193   |
| MX | Issued      | SENSOR HOUSING FOR OUTDOOR LUMINAIRE   | DES-DESIGN                      | MX/E/2016/003417   | 11/4/2016        | 3/5/2018    | MX52122       |
| BR | Filed       | SENSOR HOUSING FOR OUTDOOR LUMINAIRE   | DES-DESIGN                      | 302016005032-5     | 11/4/2016        |             |               |
| US | Filed       | INDOOR POSITIONING SYSTEM BASED ON MOTION SENSING AUGMENTED WITH BEACONS                   | PRI-PRIORITY APPLICATION        | 15/332896          | 10/24/2016       |             |               |
| US | Filed       | TEMPERATURE CORRECTION FOR ENERGY MEASUREMENT IN A STREET LIGHTING LUMINAIRE               | ORD-UTILITY PATENT FILING       | 15/425498          | 2/6/2017         |             |               |
| WO | Filed       | TEMPERATURE CORRECTION FOR ENERGY MEASUREMENT IN A STREET LIGHTING LUMINAIRE               | ORD-UTILITY PATENT FILING       | PCT/US2017/036228  | 6/6/2017         |             |               |
| US | Filed       | PROCESSING OF SIGNALS FROM LUMINAIRE MOUNTED MICROPHONES FOR ENHANCING SENSOR CAPABILITIES | ORD-UTILITY PATENT FILING       | 15/274193          | 9/23/2016        |             |               |
| US | Filed       | METHOD OF PROTECTING AND DETECTING A SURGE EVENT IN A NODE                                 | ORD-UTILITY PATENT FILING       | 15/400017          | 1/6/2017         |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| US | Filed       | SYSTEM FOR SELECTIVE ACCURACY OF AN INDOOR POSITIONING SYSTEM               | PRI-PRIORITY APPLICATION  | 15/477849          | 4/3/2017         |             |               |
| US | Filed       | METHOD AND SYSTEM FOR LIGHTNING DETECTION                                   | PRI-PRIORITY APPLICATION  | 15/368712          | 12/5/2016        |             |               |
| WO | Filed       | SMART LIGHT FIXTURE COMMUNICATION NETWORK INFRASTRUCTURE AND METHODS OF USE | ORD-UTILITY PATENT FILING | PCT/US2017/038298  | 6/20/2017        |             |               |
|    |             |   |                           |                    |                  |             |               |
| US | Filed       | A WAVEFORM SHAPING CIRCUIT FOR SPURIOUS HARMONIC SUPPRESSION                | PRI-PRIORITY APPLICATION  | 15/496882          | 4/25/2017        |             |               |
| CA | Filed       | A WAVEFORM SHAPING CIRCUIT FOR SPURIOUS HARMONIC SUPPRESSION                | ORD-UTILITY PATENT FILING |                    | 4/12/2018        |             |               |
| EP | Filed       | A WAVEFORM SHAPING CIRCUIT FOR SPURIOUS HARMONIC SUPPRESSION                | ORD-UTILITY PATENT FILING | 18168956.3         | 4/24/2018        |             |               |
| US | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                        | PRI-PRIORITY APPLICATION  | 15/631362          | 6/23/2017        |             |               |
| US | Filed       | EXPANDING SENSING CAPABILITIES OF A LUMINAIRE                               | ORD-UTILITY PATENT FILING | 15/692181          | 8/31/2017        |             |               |
| CA | Filed       | EXPANDING SENSING CAPABILITIES OF A LUMINAIRE                               | ORD-UTILITY PATENT FILING | 2979151            | 9/14/2017        |             |               |
| CN | Filed       | LED LAMP AND TEMPERATURE CONTROL CIRCUIT APPLIED TO THE LED LAMP            | PRI-PRIORITY APPLICATION  | 201710362912.7     | 5/22/2017        |             |               |
| US | Filed       | FLYBACK BIFILARMULTIFLAR SYMMETRIC TRANSFORMER                              | PRI-PRIORITY APPLICATION  | 15/399324          | 1/5/2017         |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description              | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------------|--------------------|------------------|-------------|---------------|
| US | Filed       | DETERMINING POSITION VIA MULTIPLE CAMERAS AND VLC TECHNOLOGY   | ORD-UTILITY PATENT FILING       | 15/810286          | 11/13/2017       |             |               |
| CN | Filed       | LED LAMP   | PRI-PRIORITY APPLICATION        | 201710249426.4     | 4/17/2017        |             |               |
| US | Filed       | SENSOR MOUNT   | PDS-PRIORITY DESIGN APPLICATION | 29/582396          | 10/27/2016       |             |               |
| EP | Filed       | LUMINAIRE MOUNTING   | PRI-PRIORITY APPLICATION        | EP16204857.3       | 12/16/2016       |             |               |
| US | Filed       | GOVERNANCE OF THE CONTROL PROCESS BY THE STATE OF THE NODE     | PRI-PRIORITY APPLICATION        | 15/646337          | 7/11/2017        |             |               |
| US | Filed       | POSITIONING SYSTEM BASED ON VISIBLE LIGHT COMMUNICATIONS       | PRI-PRIORITY APPLICATION        | 15/454936          | 3/9/2017         |             |               |
| US | Filed       | LIGHT FIXTURE  | PDS-PRIORITY DESIGN APPLICATION | 29/591711          | 1/23/2017        |             |               |
| US | Filed       | METHOD AND APPARATUS FOR AUTONOMOUS LIGHTING CONTROL           | ORD-UTILITY PATENT FILING       | 15/475849          | 3/31/2017        |             |               |
| WO | Filed       | METHOD AND APPARATUS FOR AUTONOMOUS LIGHTING CONTROL           | ORD-UTILITY PATENT FILING       | PCT/US2017/056012  | 10/11/2017       |             |               |
| TW | Filed       | METHOD AND APPARATUS FOR AUTONOMOUS LIGHTING CONTROL           | ORD-UTILITY PATENT FILING       | 106137324          | 10/30/2017       |             |               |
| US | Filed       | ROADWAY FIXTURE SYSTEMS WITH INTEGRATED TRANSCENDING EQUIPMENT | ORD-UTILITY PATENT FILING       | 15/814836          | 11/16/2017       |             |               |
| WO | Filed       | ROADWAY FIXTURE SYSTEMS WITH INTEGRATED TRANSCENDING EQUIPMENT | ORD-UTILITY PATENT FILING       | PCT/US2017/063819  | 11/30/2017       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------|--------------------|------------------|-------------|---------------|
| US | Filed       | Automated Region of Interest Learning for Video Analytics                            | PRO-PROVISIONAL           | 62/610596          | 12/27/2017       |             |               |
| US | Filed       | SONIC POLE POSITION TRIANGULATION IN A LIGHTING SYSTEM                               | PRO-PROVISIONAL           | 62/611843          | 12/29/2017       |             |               |
| US | Filed       | ASSEMBLY AND METHOD FOR ACCESSING SECURE NETWORKS USING OPTICALLY-SENSED INFORMATION | PRO-PROVISIONAL           | 62/573469          | 10/17/2017       |             |               |
| US | Filed       | ASSEMBLY AND METHOD FOR ACCESSING SECURE NETWORKS USING OPTICALLY-SENSED INFORMATION | ORD-UTILITY PATENT FILING | 15/881377          | 1/26/2018        |             |               |
| US | Filed       | METHOD AND SYSTEM FOR IDENTIFYING LOCATION OF A PARKED VEHICLE                       | PRI-PRIORITY APPLICATION  | 15/692263          | 8/31/2017        |             |               |
| US | Filed       | Simplified Commissioning of Lighting Controls via Visible Light Communication        | PRO-PROVISIONAL           | 62/570387          | 10/10/2017       |             |               |
| US | Issued      | NETWORKED LIGHT CONTROL SYSTEM AND METHOD  | PRI-PRIORITY APPLICATION  | 15/621121          | 6/13/2017        | 1/16/2018   | US9872361     |
| US | Filed       | COATED MANGANESE DOPED PHOSPHORS   | PRI-PRIORITY APPLICATION  | 15/674495          | 8/10/2017        |             |               |
| US | Filed       | CONTROL SYSTEM FOR USER-ACTIVATED SELECTION OF CONTROL FUNCTIONALITY                 | PRI-PRIORITY APPLICATION  | 15/706816          | 9/18/2017        |             |               |
| US | Filed       | PROCESSES FOR PREPARING PHOSPHORS  | PRO-PROVISIONAL           | 62/542985          | 8/9/2017         |             |               |
| US | Filed       | BUILDING ENERGY MODELING TOOL SYSTEMS AND METHODS                                    | PRI-PRIORITY APPLICATION  | 15/823130          | 11/27/2017       |             |               |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title  | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | METHODS AND SYSTEMS FOR MONITORING LIGHTING CONTROL AND INDICATING FAILURE | ORD-UTILITY PATENT FILING            | 09/611871          | 7/7/2000         | 7/9/2002    | US6417775     |
| US | Issued      | INDUSTRIAL LIGHTING CONTROL SYSTEM AND METHOD                              | ORD-UTILITY PATENT FILING            | 09/681704          | 5/23/2001        | 5/4/2004    | US6731079     |
| US | Issued      | INTERFACE CIRCUIT AND METHOD   | ORD-UTILITY PATENT FILING            | 09/630303          | 7/31/2000        | 4/16/2002   | US6373200     |
| TW | Filed       | LED POWER SOURCE   | ORD-UTILITY PATENT FILING            | 90125387           | 10/15/2001       |             |               |
| CN | Issued      | LED POWER SOURCE   | PCT-PATENT COOPERATION TREATY        | 01803277.X         | 6/24/2002        | 5/30/2007   | CN01803277.X  |
| US | Issued      | LIGHT EMITTING DIODE POWER SUPPLY  | ORD-UTILITY PATENT FILING            | 09/736994          | 12/14/2000       | 6/25/2002   | US6411045     |
| US | Issued      | SELF-OSCILLATING SYNCHRONOUS BOOST CONVERTER                               | ORD-UTILITY PATENT FILING            | 09/861208          | 5/18/2001        | 2/25/2003   | US6525488     |
| US | Issued      | BALLAST HOUSING FOR LIGHTING FIXTURE                                       | DES-DESIGN                           | 29/132206          | 11/3/2000        | 7/9/2002    | USD460209     |
| US | Issued      | HIGH INTENSITY DISCHARGE LIGHTING FIXTURE                                  | PDS-PRIORITY DESIGN APPLICATION      | 29/168296          | 9/30/2002        | 7/27/2004   | USD493558     |
| US | Issued      | LUMINAIRE  | PDS-PRIORITY DESIGN APPLICATION      | 29/168349          | 9/30/2002        | 6/29/2004   | USD492441     |
| CN | Issued      | LIGHT EMITTING DEVICE WITH PHOSPHOR HAVING HIGH LUMINOUS EFFICACY          | PCT-PATENT COOPERATION TREATY        | 99802506.2         | 7/28/2000        | 4/30/2008   | CN100385688C  |
| GB | Issued      | LIGHT EMITTING DEVICE WITH PHOSPHOR HAVING HIGH LUMINOUS EFFICACY          | EPP-EUROPEAN PATENT - PCT ORIGINATED | 99964012.1         | 7/17/2000        | 6/22/2016   | EP1051758     |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|--------------------------------------|--------------------|------------------|-------------|---------------|
|    |             | LIGHT EMITTING DEVICE WITH PHOSPHOR HAVING HIGH LUMINOUS EFFICACY   | PCT-PATENT COOPERATION TREATY        | 2000-585941        | 7/18/2000        | 9/14/2012   | JP5085815     |
| JP | Issued      | LIGHT EMITTING DEVICE WITH BA2MGS1207:EU2+, BA2SIO4:EU2+, OR (SRXCAY BA1-X-Y)/(AIZGA1-Z)2SR:EU2+ PHOSPHORS                | PRI-PRIORITY APPLICATION             | 09/203206          | 11/30/1998       | 8/6/2002    | US6429583B1   |
| US | Issued      | SOLID STATE ILLUMINATION SYSTEM CONTAINING A LIGHT EMITTING DIODE, A LIGHT SCATTERING MATERIAL AND A LUMINESCENT MATERIAL | CIP-CONTINUATION IN PART             | 09/642655          | 8/22/2000        | 9/14/2004   | US6791259     |
| US | Issued      | LIGHT EMITTING DEVICE WITH PHOSPHOR HAVING HIGH LUMINOUS EFFICACY   | EPP-EUROPEAN PATENT - PCT ORIGINATED | 99964012.1         | 7/17/2000        | 6/22/2016   | EP1051758     |
| DE | Issued      | LIGHT EMITTING DEVICE WITH PHOSPHOR HAVING HIGH LUMINOUS EFFICACY   | EPP-EUROPEAN PATENT - PCT ORIGINATED | 99964012.1         | 7/17/2000        | 6/22/2016   | EP1051758     |
| FR | Issued      | LIGHT EMITTING DEVICE WITH PHOSPHOR HAVING HIGH LUMINOUS EFFICACY   | EPP-EUROPEAN PATENT - PCT ORIGINATED | 99964012.1         | 7/17/2000        | 6/22/2016   | EP1051758     |
| US | Issued      | GREEN-LIGHT EMITTING PHOSPHORS AND LIGHT SOURCES USING THE SAME   | ORD-UTILITY PATENT FILING            | 09/144137          | 8/31/1998        | 8/21/2001   | US6278135     |
| US | Issued      | LIGHT SOURCE INCLUDING AN ARRAY OF LIGHT EMITTING SEMICONDUCTOR DEVICES AND CONTROL METHOD                                | ORD-UTILITY PATENT FILING            | 09/258935          | 3/1/1999         | 7/2/2002    | US6412971     |
| US | Issued      | UNIFORM ANGULAR LIGHT DISTRIBUTION FROM LEADS   | ORD-UTILITY PATENT FILING            | 09/550769          | 4/17/2000        | 11/25/2003  | US6653765     |
| US | Issued      | GREEN EMITTING PHOSPHOR FOR USE IN UV LIGHT EMITTING DIODES   | CIP-CONTINUATION IN PART             | 09/583196          | 5/30/2000        | 10/22/2002  | US6469322     |
| US | Issued      | LIGHT EMITTING SEMI-CONDUCTOR DEVICE APPARATUS FOR DISPLAY ILLUMINATION   | CON-CONTINUATION                     | 10/207317          | 7/29/2002        | 4/26/2005   | US6883926     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | FLIP CHIP LED APPARATUS   | ORD-UTILITY PATENT FILING | 09/542037          | 4/3/2000         | 11/19/2002  | US6483196     |
| US | Issued      | HIGH POWER WHITE LED LAMP STRUCTURE USING UNIQUE PHOSPHOR APPLICATION FOR LED LIGHTING PRODUCTS | ORD-UTILITY PATENT FILING | 09/670240          | 9/26/2000        | 10/21/2003  | US6635987     |
| US | Issued      | PHOSPHOR COATING WITH SELF-ADJUSTING DISTANCE FROM LED CHIP                                     | ORD-UTILITY PATENT FILING | 09/642901          | 8/21/2000        | 10/21/2003  | US6635363     |
| US | Issued      | PLASTIC PACKAGING OF LED ARRAYS   | ORD-UTILITY PATENT FILING | 09/654163          | 9/1/2000         | 9/2/2003    | US6614103     |
| US | Issued      | PLASTIC PACKAGING OF LED ARRAYS   | DIV-DIVISIONAL FILING     | 10/387862          | 3/14/2003        | 5/4/2004    | US6730533     |
| US | Issued      | PLASTIC PACKAGING OF LED ARRAYS   | DIV-DIVISIONAL FILING     | 10/387835          | 3/14/2003        | 5/11/2004   | US6733711     |
| US | Issued      | LIGHT EMITTING DEVICE PACKAGE AND METHOD OF FABRICATION   | ORD-UTILITY PATENT FILING | 09/682163          | 7/30/2001        | 3/2/2004    | US6700136     |
| US | Issued      | ORGANIC ELECTROLUMINESCENT DEVICES WITH ENHANCED LIGHT EXTRACTION                               | ORD-UTILITY PATENT FILING | 09/741961          | 12/22/2000       | 8/17/2004   | US6777871     |
| US | Issued      | COLOR TUNABLE ORGANIC ELECTROLUMINESCENT LIGHT SOURCE   | ORD-UTILITY PATENT FILING | 09/684483          | 10/10/2000       | 12/9/2003   | US6661029     |
| US | Issued      | COLOR TUNABLE ORGANIC ELECTROLUMINESCENT LIGHT SOURCE   | DIV-DIVISIONAL FILING     | 10/666145          | 9/22/2003        | 1/11/2005   | US6841949     |
| US | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLEND FOR LED DEVICES   | CON-CONTINUATION          | 10/295943          | 11/18/2002       | 3/21/2006   | US7015510     |
| US | Issued      | A PHOSPHOR FOR DOWN CONVERTING ULTRAVIOLET LIGHT OF LEADS TO BLUE-GREEN LIGHT                   | ORD-UTILITY PATENT FILING | 09/571382          | 5/15/2000        | 4/29/2003   | US6555958     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|--------------------------------------|--------------------|------------------|-------------|---------------|
| FR | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 1939044.2          | 5/15/2001        | 8/10/2016   | EP1332520     |
| GB | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 1939044.2          | 5/15/2001        | 8/10/2016   | EP1332520     |
| US | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | PRI-PRIORITY APPLICATION             | 09/570932          | 5/15/2000        | 9/16/2003   | US6621211     |
| JP | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | PCT-PATENT COOPERATION TREATY        | 2001-584500        | 5/15/2001        | 11/22/2013  | JP5414957     |
| CN | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | PCT-PATENT COOPERATION TREATY        | 1811702.3          | 12/24/2002       | 12/17/2008  | CN100444305   |
| KR | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | PCT-PATENT COOPERATION TREATY        | 2002-7015303       | 5/15/2001        | 9/23/2008   | KR10-0860755  |
| US | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | DIV-DIVISIONAL FILING                | 10/617028          | 7/11/2003        | 9/6/2005    | US6939481     |
| DE | Issued      | WHITE LIGHT EMITTING PHOSPHOR BLENDS FOR LED DEVICES  | EPP-EUROPEAN PATENT - PCT ORIGINATED | 1939044.2          | 5/15/2001        | 8/10/2016   | EP1332520     |
| US | Issued      | UV REFLECTORS AND UV-BASED LIGHT SOURCES HAVING REDUCED UV RADIATION LEAKAGE INCORPORATING THE SAME | ORD-UTILITY PATENT FILING            | 09/681560          | 4/30/2001        | 2/3/2004    | US6686676     |
| US | Issued      | YELLOW LIGHT-EMITTING HALOPHOSPHATE PHOSPHORS AND LIGHT SOURCES INCORPORATING THE SAME              | ORD-UTILITY PATENT FILING            | 09/681686          | 5/21/2001        | 9/9/2003    | US6616862     |
| CN | Issued      | YELLOW LIGHT-EMITTING HALOPHOSPHATE PHOSPHORS AND LIGHT SOURCES INCORPORATING THE SAME              | PCT-PATENT COOPERATION TREATY        | 2829006.2          | 11/22/2004       | 11/7/2007   | CN02829006.2  |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | BROAD-SPECTRUM TERBIUM-CONTAINING GARNET PHOSPHORS AND WHITE-LIGHT SOURCES INCORPORATING THE SAME   | ORD-UTILITY PATENT FILING | 09/681522          | 6/1/2001         | 7/22/2003   | US6596195     |
| US | Issued      | A DEVICE WITH COMBINED FEATURES OF LIGHTING AND AIR PURIFICATION                                    | PRE-PRIORITY APPLICATION  | 13/273371          | 10/14/2011       | 6/10/2014   | US8746929     |
| US | Published   | DETERMINING OVERLAP OF A PARKING SPACE BY A VEHICLE   | Non Provisional           | 15/099338          | 2016-04-14       |             |               |
| CA | Application | IDENTIFYING AND TRACKING VEHICLES IN MOTION   | Non Provisional           | 2984955            | 2016-04-17       |             |               |
| EP | Published   | IDENTIFYING AND TRACKING VEHICLES IN MOTION   | Non Provisional           | 16780974.8         | 2016-04-17       |             |               |
| MX | Published   | IDENTIFYING AND TRACKING VEHICLES IN MOTION   | Non Provisional           | MX/A/2017/013399   | 2016-04-17       |             |               |
| US | Granted     | IDENTIFYING AND TRACKING VEHICLES IN MOTION   | Non Provisional           | 15/099357          | 2016-04-14       | 4/10/2018   | US9940524     |
| CA | Application | USER INTERFACES FOR PARKING ZONE CREATION   | Non Provisional           | 2984148            | 2016-04-17       |             |               |
| EP | Published   | USER INTERFACES FOR PARKING ZONE CREATION   | Non Provisional           | 16780975.5         | 2016-04-17       |             |               |
| MX | Published   | USER INTERFACES FOR PARKING ZONE CREATION   | Non Provisional           | MX/A/2017/013400   | 2016-04-17       |             |               |
| US | Published   | USER INTERFACES FOR PARKING ZONE CREATION   | Non Provisional           | 15/099363          | 2016-04-14       |             |               |
| US | Application | LIGHT DISINFECTION SYSTEM AND METHOD  | Non Provisional           | 15/990296          | 5/28/2018        |             |               |
| US | Application | SYSTEM AND METHOD FOR CONTROLLING AUXILIARY POWER SUPPLY  | Non Provisional           | 15970473           | 2018-05-03       |             |               |
| US | Application | GENERATION OF COORDINATED CONTROL COMMANDS FOR GROUPINGS OF HEATING/VENTILATION/COOLING THERMOSTATS | Non Provisional           | 15/904319          | 2018-02-24       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status                       | Title   | Filing Description | Application Number | Application Date | Patent Date | Patent Number |
|----|-----------------------------------|---|--------------------|--------------------|------------------|-------------|---------------|
| US | Application                       | SYSTEMS AND METHODS FOR ALLOCATING A NETWORK ADDRESS TO A LIGHTING DEVICE                                     | Non Provisional    | 16/102950          | 2018-08-15       |             |               |
| US | Application                       | SYSTEM AND METHOD FOR COMMUNICATING BETWEEN NONNETWORKED MONITORING DEVICE AND NETWORKED LIGHTING CONTROLLERS | Non Provisional    | 15961438           | 2018-04-24       |             |               |
| US | Application                       | SELF-FORMING NETWORK COMMISSIONING SYSTEM AND METHOD  | Non Provisional    | 16/105453          | 2018-08-20       |             |               |
| US | Application                       | APPARATUS AND METHOD FOR INSTALLING AND REPLACING LIGHT FIXTURE DEVICES                                       | Non Provisional    | 16/105375          | 2018-08-20       |             |               |
| US | Application                       | POSITIONING SYSTEM AND METHOD USING LAMP FIXTURE INDICATOR  | Non Provisional    | 16/040099          | 2018-07-19       |             |               |
| US | Application (needs to be revived) | SIMULATING CAMERA NODE OUTPUT FOR PARKING POLICY MANAGEMENT SYSTEM  | Non Provisional    |                    |                  |             |               |
| US | Application                       | SENSOR DATA ARRAY AND METHOD OF COUNTING OCCUPANTS  | provisional        | 62/727949          | 2018-09-06       |             |               |
| US | Application                       | SYSTEMS AND METHODS FOR ALLOCATING A NETWORK ADDRESS TO A LIGHTING DEVICE                                     | provisional        | 62/667504          | 2018-05-05       |             |               |
| US | Application                       | DISTRIBUTED OCCUPANCY DETECTION SYSTEM AND METHOD   | provisional        | 62/667488          | 2018-05-05       |             |               |
| US | Application                       | SELF-FORMING NETWORK COMMISSIONING SYSTEM AND METHOD  | provisional        | 62/667495          | 2018-05-05       |             |               |
| US | Application                       | COLORBANDS: IDENTIFICATION OF LIGHTING FIXTURES FOR INDOOR POSITIONING  | provisional        | 62/751,479         | 2018-10-26       |             |               |

## Patents of Current Lighting Solutions, LLC

| CO | Case Status | Title   | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number      |
|----|-------------|---|--------------------------------------|--------------------|------------------|-------------|--------------------|
| US | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | PRI-PRIORITY APPLICATION             | 12/843947          | 7/27/2010        | 11/15/2011  | US8057706          |
| NL | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11738105.3         | 1/17/2013        | 11/23/2016  | NL2598601          |
| CN | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | PCT-PATENT COOPERATION TREATY        | 201180036339.1     | 1/24/2013        | 1/27/2016   | CNZL201180036339.1 |
| JP | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | PCT-PATENT COOPERATION TREATY        | 2013-521802        | 1/22/2013        | 5/27/2016   | JP5941464          |
| KR | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | PCT-PATENT COOPERATION TREATY        | 1020137004332      | 2/21/2013        | 2/20/2018   | KR101832529        |
| DE | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11738105.3         | 1/17/2013        | 11/23/2016  | DE2598601          |
| FR | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11738105.3         | 1/17/2013        | 11/23/2016  | FR2598601          |
| GB | Issued      | MOISTURE-RESISTANT PHOSPHOR AND ASSOCIATED METHOD | EPP-EUROPEAN PATENT - PCT ORIGINATED | 11738105.3         | 1/17/2013        | 11/23/2016  | GB2598601          |
| IN | Filed       | PHOSPHOR MATERIALS AND RELATED DEVICES            | ORD-UTILITY PATENT FILING            | 3392/CHE/2011      | 9/30/2011        |             |                    |
| DE | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES            | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12769822.3         | 3/24/2014        | 12/16/2015  | EP2760970          |
| FR | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES            | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12769822.3         | 3/24/2014        | 12/16/2015  | EP2760970          |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------------|--------------------|------------------|-------------|---------------|
| GB | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES       | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12769822.3         | 3/24/2014        | 12/16/2015  | EP2760970     |
| NL | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES       | EPP-EUROPEAN PATENT - PCT ORIGINATED | 12769822.3         | 3/24/2014        | 12/16/2015  | EP2760970     |
| IT | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES       | EPP-EUROPEAN PATENT - PCT ORIGINATED | 502016000002232    | 3/24/2014        | 12/16/2015  | EP2760970     |
| WO | Filed       | PHOSPHOR MATERIALS AND RELATED DEVICES       | ORD-UTILITY PATENT FILING            | PCT/US12/56299     | 9/20/2012        |             |               |
| US | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES       | PCT-PATENT COOPERATION TREATY        | 14/348244          | 3/28/2014        | 4/4/2017    | US9611237B2   |
| JP | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES       | PCT-PATENT COOPERATION TREATY        | 2014-533614        | 3/28/2014        | 9/1/2017    | JP6200891     |
| CN | Issued      | PHOSPHOR MATERIALS AND RELATED DEVICES       | PCT-PATENT COOPERATION TREATY        | 201280047878.X     | 3/28/2014        | 4/26/2017   | CN103827259   |
| KR | Filed       | PHOSPHOR MATERIALS AND RELATED DEVICES       | PCT-PATENT COOPERATION TREATY        | 2014-7011126       | 4/25/2014        |             |               |
| MX | Filed       | PHOSPHOR MATERIALS AND RELATED DEVICES       | PCT-PATENT COOPERATION TREATY        | MX/a/2014/003844   | 3/28/2014        |             |               |
| CA | Filed       | PHOSPHOR MATERIALS AND RELATED DEVICES       | PCT-PATENT COOPERATION TREATY        | 2848917            | 3/14/2014        |             |               |
| TW | Filed       | PHOSPHOR ASSEMBLY FOR LIGHT EMITTING DEVICES | ORD-UTILITY PATENT FILING            | 103115083          | 4/25/2014        |             |               |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title                               | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|-------------------------------------|-------------------------------|--------------------|------------------|-------------|---------------|
| CN | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201480028317.4     | 11/16/2015       | 9/15/2017   | CN105189696   |
| EP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 14720825           | 10/7/2015        |             |               |
| IN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 5623/CHENP/2015    | 9/16/2015        |             |               |
| JP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2016-502530        | 9/10/2015        |             |               |
| KR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1020157029868      | 10/15/2015       |             |               |
| MY | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2015002135         | 8/28/2015        |             |               |
| MX | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | MX/A/2015/012735   | 9/14/2015        |             |               |
| PH | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 12015501963        | 9/4/2015         |             |               |
| TH | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1501005565         | 9/15/2015        |             |               |
| VN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1-2015-03773       | 10/9/2015        |             |               |
| US | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | CON-CONTINUATION              | 15/402606          | 1/10/2017        |             |               |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| AU | Filed       | Improved stability Mn <sup>4+</sup> -doped fluoride phosphor and devices that use this phosphor | DIV-DIVISIONAL FILING         | 2017200092         | 1/6/2017         |             |               |
| CN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS   | DIV-DIVISIONAL FILING         | 201710706690.6     | 8/17/2017        |             |               |
| JP | Filed       | -   | DIV-DIVISIONAL FILING         | 2018-025677        | 2/16/2018        |             |               |
| TW | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS   | ORD-UTILITY PATENT FILING     | 103109499          | 3/14/2014        |             |               |
| US | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS   | ORD-UTILITY PATENT FILING     | 14/208592          | 3/13/2014        | 7/4/2017    | US9698314     |
| US | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS   | CON-CONTINUATION              | 14/285746          | 5/23/2014        | 2/28/2017   | US9580648     |
| US | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS   | CON-CONTINUATION              | 14/311624          | 6/23/2014        | 12/9/2014   | US8906724     |
| AU | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS   | PCT-PATENT COOPERATION TREATY | 2014239197         | 9/10/2015        | 5/18/2017   | AU2014239197  |
| BR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS   | PCT-PATENT COOPERATION TREATY | 112015022228-5     | 9/10/2015        |             |               |
| CA | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS   | PCT-PATENT COOPERATION TREATY | 2905489            | 9/10/2015        |             |               |
| IN | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS                                  | PCT-PATENT COOPERATION TREATY | 201647006864       | 2/28/2016        |             |               |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| JP | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2016-536492        | 2/18/2016        |             |               |
| KR | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1020167007084      | 3/17/2016        |             |               |
| MY | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | PI2016700116       | 1/13/2016        |             |               |
| MX | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | MX/A/2016/002275   | 2/19/2016        |             |               |
| PH | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1-2016-500292      | 2/11/2016        |             |               |
| TH | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1601000747         | 2/9/2016         |             |               |
| AU | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | DIV-DIVISIONAL FILING         | 2018201820         | 3/14/2018        |             |               |
| US | Issued      | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | ORD-UTILITY PATENT FILING     | 14/465024          | 8/21/2014        | 7/26/2016   | US9399732B2   |
| TW | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | ORD-UTILITY PATENT FILING     | 103129173          | 8/25/2014        |             |               |
| BR | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 112016002023-5     | 1/29/2016        |             |               |
| CA | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2921044            | 2/10/2016        |             |               |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| CN | Issued      | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201480046448.5     | 2/22/2016        | 2/13/2018   | CN105452418   |
| EP | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED PHOSPHORS | PCT-PATENT COOPERATION TREATY | 14781701.9         | 2/9/2016         |             |               |
| JP | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | 2016-527216        | 4/28/2016        |             |               |
| KR | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | 10-2016-7013911    | 5/25/2016        |             |               |
| MY | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | 2016701086         | 3/25/2016        |             |               |
| MX | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | MX/A/2016/005884   | 5/4/2016         |             |               |
| PH | Unfiled     | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| TH | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | 1601002285         | 4/21/2016        |             |               |
| TW | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | ORD-UTILITY PATENT FILING     | 103136656          | 10/23/2014       |             |               |
| AU | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | 2014347188         | 5/3/2016         |             |               |
| BR | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS                        | PCT-PATENT COOPERATION TREATY | 112016009298-8     | 4/27/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description             | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------|--------------------|------------------|-------------|---------------|
| CA | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS      | PCT-PATENT COOPERATION TREATY  | 2929037            | 4/28/2016        |             |               |
| CN | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS      | PCT-PATENT COOPERATION TREATY  | 201480061124.9     | 5/6/2016         |             |               |
| EP | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS      | PCT-PATENT COOPERATION TREATY  | 14781793.6         | 4/28/2016        |             |               |
| IN | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS      | PCT-PATENT COOPERATION TREATY  | 201647017115       | 5/18/2016        |             |               |
| US | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | PRI-PRIORITY APPLICATION       | 14/267434          | 5/1/2014         | 12/6/2016   | US9512356B2   |
| KR | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 10-2015-0061213    | 4/30/2015        |             |               |
| MY | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | P1 2015000725      | 3/23/2015        |             |               |
| MX | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | MX/A/2015/005580   | 4/30/2015        |             |               |
| TW | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 104112582          | 4/20/2015        |             |               |
| DE | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | EPC-EUROPEAN PATENT CONVENTION | 15165675.8         | 4/29/2015        | 8/16/2017   | EP2940099     |
| FR | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | EPC-EUROPEAN PATENT CONVENTION | 15165675.8         | 4/29/2015        | 8/16/2017   | EP2940099     |

## Patents of Current Lighting Solutions, LLC

| CO | Case Status | Title  | Filing Description             | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------|--------------------|------------------|-------------|---------------|
| GB | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | EPC-EUROPEAN PATENT CONVENTION | 15165675.8         | 4/29/2015        | 8/16/2017   | EP2940099     |
| NL | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | EPC-EUROPEAN PATENT CONVENTION | 15165675.8         | 4/29/2015        | 8/16/2017   | EP2940099     |
| AU | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 2015202021         | 4/21/2015        |             |               |
| BR | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 102015008716-0     | 4/17/2015        |             |               |
| CA | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 2888734            | 4/23/2015        |             |               |
| CN | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 201510216824.7     | 4/30/2015        |             |               |
| EP | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 15165675.8         | 4/29/2015        | 8/16/2017   | EP2940099     |
| IN | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 1934/CHE/2015      | 4/15/2015        |             |               |
| JP | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 2015-088859        | 4/24/2015        |             |               |
| US | Issued      | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | PRI-PRIORITY APPLICATION       | 14/267449          | 5/1/2014         | 1/17/2017   | US9546318B2   |
| AU | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING      | 2015202034         | 4/22/2015        |             |               |

## Patents of Current Lighting Solutions, LLC

| CO | Case Status | Title  | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|---------------------------|--------------------|------------------|-------------|---------------|
| MY | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 2015000874         | 4/6/2015         |             |               |
| IN | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 2140/CHE/2015      | 4/27/2015        |             |               |
| EP | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 15165904.2         | 4/30/2015        |             |               |
| CN | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 201510215473.8     | 4/30/2015        |             |               |
| JP | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 2015-087995        | 4/23/2015        |             |               |
| KR | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 10-2015-0061564    | 4/30/2015        |             |               |
| TW | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 104112249          | 4/16/2015        |             |               |
| CA | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 2888731            | 4/23/2015        |             |               |
| MX | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | MX/A/2015/005581   | 4/30/2015        |             |               |
| BR | Filed       | PROCESS FOR PREPARING RED-EMITTING PHOSPHORS                   | ORD-UTILITY PATENT FILING | 102015009499-0     | 4/28/2015        |             |               |
| IN | Filed       | MOISTURE RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PRI-PRIORITY APPLICATION  | 6152/CHE/2013      | 12/30/2013       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description                   | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|--------------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PCT-PATENT COOPERATION TREATY        | 112016015280-8     | 6/29/2016        |             |               |
| AU | Issued      | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PCT-PATENT COOPERATION TREATY        | 2014374223         | 6/24/2016        |             | AU2014374223  |
| MY | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PCT-PATENT COOPERATION TREATY        | PI2016701852       | 5/23/2016        |             |               |
| TH | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PCT-PATENT COOPERATION TREATY        | 1601003849         | 6/28/2016        |             |               |
| PH | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PCT-PATENT COOPERATION TREATY        | 1-2016-500972      | 5/25/2016        |             |               |
| US | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | PCT-PATENT COOPERATION TREATY        | 15/109267          | 6/30/2016        |             |               |
| DE | Issued      | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 14828089.4         | 6/15/2016        | 2/21/2018   | EP3090030     |
| NL | Issued      | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 14828089.4         | 6/15/2016        | 2/21/2018   | EP3090030     |
| FR | Issued      | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 14828089.4         | 6/15/2016        | 2/21/2018   | EP3090030     |
| GB | Issued      | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | EPP-EUROPEAN PATENT - PCT ORIGINATED | 14828089.4         | 6/15/2016        | 2/21/2018   | EP3090030     |
| TW | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS | ORD-UTILITY PATENT FILING            | 103143909          | 12/16/2014       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| EP | Issued      | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS                  | PCT-PATENT COOPERATION TREATY | 14828089.4         | 6/15/2016        | 2/21/2018   | EP3090030     |
| JP | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS                  | PCT-PATENT COOPERATION TREATY | 2016-542720        | 6/23/2016        |             |               |
| KR | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS                  | PCT-PATENT COOPERATION TREATY | 10-2016-7019884    | 7/20/2016        |             |               |
| CA | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS                  | PCT-PATENT COOPERATION TREATY | 2934249            | 6/16/2016        |             |               |
| MX | Filed       | MOISTURE-RESISTANT PHOSPHOR COMPOSITIONS AND ASSOCIATE METHODS                  | PCT-PATENT COOPERATION TREATY | MX/A/2016/008668   | 6/29/2016        |             |               |
| IN | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201647022392       | 6/30/2016        |             |               |
| JP | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2016-537527        | 6/8/2016         |             |               |
| KR | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 10-2016-7018760    | 7/12/2016        |             |               |
| MY | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2016701626         | 5/5/2016         |             |               |
| MX | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | MX/A/2016/007678   | 6/10/2016        |             |               |
| PH | Unfiled     | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |



**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| TH | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1601003462         | 6/13/2016        |             |               |
| US | Issued      | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | ORD-UTILITY PATENT FILING     | 14/568396          | 12/12/2014       | 7/12/2016   | US9388336B2   |
| TW | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | ORD-UTILITY PATENT FILING     | 103143523          | 12/12/2014       |             |               |
| AU | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2014362239         | 5/30/2016        |             |               |
| BR | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 112016012238-0     | 5/30/2016        |             |               |
| CA | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2932616            | 6/2/2016         |             |               |
| CN | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201480068017.9     | 6/13/2016        |             |               |
| EP | Filed       | PROCESSES FOR PREPARING COLOR STABLE MANGANESE-DOPED COMPLEX FLUORIDE PHOSPHORS | PCT-PATENT COOPERATION TREATY | 14821427.3         | 6/9/2016         |             |               |
| US | Issued      | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                            | PRI-PRIORITY APPLICATION      | 14/568170          | 12/12/2014       | 1/3/2017    | US9537061     |
| BR | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                            | PCT-PATENT COOPERATION TREATY | 112017011463-1     | 5/31/2017        |             |               |
| AU | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                            | PCT-PATENT COOPERATION TREATY | 2015361064         | 5/30/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| MY | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2017701909         | 5/24/2017        |             |               |
| IN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 201747022984       | 6/30/2017        |             |               |
| VN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 1201702490         | 6/30/2017        |             |               |
| TW | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | ORD-UTILITY PATENT FILING     | 104139746          | 11/27/2015       |             |               |
| EP | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 15816931.8         | 5/30/2017        |             |               |
| CN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 201580067683.5     | 6/12/2017        |             |               |
| JP | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2017-530189        | 6/6/2017         |             |               |
| KR | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 10-2017-7019058    | 7/10/2017        |             |               |
| CA | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 2969524            | 6/1/2017         |             |               |
| MX | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | MX/A/2017/007590   | 6/9/2017         |             |               |
| US | Issued      | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES        | PRI-PRIORITY APPLICATION      | 14/303020          | 6/12/2014        | 2/14/2017   | US9567516     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 112016027358-3     | 11/22/2016       |             |               |
| AU | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 2015274474         | 12/12/2016       |             |               |
| MY | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | PI 2016703989      | 10/31/2016       |             |               |
| IN | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 201747001162       | 1/11/2017        |             |               |
| TH | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 1601007318         | 12/8/2016        |             |               |
| PH | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 1-2016-502269      | 11/15/2016       |             |               |
| TW | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | ORD-UTILITY PATENT FILING     | 104118924          | 6/11/2015        |             |               |
| EP | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 15731791.8         | 12/5/2016        |             |               |
| CN | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 201580031387.X     | 12/12/2016       |             |               |
| JP | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 2016-571167        | 12/2/2016        |             |               |
| KR | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 10-2017-7000729    | 1/10/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| CA | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | 2951410            | 12/6/2016        |             |               |
| MX | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES | PCT-PATENT COOPERATION TREATY | MX/a/2016/016392   | 12/9/2016        |             |               |
| US | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS           | PRI-PRIORITY APPLICATION      | 14/302823          | 6/12/2014        | 7/5/2016    | US9385282B2   |
| AU | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | 2015274758         | 12/5/2016        |             |               |
| MY | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | PI 2016704474      | 12/1/2016        |             |               |
| IN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | 201747001163       | 1/11/2017        |             |               |
| VN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | 1201605165         | 12/29/2016       |             |               |
| EP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | 15795004.9         | 12/9/2016        |             |               |
| TW | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS           | ORD-UTILITY PATENT FILING     | 104118927          | 6/11/2015        | 3/21/2018   | TW618778      |
| CN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | 201580031379.5     | 12/12/2016       |             |               |
| JP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS           | PCT-PATENT COOPERATION TREATY | 2016-572305        | 12/8/2016        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title                                   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| KR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | 10-2017-7000734    | 1/10/2017        |             |               |
| CA | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | 29522250           | 12/6/2016        |             |               |
| MX | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | MX/a/2016/016390   | 12/9/2016        |             |               |
| BR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | 112016028806-8     | 12/8/2016        |             |               |
| US | Issued      | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PRI-PRIORITY APPLICATION      | 14/304098          | 6/13/2014        | 3/27/2018   | US9929319     |
| JP | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2016-570864        | 12/1/2016        |             |               |
| KR | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1020177001142      | 1/13/2017        |             |               |
| MY | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | PI 2016704109      | 11/8/2016        |             |               |
| MX | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | MX/a/2016/016393   | 12/9/2016        |             |               |
| PH | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1-2016-502268      | 11/15/2016       |             |               |
| TH | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1601007265         | 12/2/2016        |             |               |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title                                   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
| TW | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 104118925          | 6/11/2015        |             |               |
| AU | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2015274858         | 12/2/2016        |             |               |
| BR | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 112016028142-0     | 11/30/2016       |             |               |
| CA | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2951381            | 12/6/2016        |             |               |
| CN | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201580031761.6     | 12/13/2016       |             |               |
| EP | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 15794995.9         | 12/5/2016        |             |               |
| IN | Filed       | LED PACKAGE WITH RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201647040300       | 11/25/2016       |             |               |
| US | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS     | PR1-PRIORITY APPLICATION      | 14/302907          | 6/12/2014        | 6/21/2016   | US9371481B2   |
| BR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | 1120160279999      | 11/29/2016       |             |               |
| AU | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | 2015274585         | 11/28/2016       |             |               |
| MY | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS     | PCT-PATENT COOPERATION TREATY | PI 2016704277      | 11/18/2016       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| IN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 201747001164       | 1/11/2017        |             |               |
| TH | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 1601007110         | 11/28/2016       |             |               |
| PH | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 1-2016-502361      | 11/28/2016       |             |               |
| TW | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | ORD-UTILITY PATENT FILING     | 104119176          | 6/12/2015        |             |               |
| EP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 15795022.1         | 11/30/2016       |             |               |
| CN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 201580031443.X     | 12/12/2016       |             |               |
| JP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 2016-570793        | 12/1/2016        |             |               |
| KR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 1020177000883      | 1/11/2017        |             |               |
| CA | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | 2951717            | 12/8/2016        |             |               |
| MX | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS                      | PCT-PATENT COOPERATION TREATY | MX/a/2016/016391   | 12/9/2016        |             |               |
| US | Issued      | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PRI-PRIORITY APPLICATION      | 14/337984          | 7/22/2014        | 12/6/2016   | US9512357B2   |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| BR | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 112017001130-1     | 1/19/2017        |             |               |
| AU | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 2015294337         | 1/20/2017        |             |               |
| MY | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | PI 2017700177      | 1/16/2017        |             |               |
| IN | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 201747004025       | 2/3/2017         |             |               |
| TH | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 1701000306         | 1/20/2017        |             |               |
| PH | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 1-2017-500251      | 2/10/2017        |             |               |
| TW | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | ORD-UTILITY PATENT FILING     | 104123561          | 7/21/2015        |             |               |
| EP | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 15745673.2         | 1/23/2017        |             |               |
| CN | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 201580051217.8     | 3/22/2017        |             |               |
| JP | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 2017-503101        | 1/19/2017        |             |               |
| KR | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 1020177004499      | 2/17/2017        |             |               |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| CA | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | 2955799            | 1/19/2017        |             |               |
| MX | Filed       | RED-EMITTING PHOSPHORS, ASSOCIATED PROCESSES AND DEVICES | PCT-PATENT COOPERATION TREATY | MX/a/2017/001015   | 1/20/2017        |             |               |
| IN | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PRI-PRIORITY APPLICATION      | 1093/CHE/2015      | 3/5/2015         |             |               |
| US | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | 15/555719          | 9/5/2017         |             |               |
| TW | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | ORD-UTILITY PATENT FILING     | 105105322          | 2/23/2016        |             |               |
| CN | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | 201680013986.3     | 9/5/2017         |             |               |
| EP | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | 16719567.6         | 9/4/2017         |             |               |
| JP | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | 2017-544656        | 8/22/2017        |             |               |
| KR | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | 10-2017-7027513    | 9/27/2017        |             |               |
| MY | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | P12017702734       | 7/26/2017        |             |               |
| VN | Filed       | RED-EMITTING PHOSPHORS, PROCESSES AND DEVICES            | PCT-PATENT COOPERATION TREATY | 1-2017-03217       | 8/21/2017        |             |               |

**Patents of Current Lighting Solutions, LLC**

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| TW | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | ORD-UTILITY PATENT FILING     | 105113753          | 5/3/2016         |             |               |
| US | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | 15/574539          | 11/16/2017       |             |               |
| EP | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | 15727167.7         | 11/9/2017        |             |               |
| CN | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | 201580080098.9     | 11/17/2017       |             |               |
| JP | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | 2017-558370        | 11/7/2017        |             |               |
| KR | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | 1020177036189      | 12/15/2017       |             |               |
| MY | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | P12017703612       | 9/26/2017        |             |               |
| VN | Filed       | PROCESS FOR IMPROVED HALIDE MATERIALS                | PCT-PATENT COOPERATION TREATY | 1-2017-04824       | 11/30/2017       |             |               |
| US | Issued      | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | CIP-CONTINUATION IN PART      | 14/747174          | 6/23/2015        | 2/13/2018   | US9890328     |
| TW | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | ORD-UTILITY PATENT FILING     | 105117640          | 6/3/2016         |             |               |
| EP | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF | PCT-PATENT COOPERATION TREATY | 16727092.5         | 11/30/2017       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| CN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                                 | PCT-PATENT COOPERATION TREATY | 201680036911.7     | 12/22/2017       |             |               |
| JP | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                                 | PCT-PATENT COOPERATION TREATY | 2017-564562        | 12/12/2017       |             |               |
| KR | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                                 | PCT-PATENT COOPERATION TREATY | 1020187001985      | 1/22/2018        |             |               |
| MY | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                                 | PCT-PATENT COOPERATION TREATY | P12017703925       | 10/17/2017       |             |               |
| VN | Filed       | PHOSPHOR COMPOSITIONS AND LIGHTING APPARATUS THEREOF                                 | PCT-PATENT COOPERATION TREATY | 1201800029         | 1/3/2018         |             |               |
| IN | Filed       | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PRI-PRIORITY APPLICATION      | 6365/CHE/2015      | 11/26/2015       |             |               |
| US | Filed       | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 15/768562          | 4/16/2018        |             |               |
| TW | Filed       | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 105137704          | 11/17/2016       |             |               |
| CN | Unfiled     | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| JP | Unfiled     | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| KR | Unfiled     | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| MY | Filed       | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | PI2018701408       | 4/9/2018         |             |               |
| VN | Unfiled     | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| EP | Unfiled     | PROCESSES FOR SYNTHESIZING RED-EMITTING PHOSPHORS AND RELATED RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY |                    |                  |             |               |
| US | Issued      | COLOR STABLE RED-EMITTING PHOSPHORS  | CIP-CONTINUATION IN PART      | 14/549847          | 11/21/2014       | 6/28/2016   | US9376615B2   |
| JP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | PCT-PATENT COOPERATION TREATY | 2017-525904        | 5/12/2017        |             |               |
| KR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | PCT-PATENT COOPERATION TREATY | 10-2017-7015975    | 6/12/2017        |             |               |
| MY | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | PCT-PATENT COOPERATION TREATY | PI 2017701252      | 4/10/2017        |             |               |
| MX | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | PCT-PATENT COOPERATION TREATY | MX/A/2017/006661   | 5/19/2017        |             |               |
| VN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | PCT-PATENT COOPERATION TREATY | 1-2017-02001       | 5/29/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title                               | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|-------------------------------------|-------------------------------|--------------------|------------------|-------------|---------------|
| TW | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 104138604          | 11/20/2015       |             |               |
| AU | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2015350281         | 5/9/2017         |             |               |
| BR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 112017008966-1     | 4/28/2017        |             |               |
| CA | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2967642            | 5/11/2017        |             |               |
| CN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201580062970.7     | 5/19/2017        |             |               |
| EP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 15797819.8         | 5/15/2017        |             |               |
| IN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201747017319       | 5/17/2017        |             |               |
| BR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 112017017718-8     | 8/18/2017        |             |               |
| AU | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2016220527         | 8/7/2017         |             |               |
| MY | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2017702689         | 7/21/2017        |             |               |
| IN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 201747032400       | 9/13/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title                               | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|-------------------------------------|-------------------------------|--------------------|------------------|-------------|---------------|
| VN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 1-2017-03251       | 8/23/2017        |             |               |
| EP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 16708749.3         | 8/3/2017         |             |               |
| US | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 14/950679          | 11/24/2015       | 5/29/2018   | US9982190     |
| TW | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 105104315          | 2/15/2016        |             |               |
| CN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 20168001147.8      | 8/18/2017        |             |               |
| JP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2017-541767        | 8/8/2017         |             |               |
| KR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 10-2017-7026538    | 9/20/2017        |             |               |
| CA | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 2976335            | 8/10/2017        |             |               |
| MX | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | MX/A/2017/010695   | 8/18/2017        |             |               |
| EP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | PCT-PATENT COOPERATION TREATY | 16723922.7         | 11/28/2017       |             |               |
| US | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 14/950644          | 11/24/2015       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title  | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|--|-------------------------------|--------------------|------------------|-------------|---------------|
| TW | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | ORD-UTILITY PATENT FILING     | 105115997          | 5/23/2016        |             |               |
| CN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | PCT-PATENT COOPERATION TREATY | 201680032287.3     | 12/1/2017        |             |               |
| JP | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | PCT-PATENT COOPERATION TREATY | 2017-560665        | 11/21/2017       |             |               |
| KR | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | PCT-PATENT COOPERATION TREATY | 1020177037736      | 12/28/2017       |             |               |
| MY | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | PCT-PATENT COOPERATION TREATY | P12017703725       | 10/2/2017        |             |               |
| VN | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | PCT-PATENT COOPERATION TREATY | 1201704617         | 11/20/2017       |             |               |
| WO | Filed       | COATED MANGANESE DOPED PHOSPHORS                 | ORD-UTILITY PATENT FILING     | PCT/US17/39439     | 6/27/2017        |             |               |
| US | Filed       | CORE-SHELL MATERIALS WITH RED-EMITTING PHOSPHORS | PRI-PRIORITY APPLICATION      | 15/238989          | 8/17/2016        |             |               |
| WO | Filed       | CORE-SHELL MATERIALS WITH RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | PCT/US2017/051706  | 9/15/2017        |             |               |
| TW | Filed       | CORE-SHELL MATERIALS WITH RED-EMITTING PHOSPHORS | ORD-UTILITY PATENT FILING     | 106131401          | 9/13/2017        |             |               |
| US | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS              | PRO-PROVISIONAL               | 62/472135          | 3/16/2017        |             |               |

## Patents of Current Lighting Solutions, LLC

| CG  | Case Status | Title  | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|-----|-------------|--|---------------------------|--------------------|------------------|-------------|---------------|
| US  | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | ORD-UTILITY PATENT FILING | 15/709557          | 9/20/2017        |             |               |
| W/O | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | ORD-UTILITY PATENT FILING | PCT/US2018/016360  | 2/1/2018         |             |               |
| TW  | Filed       | COLOR STABLE RED-EMITTING PHOSPHORS  | ORD-UTILITY PATENT FILING | 107107021          | 3/2/2018         |             |               |
| US  | Filed       | PURIFIED POTASSIUM HEXAFLUOROMANGANATE AND METHODS FOR PURIFYING POTASSIUM HEXAFLUOROMANGANATE | PRI-PRIORITY APPLICATION  | 15/241758          | 8/19/2016        |             |               |
| W/O | Filed       | PURIFIED POTASSIUM HEXAFLUOROMANGANATE AND METHODS FOR PURIFYING POTASSIUM HEXAFLUOROMANGANATE | ORD-UTILITY PATENT FILING | PCT/US2017/042721  | 7/19/2017        |             |               |
| TW  | Filed       | PURIFIED POTASSIUM HEXAFLUOROMANGANATE AND METHODS FOR PURIFYING POTASSIUM HEXAFLUOROMANGANATE | ORD-UTILITY PATENT FILING | 106126166          | 8/3/2017         |             |               |
| US  | Issued      | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHORS                                    | CIP-CONTINUATION IN PART  | 15/197897          | 6/30/2016        | 1/16/2018   | US9868898     |
| W/O | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHORS                                    | ORD-UTILITY PATENT FILING | PCT/US2017/051038  | 9/12/2017        |             |               |
| TW  | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHORS                                    | ORD-UTILITY PATENT FILING | 106131402          | 9/13/2017        |             |               |
| US  | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES  | CIP-CONTINUATION IN PART  | 15/171098          | 6/2/2016         |             |               |



## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| WO | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES   | ORD-UTILITY PATENT FILING | PCT/US2017/034477  | 5/25/2017        |             |               |
| TW | Filed       | RED-EMITTING PHOSPHORS AND ASSOCIATED DEVICES   | ORD-UTILITY PATENT FILING | 106118332          | 6/2/2017         |             |               |
| US | Filed       | DEVICES CONTAINING A REMOTE PHOSPHOR PACKAGE WITH RED LINE EMITTING PHOSPHORS AND GREEN EMITTING QUANTUM DOTS | ORD-UTILITY PATENT FILING | 15/370762          | 12/6/2016        |             |               |
| WO | Filed       | DEVICES CONTAINING A REMOTE PHOSPHOR PACKAGE WITH RED LINE EMITTING PHOSPHORS AND GREEN EMITTING QUANTUM DOTS | PRI-PRIORITY APPLICATION  | PCT/US17/27209     | 4/12/2017        |             |               |
| IN | Filed       | COATED RED LINE EMITTING PHOSPHORS  | PRI-PRIORITY APPLICATION  | 201641039267       | 11/17/2016       |             |               |
| WO | Filed       | COATED RED LINE EMITTING PHOSPHORS  | ORD-UTILITY PATENT FILING | PCT/US17/61702     | 11/15/2017       |             |               |
| TW | Filed       | COATED RED LINE EMITTING PHOSPHORS  | ORD-UTILITY PATENT FILING | 106139674          | 11/16/2017       |             |               |
| US | Unfiled     | COATED RED LINE EMITTING PHOSPHORS  | ORD-UTILITY PATENT FILING |                    |                  |             |               |
| US | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHOR PARTICLES HAVING SMALL PARTICLE SIZE               | ORD-UTILITY PATENT FILING | 15/829878          | 12/2/2017        |             |               |
| WO | Filed       | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHOR PARTICLES HAVING SMALL PARTICLE SIZE               | ORD-UTILITY PATENT FILING | PCT/US17/65795     | 12/12/2017       |             |               |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description            | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|-------------------------------|--------------------|------------------|-------------|---------------|
|    |             | PROCESSES FOR PREPARING COLOR STABLE RED-EMITTING PHOSPHOR PARTICLES HAVING SMALL PARTICLE SIZE | ORD-UTILITY PATENT FILING     | 106143544          | 12/12/2017       |             |               |
| TW | Filed       | LIGHTING APPARATUS INCLUDING COLOR STABLE RED EMITTING PHOSPHORS AND QUANTUM DOTS               | CIP-CONTINUATION IN PART      | 14/962624          | 12/8/2015        |             |               |
| US | Filed       | METHODS FOR FABRICATING DEVICES CONTAINING RED LINE EMITTING PHOSPHORS                          | PRI-PRIORITY APPLICATION      | 15/270657          | 9/20/2016        | 4/10/2018   | US9938457     |
| US | Issued      | PROCESSES FOR PREPARING STABLE RED-EMITTING PHOSPHORS   | ORD-UTILITY PATENT FILING     | 15/794759          | 10/26/2017       |             |               |
| US | Filed       | MANGANESE-DOPED PHOSPHOR MATERIALS FOR HIGH POWER DENSITY APPLICATIONS                          | PCT-PATENT COOPERATION TREATY | 15/743435          | 1/10/2018        |             |               |
| WO | Filed       | MANGANESE-DOPED PHOSPHOR MATERIALS FOR HIGH POWER DENSITY APPLICATIONS                          | ORD-UTILITY PATENT FILING     | PCT/US2017/031654  | 5/9/2017         |             |               |
| CN | Issued      | LUMINAIRE   | DES-DESIGN                    | 200630010410       | 4/4/2006         | 3/21/2007   | CN3624666     |
| CN | Issued      | ROADWAY   | DES-DESIGN                    | 200530169020.3     | 12/15/2005       | 10/6/2006   | CN3567460     |
| CN | Issued      | BEAM TRIMMER  | DES-DESIGN                    | 200530018550.8     | 6/15/2005        | 4/19/2006   | CN3521572     |
| US | Filed       | MOTION-BASED MATERIALS MANAGEMENT SYSTEM AND METHOD   | PRO-PROVISIONAL               | 62/577664          | 10/26/2017       |             |               |
| US | Issued      | LED packaging methods and LEDbased lighting products  | PRI-PRIORITY APPLICATION      | 12/198662          | 8/26/2008        | 9/7/2010    | US7791089     |

## Patents of Current Lighting Solutions, LLC

| CG | Case Status | Title   | Filing Description              | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | LED packaging methods and LEDbased lighting products  | DIV-DIVISIONAL FILING           | 12/843194          | 7/26/2010        | 5/24/2011   | US7947516     |
| US | Issued      | LED packaging methods and LEDbased lighting products  | CIP-CONTINUATION IN PART        | 12/857472          | 8/16/2010        | 11/15/2011  | US8058659     |
| US | Issued      | SYSTEMS AND METHODS FOR CONVEYING INFORMATION USING A CONTROL SIGNAL REFERENCED TO ALTERNATING CURRENT AC POWER | CON-CONTINUATION                | 13/598195          | 8/29/2012        | 8/6/2013    | US8502649     |
| US | Issued      | LEDBased Lighting Power Supplies With Power Factor Correction And Dimming Control                               | ORD-UTILITY PATENT FILING       | 12/859717          | 8/19/2010        | 3/5/2013    | US8390214     |
| US | Issued      | HIGH BAY LED LIGHT FIXTURE  | PDS-PRIORITY DESIGN APPLICATION | 29/318524          | 5/21/2008        | 5/19/2009   | USD592785     |
| US | Issued      | LED light fixture   | PDS-PRIORITY DESIGN APPLICATION | 29/318648          | 5/23/2008        | 5/19/2009   | USD592786     |
| US | Issued      | High bay LED light fixture  | PDS-PRIORITY DESIGN APPLICATION | 29/325189          | 9/26/2008        | 2/8/2011    | USD632418     |
| US | Issued      | LED LIGHT FIXTURE   | PDS-PRIORITY DESIGN APPLICATION | 29/391284          | 5/5/2011         | 2/18/2014   | USD699886     |
| US | Issued      | LED LIGHT FIXTURES  | DDV-DESIGN DIVISIONAL           | 29/482308          | 2/17/2014        | 9/30/2014   | USD714486     |
| US | Issued      | LED Light Fixture   | PDS-PRIORITY DESIGN APPLICATION | 29/449296          | 3/14/2013        | 6/2/2015    | USD731103     |
| US | Issued      | Glare Shield For LED Light Fixture  | DDV-DESIGN DIVISIONAL           | 29/524696          | 4/22/2015        | 12/13/2016  | USD774235S1   |

## Patents of Current Lighting Solutions, LLC

| CO | Case Status | Title   | Filing Description        | Application Number | Application Date | Patent Date | Patent Number |
|----|-------------|---|---------------------------|--------------------|------------------|-------------|---------------|
| US | Issued      | Thermal Management of LED Based Lighting System   | CON-CONTINUATION          | 12/897593          | 10/4/2010        | 9/6/2011    | US8011799     |
| US | Issued      | THERMAL MANAGEMENT OF LEDBASED LIGHTING SYSTEMS   | ORD-UTILITY PATENT FILING | 11/735903          | 4/16/2007        | 10/5/2010   | US7806574     |
| US | Issued      | FLOW-THROUGH LED LIGHTING SYSTEM  | ORD-UTILITY PATENT FILING | 11/959335          | 12/18/2007       | 8/13/2013   | US8506121     |
| US | Issued      | THERMAL MANAGEMENT OF LEDBASED LIGHTING SYSTEMS   | CIP-CONTINUATION IN PART  | 12/431674          | 4/28/2009        | 4/23/2013   | US8425085     |
| US | Issued      | LED ChipBased Lighting Products and Methods of Building   | CIP-CONTINUATION IN PART  | 13/718755          | 12/18/2012       | 10/15/2013  | US8558255     |
| US | Issued      | METHODS OF INTEGRATING LED CHIPS WITH HEAT SINKS AND LEDBASED LIGHTING ASSEMBLIES MADE THEREBY  | CIP-CONTINUATION IN PART  | 13/802444          | 3/13/2013        | 7/7/2015    | US9076951     |
| US | Issued      | Methods of Integrating LED Chips With Heat Sinks and LED Based Lighting Assemblies Made Thereby | PR1-PRIORITY APPLICATION  | 13/802401          | 3/13/2013        | 3/17/2015   | US8981629     |
| US | Filed       | LAMP  | DES-DESIGN                | 29/626301          | 11/16/2017       |             |               |

**Schedule B**  
**Trademarks**

See attached.

**Trademarks of Current Lighting Solutions, LLC**

| <b>MARK</b>   | <b>COUNTRY</b>           | <b>SER. NO.</b> | <b>REG. NO.</b> |
|---|--------------------------|-----------------|-----------------|
| ACE   | United States of America | 87195118        | 5313308         |
| ALGLAS  | Australia                | 416604          | 416604          |
| ALGLAS  | China                    | 227487          | 227487          |
| ALGLAS  | Singapore                | T8405428D       | T8405428D       |
| ALGLAS  | Taiwan                   | 73049884        | 286291          |
| ALGLAS  | United States of America | 72268042        | 881579          |
| ALGLAS (ENGLISH)<br>ALGLAS (KATAKANA<br>CHARACTERS) | Japan                    | S52-073800      | 1449357         |
| ALLSITES  | Argentina                | 3665202         |                 |
| ALLSITES  | Argentina                | 3665201         |                 |
| ALLSITES  | Brazil                   | 913800236       |                 |
| ALLSITES  | Brazil                   | 913800260       |                 |
| ALLSITES  | Canada                   | 1857609         |                 |
| ALLSITES  | EUTM                     | 17155227        | 17155227        |
| ALLSITES  | Mexico                   | 1979275         | 1921192         |
| ALLSITES  | Mexico                   | 1979276         | 1847183         |
| ALLSITES  | Peru                     | 7292302017      | 19641           |
| ALLSITES  | United States of America | 87582036        |                 |
| ARCSTREAM   | Australia                | 656550          | 656550          |
| ARCSTREAM   | Bangladesh               | 45329           | 45329           |

|               |                          |               |             |
|---------------|--------------------------|---------------|-------------|
| ARCSTREAM     | Canada                   | 794406        | 461990      |
| ARCSTREAM     | Denmark                  | VA199508452   | VR199601908 |
| ARCSTREAM     | France                   | 95588620      | 95588620    |
| ARCSTREAM     | Germany                  | 395386802     | 39538680    |
| ARCSTREAM     | India                    | 680932        | 680932      |
| ARCSTREAM     | Italy                    | MI1996C010088 | 1210982     |
| ARCSTREAM     | Mexico                   | 244482        | 507444      |
| ARCSTREAM     | Spain                    | 1987322       | 1987322     |
| ARCSTREAM     | Sri Lanka                | 76687         | 76687       |
| ARCSTREAM     | Sweden                   | 9512718       | 312838      |
| ARIZE         | Brazil                   | 911176330     | 911176330   |
| ARIZE         | Canada                   | 1786718       |             |
| ARIZE         | China                    | 20627690      | 20627690    |
| ARIZE         | EUTM                     | 15552813      | 15552813    |
| ARIZE         | Mexico                   | 1761143       | 1688196     |
| ARIZE         | United States of America | 87067695      | 5387512     |
| ARIZE ELEMENT | United States of America | 87549593      | 5676084     |
| BREADLEAF     | China                    | 9723365       | 9723365     |
| CITYIQ        | Canada                   | 1825129       |             |
| CITYIQ        | Mexico                   | 1860515       | 1766490     |
| CITYIQ        | Mexico                   | 1860522       | 1976594     |
| CITYIQ        | United States of America | 87350985      | 5,546,756   |
| CODE CONTROL  | Canada                   | 1302109       | TMA691366   |

|                             |                                |               |              |
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| CONSTANTCOLOR               | Australia                      | 649855        | 649855       |
| CONSTANTCOLOR               | Indonesia                      | D002011035912 | IDM000412974 |
| CONSTANTCOLOR               | Korea - Republic of<br>(South) | 40201145924   | 400939549    |
| CONSTANTCOLOR               | Malaysia                       | 2011015507    | 2011015507   |
| CONSTANTCOLOR               | New Zealand                    | 847982        | 847982       |
| CONSTANTCOLOR               | Singapore                      | T1111597F     | T1111597F    |
| CONSTANTCOLOR               | Taiwan                         | 100042927     | 1517278      |
| CONSTANTCOLOR               | United States of<br>America    | 74190883      | 1766646      |
| CONSTANTCOLOR               | Vietnam                        | 4201117393    | 191662       |
| CONSTANTCOLOR<br>(STYLISED) | Hong Kong                      | 302013074     | 302013074    |
| CURRENT                     | Brazil                         | 913704733     | 913704733    |
| CURRENT                     | Brazil                         | 913704750     | 913704750    |
| CURRENT                     | Brazil                         | 913704784     | 913704784    |
| CURRENT                     | Brazil                         | 913704806     | 913704806    |
| CURRENT                     | Brazil                         | 913704822     | 913704822    |
| CURRENT                     | Canada                         | 1867210       |              |
| CURRENT                     | EUTM                           | 17452351      |              |
| CURRENT                     | Mexico                         | 1971089       |              |
| CURRENT                     | Mexico                         | 1971090       | 1847935      |
| CURRENT                     | Mexico                         | 1971091       | 1847936      |
| CURRENT                     | Mexico                         | 1971087       | 1847934      |
| DUROGLOW                    | Spain                          | 1055464       | 1055464      |
| ECOLUX                      | Mexico                         | 370403        | 657491       |



|        |                             |               |              |
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| ECOLUX | United States of America    | 75157145      | 2186490      |
| EVOLVE | Argentina                   | 2941652       | 2373381      |
| EVOLVE | Australia                   | 1193360       | 1193360      |
| EVOLVE | Brazil                      | 830375805     | 830375805    |
| EVOLVE | Canada                      | 1450253       | TMA820517    |
| EVOLVE | Chile                       | 876529        | 885264       |
| EVOLVE | China                       | 1193360       | 1193360      |
| EVOLVE | Colombia                    | 1193360       | 1193360      |
| EVOLVE | Guatemala                   | M0058962009   | 167744       |
| EVOLVE | India                       | 1868860       | 1868860      |
| EVOLVE | India                       | 1193360       | 1193360      |
| EVOLVE | Indonesia                   | D002009032818 | IDM000298298 |
| EVOLVE | Jamaica                     | 54523         | 54523        |
| EVOLVE | Korea - Republic of (South) | 1193360       | 1193360      |
| EVOLVE | Malaysia                    | 9017054       | 9017054      |
| EVOLVE | Mexico                      | 1193360       | 1193360      |
| EVOLVE | New Zealand                 | 1193360       | 1193360      |
| EVOLVE | Panama                      | 184801        | 184801       |
| EVOLVE | Peru                        | 398272        | 158837       |
| EVOLVE | Philippines                 | 1193360       | 1193360      |
| EVOLVE | Singapore                   | 1193360       | 1193360      |
| EVOLVE | Taiwan                      | 98050071      | 1414145      |
| EVOLVE | Thailand                    | 745958        | TM325927     |

|                   |                          |               |           |
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| EVOLVE            | United States of America | 77375301      | 3747331   |
| EVOLVE            | Venezuela                | 171082010     | P313052   |
| EVOLVE            | Vietnam                  | 1193360       | 1193360   |
| EVOLVE            | WIPO                     | 1193360       | 1193360   |
| EVOLVE (STYLISED) | Hong Kong                | 301438452     | 301438452 |
| EYES ON TRACK     | EUTM                     | 15865711      | 15865711  |
| EYES ON TRACK     | United Kingdom           | 3187886       | 3187886   |
| EYES ON TRACK     | United States of America | 87187373      |           |
| E-Z LUX           | United States of America | 73048566      | 1024164   |
| FILTERGLOW        | Italy                    | MI1970V018546 | 1291756   |
| FILTERGLOW        | Spain                    | 1055466       | 1055466   |
| GARAGE-GARD       | Spain                    | 1929391       | 1929391   |
| GHB               | United States of America | 73740531      | 1552751   |
| INFUSION          | Brazil                   | 830497358     | 830497358 |
| INFUSION          | Canada                   | 1456887       | TMA827408 |
| INFUSION          | China                    | 8028217       | 8028217   |
| INFUSION          | EUTM                     | 8811721       | 8811721   |
| INFUSION          | Japan                    | 2010-002276   | 5338140   |
| INFUSION          | Mexico                   | 1060670       | 1153807   |
| INFUSION          | United States of America | 77306300      | 3923497   |
| INTRINSX          | United States of America | 85554560      | 4314481   |
| LIGHTLOGIX        | EUTM                     | 15269871      | 15269871  |

|             |                          |               |            |
|-------------|--------------------------|---------------|------------|
| LIGHTLOGIX  | Kuwait                   | 181295        | 154297     |
| LIGHTLOGIX  | Norway                   | 201607027     | 289668     |
| LIGHTLOGIX  | Qatar                    | 106990        | 106990     |
| LIGHTLOGIX  | Russian Federation       | 2016721884    | 612003     |
| LIGHTLOGIX  | Saudi Arabia             | 1437020936    | 1437020936 |
| LIGHTLOGIX  | Turkey                   | 201654103     | 201654103  |
| LIGHTLOGIX  | United Arab Emirates     | 255800        | 255800     |
| LIGHTSWEEP  | United States of America | 85517916      | 4296432    |
| LIGHTX      | Canada                   | 1323186       | TMA699812  |
| LUMINATION  | United States of America |               | 3603057    |
| LUMENCHOICE | Canada                   | 1876527       |            |
| LUMENCHOICE | United States of America | 87746579      | 5,639,521  |
| MOD-U-LINE  | Mexico                   | 11207         | 325135     |
| MOD-U-LINE  | Peru                     | 5746732014    | 54260      |
| MOD-U-LINE  | United States of America | 73180988      | 1137936    |
| MULTIVAPOR  | EUTM                     | 12393765      | 12393765   |
| MULTI-VAPOR | Benelux                  | 524440        | 301921     |
| MULTI-VAPOR | China                    | 228571        | 228571     |
| MULTI-VAPOR | EUTM                     | 15293822      | 15293822   |
| MULTI-VAPOR | Germany                  |               | 887249     |
| MULTI-VAPOR | Germany                  |               | DD653357   |
| MULTI-VAPOR | Italy                    | MI1971C000001 | 1409147    |
| MULTI-VAPOR | Italy                    | MI1991C001294 | 621503     |

|              |                             |               |          |
|--------------|-----------------------------|---------------|----------|
| MULTI-VAPOR  | Korea - Republic of (South) | 4.01983E+12   | 107252   |
| MULTI-VAPOR  | Peru                        | 5746722014    | 54256    |
| MULTI-VAPOR  | Spain                       | 576850        | 576850   |
| MULTI-VAPOR  | Switzerland                 | 01088/1991    | P-387833 |
| MULTI-VAPOR  | United States of America    | 72205278      | 820924   |
| OKOLORLUX    | Australia                   | 217197        | 217197   |
| PERMA-GARD   | United States of America    | 73740530      | 1540355  |
| POWER GROOVE | Germany                     | W64912        | DD653490 |
| POWER GROOVE | Germany                     |               | 810711   |
| POWER GROOVE | Italy                       | MI2015C000174 | 1637060  |
| POWER GROOVE | Mexico                      | 155008        | 239602   |
| POWER GROOVE | South Africa                |               | 650508   |
| POWER GROOVE | Switzerland                 | 00221/1985    | 336404   |
| POWER GROOVE | United States of America    | 72086958      | 706579   |
| PROLINE      | United States of America    | 78377097      | 3018636  |
| PROLINE      | United States of America    | 78352339      | 2917477  |
| PRO-LINE     | United States of America    | 75389493      | 2325186  |
| PROSYS       | United States of America    | 76099257      | 2747833  |
| PULSEARC     | United States of America    | 75290545      | 2406576  |
| QUARTZLINE   | Korea - Republic of (South) | 4.01988E+12   | 190296   |

|            |                             |             |             |
|------------|-----------------------------|-------------|-------------|
| QUARTZLINE | Peru                        | 574674-2014 | 54258       |
| QUARTZLINE | Sweden                      | 01-46480    | 146480      |
| QUARTZLINE | United States of America    | 72091372    | 710836      |
| RADIANTRED | Australia                   | 1800205     | 1800205     |
| RADIANTRED | Brazil                      | 912365153   | 912365153   |
| RADIANTRED | Brazil                      | 912365196   | 912365196   |
| RADIANTRED | Canada                      | 1804186     |             |
| RADIANTRED | France                      | 174334586   | 174334586   |
| RADIANTRED | Italy                       | 3.02017E+14 | 3.02017E+14 |
| RADIANTRED | Japan                       | 2016-106203 | 5945050     |
| RADIANTRED | Korea - Republic of (South) | 40201692262 | 401260735   |
| RADIANTRED | Spain                       | 3649737     | 3649737     |
| RADIANTRED | Taiwan                      | 105058060   | 1862964     |
| RADIANTRED | United States of America    | 87169040    |             |
| SBF        | United States of America    | 73521391    | 1360397     |
| SELECT TX  | United States of America    | 87357843    |             |
| SKYGARD    | United States of America    | 78078190    | 2807401     |
| STARCOAT   | Australia                   | 833020      | 833020      |
| STARCOAT   | EUTM                        | 1628023     | 1628023     |
| STARCOAT   | India                       | 920104      | 920104      |
| STARCOAT   | Japan                       | 2000-077108 | 4566513     |

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|---------------------------------|--------------------------|-------------|-----------|
| STARCOAT                        | Kuwait                   | 50543       | 41990     |
| STARCOAT                        | Norway                   | 200004879   | 205562    |
| STARCOAT                        | Oman                     | 22415       | 22415     |
| STARCOAT                        | Saudi Arabia             | 64050       | 57066     |
| STARCOAT                        | South Africa             | 200007782   | 200007782 |
| STARCOAT                        | United Arab Emirates     | 36468       | 29522     |
| STARCOAT                        | United States of America | 75632103    | 2319103   |
| STREETDREAMS                    | Canada                   | 1239858     | TMA717271 |
| STREETDREAMS                    | United States of America | 78435902    | 3104954   |
| TRIMLINE                        | Canada                   | CA080486700 | 482695    |
| TRIMLINE                        | China                    | 960034855   | 1467292   |
| ULC                             | United States of America | 75817212    | 2678536   |
| UNIMOUNT                        | United States of America | 73308994    | 1216586   |
| ULTRASTART                      | United States of America | 78453794    | 3101888   |
| VERSAGLOW                       | United States of America | 73042671    | 1026153   |
| CONSTANT COLOR<br>PRECISE MR 16 | Brazil                   | 816767939   | 816767939 |
| MOD-U-LINE                      | Canada                   | 333542      | 177574    |
| MULTI-VAPOR                     | Canada                   | 333543      | 184671    |
| POWER GROOVE                    | Canada                   | 265064      | TMA127291 |
| QUARTZLINE                      | Canada                   | 265065      | TMA126313 |

**Schedule C**  
**Copyrights**

None.

Schedule C