

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF OHIO
EASTERN DIVISION**

GE LIGHTING SOLUTIONS, LLC,)	
)	
Plaintiff,)	CIVIL ACTION NO.
)	
v.)	JUDGE
)	
AGILIGHT, INC.)	COMPLAINT FOR PATENT
)	INFRINGEMENT AND DEMAND
Defendant.)	FOR JURY TRIAL
)	

ORIGINAL COMPLAINT

Plaintiff, GE Lighting Solutions, LLC (“GE Lighting Solutions”), by its attorneys and for its Complaint against Defendant, AgiLight, Inc. (“AgiLight”), alleges and states as follows:

I. PARTIES

1. GE Lighting Solutions is a Delaware Limited Liability Company having its principal place of business located at 1975 Noble Road, East Cleveland, Ohio.
2. GE Lighting Solutions is a designer, developer, manufacturer, and seller of LED lighting systems and solutions.
3. AgiLight is a Delaware corporation having a place of business at 1218 Arion Parkway, Suite 108, San Antonio, Texas 78216. AgiLight has engaged, and is engaging, in business in Ohio and in this judicial district.

II. JURISDICTION AND VENUE

4. AgiLight imports, manufactures and/or sells light emitting diode (LED) light strings for use in signage illumination marketed under the “SignRayz” designation.

5. This is a complaint for patent infringement pursuant to 35 U.S.C. § 271 *et. seq.* This Court has subject matter jurisdiction over GE Lighting Solutions' claims pursuant to 28 U.S.C. §§ 1331 and 1338.

6. This Court has personal jurisdiction over AgiLight by virtue of AgiLight's regular commercial and business activities within and/or directed to the State of Ohio.

7. Venue in this Court is based on 28 U.S.C. §§ 1391 and 1400. AgiLight sells its products, including LED light strings for use in signage illumination marketed under the "SignRayz" designation, through various distributors in this District, including, but not limited to, N. Glantz & Son.

COUNT I:
INFRINGEMENT OF UNITED STATES PATENT NO. 7,160,140

8. The allegations of the foregoing paragraphs are incorporated as if fully set forth herein.

9. On January 9, 2007, U.S. Patent No. 7,160,140 ("the '140 patent") entitled "LED String Light Engine" was duly and legally issued to Matthew Mrakovich and Ronald Brengartner, Jr. and assigned to GELcore, LLC (now known as GE Lighting Solutions, LLC). A true and correct copy of the '140 patent is attached to this Complaint as Exhibit A.

10. GE Lighting Solutions is the assignee and owner of all rights and title to the '140 patent, with the exclusive right to enforce the patent against infringers and to sue for and collect damages for all relevant times, including the right to assert the present cause of action.

11. AgiLight manufactures, makes, has made, uses, practices, imports, provides, supplies, distributes, sells and/or offers for sale certain LED string lights, including but not limited to the AgiLight SignRayz series of products, that directly infringe one or more claims of the '140 patent.

12. As one example of AgiLight's direct infringement of the '140 patent, AgiLight's SignRayz series of LED light string products infringe at least claims 1-3, 5, 6, 10 and 14 of the '140 patent. Details of this infringement with regard to claim 1 are set forth below.

13. Each of AgiLight's SignRayz series of products are a "string light engine" as recited by claim 1 of the '140 patent and comprise a plurality of LED modules interconnected via a flexible insulated electrical conductor, as illustrated in the photograph below:



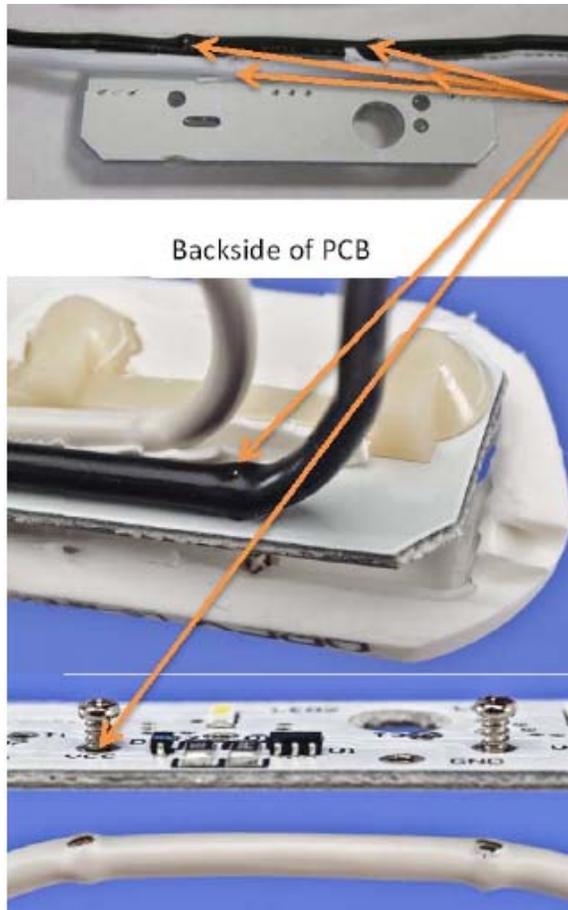
14. As further recited by claim 1 of the '140 patent, AgiLight's SignRayz products include a "flexible insulated electrical conductor" along the length, as illustrated in the photograph below to which a yellow arrow has been added to indicate the recited conductor:



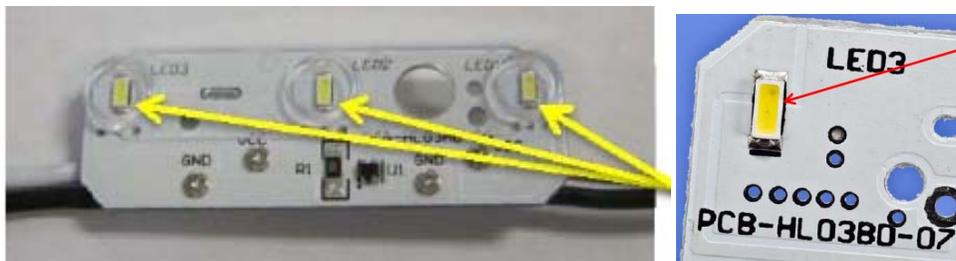
15. As further recited by claim 1 of the '140 patent, each module of the AgiLight SignRayz products includes "a first support comprising a dielectric layer and circuitry" as illustrated in the photograph below of an AgiLight SignRayz module with the over-molding removed to which a red arrow has been added to identify the first support:



16. As further recited by claim 1 of the '140 patent, each module of the AgiLight SignRayz products contains “a first IDC connector extending away from the first support and in electrical communication with the circuitry of the first support, the first IDC connector comprising a terminal that is inserted into the conductor to provide an electrical connection between the conductor and the circuitry of the first support.” This element is found in the four insulation displacement connectors that extend away from the support (two for each of the flexible insulated electrical conductors) and are inserted into the conductor to provide an electrical connection in the referenced AgiLight product. The insulation displacement connectors connect to the circuitry of the PCB via plated through-holes. These features are illustrated in the photographs below and are generally identified by the added orange arrows:



17. As further recited by claim 1 of the '140 patent, each module of the AgiLight SignRayz products contains “a first LED mounted on the first support and in electrical communication with the circuitry of the first support.” This is shown by the fact that each module of the AgiLight SignRayz series of products includes three LEDs mounted to the PCB and in electrical communication therewith as reflected in the figures below and designated by the added yellow and red arrows:



18. As further recited by claim 1 of the '140 patent, each module of the AgiLight SignRayz products contains “a first overmolded housing at least substantially surrounding the first support and a portion of the conductor adjacent to the first support.” This is shown by the fact that each AgiLight SignRayz series of products includes an overmolded housing surrounding the PCB and a portion of the conductor adjacent to the PCB. The photograph below illustrates the overmolded housing of an exemplary AgiLight product bisected along the outer periphery to remove it from the PCB. As stated in AgiLight’s Specification Sheets for the SignRayz products, the “[o]ver molded design [of the SignRayz products] protects circuitry and connections.”



19. In addition to directly infringing claim 1 of the '140 Patent, AgiLight has directly infringed other claims of the '140 Patent.

20. In addition to directly infringing the '140 patent, AgiLight has contributed to infringement of one or more claims of the '140 patent because there is no substantial non-infringing use of the AgiLight LED light strings at issue.

21. In addition to directly infringing the '140 patent through its acts associated with the LED light strings, AgiLight sells LED light strings that, when used as intended by AgiLight and in accordance with instructions provided by AgiLight, directly infringes the '140 patent. As such, AgiLight has induced and continues to induce infringement of the '140 patent.

22. AgiLight has engaged in its conduct willfully and in complete disregard of, or with indifference to, GE Lighting Solutions' rights and interests.

23. At all relevant times, GE Lighting Solutions has complied with any marking and/or notice provisions of 35 U.S.C. § 287 with respect to the '140 patent.

24. As a result of AgiLight's actions, GE Lighting Solutions has suffered and continues to suffer substantial injury, including irreparable injury for which there is no adequate remedy at law, which will result in damages to GE Lighting Solutions, including loss of sales and profits, which GE Lighting Solutions would have made but for the infringement by AgiLight, unless AgiLight is enjoined by this Court.

COUNT II:
INFRINGEMENT OF UNITED STATES PATENT NO. 7,520,771

25. The allegations of the foregoing paragraphs are incorporated as if fully set forth herein.

26. On April 21, 2009, U.S. Patent No. 7,520,771 ("the '771 patent") entitled "LED String Light Engine and Devices that are Illuminated by the String Light Engine" was duly and legally issued to Jeffrey Nall, Paul Southard, Matthew Mrakovich, Mark Scarlato, Ronald Brengartner, Jr., Koushik Saha and Yu Pan and assigned to Lumination, LLC (now known as GE Lighting Solutions, LLC). A true and correct copy of the '771 patent is attached to this Complaint as Exhibit B.

27. GE Lighting Solutions is the assignee and owner of all rights and title to the '771 patent, with the exclusive right to enforce the patent against infringers and to sue for and collect damages for all relevant times, including the right to assert the present cause of action.

28. AgiLight manufactures, makes, has made, uses, practices, imports, provides, supplies, distributes, sells and/or offers for sale certain LED string lights, including but not limited to the

AgiLight SignRayz series of products, that directly infringe one or more claims of the '771 patent.

29. As one example of AgiLight's direct infringement of the '771 patent, AgiLight's SignRayz series of LED light string products infringe at least claims 1, 3, 6, 7, 8, 10, 12 and 15 of the '771 patent. Details of this infringement with regard to claim 1 are set forth below.

30. Each of AgiLight's SignRayz series of products are a "string light engine" as recited by claim 1 of the '771 patent and comprise a plurality of LED modules interconnected via a flexible insulated electrical conductor, as illustrated in the photograph below:



31. As further recited by claim 1 of the '771 patent, AgiLight's SignRayz products include a "flexible electrical conductor" along the length, as illustrated in the photograph below and identified with the added yellow arrow:

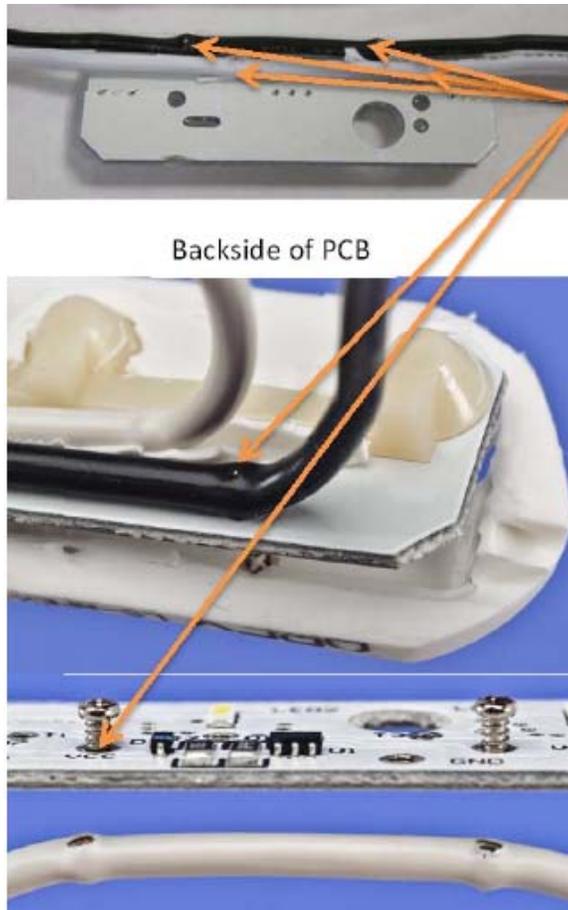


32. As further recited by claim 1 of the '771 patent, each module of the AgiLight SignRayz products includes "a plurality of supports each comprising a dielectric layer and circuitry" as

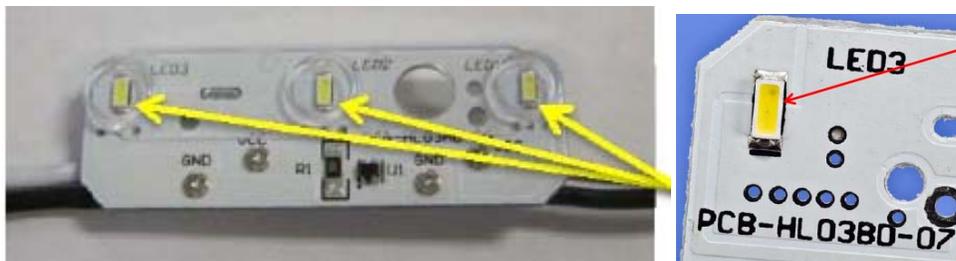
illustrated in the photograph below of an AgiLight SignRayz module with the over-molding removed and the red arrow added:



33. As further recited by claim 1 of the '771 patent, each module of the AgiLight SignRayz products contains “a plurality of IDC connectors each extending away from a respective support and in electrical communication with the circuitry of the respective support, each IDC connector including a terminal that provides an electrical connection between the conductor and the circuitry of the respective support.” This is shown by the four insulation displacement connectors that extend away from the support (two for each of the flexible insulated electrical conductors) and are inserted into the conductor to provide an electrical connection. The insulation displacement connectors connect to the circuitry of the PCB via plated through-holes. These features are illustrated in the photographs below and identified with added orange arrows:



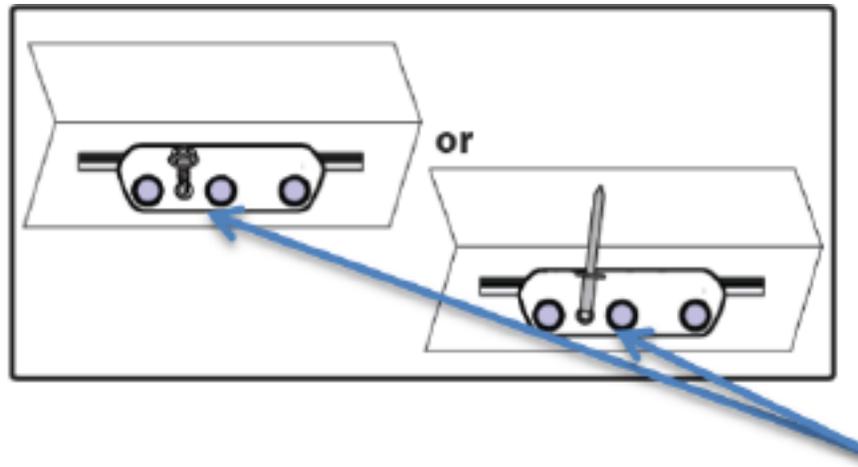
34. As further recited by claim 1 of the '771 patent, each module of the AgiLight SignRayz products contains “at least one LED mounted on each support and in electrical communication with the circuitry of the support.” This is shown by the fact that each module of the AgiLight SignRayz series of products includes three LEDs mounted to the PCB and in electrical communication therewith as reflected in the photographs below and as highlighted by the yellow and red arrows:



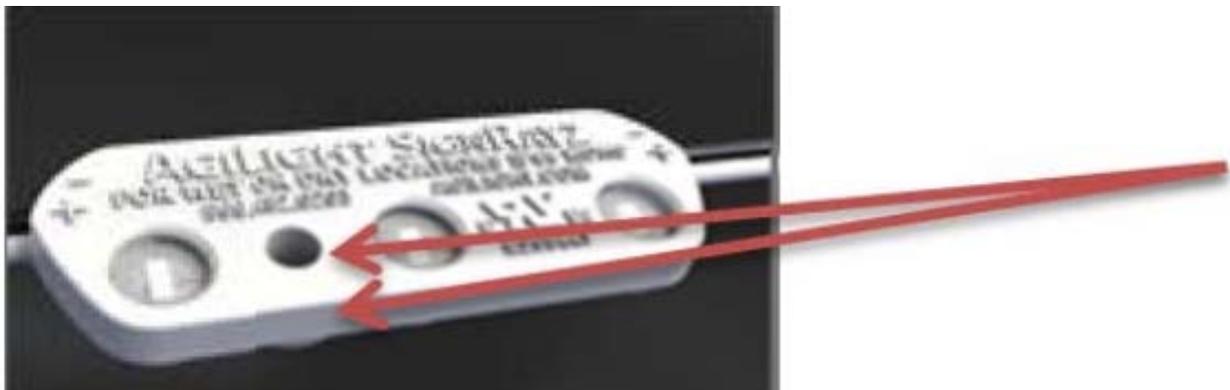
35. As further recited by claim 1 of the '771 patent, each module of the AgiLight SignRayz products contains a “plurality of overmolded housings, each housing at least substantially surrounding at least one support of the plurality of supports.” This is shown by the fact that each AgiLight SignRayz series of products includes an overmolded housing surrounding the PCB and a portion of the conductor adjacent to the PCB. The photograph below illustrates the overmolded housing of an infringing AgiLight product bisected along the outer periphery to remove it from the PCB. As stated in AgiLight’s Specification Sheets for the SignRayz products, the “[o]ver molded design [of the SignRayz products] protects circuitry and connections.”



36. In addition to directly infringing claim 1 of the '771 Patent, AgiLight has directly infringed other claims of the '771 Patent. As one non-limiting example, AgiLight has directly infringed claim 3 of the '771 Patent. Claim 3 of the '771 Patent depends from claim 1 and recites the light engine of claim 1 “further comprising a mounting element associated with at least one of the housings.” As reflected in the images below, highlighted with the added blue arrows, taken from AgiLight’s own materials, each housing of the AgiLight SignRayz series of products includes a mounting element through the housing:



37. As another non-limiting example of other directly infringed claims, claim 6 of the '771 Patent depends from claim 3 and recites that the “mounting element and the overmolded housing are an integrally formed unit.” As reflected in the photograph below and highlighted with the added red arrows, in the infringing AgiLight product, the mounting element and the overmolded housing are an integrally formed unit:



38. In addition to directly infringing the '771 patent, AgiLight has contributed to infringement of one or more claims of the '771 patent because there is no substantial non-infringing use of the AgiLight LED light strings at issue.

39. In addition to directly infringing the '771 patent through its acts associated with the LED light strings, AgiLight sells LED light strings that, when used as intended by AgiLight and in

accordance with instructions provided by AgiLight, directly infringe the '771 patent. As such, AgiLight has induced and continues to induce infringement of the '771 patent.

40. AgiLight has engaged in its conduct willfully and in complete disregard of, or with indifference to, GE Lighting Solutions' rights and interests.

41. At all relevant times, GE Lighting Solutions has complied with any marking and/or notice provisions of 35 U.S.C. § 287 with respect to the '771 patent.

42. As a result of AgiLight's actions, GE Lighting Solutions has suffered and continues to suffer substantial injury, including irreparable injury for which there is no adequate remedy at law, which will result in damages to GE Lighting Solutions, including loss of sales and profits, which GE Lighting Solutions would have made but for the infringement by AgiLight, unless AgiLight is enjoined by this Court.

COUNT III:
INFRINGEMENT OF UNITED STATES PATENT NO. 7,633,055

43. The allegations of the foregoing paragraphs are incorporated as if fully set forth herein.

44. On December 15, 2009, U.S. Patent No. 7,633,055 ("the '055 patent") entitled "Sealed Light Emitting Diode Assemblies Including Annular Gaskets and Method of Making Same" was duly and legally issued to Jeffrey Nall, Babi Koushik Saha and Bill Xin Wang and assigned to Lumination, LLC (now known as GE Lighting Solutions, LLC). A true and correct copy of the '055 patent is attached to this Complaint as Exhibit C.

45. GE Lighting Solutions is the assignee and owner of all rights and title to the '055 patent, with the exclusive right to enforce the patent against infringers and to sue for and collect damages for all relevant times, including the right to assert the present cause of action.

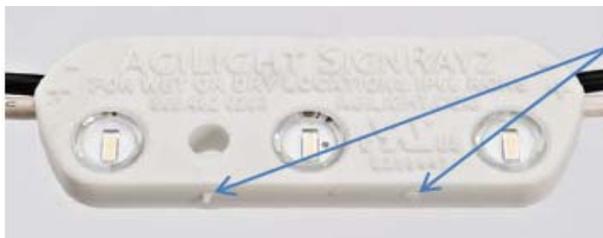


50. As further recited by claim 1 of the '055 patent, manufacture of AgiLight SignRayz products requires “sealing the circuit board with a sealant that also covers at least an outer annular portion of the annular gasket, but does not cover the optoelectronic device.” This is shown by the fact that the circuit board is sealed with a sealant that covers the outer annular portion of the gasket but does not cover the LEDs, as illustrated in the photograph below and highlighted with the added orange arrow:



51. As further recited by claim 1 of the '055 patent, the sealing in the AgiLight SignRayz products comprises “disposing the circuit board in an injection mold that includes a generally hollow member receiving the optoelectronic device and having an edge sealing against the gasket.” This is apparent from a visual inspection of the AgiLight SignRayz products, in that it is apparent that sealing is applied to the circuit board through an injection molding process. The

evidence of this injection molding process is illustrated in the photograph below and highlighted with the blue arrows:



52. As further recited by claim 1 of the '055 patent, the sealing in the AgiLight SignRayz products comprises “injecting sealant material into the injection mold, the injected sealant material being blocked by the generally hollow member and the annular gasket from reaching the optoelectronic device.” This is shown by the fact that the injected sealant material is blocked, by the generally hollow member and the annular gasket, from reaching the optoelectronic device as illustrated in the photograph below:



53. In addition to directly infringing the '055 patent, AgiLight has contributed to infringement of one or more claims of the '055 patent because there is no substantial non-infringing use of the AgiLight LED light strings at issue.

54. In addition to directly infringing the '055 patent through its acts associated with the LED light strings, AgiLight sells LED light strings that, when used as intended by AgiLight and in

accordance with instructions provided by AgiLight, directly infringes the '055 patent. As such, AgiLight has induced and continues to induce infringement of the '055 patent.

55. AgiLight has engaged in its conduct willfully and in complete disregard of, or with indifference to, GE Lighting Solutions' rights and interests.

56. At all relevant times, GE Lighting Solutions has complied with any marking and/or notice provisions of 35 U.S.C. § 287 with respect to the '055 patent.

57. As a result of AgiLight's actions, GE Lighting Solutions has suffered and continues to suffer substantial injury, including irreparable injury for which there is no adequate remedy at law, which will result in damages to GE Lighting Solutions, including loss of sales and profits, which GE Lighting Solutions would have made but for the infringement by AgiLight, unless AgiLight is enjoined by this Court.

COUNT IV
INFRINGEMENT OF UNITED STATES PATENT NO. 7,832,896

58. The allegations of the foregoing paragraphs are incorporated as if fully set forth herein.

59. On November 16, 2010, U.S. Patent No. 7,832,896 ("the '896 patent") entitled "LED Light Engine" was duly and legally issued to Koushik Saha, Jeffrey Nall, Mark J. Mayer, Chunmei Gao, Kevin Carpenter, Shanshan Xie, Yiyu Cao and John Owens and assigned to Lumination, LLC (now known as GE Lighting Solutions, LLC). A true and correct copy of the '896 patent is attached to this Complaint as Exhibit D.

60. GE Lighting Solutions is the assignee and owner of all rights and title to the '896 patent, with the exclusive right to enforce the patent against infringers and to sue for and collect damages for all relevant times, including the right to assert the present cause of action.

61. AgiLight manufactures, makes, has made, uses, practices, imports, provides, supplies, distributes, sells and/or offers for sale certain LED string lights, including but not limited to the AgiLight SignRayz series of products, that directly infringe one or more claims of the '896 patent.

62. As one example of AgiLight's direct infringement of the '896 patent, AgiLight's SignRayz Series G2 product infringes at least claims 16–20 of the '896 patent. Details of this infringement with regard to claim 16 are set forth below.

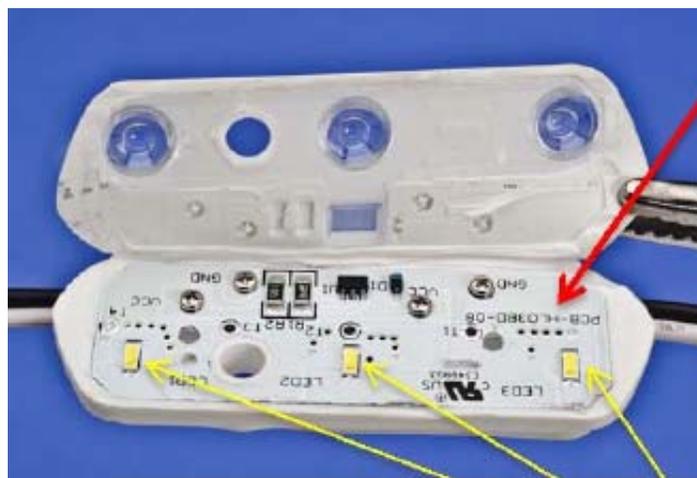
63. AgiLight's SignRayz Series G2 product is a “light engine” as recited by claim 16 of the '896 patent and comprises a plurality of LED modules interconnected via a flexible insulated electrical conductor, as illustrated in the photograph below:



64. As further recited by claim 16 of the '896 patent, AgiLight's SignRayz Series G2 product includes “a plurality of electrically interconnected LED modules” as shown by the fact that the AgiLight SignRayz Series G2 product has three modules per foot of length as described in the Series G2 data sheet and as illustrated in the photograph below:



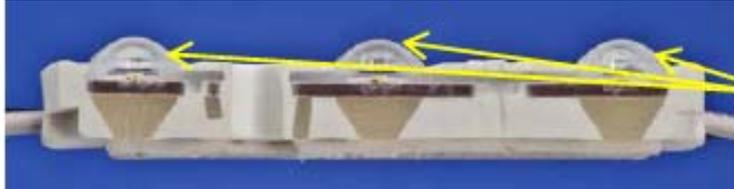
65. As further recited by claim 16 of the '896 patent, the modules of the AgiLight SignRayz Series G2 “LED modules includ[e] a support having circuitry on a first surface.” This is shown by the fact that each LED module has a support comprising a printed circuit board having circuitry on a surface of the PCB as illustrated in the photograph below:



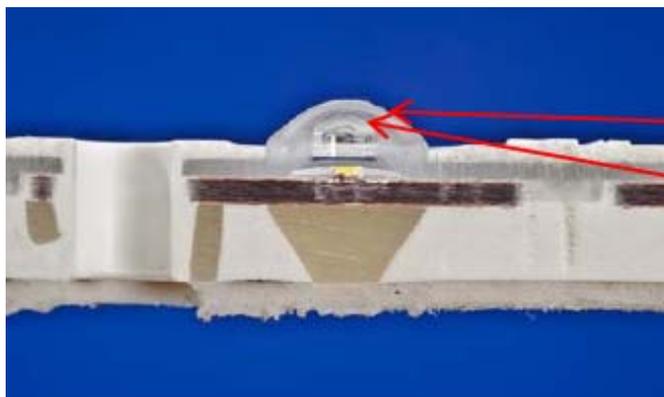
66. As further recited by claim 16 of the '896 patent, “an LED on the first surface support and electrically connected to the circuitry, the LED having a primary viewing angle.” This is shown by the fact that each LED module includes three LEDs electrically connected to the

circuitry and by the fact that each LED has a primary viewing angle of approximately 110 degrees, as illustrated in the photograph above.

67. As further recited by claim 16 of the '896 patent, “a substantially dome-shaped refractive optical element cover[s] the LED.” This is shown by the fact that each LED is covered by a dome-shaped refractive optic, as illustrated by the photograph below:



68. As further recited by claim 16 of the '896 patent, “the optical element having a generally spherical outer profile and substantially ellipsoidal inner profile to increase the primary viewing angle of the LED to provide an altered viewing angle that is greater than the primary viewing angle.” This is shown by the fact that the AgiLight SignRayz Series G2 light engine includes an optical element having a generally spherical outer profile and a substantially ellipsoidal inner profile which results in an altered viewing angle of 172 degrees, as illustrated in part by the photograph below. The AgiLight SignRayz Series G2 data sheet states that the “Nominal Beam Angle” is 172 degrees: “172° wide beam angle suitable for low profile channel letters.”



69. As further recited by claim 16 of the '896 patent, the AgiLight SignRayz Series G2 modules comprise “an overmolded housing substantially surrounding said support and contacting the optical element to seal the LED protecting the LED from ambient.” This is shown by the fact that each module includes an overmolded housing surrounding the support and contacting the optical element as illustrated by the photograph below. The AgiLight SignRayz Series G2 data sheet states, in pertinent part: “Over molded design protects circuitry and connections” and “Protective lens provides environmental protection.”



70. In addition to directly infringing claim 16 of the '896 Patent, AgiLight has directly infringed other claims of the '896 Patent. As one non-limiting example, AgiLight has directly infringed claim 17 of the '896 Patent. Claim 17 of the '896 Patent depends from claim 16 and recites the engine of claim 16 “wherein each LED module includes at least two LEDs mounted on the support and the optical element includes at least two refractive domes connected by an integrally formed portion, said integrally formed portion defining an opening, each refractive dome cooperating with a respective LED.” As reflected in the first image below, highlighted

with the added blue arrows, each of the AgiLight G2 modules includes three LEDs mounted on a PCB support and an optical element that includes three refractive domes, interconnected and cooperating, as required by this claim. As reflected in the second image below, and identified with the added red arrows, the integrally formed portion includes an opening:



71. As another non-limiting example of another claim of the '896 Patent that is directly infringed by AgiLight, AgiLight has directly infringed claim 19 of the '896 Patent. Claim 19 depends from claim 17 and recites that “the refractive domes are found on an integrally molded plastic or glass piece.” As reflected in the second image in the previous paragraph, the three refractive domes in the AgiLight GE products are found on an integrally molded plastic piece.

72. In addition to directly infringing the '896 patent, AgiLight has contributed to infringement of one or more claims of the '896 patent because there is no substantial non-infringing use of the AgiLight LED light strings at issue.

73. In addition to directly infringing the '896 patent through its acts associated with the LED light strings, AgiLight sells LED light strings that, when used as intended by AgiLight and in

accordance with instructions provided by AgiLight, directly infringe the '896 patent. As such, AgiLight has induced and continues to induce infringement of the '896 patent.

74. AgiLight has engaged in its conduct willfully and in complete disregard of, or with indifference to, GE Lighting Solutions' rights and interests.

75. At all relevant times, GE Lighting Solutions has complied with any marking and/or notice provisions of 35 U.S.C. § 287 with respect to the '896 patent.

76. As a result of AgiLight's actions, GE Lighting Solutions has suffered and continues to suffer substantial injury, including irreparable injury for which there is no adequate remedy at law, which will result in damages to GE Lighting Solutions, including loss of sales and profits, which GE Lighting Solutions would have made but for the infringement by AgiLight, unless AgiLight is enjoined by this Court.

IV. JURY DEMAND

77. GE Lighting Solutions requests a trial by jury on its claims.

PRAYER FOR RELIEF

THEREFORE, GE Lighting Solutions respectfully requests that this Court enter judgment in its favor and grant GE Lighting Solutions the following relief:

A. Enter judgment that one or more claims of the '140, '771, '055 and/or '896 patents have been infringed, literally and/or under the doctrine of equivalents, by Defendant and/or by other to whose infringement Defendant has contributed and/or by others whose infringement has been induced by Defendant;

B. Award GE Lighting Solutions monetary damages adequate to compensate it for past infringement consistent with 35 U.S.C. § 284;

C. That Defendant's infringement be found to be willful from the time Defendant became aware of the infringing nature of its products, which was prior to the time of filing of Plaintiff's Original Complaint, and that the Court treble damages for the period of such willful infringement pursuant to 325 U.S.C. § 284;

D. That GE Lighting Solutions be granted pre-judgment and post-judgment interest on the damages caused to it by reason of Defendant's infringing activities and other conduct complained of herein;

E. That this Court declare this an exceptional case and award GE Lighting Solutions its reasonable attorney's fees and costs in accordance with 35 U.S.C. § 285;

F. That Defendant be enjoined from any further activity or conduct that infringes one or more claims of the '140 patent, the '771 patent, the '055 patent and/or the '896 patent;

G. That this Court order that Defendant and its officers, agents, servants, employees, and attorneys, and those acting in concert and participation with them who receive actual notice of the Order, destroy all infringing products as well as all molds, machines, tooling, or other equipment used in the manufacture of products infringing the '140 patent, the '771 patent, the '055 patent and/or the '896 patent; and

H. That GE Lighting Solutions be granted such other and further relief as the Court may deem just and proper under the circumstances including, but not limited to, supplemental damages and/or and accounting for any infringing acts not covered by any damages verdict entered in this action and for any post-verdict and/or post-injunction infringing acts.

Date: February 13, 2012

Respectfully submitted

By: /s/Ryan P. Nowlin

James D. Vail
Ohio State Bar No. 0006723
Ryan P. Nowlin
Ohio State Bar No. 0079769
**SCHNEIDER, SMELTZ, RANNEY, &
LAFOND PLL**
1111 Superior Avenue, Suite 1000
Cleveland, OH 44114-2568
Telephone: (216) 696-4200
Facsimile: (216) 696-7303
jvail@ssrl.com
rnowlin@ssrl.com

Attorneys for Plaintiff
GE Lighting Solutions LLC

Robert J. McAughan, Jr.
Texas State Bar No. 00786096
Lead Attorney
David L. Terrell
Texas State Bar No. 24063030
SUTTON, MCAUGHAN & DEEVER, LLP
3 Riverway, Suite 900
Houston, Texas 77056
Telephone: (713) 800-5700
Facsimile: (713) 800-5699
bmcaughan@smd-iplaw.com
dterrell@smd-iplaw.com
*Of Counsel, Pro Hoc Vice Application to be
filed*