

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4127004

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST
CONVEYING PARTY DATA	
Name	Execution Date
LIGHTING SCIENCE GROUP CORPORATION	10/31/2016
BIOLOGICAL ILLUMINATION, LLC	10/31/2016
RECEIVING PARTY DATA	
Name:	ACF FINCO I LP, AS AGENT
Street Address:	580 WHITE PLAINS ROAD
Internal Address:	SUITE 610
City:	TARRYTOWN
State/Country:	NEW YORK
Postal Code:	10580
PROPERTY NUMBERS Total: 126	
Property Type	Number
Patent Number:	9412253
Patent Number:	9404635
Patent Number:	9408275
Patent Number:	9402294
Patent Number:	9366409
Patent Number:	9360202
Patent Number:	9353935
Patent Number:	9353916
Patent Number:	9352428
Patent Number:	9347655
Patent Number:	9347654
Patent Number:	9322516
Patent Number:	9310058
Patent Number:	9303825
Patent Number:	9289574
Patent Number:	9269211
Patent Number:	9265968
Patent Number:	9255670

Property Type	Number
Patent Number:	9255685
Patent Number:	9222653
Patent Number:	9220202
Patent Number:	D744689
Patent Number:	D744673
Patent Number:	9174067
Patent Number:	9173269
Patent Number:	9157618
Patent Number:	9157581
Patent Number:	9151482
Patent Number:	9151453
Patent Number:	D740458
Patent Number:	D740459
Patent Number:	9148929
Patent Number:	9137874
Patent Number:	9127818
Patent Number:	9131573
Patent Number:	D738032
Patent Number:	9036244
Patent Number:	9036868
Patent Number:	9028091
Patent Number:	9024536
Patent Number:	9016899
Patent Number:	9018854
Patent Number:	9006987
Patent Number:	D726948
Patent Number:	D726349
Patent Number:	8978187
Patent Number:	8980410
Patent Number:	D724249
Patent Number:	8967844
Patent Number:	D723729
Patent Number:	8963450
Patent Number:	8955357
Patent Number:	D722708
Patent Number:	8941329
Patent Number:	8933638
Patent Number:	8905584

Property Type	Number
Patent Number:	8901850
Patent Number:	8899780
Patent Number:	8899775
Patent Number:	8899776
Patent Number:	8901831
Patent Number:	8866839
Patent Number:	D715973
Patent Number:	8864340
Patent Number:	8866168
Patent Number:	8866414
Patent Number:	8847436
Patent Number:	8841864
Patent Number:	8835945
Patent Number:	D713584
Patent Number:	D711560
Patent Number:	D710721
Patent Number:	D709639
Patent Number:	D709640
Patent Number:	D709641
Patent Number:	D709642
Patent Number:	8760370
Patent Number:	D707381
Patent Number:	8754832
Patent Number:	D706481
Patent Number:	8743023
Patent Number:	D705972
Patent Number:	8730558
Patent Number:	D705457
Patent Number:	8729832
Patent Number:	D704359
Patent Number:	D703855
Patent Number:	D703861
Patent Number:	D703842
Patent Number:	8702259
Patent Number:	D702861
Patent Number:	8686641
Patent Number:	8680457
Patent Number:	D701639

Property Type	Number
Patent Number:	D701636
Patent Number:	D700980
Patent Number:	D700735
Application Number:	15244091
Application Number:	15237804
Application Number:	15210713
Application Number:	15180411
Application Number:	15167536
Application Number:	62327697
Application Number:	62327856
Application Number:	62327859
Application Number:	15092154
Application Number:	62316160
Application Number:	15067364
Application Number:	14996714
Application Number:	14959664
Application Number:	14956968
Application Number:	14921360
Application Number:	14863150
Application Number:	14853516
Application Number:	14729719
Application Number:	14728606
Application Number:	14703809
Application Number:	14702149
Application Number:	14590557
Application Number:	14573922
Application Number:	14492348
Application Number:	14338942
Application Number:	29493193
Application Number:	14272858
Application Number:	14211663
Application Number:	14208370

CORRESPONDENCE DATA

Fax Number: (678)533-7787

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: 404-523-5300

Email: sls@phrd.com

Correspondent Name: STEVE SCHAAF, PARALEGAL
Address Line 1: 303 PEACHTREE STREET, NE, SUITE 3600
Address Line 2: PARKER, HUDSON, RAINER & DOBBS LLP
Address Line 4: ATLANTA, GEORGIA 30308

ATTORNEY DOCKET NUMBER: 5722.2

NAME OF SUBMITTER: C. KEITH TAYLOR

SIGNATURE: /CKT/

DATE SIGNED: 11/01/2016

This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 35

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October 31, 2016

ACF FinCo I LP, as assignee of FCC, LLC
580 White Plains Road, Suite 610
Tarrytown, NY 10591
Attn: Oleh Szczupak
Facsimile No.: (914) 418-1217

RE: Amendment to Patent and Trademark Security Agreement – Lighting Science Group Corporation and BioLogical Illumination, LLC

Ladies and Gentlemen:

Reference is made to that certain Patent and Trademark Security Agreement (as at any time amended, modified, restated or supplemented, the "IP Security Agreement") dated April 25, 2014, by and among Lighting Science Group Corporation, a Delaware corporation ("LSG"), BioLogical Illumination, LLC, a Delaware limited liability company ("BioLogical"; LSG and BioLogical are referred to collectively as "Assignors" and each individually as an "Assignor"), and ACF Finco I LP, as assignee of FCC, LLC, in its capacity as agent (together with its successors and assigns in such capacity, "Agent") for the various financial institutions ("Lenders") party from time to time to the Loan Agreement (as defined below). All capitalized terms used in this letter amendment, unless otherwise defined herein, shall have the meaning ascribed to such terms in the IP Security Agreement, or, if not defined in the IP Security Agreement and not otherwise defined herein, the Loan Agreement (as defined below).

Environmental Light Technologies Corp., a Delaware corporation ("ELTC"), LSG, BioLogical (ELTC, LSG and BioLogical are referred to collectively as "Borrowers" and each individually as a "Borrower"), Agent and Lenders are parties to that certain Loan and Security Agreement dated April 25, 2014 (as at any time amended, restated, supplemented or otherwise modified, the "Loan Agreement") setting forth the terms on which Lenders may now or hereafter extend credit to or for the account of Borrowers.

Each Assignor desires to amend the IP Security Agreement to add the Patents listed on Exhibit A-1 of this letter amendment to Exhibit A of the IP Security Agreement and to add the Trademarks listed on Exhibit B-1 of this letter amendment to Exhibit B of the IP Security Agreement as provided below.

NOW, THEREFORE, for Ten Dollars (\$10.00) in hand paid and other good and valuable consideration receipt of which is acknowledged, the parties hereto, intending to be legally bound, hereby agree as follows:

1. **Amendments to IP Security Agreement.** The IP Security Agreement is hereby amended as follows:

(a) By deleting the last sentences of Sections 3(a), 3(b) and 3(c), respectively, of the IP Security Agreement in their entirety.

(b) By adding the following new Section 3(k) immediately following Section 3(j) of the IP Security Agreement:

(k) **Intellectual Property Update.** Within five (5) Business Days after each March 31, June 30, September 30 and December 31 hereafter Borrowers shall provide Agent with a certificate listing all of their and their Affiliates' (other than Environmental Light Technologies Corp.) Intellectual Property, substantially in the form attached hereto as **Schedule 1** (but, in any event, specifically identifying which Person owns such Intellectual Property and whether such Intellectual Property has been previously listed on the exhibits to this Agreement and authorizing Agent to file such document with the United States Patent and Trademark Office).

(c) By attaching a copy of **Exhibit A-1** of this letter amendment to the IP Security Agreement as a supplement to **Exhibit A** of the IP Security Agreement.

(d) By attaching a copy of **Exhibit B-1** of this letter amendment to the IP Security Agreement as a supplement to **Exhibit B** of the IP Security Agreement.

(e) By attaching a copy of **Schedule 1** of this letter amendment to the IP Security Agreement.

2. **Security Interest.** Each Assignor hereby irrevocably pledges and assigns to, and grants Agent, for the benefit of Lenders, a security interest (the "Security Interest") with power of sale to the extent permitted by law, in the Patents set forth in **Exhibit A-1** of this letter amendment and in the Trademarks set forth in **Exhibit B-1** of this letter amendment to secure payment of the Obligations. As set forth in the Loan Agreement, the Security Interest is coupled with a security interest in substantially all of the personal property of Borrowers. This letter amendment grants only the Security Interest herein described, is not intended to and does not affect any present transfer of title of any trademark registration or application and makes no assignment and grants no right to assign or perform any other action with respect to any intent to use trademark application, unless such action is permitted under 15 U.S.C. § 1060.

3. **Authorization.** Agent is hereby authorized to file a copy of this letter amendment with the United States Patent and Trademark office.

4. **Representations and Warranties.** Assignors represent and warrant to Agent, to induce Agent to enter into this letter amendment, that no Default exists on the date hereof; the execution, delivery and performance of this letter amendment have been duly authorized by all requisite corporate or company action on the part of each Assignor and this letter amendment has been duly executed and delivered by each Assignor; and all of the representations and warranties made by each Assignor in the IP Security Agreement are true and correct on and as of the date hereof.

5. **Reference to IP Security Agreement.** Upon the effectiveness of this letter amendment, each reference in the IP Security Agreement to "this Agreement," "hereunder," or words of like import shall mean and be a reference to the IP Security Agreement, as amended by this letter amendment. This letter amendment shall be part of the IP Security Agreement and a breach of any representation, warranty or covenant herein shall constitute a Default.

6. **Expenses of Agent.** Each Assignor, jointly and severally, agrees to pay, **on demand**, all costs and expenses incurred by Agent in connection with the preparation, negotiation and execution of this letter amendment and any other Loan Documents executed pursuant hereto and any and all amendments, modifications, and supplements thereto, including, without limitation, the cost and fees of Agent's legal counsel and any taxes, filing fees and other expenses associated with or incurred in connection with the execution, delivery or filing of any instrument or agreement referred to herein or contemplated hereby.

7. **Effectiveness; Governing Law.** This letter amendment shall be effective upon acceptance by Agent (notice of which acceptance is hereby waived), whereupon the same shall be governed by and construed in accordance with the internal laws of Georgia without regard to conflict of law provisions.

8. **No Novation, etc.** Except as otherwise expressly provided in this letter amendment, nothing herein shall be deemed to amend or modify any provision of the IP Security Agreement or any of the other Loan Documents, each of which shall remain in full force and effect. This letter amendment is not intended to be, nor shall it be construed to create, a novation or accord and satisfaction, and the IP Security Agreement as herein modified shall continue in full force and effect.

9. **Successors and Assigns.** This letter amendment shall be binding upon and inure to the benefit of the parties hereto and their respective successors and assigns.

10. **Further Assurances.** Each Assignor agrees to take such further actions as Agent shall reasonably request from time to time in connection herewith to evidence or give effect to the amendments set forth herein or any of the transactions contemplated hereby.

11. **Miscellaneous.** Notwithstanding any prior, temporary mutual disregard of the terms of any contracts between the parties, each Assignor hereby agrees that it shall be required strictly to comply with all of the terms of the Loan Documents on and after the date hereof. This letter amendment may be executed in any number of counterparts and by different parties to this letter amendment on separate counterparts, each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same agreement. Any manually executed signature page to this letter amendment delivered by a party by facsimile or other electronic transmission shall be deemed to be an original signature hereto. Section titles and references used in this letter amendment shall be without substantive meaning or content of any kind whatsoever and are not a part of the agreements among the parties hereto. This letter amendment expresses the entire understanding of the parties with respect to the subject matter hereof and may not be amended except in a writing signed by the parties.

[Remainder of page intentionally left blank; signatures appear on the following pages.]

If this letter amendment is acceptable to Agent, please evidence its agreement by executing the enclosed copy of this letter amendment.

**LIGHTING SCIENCE GROUP
CORPORATION**

By: 

Name: Philip J. Ragona

Title: EVP and Secretary

BIOLOGICAL ILLUMINATION, LLC

By: 

Name: Philip J. Ragona

Title: EVP and Secretary

[Signatures continue on the following page.]

Accepted and agreed to:

ACF FINCO I LP, as assignee of FCC, LLC, in
its capacity as sole Lender and in its capacity as
agent for the Lenders

By: 

Name: Oishi Sekiyook

Title: Vice President

STATE OF RHODE ISLAND)
) SS:
COUNTY OF KENT)

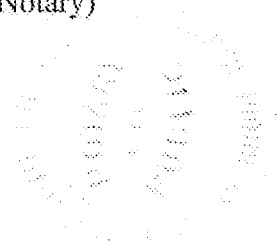
On October 19, 2016, before me, Jennifer Soucy, Notary Public, personally appeared Philip J. Ragona, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument on behalf of Lighting Science Group Corporation and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature Jennifer Soucy (Signature of Notary)

Jennifer Soucy
Notary Public, State of Rhode Island
My Commission Expires 4/29/17
ID# 755306 (Notary)



STATE OF RHODE ISLAND)
) SS:
COUNTY OF KENT)

On October 19, 2016, before me, Jennifer Soucy, Notary Public, personally appeared Philip J. Ragona, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument on behalf of BioLogical Illumination, LLC and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature Jennifer Soucy (Signature of Notary)

Jennifer Soucy
Notary Public, State of Rhode Island
My Commission Expires 4/29/17
ID# 755306 (Notary)



STATE OF New York)
) SS:
COUNTY OF Westchester)

On September 6, 2016, before me, EILEEN O'NEILL, Notary Public, personally appeared Oleh Szezygalski, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument on behalf of ACF FINCO I LP, as assignee of FCC, LLC, and acknowledged to me that he or she executed the same in his or her authorized capacity, and that by his or her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature Eileen O'Neill (Signature of Notary)

(Seal of Notary)

EILEEN O'NEILL
Notary Public - State of New York
No. 01046226630
Qualified in Rockland County
My Commission Expires October 12, 2018

EXHIBIT A-1

UNITED STATES ISSUED PATENTS

Title	Patent Number	Issue Date	Owner
System for Detecting and Analyzing Motion for Pattern Prediction and Associated Methods	9412253	08/09/2016	Biological
Light Directing Apparatus	9404635	8/2/2016	LSG
System for Optimizing Light Absorbance and Associated Methods	9408275	08/02/2016	Biological
Self-Calibrating Multi-Directional Security Luminaire and Associated Methods	9402294	7/26/2016	LSG
Tunable Lighting Apparatus	9366409	6/14/2016	LSG
System for Actively Cooling an LED Filament and Associated Methods	9360202	6/7/2016	LSG
Rotatable Lighting Device	9353935	5/31/2016	LSG
Elongate LED Luminaire and Associated Methods	9353916	5/31/2016	LSG
Luminaire with Integrally Molded Cooling System and Associated Methods	9352428	5/31/2016	LSG
Rotatable Lighting Device	9347655	5/24/2016	LSG
Lighting Device Having A Moveable Housing	9347654	5/24/2016	LSG
Lighting Device Having A Moveable Housing	9347654	5/24/2016	LSG
Luminaire Having Vented Optical Chamber and Associated Methods	9322516	4/26/2016	LSG
Lamp Connector	9310058	4/12/2016	LSG
High Bay Luminaire	9303825	4/5/2016	LSG
Three-Channel Tuned LED Lamp for Producing Biologically-Adjusted Light	9289574	03/22/2016	Biological
Autonomous Luminaire Assembly and Vending System and Associated Methods	9269211	02/23/2016	LSG
System for Generating Non-Homogenous Biologically-Adjusted Light and Associated Methods	9265968	02/23/2016	Biological
Street Lighting Device for Communicating with Observers and Associated Methods	9255670	2/9/2016	LSG
Luminaire with Prismatic Optic	9255685	2/9/2016	LSG
Concave Low Profile Luminaire with Magnetic Lighting Devices and Associated Systems and Methods	9222653	12/29/2015	LSG
Lighting System to Control the Circadian Rhythm of Agricultural Products and Associated Methods	9220202	12/29/2015	Biological
Troffer Luminaire	D744,689	12/01/2015	LSG
Lighting Device with Overlying Sections	D744,673	12/01/2015	LSG
System for Treating Light Treatable Conditions and Associated Methods	9174067	11/03/2015	Biological
Lighting System for Accentuating Regions of a Layer and Associated Methods	9173269	10/27/2015	LSG

Title	Patent Number	Issue Date	Owner
Lighting System for Accentuating Regions of a Layer and Associated Methods	9173269	10/27/2015	LSG
Trough Luminaire with Magnetic Lighting Device and Associated Systems and Methods	9157618	10/13/2015	LSG
Low Profile Luminaire With Light Guide and Associated Systems and Methods	9157581	10/13/2015	LSG
Sealed Electrical Device with Cooling System and Associated Methods	9151482	10/6/2015	LSG
Magnetically-Mountable Lighting Device and Associated Systems and Methods	9151453	10/06/2015	LSG
Lighting Device	D740,458	10/06/2015	LSG
Luminaire With Geodesic Optic	D740,459	10/06/2015	LSG
LED Driver Circuit and Bleeder Circuit	9148929	09/29/2015	LSG
Illumination and Grow Light System and Associated Methods	9137874	09/15/2015	Biological
Elongate LED Luminaire and Associated Methods	9127818	9/8/2015	LSG
Tunable LED Lamp For Producing Biologically-Adjusted Light	9131573	09/08/2015	Biological
Square Troffer Luminaire	D738,032	09/01/2015	LSG
Wavelength Converting Lighting Device and Associated Methods	9036244	5/19/2015	LSG
Sustainable Outdoor Lighting System for Use in Environmentally Photo-Sensitive Area	9036868	05/19/2015	Biological
Low Profile Light Having Elongated Reflector and Associated Methods	9028091	05/12/2015	LSG
Tunable LED Lamp for Producing Biologically-Adjusted Light and Associated Methods	9024536	05/05/2015	Biological
Luminaire With Modular Cooling System and Associated Methods	9016899	04/28/2015	LSG
Lighting System with Reduced Physioneurol Compression and Associated Methods	9018854	04/28/2015	Biological
Wall-Mountable Luminaire and Associated Systems and Methods	9006987	4/14/2015	LSG
Solar Roadway Luminaire	D726,948	04/14/2015	LSG
Luminaire	D726349	4/7/2015	LSG
System for Electrostatic Removal of Debris and Associated Methods	8978187	03/17/2015	LSG
Thermally Conductive Sheet and Associated Methods	8980410	03/17/2015	LSG
Linear Lighting Device	D724,249	03/10/2015	Biological
Low Profile Light and Accessory Kit for the Same	8967844	3/3/2015	LSG
Low Bay Luminaire	D723,729	03/03/2015	LSG
Adaptable Biologically-Adjusted Indirect Lighting Device and Associated Methods	8963450	02/24/2015	Biological
System and Methods of Embedding Material in a Glass Substrate	8955357	02/17/2015	LSG
Lamp Having a Modular Heat Sink (G-25)	D722,708	02/17/2015	LSG
Tunable LED Lamp for Producing Biologically-Adjusted Light	8941329	01/27/2015	Biological
Programmable Luminaire and Programmable Luminaire System	8933638	01/13/2015	LSG

Title	Patent Number	Issue Date	Owner
Rotatable Lighting Fixture	8905584	12/9/2014	LSG
Adaptive Anti-Glare Light System and Associated Methods	8901850	12/2/2014	LSG
Configurable Linear Light Assembly and Associated Methods	8899780	12/2/2014	LSG
Low-Angle Thoroughfare Surface Lighting Device	8899775	12/02/2014	LSG
Low-Angle Thoroughfare Surface Lighting Device	8899776	12/02/2014	LSG
Constant Current Pulse-Width Modulation Lighting System and Associated Methods	8901831	12/02/2014	LSG
High Efficacy Lighting Signal Converter and Associated Methods	8866839	10/21/2014	LSG
Lamp having Vented Optical Chamber and Associated Methods	D715,973	10/21/2014	LSG
Low Profile Light Having Concave Reflector and Associated Methods	8864340	10/21/2014	LSG
Optical Devices for Controlling Color Mixing	8866168	10/21/2014	LSG
Tunable LED Lamp for Producing Biologically-Adjusted Light	8866414	10/21/2014	Biological
System for Inductively Powering an Electrical Device and Associated Methods	8847436	09/30/2014	LSG
Tunable LED Lamp for Producing Biologically-Adjusted Light	8841864	09/23/2014	Biological
Serially-Connected Light Emitting Diodes, Methods of Forming Same, and Luminares Containing Same	8835945	09/16/2014	LSG
Low Bay Luminaire	D713,584	09/16/2014	LSG
Lamp Having a Modular Heat Sink (BR)	D711,560	08/19/2014	LSG
Multi-Directional Security Light	D710,721	08/12/2014	LSG
Luminaire	D709639	7/22/2014	LSG
Luminaire	D709640	7/22/2014	LSG
Luminaire	D709641	7/22/2014	LSG
Luminaire	D709642	7/22/2014	LSG
System for Generating Non-Homogenous Light and Associated Methods	8760370	06/24/2014	LSG
Roadway Lamp	D707,381	06/17/2014	LSG
Lighting System for Accenting Regions of a Layer and Associated Methods	8754832	06/17/2014	LSG
High Bay Lighting Fixture	D706,481	6/3/2014	LSG
System for Generating Non-Homogenous Biologically-Adjusted Light and Associated Methods	8743023	06/03/2014	Biological
Thoroughfare Surface Light	D705,972	05/27/2014	LSG
Wavelength Converting Lighting Device and Associated Methods	8730558	5/20/2014	LSG
Luminaire	D705457	5/20/2014	LSG
Programmable Luminaire System	8729832	05/20/2014	LSG
Luminaire having a Radially Oriented Light Source	D704,359	05/06/2014	LSG
Solar-Powered Roadway Light	D703,855	04/29/2014	LSG

Title	Patent Number	Issue Date	Owner
Canopy Light Fixture	D703,861	04/29/2014	LSG
Lamp Body With Integrally Molded Heat Sink	D703,842	04/29/2014	LSG
Color Conversion Occlusion and Associated Methods	8702259	04/22/2014	LSG
Luminaire	D702861	4/15/2014	LSG
Tunable LED Lamp for Producing Biologically-Adjusted Light	8686641	04/01/2014	Biological
Motion Detection System and Associated Methods (Having at least one light emitting element)	8680457	3/25/2014	LSG
Elongate Lighting Device	D701,639	03/25/2014	LSG
Light Fixture for a Canopy Light System	D701,636	03/25/2014	LSG
Compact Lamp	D700,980	03/11/2014	LSG
Off-Grid Luminaire	D700,735	03/04/2014	LSG

UNITED STATES PATENT APPLICATIONS

Title	Serial Number	Filing Date	Owner
Canopy Light System	15/244,091	08/23/2016	LSG
Low Profile Light	15/237,804	8/16/2016	LSG
Systems and Methods for Optimizing Power and Control of a Multicolored Lighting System	15/210,713	7/14/2016	LSG
Tunable Lighting Apparatus	15/180,411	6/13/2016	LSG
Luminaire with Thermally-Insulating Fin Guards and Associated Methods	15/167,536	5/27/2016	LSG
Lighting Assembly with Moveable Optic for Light Pole	62/327,697	04/26/2016	LSG
Gimbal Luminaire	62/327,856	04/26/2016	LSG
Collapsible Luminaire	62/327,859	04/26/2016	LSG
LED Lamp for Producing Biologically-Adjusted Light	15/092,154	04/06/2016	Biological
LED Powering Circuit	62/316,160	03/31/2016	LSG
LED Lamp for Producing Biologically-Adjusted Light Including a Cyan LED	15/067,364	03/11/2016	Biological
Autonomous Luminaire Assembly and Vending System and Associated Methods	14/996,714	01/15/2016	LSG
Street Lighting Device for Communicating with Observers and Associated Methods	14/959,664	12/04/2015	LSG
Low-Profile Lighting Device and Attachment Members and Kit Comprising Same	14/956,968	12/02/2015	LSG
Lighting System for Accenting Regions of a Layer and Associated Methods	14/921,360	10/23/2015	LSG
Low Profile Luminaire and Associated Methods	14/863,150	09/23/2015	LSG
Illumination and Grow Light System and Associated Methods	14/853,516	09/14/2015	Biological
Radiated Energy Sterilization Device and Associated Method	14/729,719	06/03/2015	Biological
System for Non-Invasive Measurement of Intracranial Pressure and Associated Methods	14/728,606	06/02/2015	Biological
Modular Street Lighting System	14/703,809	05/04/2015	LSG
Low Profile Light and Accessory Kit for the Same	14/702,149	5/1/2015	LSG
System For Dynamically Adjusting Circadian Rhythm Responsive To Scheduled Events And Associated Methods	14/590,557	01/06/2015	Biological
System and Methods for Operating a Lighting Device	14/573,922	12/17/2014	LSG
Low Profile Light and Accessory Kit for the Same	14/492,348	9/22/2014	LSG
Serially-Connected Light Emitting Diodes, Methods of Forming Same, and Luminaires Containing Same	14/338,942	07/23/2014	LSG
Lighting Device with Domed Reflector	29/493,193	06/06/2014	LSG
System for Generating Non-Homogenous Light and Associated Methods	14/272,858	05/08/2014	LSG
Photoreactive System for Preserving Produce	14/211,663	03/14/2014	Biological

PATENT

REEL: 040555 FRAME: 0900

Title	Serial Number	Filing Date	Owner
Method for Controlling Blood Glucose Production and Digestion Cycles	14/208,370	03/13/2014	Biological

FOREIGN ISSUED PATENTS

Title	Country	Patent Number	Issue Date	Owner
Lighting System With Reduced Physiological Compression and Associated Methods	Canada	2906451	6/21/2016	LSG
LED Lamp for Producing Biologically-Corrected Light	Japan	5907962	04/01/2016	Biological
LED Lamp for Producing Biologically-Corrected Light	Hong Kong	HK1182757	08/07/2015	Biological
Versatile, Low Cost, High Power Light Emitting Diode Array Package	Japan	5600699	8/22/2014	LSG
Method and Apparatus for Driving a Light Emitting Diode	Taiwan	1437904	5/11/2014	LSG

FOREIGN PATENT APPLICATIONS

Title	Country	Serial Number	Filing Date	Owner
Tunable LED Lamp for Producing Biologically-Adjusted Light	Europe	EP16180625.2	07/21/2016	Biological
Lighting System With Reduced Physiological Compression and Associated Methods	Hong Kong	16101085.6	01/29/2016	LSG
System for Generating Non-Homogenous Biologically-Adjusted Light and Associated Methods	Hong Kong	16101059.8	01/29/2016	Biological
Lighting System With Reduced Physiological Compression and Associated Methods	China	201480027860.2	11/13/2015	LSG
System for Generating Non-Homogenous Biologically-Adjusted Light and Associated Methods	China	201480027170.7	11/12/2015	Biological
Lighting System With Reduced Physiological Compression and Associated Methods	Korea	10-2015-7029401	10/14/2015	LSG
Three-Channel Tuned LED Lamp for Producing Biologically-Adjusted Light	PCT	PCT/US15/55103	10/12/2015	Biological
System for Generating Non-Homogenous Biologically-Adjusted Light and Associated Methods	Europe	14774608.5	10/09/2015	Biological
Lighting System With Reduced Physiological Compression and Associated Methods	Europe	14731408.2	10/08/2015	LSG
Lighting System to Control the Circadian Rhythm of Agricultural Products and Associated Methods	PCT	PCT/US15/50425	09/16/2015	Biological
Lighting System With Reduced Physiological Compression and Associated Methods	Brazil	PCT BR 11 2015 023442 9	09/14/2015	LSG
Lighting System With Reduced Physiological Compression and Associated Methods	UAE	1191/2015	09/13/2015	LSG
Lighting System With Reduced Physiological Compression and Associated Methods	Japan	2016-501543	09/11/2015	LSG
System for Generating Non-Homogenous Biologically-Adjusted Light and Associated Methods	Japan	2016-502062	09/11/2015	Biological
Tunable Light System Having an Adaptable Light Source and Associated Methods	Europe	EP13724965.2	11/27/2014	LSG
Configurable Environmental Condition Sensing Luminaire, System and Associated Methods	Europe	EP13722608.0	09/19/2014	LSG
Tunable LED Lamp for Producing Biologically-Adjusted Light	Europe	EP12813179.4	06/17/2014	Biological

Title	Country	Serial Number	Filing Date	Owner
LED Lamp for Producing Biologically-Corrected Light	Europe	EP1281868.8	06/16/2014	Biological
Tunable LED Lamp for Producing Biologically-Adjusted Light	China	2012800594884.0	06/03/2014	Biological
Illumination and Grow Light System and Associated Methods	Canada	2856725	05/22/2014	Biological
LED Lamp for Producing Biologically-Corrected Light	Hong Kong	13112829.7	11/15/2013	Biological

EXHIBIT B-1

REGISTERED TRADEMARKS

Trademark	Registration Number	Registration Date	Country	Owner
Awake&Alert	4739852	5/19/2015	United States	LSG
DEFINITY	143403740	1/17/2014	Saudi Arabia	LSG
Definity Digital	4739645	5/19/2015	United States	LSG
EcoSnap	1741071	5/13/2016	Australia	LSG
EcoSnap	3140823	3/18/2016	United Kingdom	LSG
FreeLED	223759	8/17/2015	Dominican Republic	LSG
FreeLED	1617508	2/25/2016	Mexico	LSG
FreeLED	29579/2015	3/30/2016	Mozambique	LSG
FreeLED	4856388	11/17/2015	United States	LSG
GLIMPSE	TMA885417	9/8/2014	Canada	LSG
GoodNight	4657183	12/16/2014	United States	LSG
IT'S ALL POSSIBLE WITH LIGHT	4744318	5/26/2015	United States	LSG
IT'S ALL POSSIBLE WITH LIGHT.	IR 1198099	2/7/2014	European Union	LSG
LightingScience (Stylized) AND DESIGN	IR 1205358	1/10/2014	European Union	LSG
LightingScience (Stylized) AND DESIGN	4657140	12/16/2014	United States	LSG
Miscellaneous design	IR 1197922	2/7/2014	China	LSG
Miscellaneous design	IR 1197922	2/7/2014	European Union	LSG
MISCELLANEOUS DESIGN (broken circle)	4744331	5/26/2015	United States	LSG

Trademark	Registration Number	Registration Date	Country	Owner
MyNature	4744303	5/26/2015	United States	LSG
ROADMASTER	TMA897732	3/2/2015	Canada	LSG
SleepyBaby	4657184	12/16/2014	United States	LSG
VividGro	TMA905929	6/10/2015	Canada	LSG
VividGro	4923418	3/22/2016	United States	LSG
WELCOME TO THE LIGHT AGES	4336387	5/14/2013	United States	LSG

TRADEMARK APPLICATIONS

Trademark	Application Number	Application Date	Country	Owner
A WAKE&ALERT	911201840	6/17/2016	Brazil	LSG
A WAKE&ALERT	1787915	6/21/2016	Canada	LSG
A WAKE&ALERT	A0059580	6/14/2016	China	LSG
A WAKE&ALERT	A0059580	6/14/2016	European Union	LSG
A WAKE&ALERT	A0059580	6/14/2016	Mexico	LSG
DuraBulb	1786813	6/14/2016	Canada	LSG
DuraBulb	A0059549	6/13/2016	China	LSG
DuraBulb	A0059549	6/13/2016	European Union	LSG
DuraBulb	A0059549	6/13/2016	Mexico	LSG
DuraBulb	86849849	12/15/2015	United States	LSG
DYNASPECTRUM	87034438	5/12/2016	United States	LSG
EcoSnap	86/677336	6/29/2015	United States	LSG
FreeLED	909366110	5/12/2015	Brazil	LSG
FreeLED	1677685	5/20/2014	Canada	LSG
FreeLED	IEPI201518792	5/13/2015	Ecuador	LSG
FreeLED	N/A	6/22/2016	China	LSG
FreeLED	106915	6/9/2015	Ghana	LSG
FreeLED	168410	5/18/2015	Kuwait	LSG
FreeLED	1487217	5/20/2014	Mexico	LSG
FreeLED	Z442462	5/13/2015	Poland	LSG
FreeLED	TZT2015957	6/5/2015	Tanzania	LSG
FreeLED	244254	11/25/2015	United Arab Emirates	LSG
FreeLED	389089	5/18/2015	Pakistan	LSG
GENESIS DYNASPECTRUM	87012515	4/25/2016	United States	LSG
GOOD NIGHT	911201874	6/17/2016	Brazil	LSG
GOOD NIGHT	1787917	6/21/2016	Canada	LSG

Trademark	Application Number	Application Date	Country	Owner
GOOD NIGHT	A0059577	6/14/2016	China	LSG
GOOD NIGHT	A0059577	6/14/2016	European Union	LSG
GOOD NIGHT	A0059577	6/14/2016	Mexico	LSG
GoodDay	911187162	6/15/2016	Brazil	LSG
GoodDay	1786812	6/14/2016	Canada	LSG
GoodDay	A0059548	6/13/2016	China	LSG
GoodDay	A0059548	6/13/2016	European Union	LSG
GoodDay	A0059548	6/13/2016	Mexico	LSG
GoodDay	86/849843	12/15/2015	United States	LSG
HEALTHIE	911421807	8/2/2016	Brazil	LSG
HEALTHIE	1793679	7/29/2016	Canada	LSG
HEALTHIE	N/A	8/2/2016	China	LSG
HEALTHIE	015713779	8/1/2016	European Union	LSG
HEALTHIE	1778870	8/1/2016	Mexico	LSG
Healthie	86/895002	2/2/2016	United States	LSG
L-BAR	1791146	7/13/2016	Canada	LSG
L-BAR	87094598	7/6/2016	United States	LSG
LIGHTING SCIENCE	911201963	6/17/2016	Brazil	LSG
LIGHTING SCIENCE	IR 994779	6/15/2016	China	LSG
LIGHTING SCIENCE	IR 994779	6/15/2016	Egypt	LSG
LIGHTING SCIENCE	IR 994779	6/15/2016	Ghana	LSG
LIGHTING SCIENCE	2643518	12/16/2013	India	LSG
LIGHTING SCIENCE	IR 994779	6/15/2016	Mexico	LSG
LIGHTING SCIENCE	425233	6/6/2016	Pakistan	LSG
LSPRO	1792770	7/22/2016	Canada	LSG
LSPRO	86/885009	1/25/2016	United States	LSG
Miscellaneous design	1778707	4/22/2016	Canada	LSG
Miscellaneous design	A0057976	4/11/2016	China	LSG
Miscellaneous design	A0057976	4/11/2016	European Union	LSG

Trademark	Application Number	Application Date	Country	Owner
Miscellaneous design	A0057976	4/11/2016	India	LSG
Miscellaneous design	A0057976	4/11/2016	Switzerland	LSG
Miscellaneous design	86966304	4/6/2016	United States	LSG
Miscellaneous design	86966297	4/6/2016	United States	LSG
SERIES A+	87022892	5/3/2016	United States	LSG
SLEEPY BABY	911201912	6/17/2016	Brazil	LSG
SLEEPY BABY	1787913	6/21/2016	Canada	LSG
SLEEPY BABY	A0059578	6/14/2016	China	LSG
SLEEPY BABY	A0059578	6/14/2016	European Union	LSG
SLEEPY BABY	A0059578	6/14/2016	Mexico	LSG
VIVIDGRO	1794978	8/9/2016	Canada	LSG
VIVIDGRO	A0060733	8/9/2016	European Union	LSG
VIVIDGRO	87125727	8/3/2016	United States	LSG

Schedule 1

_____, 20____

ACF FinCo I LP, as assignee of FCC, LLC
580 White Plains Road, Suite 610
Tarrytown, NY 10591
Attn: Oleh Szczupak
Facsimile No.: (914) 418-1217

RE: Quarterly Intellectual Property Certificate

LIGHTING SCIENCE GROUP CORPORATION, a Delaware corporation ("**LSG**") and **BIOLOGICAL ILLUMINATION, LLC**, a Delaware limited liability company ("**BioLogical**"; LSG and BioLogical are referred to collectively as "**Borrowers**" and each individually as a "**Borrower**") in accordance with the terms of that certain Patent and Trademark Security Agreement (as at any time amended, modified, restated or supplemented, the "**IP Security Agreement**") dated April 25, 2014, by and among LSG, BioLogical and ACF Finco I LP, as assignee of FCC, LLC, in its capacity as agent (together with its successors and assigns in such capacity, "**Agent**") for the various financial institutions ("**Lenders**") party from time to time to the Loan Agreement (as defined in the IP Security Agreement), desire to amend the IP Security Agreement by (i) attaching a copy of **Exhibit A-1** of this certificate to the IP Security Agreement as a supplement to **Exhibit A** of the IP Security Agreement and (ii) attaching a copy of **Exhibit B-1** of this certificate to the IP Security Agreement as a supplement to **Exhibit B** of the IP Security Agreement. All capitalized terms used in this certificate, unless otherwise defined herein, shall have the respective meanings ascribed to such terms in the IP Security Agreement.

Each Borrower hereby irrevocably pledges and assigns to, and grants Agent, for the benefit of Lenders, a security interest ("**Security Interest**") with power of sale to the extent permitted by law, in the Patents set forth in **Exhibit A-1** of this certificate and the Trademarks set forth in **Exhibit B-1** of this certificate to secure payment of the Obligations. As set forth in the Loan Agreement, the Security Interest is coupled with a security interest in substantially all of the personal property of Borrowers. Each Borrower authorizes Agent to file all, or any part, of this letter with the United States Patent and Trademark Office.

Further, Borrowers certify that **Schedule A** to this certificate identifies all of their and their Affiliates (other than Environmental Light Technologies Corp.) Patents and Trademarks (including, without limitation, those identified on **Exhibit A-1** and **Exhibit B-1** to this certificate and all those previously identified on exhibits to the IP Security Agreement) and that Borrowers have absolute title to each Patent and Trademark listed on **Exhibit A-1** and **Exhibit B-1** to this certificate, free and clear of all Liens (as defined in the Loan Agreement) except Permitted Liens (as defined in the Loan Agreement).

This letter shall be governed by and construed in accordance with the internal laws of Georgia without regard to conflict of law provisions. This letter may be executed in any number

of counterparts and by different parties to this letter amendment on separate counterparts, each of which, when so executed, shall be deemed an original, but all such counterparts shall constitute one and the same letter. Any manually executed signature page to this letter delivered by a party by facsimile or other electronic transmission shall be deemed to be an original signature hereto.

[Remainder of page intentionally left blank; signatures begin on the following page]

Sincerely,

LIGHTING SCIENCE GROUP
CORPORATION

By: _____
Name: _____
Title: _____

BIOLOGICAL ILLUMINATION, LLC

By: _____
Name: _____
Title: _____

Acknowledged:

ACF FINCO I LP, as assignee of FCC, LLC, in
its capacity as sole Lender and in its capacity as
agent for the Lenders

By: _____
Name: _____
Title: _____

STATE OF _____)
) SS:
COUNTY OF _____)

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument on behalf of Lighting Science Group Corporation and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature _____ (Signature of Notary) (Seal of Notary)

STATE OF _____)
) SS:
COUNTY OF _____)

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument on behalf of BioLogical Illumination, LLC and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature _____ (Signature of Notary) (Seal of Notary)

STATE OF _____)
) SS:
COUNTY OF _____)

On _____, 20____, before me, _____, Notary Public, personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person whose name is subscribed to the within instrument on behalf of ACF FINCO I LP, as assignee of FCC, LLC, and acknowledged to me that he or she executed the same in his or her authorized capacity, and that by his or her signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

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

WITNESS my hand and official seal.

Signature _____ (Signature of Notary) (Seal of Notary)

Exhibit A-1

Patents

[see attached.]

[illegible]

PATENT

FOREIGN INSURED PATIENTS

[illegible]

PATENT
REEL: 040555 FRAME: 0918

FOREIGN PATENT APPLICATIONS

[illegible]

Exhibit B-1

Trademarks

[see attached.]

[illegible]

Schedule A

Complete List of Intellectual Property

PATENTS

Title	Patent Number/Serial Number	Jurisdiction	Owner	Date of Disclosure to Agent

TRADEMARKS

Trademark	Registration Number/Application Number	Country	Owner	Date of Disclosure to Agent

PATENT

REEL: 040555 FRAME: 0923

RECORDED: 11/03/2016