IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF GEORGIA

SATCO PRODUCTS, INC. *Plaintiff,* v. SEOUL SEMICONDUCTOR CO., LTD. and SEOUL SEMICONDUCTOR, INC. *Defendants.*	Civil Action No. _____ **JURY TRIAL DEMANDED**

PLAINTIFF'S COMPLAINT FOR PATENT INFRINGEMENT

Satco Products, Inc. ("Satco") files this Complaint against Defendants Seoul Semiconductor Co., Ltd. ("SSC") and Seoul Semiconductor, Inc. ("SSI") (collectively, "Seoul Semiconductor" or "Defendants") for infringement of U.S. Patent No. 6,930,332 (the "'332 patent"), U.S. Patent No. 8,692,285 (the "'285 patent") and U.S. Patent No. 10,533,712 (the "'712 patent") (collectively, the "Asserted Patents").

THE PARTIES

1. Plaintiff Satco is a company organized and existing under the laws of the State of New York with its principal place of business located at 110 Heartland Blvd., Brentwood, New York 11717.

2. Defendant SSI is a corporation organized under the laws of California

with its principal place of business at 1895 Beaver Ridge Circle, Suite G, Norcross, Georgia 30071. SSI is registered to do business in Georgia and has a registered agent at 1895 Beaver Ridge Circle, Suite G, Norcross, Georgia 30071.

3. Defendant SSC is a corporation organized under the laws of the Republic of Korea with its principal place of business at 97-11, Sandan-ro 163beon-gil, Danwon-gu, Ansan-si, Gyeonggi-do, Korea. On information and belief, defendant SSI is a wholly-owned subsidiary of defendant SSC.

4. On information and belief, defendant SSC and its direct and indirect subsidiaries, including defendant SSI (collectively, "Seoul Semiconductor"), operate, manage and direct the worldwide "Seoul Semiconductor" business. Seoul Semiconductor makes, sells, and offers for sale LED lighting products throughout the United States, including in the Northern District of Georgia.

5. Seoul Semiconductor describes itself as "the world's second-largest global LED manufacturer" and "a leading global innovator of LED products". (*See* http://www.seoulsemicon.com/en/company/press_view/397). In achieving its self-described market leading position, Seoul Semiconductor has focused its business on the sale of LED lighting, which has led to a significant increase in Seoul Semiconductor's sales of large-scale professional and consumer lighting products, as well as its overall revenues.

JURISDICTION AND VENUE

6. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).

7. Upon information and belief, SSC is subject to this Court's specific and general personal jurisdiction pursuant to the Georgia Long Arm Statute and/or in light of SSC's systematic and continuous contact with Georgia, due at least to its substantial business in this State and judicial district, including: (A) at least part of its infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to Georgia residents vicariously through and/or in concert with its intermediaries, distributors, importers, customers and/or subsidiaries. For example, SSC describes itself as "the world's second-largest global LED manufacturer" and SSC and its subsidiaries have a significant business presence in the United States. SSC lists "Sales offices" in Atlanta, GA, Detroit, MI, Los Angeles, CA, and San Jose, CA and Avnet, Digikey, Mouser Electronics USA, NRC Electronics, and WPG America Inc. as U.S. Distributors (*see* http://www.seoulsemicon.com/en/support/wheretobuy). SSC also lists a "Lighting Small Lab" in Atlanta, GA and a "Production" facility in Columbia, SC (*see*

http://www.seoulsemicon.com/en/company/contact/globalnetwork).

8. This Court has personal jurisdiction over SSC, directly and through intermediaries, distributors, importers, customers, and/or subsidiaries, including its U.S. based, wholly-owned subsidiaries such as SSI. Both by itself and through the direction and control of its subsidiaries, SSC has committed acts of direct and indirect patent infringement within Georgia, and elsewhere within the United States, giving rise to this Action and/or has established minimum contacts with Georgia such that personal jurisdiction over SSC would not offend traditional notions of fair play and substantial justice.

9. SSI is a wholly owned subsidiary of SSC. Upon information and belief, SSC compensates SSI for its manufacturing, use, sales, offers for sale, and/or importation of LED lighting products in the United States. As such, SSC has a direct financial interest in SSI.

10. SSC and SSI each manufactures, uses, offers for sale, sells, and/or imports the following products which infringe one or more claims of the ’285 patent: Seoul Semiconductor surface mount LEDs that comprise a multi-junction LED, including, but not limited to: Acrich MJT LEDs, Mid Power 3030 series, including S1WM-3030xx8006-00000000-00001; Acrich SAW8WA2A; Acrich SAW8P42A; Acrich MJT – 5630 series, including SAW8KG0B; and all other similar Seoul

Semiconductor LED lighting products and corresponding product and model numbers (collectively, the "Accused Multi-Junction Products").

11. SSC and SSI each manufactures, uses, offers for sale, sells, and/or imports the following products which infringe one or more claims of the '332 patent: Seoul Semiconductor surface mount LEDs, including, but not limited to: Acrich SAW8P42A; Acrich MJT – 5630 series, including SAW8KG0B; Mid-Power LED 5630 series, including STW8Q14C, and all other similar Seoul Semiconductor LED lighting products and corresponding product and model numbers (collectively, the "Accused LED Packaging Products").

12. SSC and SSI each manufactures, uses, offers for sale, sells, and/or imports the following products which infringe one or more claims of the '712 patent: Seoul Semiconductor LED filaments, including, but not limited to, the following series: CRI80 , CRI90, Title20, and 134mm, 255mm, 300mm, 428mm, 450mm, 600mm and 1755mm Flexible Filaments, including, but not limited to, the following part nos. SFW8Cx1A-AD, SFW8Cx1A-AE, SFW8Cx1A-CE SFW8Cx2B-D3, SFW2Cx1A-AD, SFW2Cx1A-AE, SFW2Cx1A-CE, SFW2Cx2B-D3, SFWHCx1A-AD, SFWHCx1A-AE, SFWHCx1A-CE, SFWHCx2B-D3, SFW8Cx2B-EE(DE), SFW9C52B-LF, SFW8C62x-xF, SFWHC62x-xF, SFW8F12A-01, SFW8F25A-01, SFW8F30A-01, SFW8F24A-01, SFW8F45A-01, SFW8F60A-01, SFW8F17B-01

(*see* http://www.seoulsemicon.com/en/technology/filament/ at "Filament Portfolio" and "Line up"); and all other similar Seoul Semiconductor LED filaments and corresponding product and model numbers (collectively, the "Accused LED Filament Products").

13. Upon information and belief, SSC directs or controls and authorizes all activities of SSI, including SSI's manufacturing, using, offering for sale, selling, and/or importing the Accused Multi-Junction Products, the Accused LED Packaging Products and the Accused LED Filament Products (collectively, the "Accused Products"), or other products that incorporate the fundamental technologies covered by the Asserted Patents. SSI is authorized to manufacture, use, import, sell, or offer for sale the Accused Products on behalf of its controlling parent SSC. Thus, SSI conducts infringing activities on behalf of SSC.

14. Upon information and belief, SSI's corporate presence in the United States provides SSC with substantially all the business advantages that it would otherwise enjoy if it conducted its business here through its own offices or paid agents. As discussed in the preceding paragraph, upon information and belief, SSI is authorized to manufacture, use, import, sell, and offer for sale SSC's Accused Products on behalf of SSC. For example, SSI operates within SSC's global network of sales subsidiaries in North and South America, Europe, and Asia. As a result, Seoul Semiconductor's

Accused Products are manufactured, imported, distributed, sold, offered for sale and used in the United States, including within the Northern District of Georgia.

15. Through SSC's intermediaries, distributors, importers, customers, and/or subsidiaries maintaining a business presence in, operating in, and/or residing in the United States, including but not limited to SSI, Seoul Semiconductor's products, including the Accused Products, are or have been widely distributed and sold in retail stores, both brick and mortar and online, in Georgia including within this judicial district.

16. Upon information and belief, SSC has placed and continues to place the Accused Products into the stream of commerce via established distribution channels comprising at least subsidiaries and distributors, including SSI, and customers, with the knowledge and/or intent that those products are and/or will be manufactured, imported, used, offered for sale, and sold in the United States and Georgia, including in this judicial district.

17. In the alternative, the Court has personal jurisdiction over SSC under Federal Rule of Civil Procedure 4(k)(2), because the claims for patent infringement in this action arise under federal law, SSC is not subject to the jurisdiction of the courts of general jurisdiction of any state, and exercising jurisdiction over SSC is consistent with the United States Constitution.

18. Venue is proper in this judicial district as to SSC pursuant to 28 U.S.C. § 1391 because, among other reasons, SSC is not a resident in the United States and, thus, may be sued in any judicial district, including this one, pursuant to 28 U.S.C. § 1391(c)(3). *See In re HTC Corp.*, 889 F.3d 1349, 1357 (Fed. Cir. 2018) ("The Court's recent decision in *TC Heartland* does not alter" the alien-venue rule).

19. On information and belief, SSI is subject to this Court's specific and general personal jurisdiction pursuant the Georgia Long Arm Statute and/or in light of SSI's systematic and continuous contact with Georgia, due at least to its physical presence and substantial business in this State and judicial district, including: (A) at least part of its own infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from the Accused Products manufactured, imported, used, offered for sale, and sold to Georgia residents. SSI has conducted and regularly conducts business within the United States and this District. SSI has purposefully availed itself of the privileges of conducting business in the United States and, more specifically, in Georgia and this District. SSI has sought protection and benefit from the laws of the State of Georgia by placing the Accused Products into the stream of commerce through an established distribution channel with awareness and/or intent that they will be purchased by consumers in this District.

20. Venue is proper in this district as to SSI under 28 U.S.C. §§ 1391 and 1400(b) because, among other reasons, SSI has a regular and established place of business in this District, including at least at 1895 Beaver Ridge Circle, Suite G, Norcross, Georgia 30071.

THE ASSERTED PATENTS AND TECHNOLOGY

21. The inventions of the '332, '285 and '712 patents were conceived by employees of Panasonic Corporation ("Panasonic") and a predecessor, Matsushita Electric Works, Ltd. Founded in 1918, Panasonic has been at the forefront of the electronics industry for over a century. For example, Panasonic made numerous innovations in the lighting, home appliance, and television industries. Indeed, Panasonic was involved with the development of: a 2-way socket (1918); the first key socket (1929); the first round fluorescent lamp (1957); a multi-halogen lamp (1966); a high-voltage sodium light (1969); the "Palook" fluorescent light (1977); the first "light capsule" light bulb socket type fluorescent light (1980); a neodymium light bulb (1990); the Palook ball compact fluorescent light bulb (1993); a double ring fluorescent lamp (1997); the world's first full-HD 3D compatible TV (2010); and 4K televisions (2013). Indeed, a search of the USPTO database for all patents assigned to "Panasonic" yields over 27,000 matches.

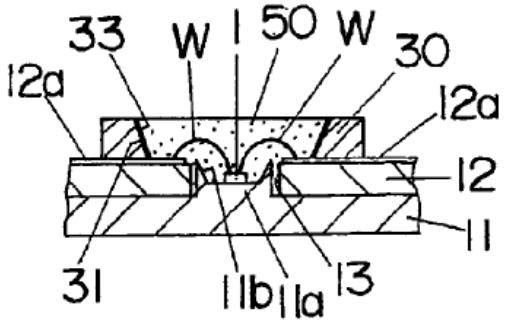
22. The '332 patent, entitled "Light emitting device using LED," issued on

August 16, 2005. A copy of the '332 patent is attached as Exhibit 1. Plaintiff is the assignee of all rights, title, and interests in and to the '332 patent and holds the right to sue and recover for past, present, and future infringement thereof.

23. The '332 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The '332 patent issued from U.S. Patent Application No. 10/466,114.

24. The '332 patent is generally directed to a light emitting device that provides enhanced heat radiation while allowing light from a LED chip to be efficiently projected. In particular, the light emitting devices of the '332 patent comprise, *inter alia*: a metal plate with a frontwardly extending projection with a housing recess; a LED chip coupled to the metal plate at the bottom of the housing recess; an insulating substrate joined to the metal plate; and a light-transmitting sealing resin that encapsulates the LED chip. *See*, *e.g.*, Fig. 9:

FIG. 9



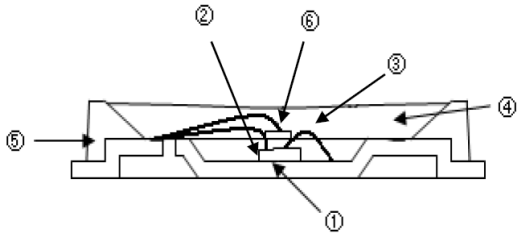
25. Seoul Semiconductor manufactures, uses, sells, offers for sale and/or

imports the Accused LED Packaging Products, which include surface-mount LEDs and lighting products having a metal plate with a frontwardly extending projection with a housing recess, a LED chip coupled to the metal plate at the bottom of the housing recess, an insulating substrate joined to the metal plate, and a light-transmitting sealing resin that encapsulates the LED chip. Upon information and belief, a significant portion of Seoul Semiconductor's revenue is derived from the manufacture and sale of the Accused LED Packaging Products. Seoul Semiconductor advertises the Accused LED Packaging Products as having the "a substrate made up of a molded plastic reflector sitting on top of a bent lead frame" with a LED "attached within the reflector cavity and the cavity is encapsulated by silicon":

SEOUL SEMICONDUCTOR Product Data Sheet

5630 – Mid-Power LED

Mechanical Dimensions / Material Structure



(*See, e.g.,* https://www.mouser.com/datasheet/2/363/STW8Q14C_datasheet(5)-1511997.pdf).

26. For example, upon information and belief, the Accused LED Packaging

Products comprise Seoul Semiconductor surface mount LEDs and other lighting products incorporating surface mount LEDs that are made, used, imported, offered for sale and/or sold in the United States, and which meet each and every limitation of at least one claim of the ’332 patent.

27. The ’285 patent, entitled “Semiconductor light emitting device, light emitting module, lighting apparatus and display element,” issued on April 8, 2014. A copy of the ’285 patent is attached as Exhibit 2. Plaintiff is the assignee of all rights, title, and interests in and to the ’285 patent and holds the right to sue and recover for past, present, and future infringement thereof.

28. The ’285 patent is valid, enforceable, and was duly issued in full compliance with Title 35 of the United States Code. The ’285 patent issued from U.S. Patent Application No. 13/651,101.

29. The ’285 patent is generally directed to multi-junction LEDs that have a multilayer epitaxial structure. In particular, the multi-junction LEDs of the ’285 patent comprise, *inter alia*: a base substrate; and a multilayer epitaxial structure that includes first and second conductive layers, a light emitting layer, a first electrode connected to the first conductive layer, a second electrode connected to the second conductive layer, an insulating film, a first power feed terminal and a second power feed terminal. *See*, *e.g.*, Figs. 1B (showing a plan view of the LED array chip) and 2A (showing a cross-

section of part of the LED array chip):

FIG.1B

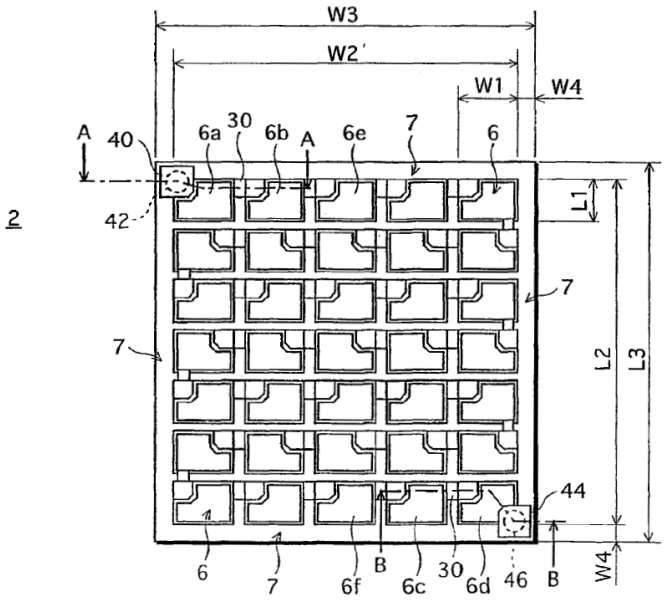
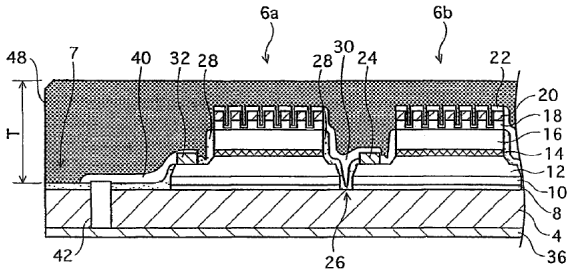
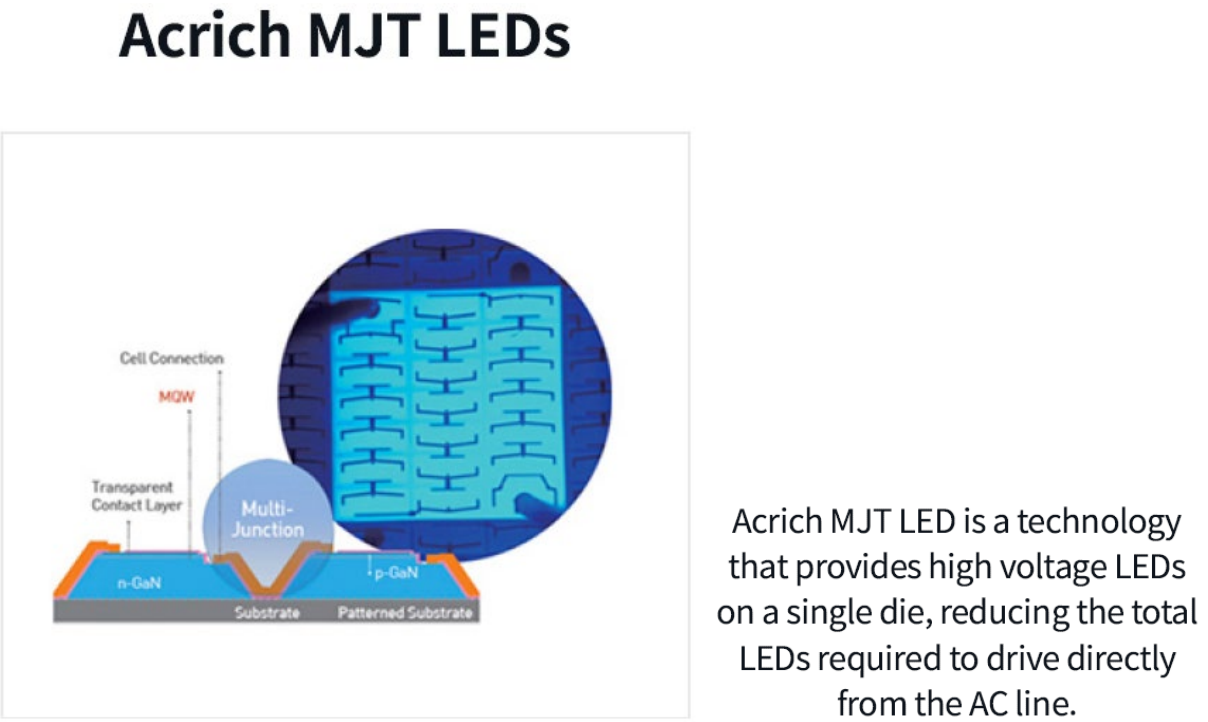


FIG.2A



30. Seoul Semiconductor manufactures, uses, sells, offers for sale and/or imports the Accused Multi-Junction Products, which include a multi-junction LED array chip and lighting products comprising a multi-junction LED array chip. Upon information and belief, a significant portion of Seoul Semiconductor's revenue is derived from the manufacture and sale of the Accused Multi-Junction Products. Seoul Semiconductor advertises the Accused Multi-Junction Products as a base substrate; and a multilayer epitaxial structure that includes first and second conductive layers, a light emitting layer, a first electrode connected to the first conductive layer, a second electrode connected to the second conductive layer, an insulating film, a first power feed terminal and a second power feed terminal:



See http://www.seoulsemicon.com/en/technology/acrich/.

31. For example, upon information and belief, the Accused Multi-Junction Products comprise Seoul Semiconductor lighting products with Acrich MJT LEDs that are made, used, imported, offered for sale and/or sold in the United States, and which meet each and every limitation of at least one claim of the ’285 patent.

32. The ’712 patent, entitled “Light bulb shaped lamp,” issued on January 14, 2020. A copy of the ’712 patent is attached as Exhibit 3. Plaintiff is the assignee of all rights, title, and interests in and to the ’712 patent and holds the right to sue and recover for past, present, and future infringement thereof.

33. The ’712 patent is valid, enforceable, and was duly issued in full

compliance with Title 35 of the United States Code. The '712 patent issued from U.S. Patent Application No. 15/639,474.

34. The '712 patent is generally directed to light emitting modules that have a higher efficiency and longer lifetime than incandescent light bulbs. In particular, the LED light emitting modules of the '712 patent comprise, *inter alia*, a base board; LED chips mounted on a base board, which are encased in a sealing material (e.g., a yellow phosphor); and power supply leads for supplying power to the LEDS. *See*, *e.g.*, Figs. 2A and 2B:

FIG. 2A

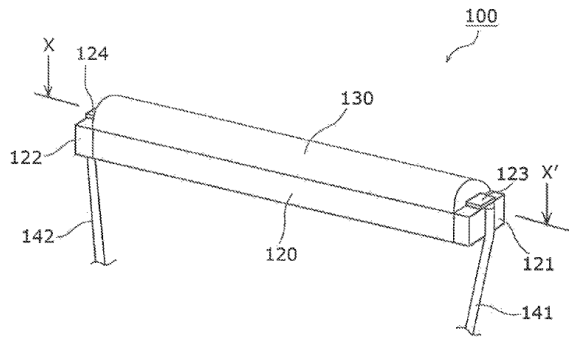
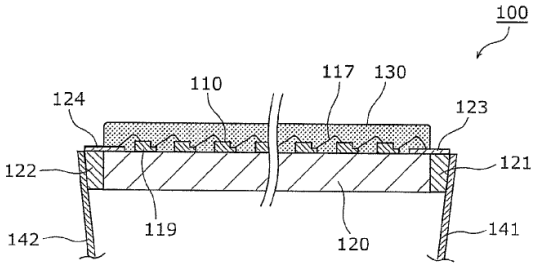


FIG. 2B



35. Upon information and belief, the Accused LED Filament Products are made, used, imported, offered for sale and/or sold in the United States and meet each and every limitation of at least one claim of the '712 patent.

COUNT I

(INFRINGEMENT OF U.S. PATENT NO. 6,930,332)

36. Plaintiff repeats and realleges paragraphs 1- 35 as if fully set forth at length herein.

37. Seoul Semiconductor has and continues to directly infringe one or more claims of the ’332 patent in this judicial district and elsewhere in Georgia and the United States.

38. Upon information and belief, Seoul Semiconductor makes, uses, sells, offers for sale, and/or imports into the United States the Accused LED Packaging Products.

39. Seoul Semiconductor directly infringes the ’332 patent under 35 U.S.C. § 271(a), literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing the Accused LED Packaging Products in the United States.

40. For example, as set forth in the attached non-limiting claim chart (Exhibit 4), Seoul Semiconductor directly infringes at least Claim 1 of the ’332 patent, literally and/or under the doctrine of equivalents, through its making, using, offering for sale, selling, and/or importing the Accused LED Packaging Products.

41. Claim 1 of the ’332 patent recites:

A light emitting device using an LED, comprising:

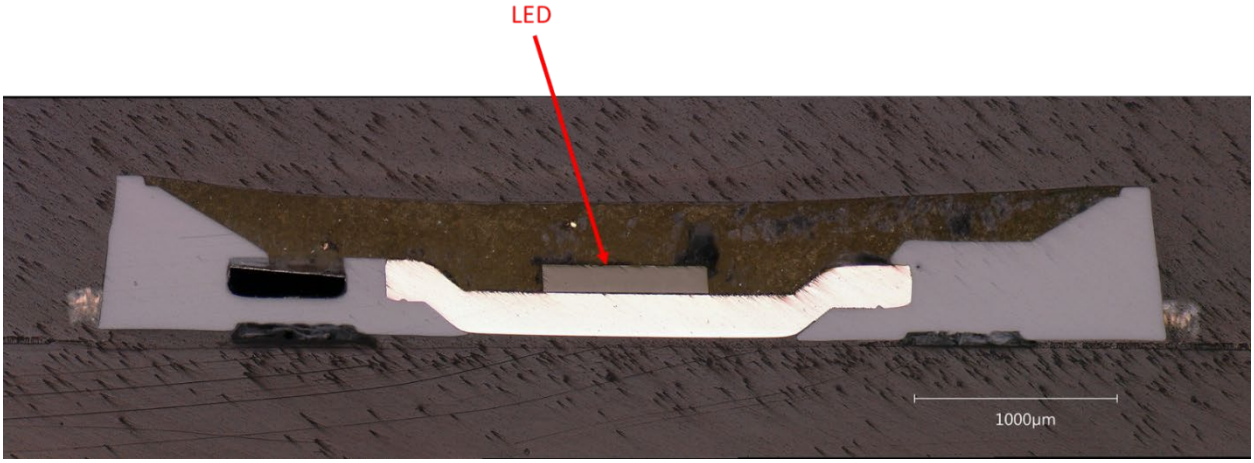
a metal plate having a frontwardly extending projection, the projection having a front provided with a housing recess;

a light emitting diode chip disposed on a bottom of the housing recess to be thermally coupled to the metal plate;

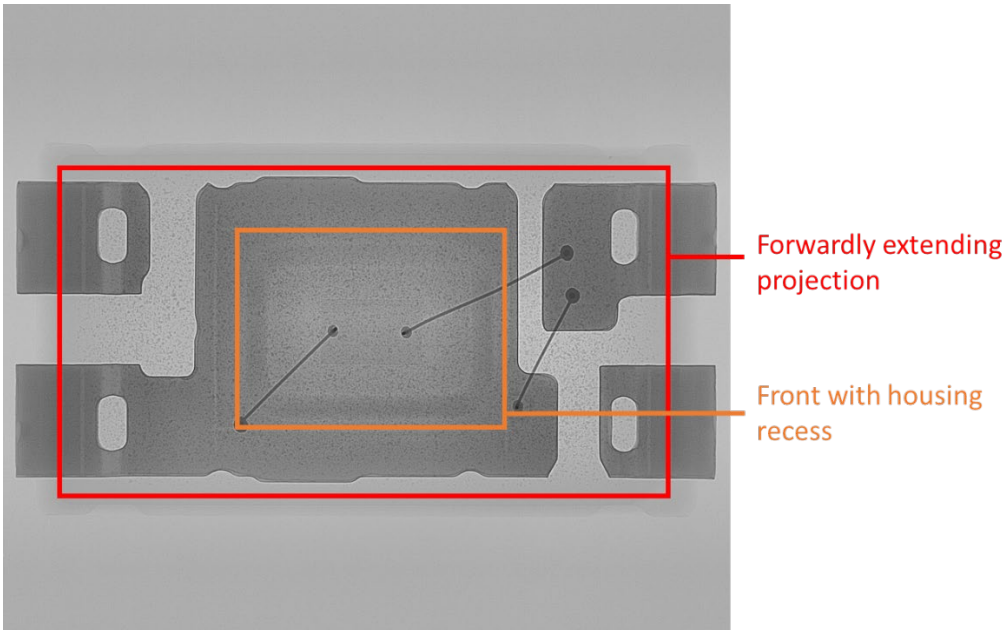
an insulating substrate having an insertion hole into which the projection extends, the insulating substrate being joined to the metal plate in layers; and

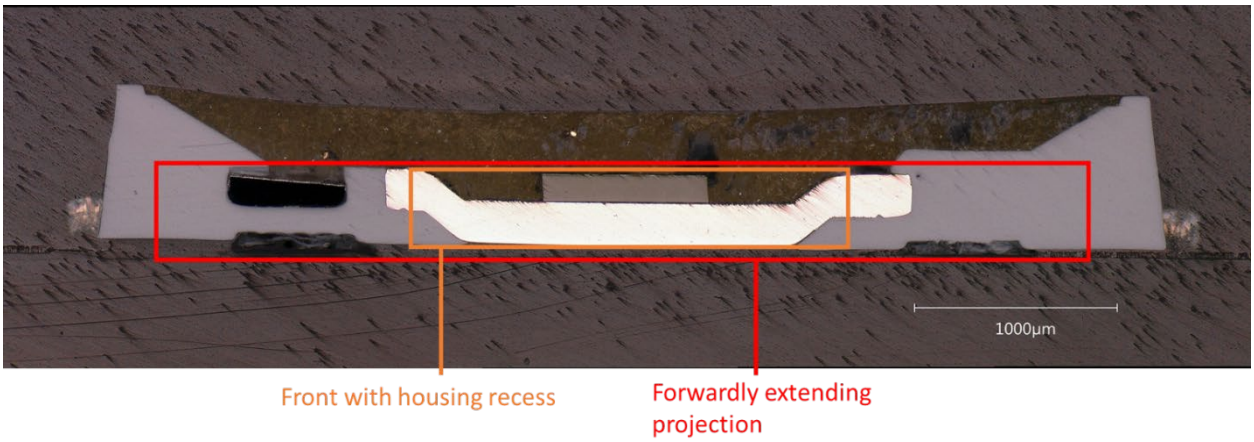
a light-transmitting sealing resin in which the light emitting diode chip is encapsulated.

42. As one non-limiting example of said infringement, on information and belief, the Seoul Semiconductor Mid-Power LED – 5630 Series, including the STW8Q14C-W5X5-CA (the "5630 Series"), is a light emitting device using an LED, as shown below:

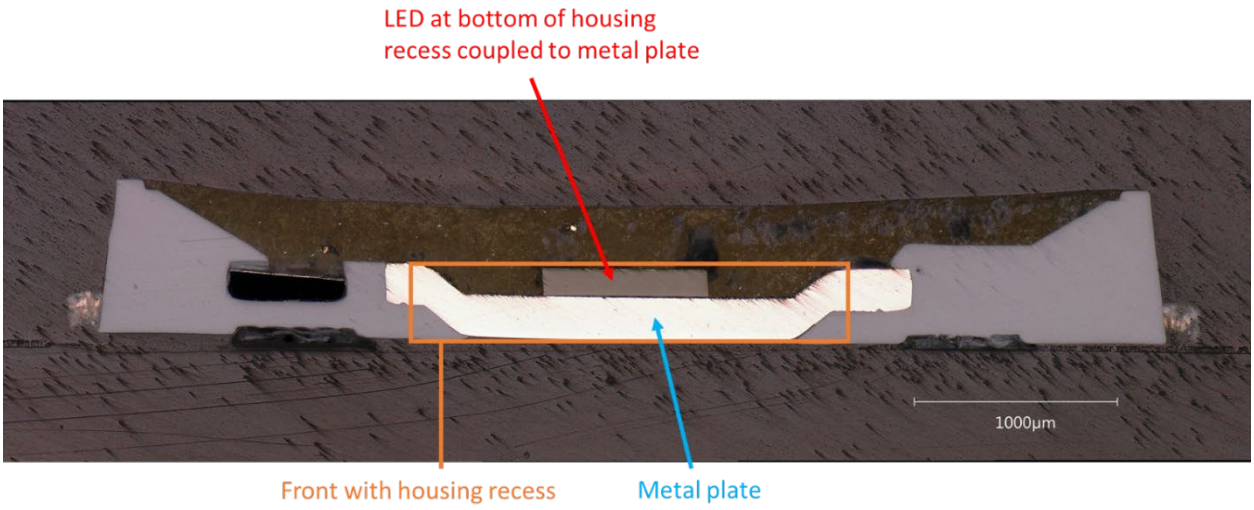


43. On information and belief, the 5630 Series comprises a metal plate having a frontwardly extending projection, the projection having a front provided with a housing recess, as shown below:

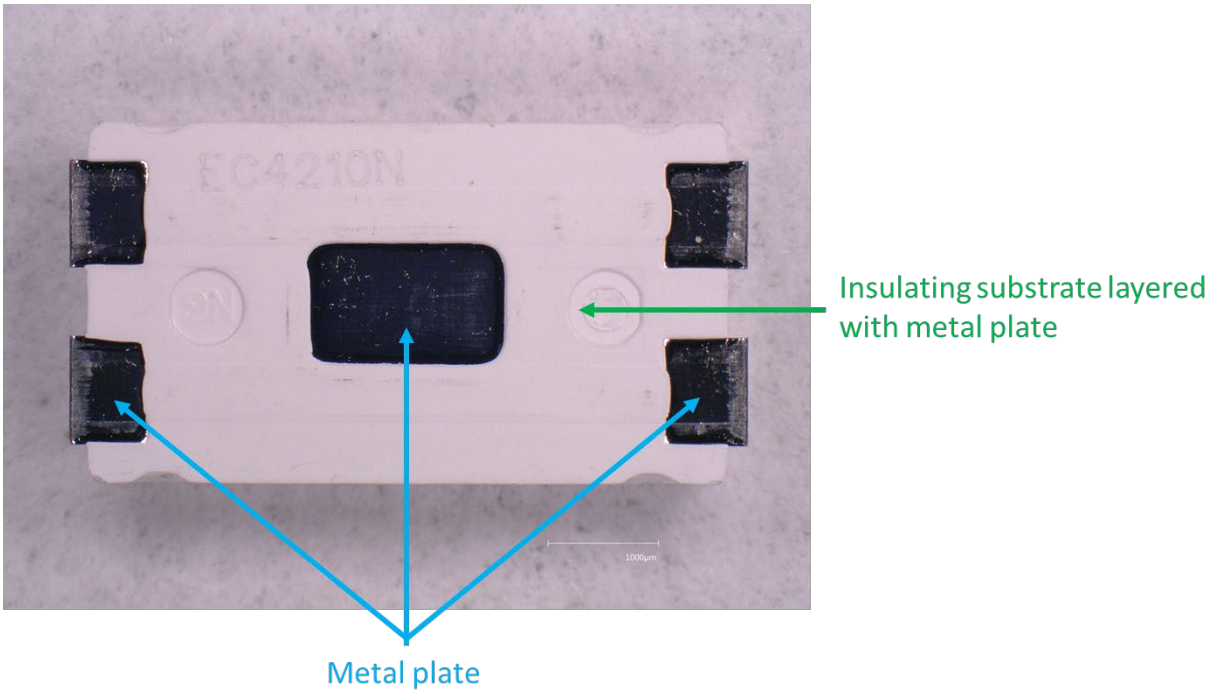


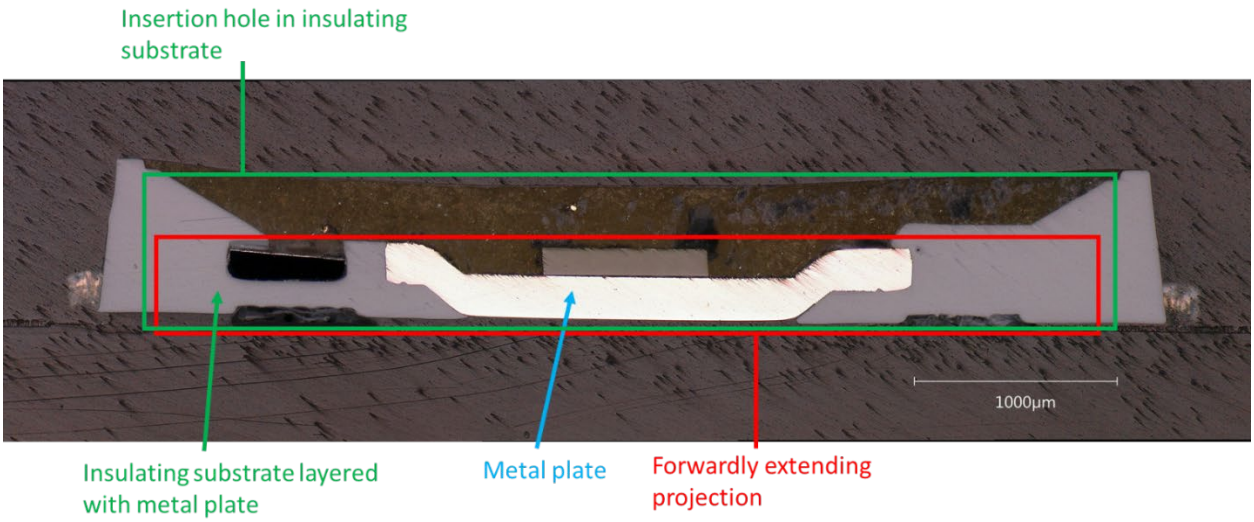


44. On information and belief, the 5630 Series comprises a light emitting diode chip disposed on a bottom of the housing recess to be thermally coupled to the metal plate, as shown below:

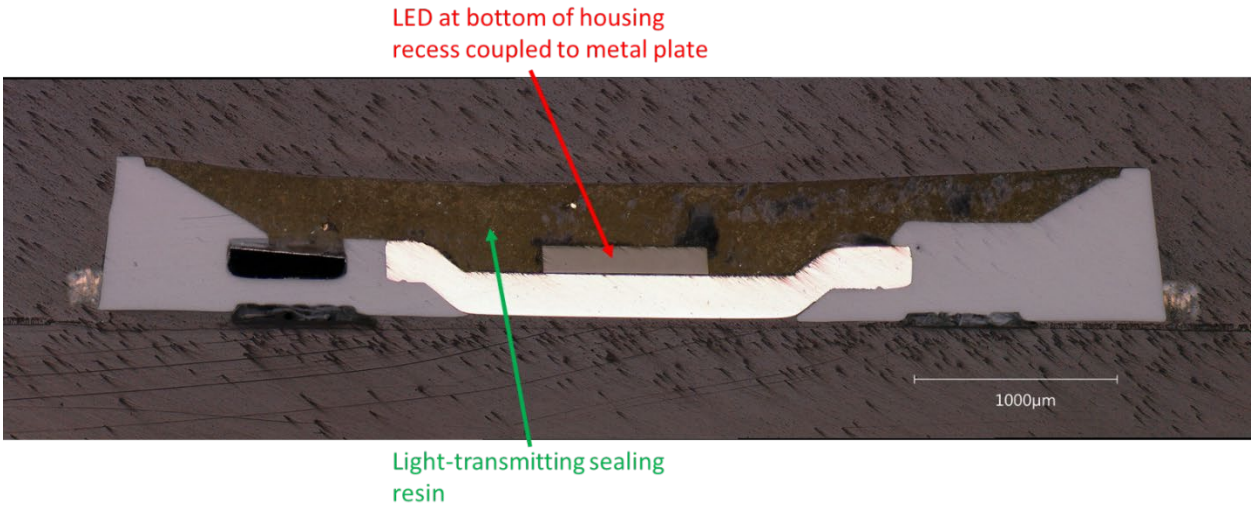


45. On information and belief, the 5630 Series comprises an insulating substrate having an insertion hole into which the projection extends, the insulating substrate being joined to the metal plate in layers, as shown below:





46. On information and belief, the 5630 Series comprises a light-transmitting sealing resin in which the light emitting diode chip is encapsulated, as shown below:



47. The full extent of Seoul Semiconductor's infringement is not presently known to Plaintiff. On information and belief, Seoul Semiconductor has made, used, sold, offered for sale, and/or imported products under different names or part numbers

that infringe the ’332 patent in a similar manner. Plaintiff makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and/or revise its identification based on additional information obtained through discovery or otherwise.

48. On information and belief, Seoul Semiconductor has known of the ’332 patent since at least as early as the service date of this Complaint.

49. Upon information and belief, since at least the above-mentioned date when Seoul Semiconductor was on notice of its infringement, Seoul Semiconductor has actively induced, under U.S.C. § 271(b), its distributors, customers and/or end users that use, sell, offer for sale and/or import the Accused LED Packaging Products that include all of the limitations of one or more claims of the ’332 patent to directly infringe one or more claims of the ’322 patent, with knowledge, and/or with willful blindness of the fact, that the induced acts constitute infringement of the ’332 patent. Seoul Semiconductor’s distributors, customers and/or end users have directly infringed and are directly infringing, either literally and/or under the doctrine of equivalents, the inventions claimed in the ’332 patent through their selling, offering for sale, importing and/or using the Accused LED Packaging Products. Seoul Semiconductor induces this direct infringement through its affirmative acts of manufacturing, selling, distributing,

and/or otherwise making available the Accused LED Packaging Products, and providing technical guides, product data sheets, demonstrations, advertisements, installation guides, and other forms of support that induce their distributors, customers, and/or end users to directly infringe the '332 patent. The Accused Multi-Junction Products are designed in such a way that when they are used for their intended purpose, the user infringes the '332 patent. Seoul Semiconductor knows and intends that its distributors, customers, and/or end users that purchase the Accused Multi-Junction Products will use those products for their intended purpose.

50. Seoul Semiconductor is, thus, at minimum, liable to Plaintiff in an amount that adequately compensates Plaintiff for Seoul Semiconductor's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT II
(INFRINGEMENT OF U.S. PATENT NO. 8,692,285)

51. Plaintiff repeats and realleges paragraphs 1- 50 as if fully set forth at length herein.

52. Seoul Semiconductor has and continues to directly infringe one or more claims of the '285 patent in this judicial district and elsewhere in Georgia and the United States.

53. Upon information and belief, Seoul Semiconductor makes, uses, sells,

offers for sale, and/or imports into the United States the Accused Multi-Junction Products.

54. Seoul Semiconductor directly infringes the ’285 patent under 35 U.S.C. § 271(a), literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing the Accused Multi-Junction Products in the United States.

55. For example, as set forth in the attached non-limiting claim chart (Exhibit 5), Seoul Semiconductor directly infringes at least Claim 1 of the ’285 patent, literally and/or under the doctrine of equivalents, through its making, using, offering for sale, selling, and/or importing the Accused Multi-Junction Products.

56. Claim 1 of the ’285 patent recites:

A semiconductor light emitting device comprising:

a base substrate;

a multilayer epitaxial structure that includes a first conductive layer, a second conductive layer and a light emitting layer that is formed between the first conductive layer and the second conductive layer, the first conductive layer being disposed on a main surface of the base substrate in such a manner to be positioned closer to the base substrate than the second conductive layer;

a first electrode that is electrically connected to the first conductive layer;

a second electrode that is electrically connected to the second conductive layer;

an insulating film is disposed on each side surface of the multilayer epitaxial structure and part of an upper surface of the multilayer epitaxial structure,

a first conductive film and a second conductive film are disposed on the main surface of the base substrate,

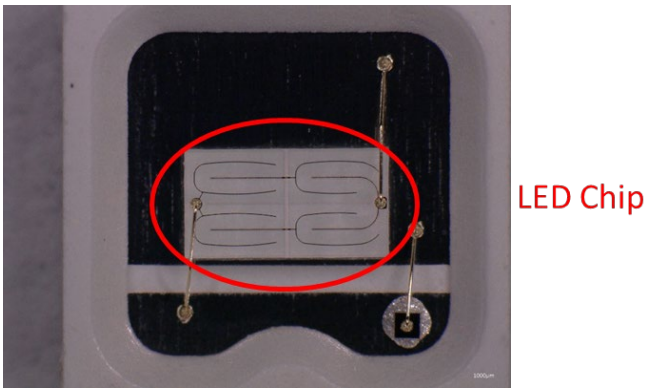
the second conductive film is disposed on one side surface of the insulating film,

a first power feed terminal and a second power feed terminal are disposed on at least one of two main surfaces of the base substrate,

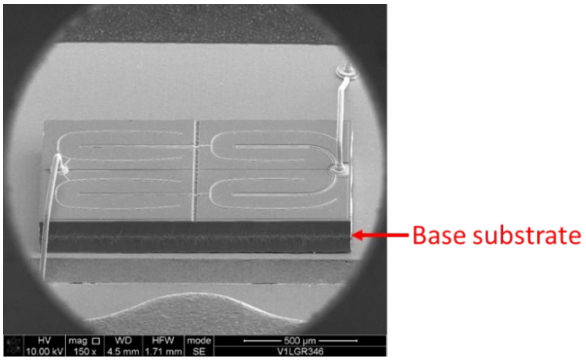
the first electrode is electrically connected to the first power feed terminal via the first conductive film, and

the second electrode is electrically connected to the second power feed terminal via the second conductive film that extends over the insulating film on the side surface and the upper surface of the multilayer epitaxial structure to electrically contact the second electrode on the second conductive layer.

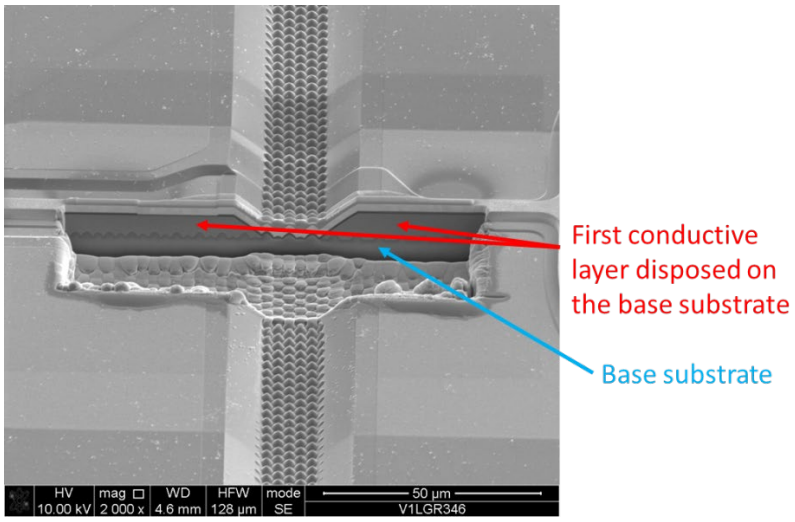
57. As one non-limiting example of said infringement, on information and belief, the Acrich MJT – 3030 series, including S1WM-3030 (the "Acrich MJT") is a semiconductor light emitting device, as shown below:

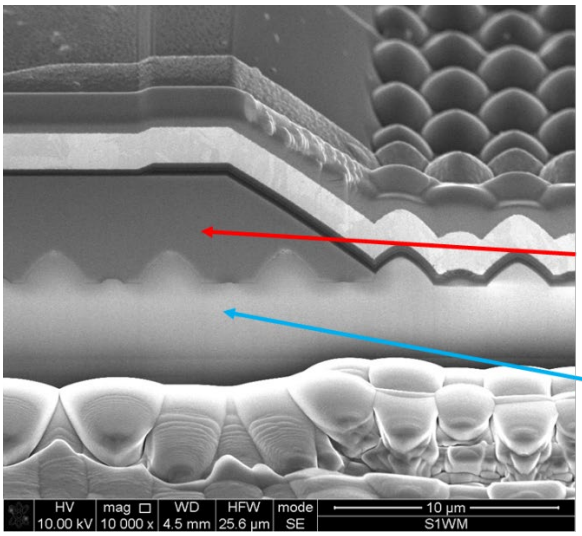


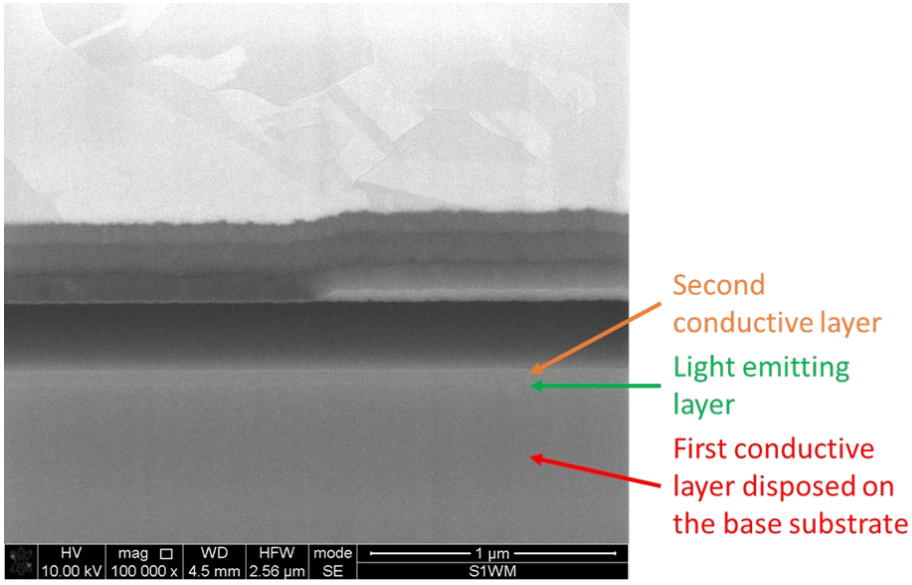
58. On information and belief, the Acrich MJT comprises a base substrate, as shown below:



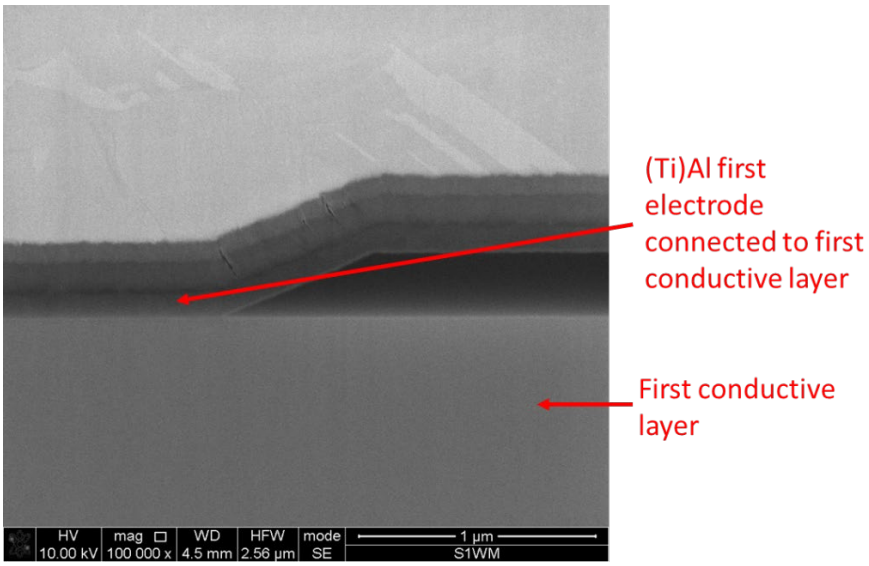
59. On information and belief, the Acrich MJT comprises a multilayer epitaxial structure that includes a first conductive layer, a second conductive layer and a light emitting layer that is formed between the first conductive layer and the second conductive layer, wherein the first conductive layer is disposed on a main surface of the base substrate in such a manner to be positioned closer to the base substrate than the second conductive layer, as shown below:



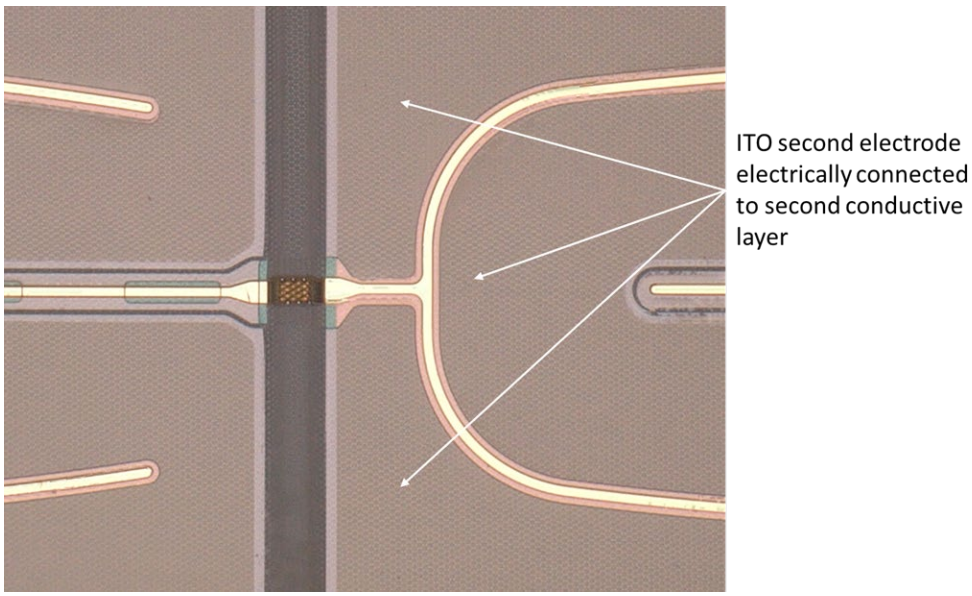




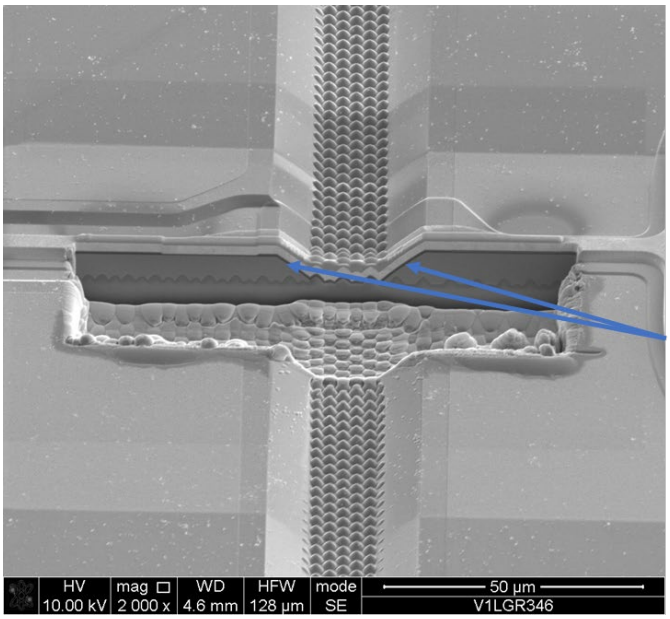
60. On information and belief, the Acrich MJT comprises a first electrode that is electrically connected to the first conductive layer, as shown below:



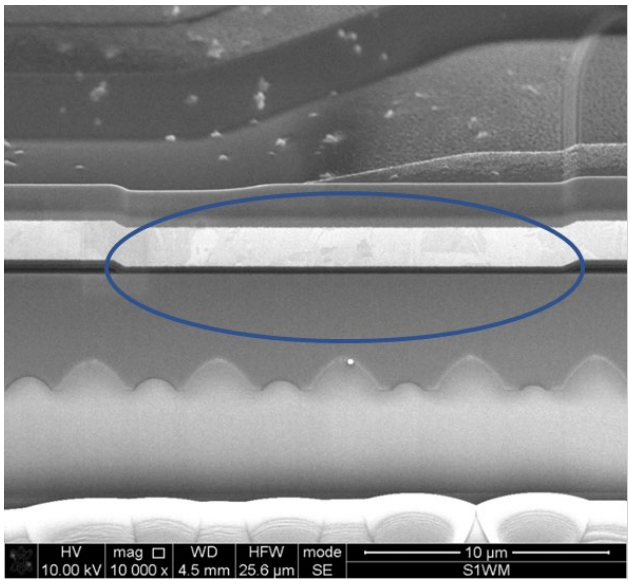
61. On information and belief, the Acrich MJT comprises a second electrode that is electrically connected to the second conductive layer, as shown below:



62. On information and belief, the Acrich MJT comprises an insulating film that is disposed on each side surface of the multilayer epitaxial structure and part of an upper surface of the multilayer epitaxial structure, as shown below:

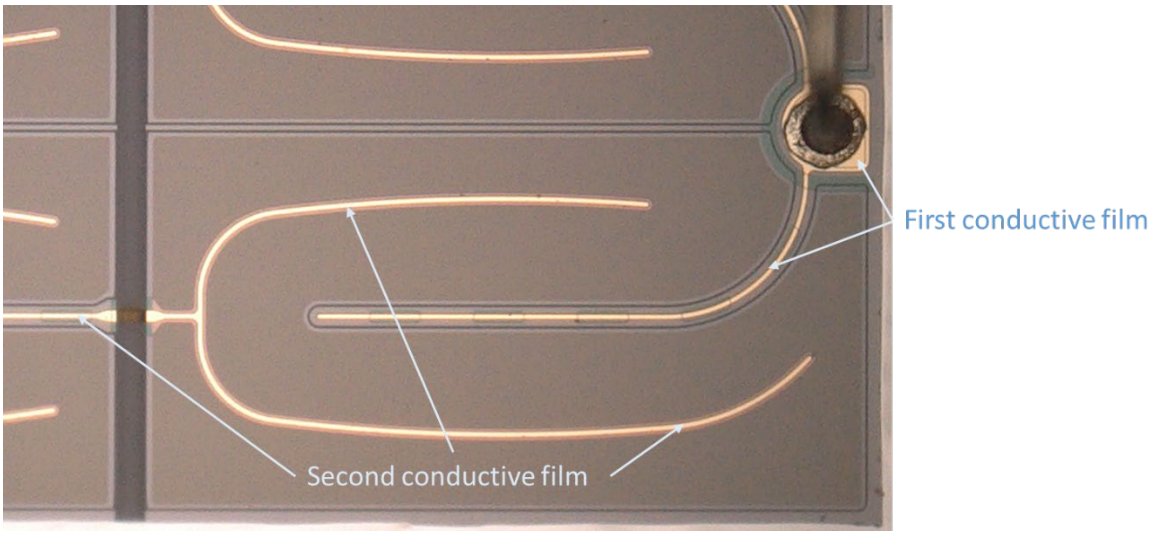


Insulating layer on each side surface

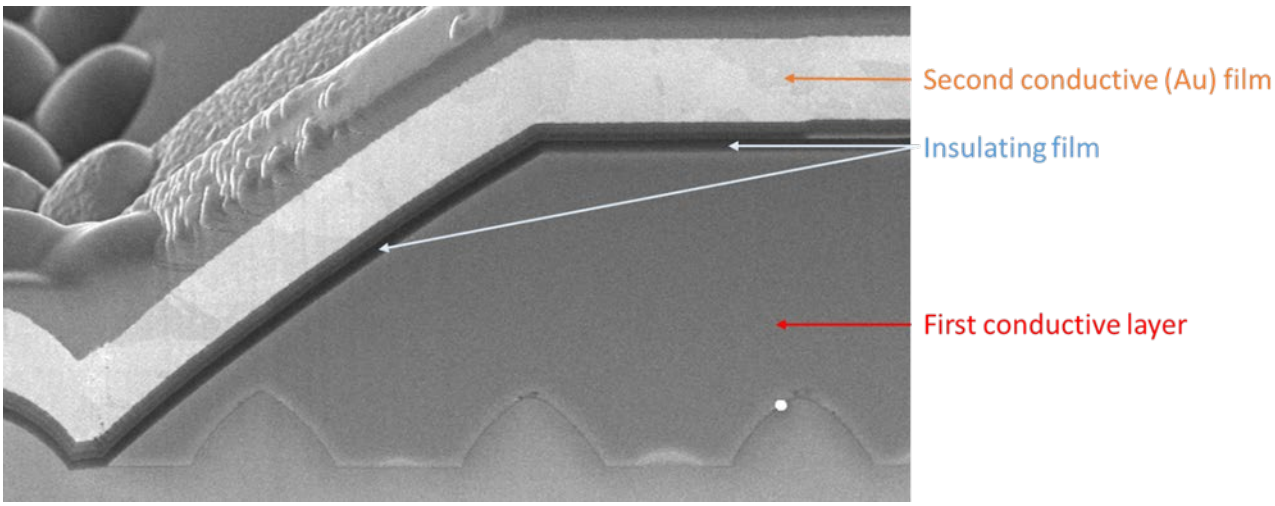


No insulating layer on part of upper surface

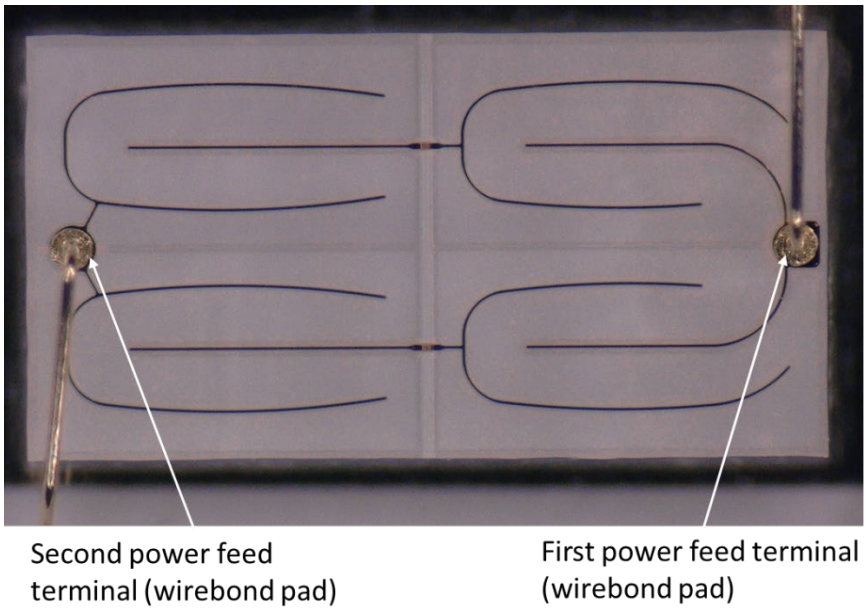
63. On information and belief, the Acrich MJT comprises a first conductive film and a second conductive film disposed on the main surface of the base substrate, as shown below:



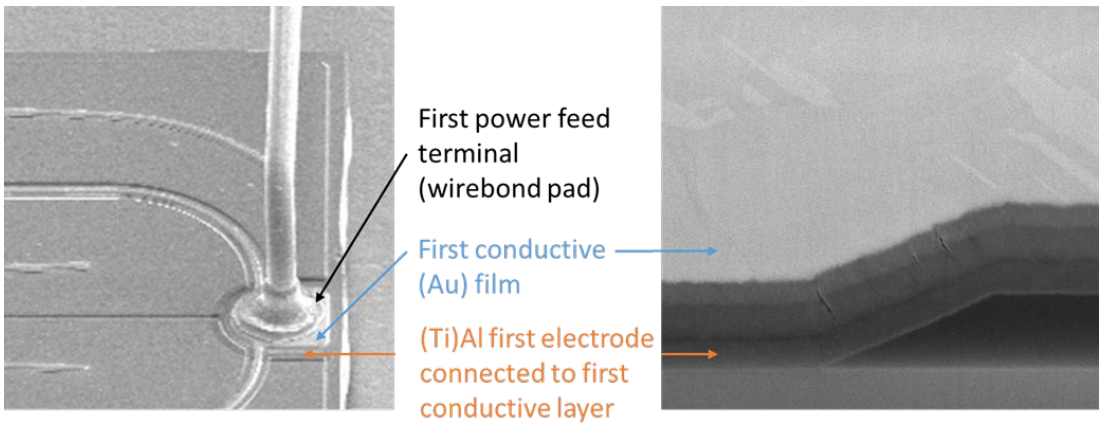
64. On information and belief, the Acrich MJT comprises a second conductive film that is disposed on one side surface of the insulating film, as shown below:



65. On information and belief, the Acrich MJT comprises a first power feed terminal and a second power feed terminal that are disposed on at least one of two main surfaces of the base substrate, as shown below:

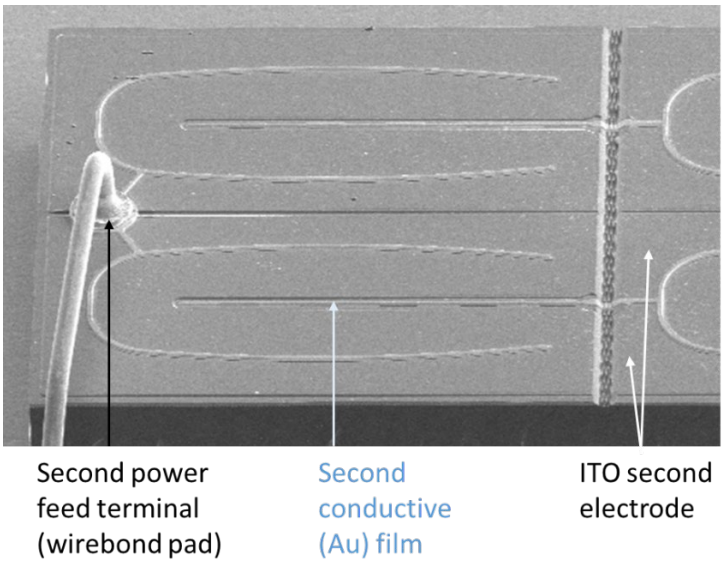


66. On information and belief, the Acrich MJT comprises a first electrode that is electrically connected to the first power feed terminal via the first conductive film, as shown below:



67. On information and belief, the Acrich MJT comprises a second electrode that is electrically connected to the second power feed terminal via the second conductive film that extends over the insulating film on the side surface and the upper

surface of the multilayer epitaxial structure to electrically contact the second electrode on the second conductive layer, as shown below:



68. The full extent of Seoul Semiconductor's infringement is not presently known to Plaintiff. On information and belief, Seoul Semiconductor has made, used, sold, offered for sale, and/or imported products under different names or part numbers that infringe the '285 patent in a similar manner. Plaintiff makes this preliminary identification of infringing products and infringed claims without the benefit of discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identification based on additional information obtained through discovery or otherwise.

69. On information and belief, Seoul Semiconductor has known of the '285 patent at least as early as the service date of this Complaint.

70. Upon information and belief, since at least the above-mentioned date when Seoul Semiconductor was on notice of its infringement, Seoul Semiconductor has actively induced, under U.S.C. § 271(b), its distributors and/or customers that use, sell, offer for sale and/or import the Accused Multi-Junction Products that include all of the limitations of one or more claims of the '285 patent to directly infringe one or more claims of the '285 patent, with knowledge, and/or with willful blindness of the fact, that the induced acts constitute infringement of the '285 patent. Seoul Semiconductor's distributors, customers and/or end users have directly infringed and are directly infringing, either literally and/or under the doctrine of equivalents, the inventions claimed in the '285 patent through their selling, offering for sale, importing and/or using the Accused Multi-Junction Products. Seoul Semiconductor induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused Multi-Junction Products, and providing technical guides, product data sheets, demonstrations, advertisements, installation guides, and other forms of support that induce their distributors, customers, and/or end users to directly infringe the '285 patent. The Accused Multi-Junction Products are designed in such a way that when they are used for their intended purpose, the user infringes the '285 patent. Seoul Semiconductor knows and intends that its distributors, customers, and/or end users that purchase the Accused Multi-Junction Products will use

those products for their intended purpose.

71. Seoul Semiconductor is, thus, at minimum, liable to Plaintiff in an amount that adequately compensates Plaintiff for Seoul Semiconductor's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

COUNT III
(INFRINGEMENT OF U.S. PATENT NO. 10,533,712)

72. Plaintiff repeats and realleges paragraphs 1- 71 as if fully set forth at length herein.

73. Seoul Semiconductor has and continues to directly infringe one or more claims of the '712 patent in this judicial district and elsewhere in Georgia and the United States.

74. Upon information and belief, Seoul Semiconductor makes, uses, sells, offers for sale, and/or imports into the United States the Accused LED Filament Products.

75. Seoul Semiconductor directly infringes the '712 patent under 35 U.S.C. § 271(a), literally and/or under the doctrine of equivalents, by making, using, offering for sale, selling, and/or importing the Accused LED Filament Products in the United States.

76. For example, Seoul Semiconductor directly infringes at least Claim 17 of the '712 patent, literally and/or under the doctrine of equivalents, through its making,

using, offering for sale, selling, and/or importing the Accused LED Filament Products.

77. Claim 17 of the ’712 patent recites:

A light emitting module comprising:

an elongated base board having a first end and a second end at opposed ends of a longitudinal direction of the base board, a first surface and a second surface opposing the first surface;

first and second conductive members provided at the first end and the second end on the first surface of the base board, and extending beyond the first and second ends of base board in the longitudinal direction of the base board;

first and second power supply terminals respectively provided at the first end and the second end of the base board, and extending transverse to the longitudinal direction of the base board, the first and second power supply terminal electrically connected to the first and second conductive members, respectively;

a plurality of light-emitting diodes provided on the first surface of the base board, arranged in a line parallel to the longitudinal direction of the base board and between the first conductive member and the second conductive member; and

wires that connect the light-emitting diodes in series, each of the wires extending in the longitudinal direction of the base board to connect one of the plurality of light-emitting diodes to an adjacent one of the plurality of light-emitting diodes;

end wires that connect longitudinal extremities of the plurality of light-emitting diodes to the first and second conductive members; and

an elongated seal including a wavelength conversion material, the elongated seal enclosing all of the plurality of light-emitting diodes and enclosing the entire base board, and enclosing the wires extending in the longitudinal direction of the base board,

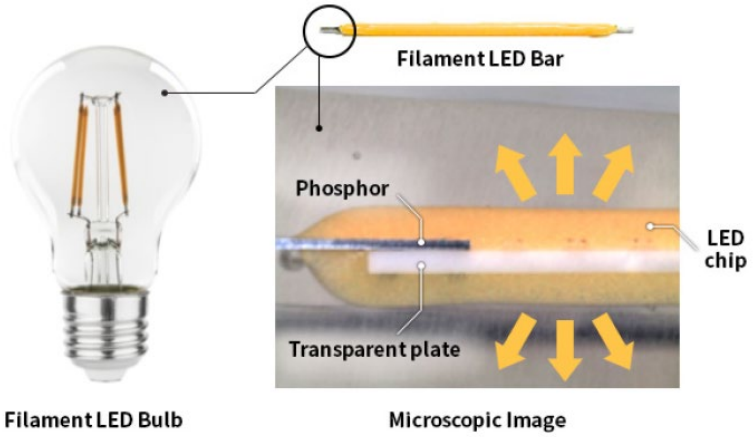
wherein the light emitting module has an elongated shape,

the elongated seal enclosing the entire base board contacts all of the plurality of

light-emitting diodes, and

a cross-section of the elongated seal above the base board, which encloses the wires extending in the longitudinal direction of the base board, has a semicircular shape that is uniform along a longitudinal direction of the base board.

78. As one non-limiting example of said infringement, on information and belief, the Accused LED Filament Products, including the SFW2C and SFW8C series LED filaments (e.g., generic product nos. SFWXCXXX-XX) ("the SFWXC series"), comprise a light emitting module, as shown below:

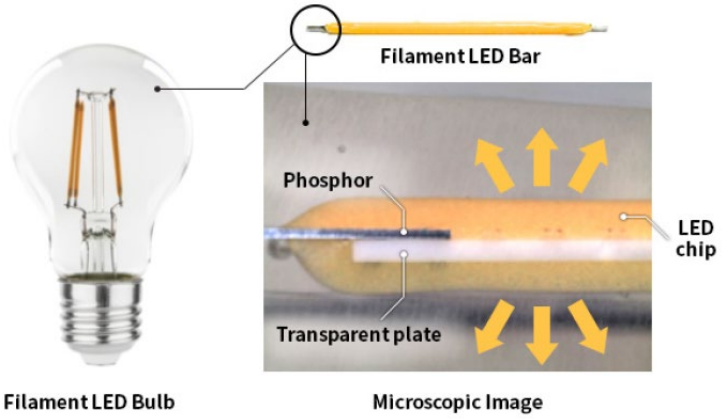


Filament suggest for 300/450lm

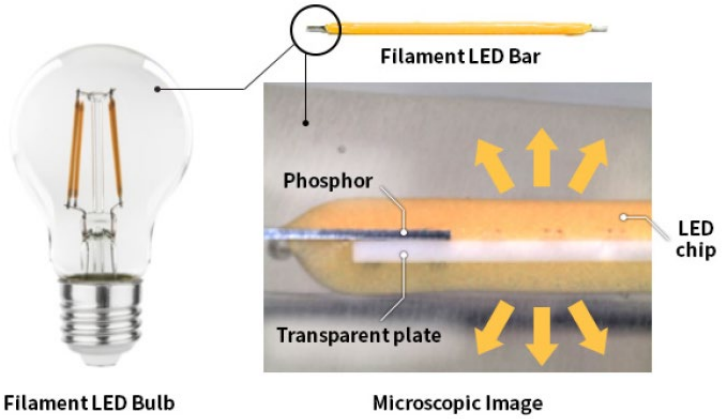
Series	CRI80			Title20			CRI90		
Appearance				38.0mm x 1.8mm 50.0mm x 1.8mm		38.0mm x 2.5mm 50.0mm x 2.5mm			* Available now
Current [mA]	10		22	10		22	10		22
VF [V] min-max	62-68	65-71	35-41	62-68	65-71	35-41	62-68	65-71	35-41
min.Flux [lm]	90	100	120	90	100	115	85	95	111
Part no.	SFW8Cx1A-AD	SFW8Cx1A-AE SFW8Cx1A-CE	SFW8Cx2B-D3	SFW2Cx1A-AD	SFW2Cx1A-AE SFW2Cx1A-CE	SFW2Cx2B-D3	SFWHCx1A-AD	SFWHCx1A-AE SFWHCx1A-CE	SFWHCx2B-D3
Application	300lm ←			→ 450lm					
CCT / CRI	2700K, Min. 80 / Min. 88 / Min 90								

(http://www.seoulsemicon.com/en/technology/filament/).

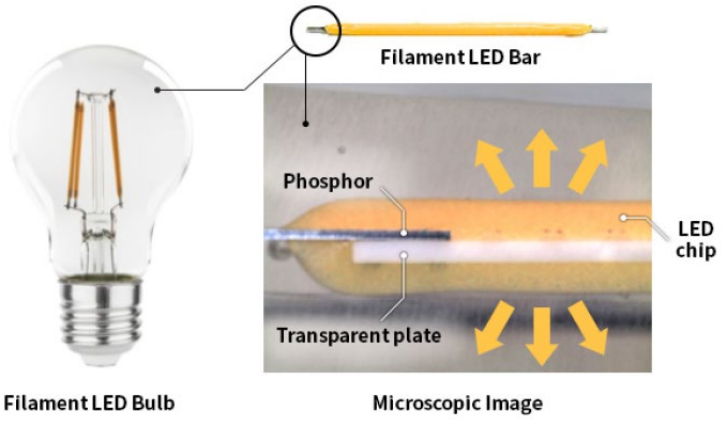
79. On information and belief, the SFWXC series comprises an elongated base board having a first end and a second end at opposed ends of a longitudinal direction of the base board, and a first surface and a second surface opposing the first surface, as shown below:



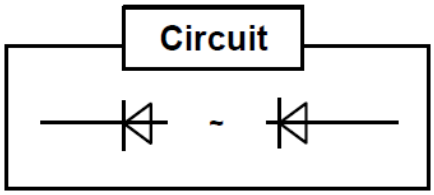
80. On information and belief, the SFWXC series comprises first and second conductive members provided at the first end and the second end on the first surface of the base board, and extending beyond the first and second ends of base board in the longitudinal direction of the base board, as shown below:



81. On information and belief, the SFWXC series comprises first and second power supply terminals respectively provided at the first end and the second end of the base board, and extending transverse to the longitudinal direction of the base board, the first and second power supply terminal electrically connected to the first and second conductive members, respectively, as shown below:

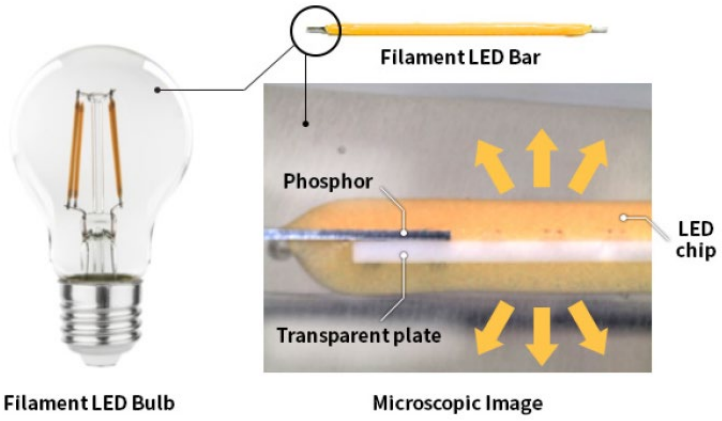


(http://www.seoulsemicon.com/en/product/spec/SFW8C52B-EE/41).

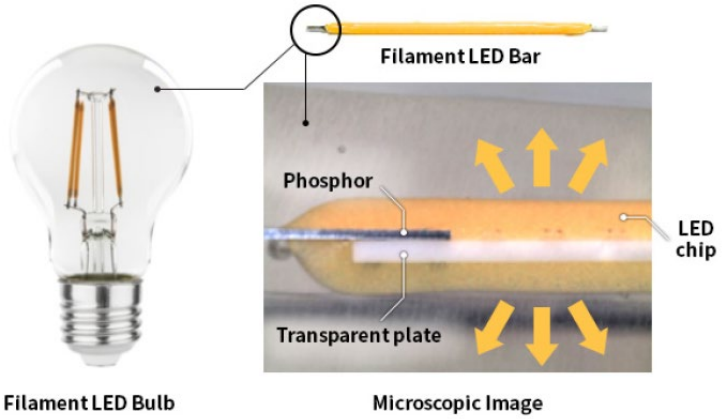


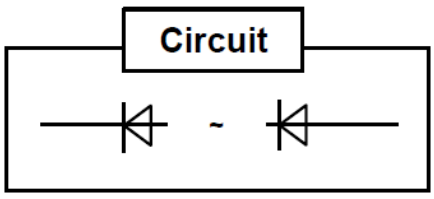
(Exhibit 6, Product Data Sheet at 9).

82. On information and belief, the SFWXC series comprises a plurality of light-emitting diodes provided on the first surface of the base board, arranged in a line parallel to the longitudinal direction of the base board and between the first conductive member and the second conductive member, as shown below:



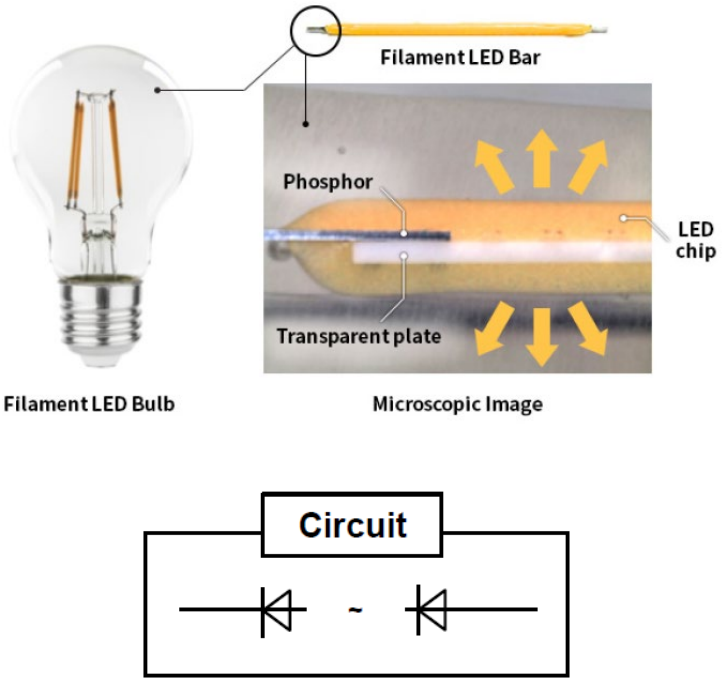
83. On information and belief, the SFWXC series comprises wires that connect the light-emitting diodes in series, each of the wires extending in the longitudinal direction of the base board to connect one of the plurality of light-emitting diodes to an adjacent one of the plurality of light-emitting diodes, as shown below:





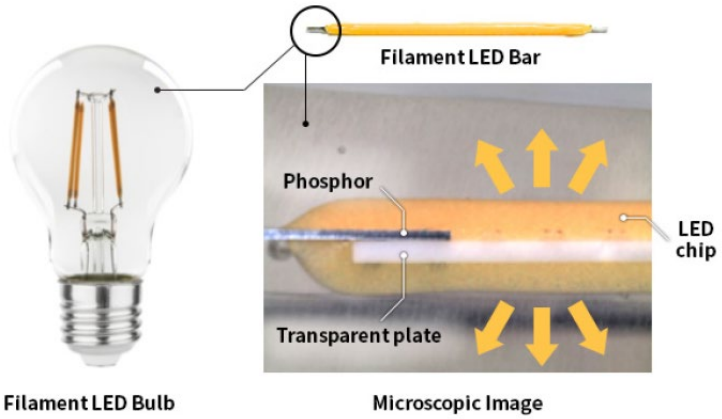
(Exhibit 6, Product Data Sheet at 9).

84. On information and belief, the SFWXC series comprises end wires that connect longitudinal extremities of the plurality of light-emitting diodes to the first and second conductive members, as shown below:

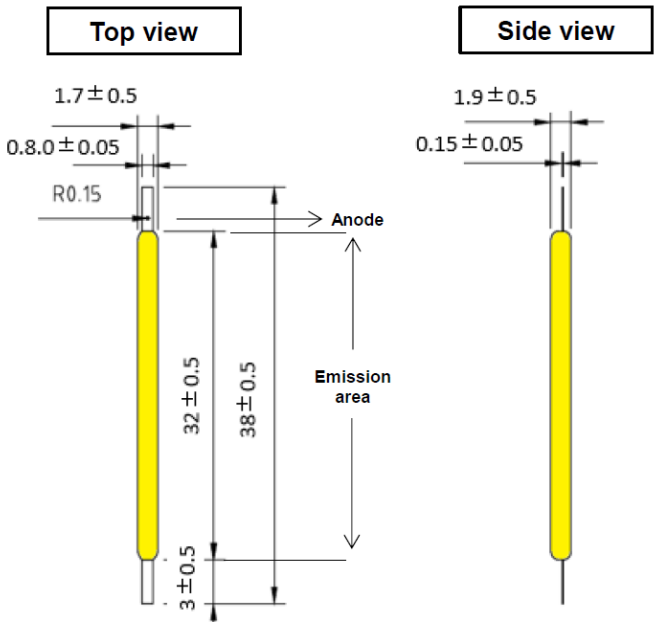


(Exhibit 6, Product Data Sheet at 9).

85. On information and belief, the SFWXC series comprises an elongated seal including a wavelength conversion material, the elongated seal enclosing all of the plurality of light-emitting diodes and enclosing the entire base board, and enclosing the wires extending in the longitudinal direction of the base board, as shown below:

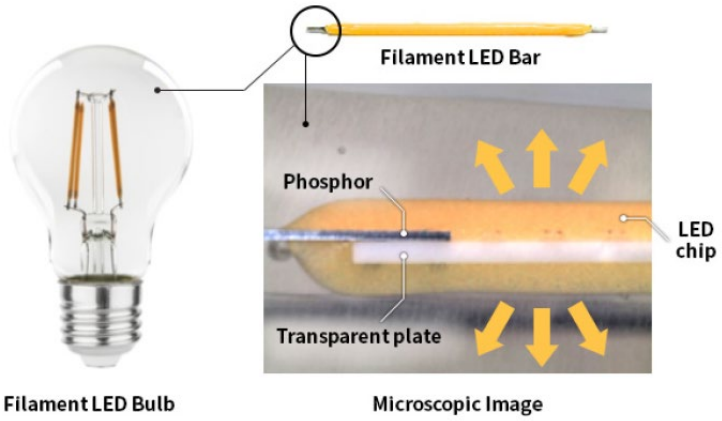


(http://www.seoulsemicon.com/en/product/spec/SFWHC31A-AE/41).

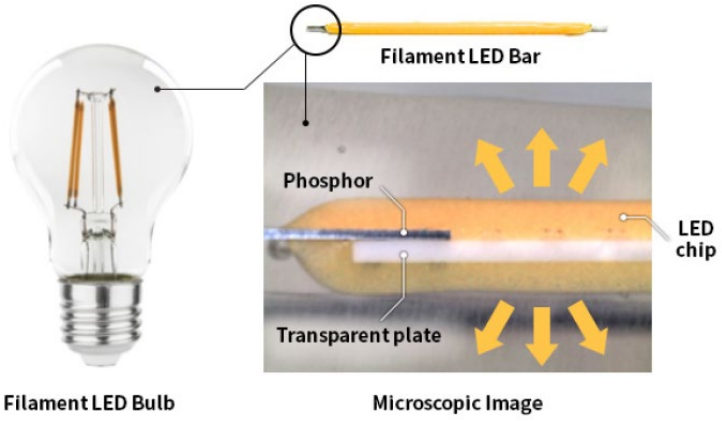


(Exhibit 6, Product Data Sheet at 9).

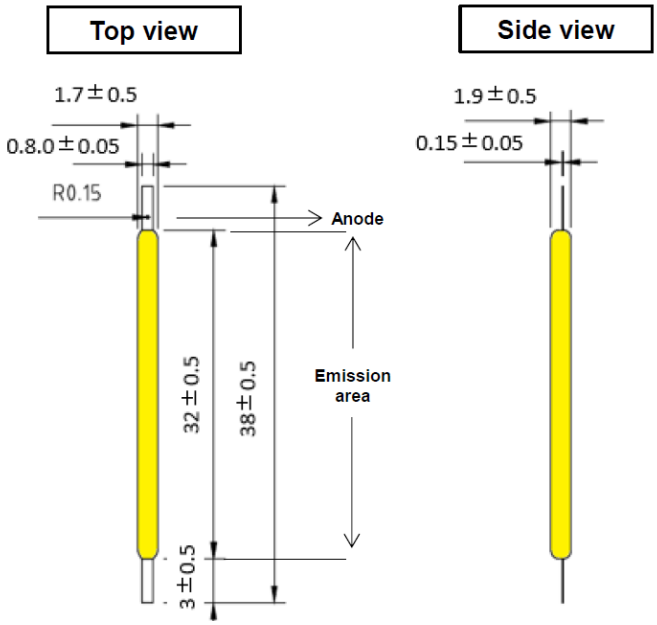
86. On information and belief, the SFWXC series comprises a light emitting module that has an elongated shape, as shown below:



87. On information and belief, the SFWXC series comprises an elongated seal that encloses the entire base board and contacts all of the plurality of light-emitting diodes, as shown below:

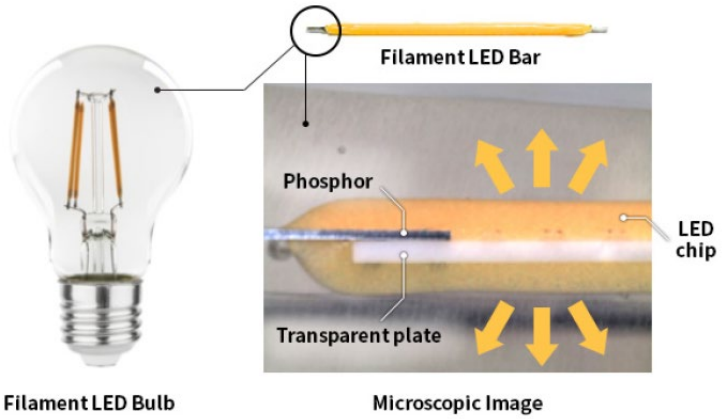


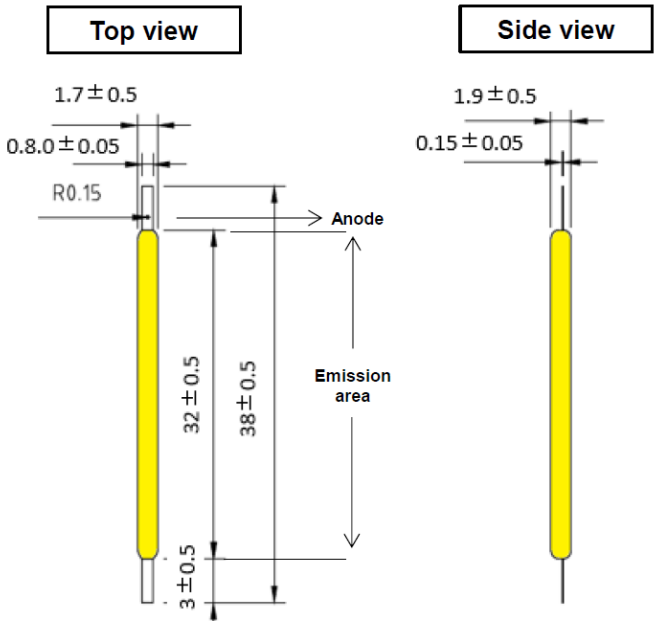
(http://www.seoulsemicon.com/en/product/spec/SFWHC31A-AE/41).



(Exhibit 6, Product Data Sheet at 9).

88. On information and belief, the SFWXC series comprises an elongated seal, wherein a cross-section of the elongated seal above the baseboard, which encloses the wires extending in the longitudinal direction of the base board, has a semicircular shape that is uniform along a longitudinal direction of the base board, as shown below:





(Exhibit 6, Product Data Sheet at 9).

89. The full extent of Seoul Semiconductor's infringement is not presently known to Plaintiff. On information and belief, Seoul Semiconductor has made, used, sold, offered for sale, and/or imported products under different names or part numbers that infringe the '712 patent in a similar manner. Plaintiff makes this preliminary identification of infringing products and infringed claims without the benefit of

discovery or claim construction in this action, and expressly reserves the right to augment, supplement, and revise its identification based on additional information obtained through discovery or otherwise.

90. On information and belief, Seoul Semiconductor has known of the '712 patent at least as early as the service date of this Complaint.

91. Upon information and belief, since at least the above-mentioned date when Seoul Semiconductor was on notice of its infringement, Seoul Semiconductor has actively induced, under U.S.C. § 271(b), its distributors and/or customers that use, sell, offer for sale and/or import the Accused LED Filament Products that include all of the limitations of one or more claims of the '712 patent to directly infringe one or more claims of the '712 patent, with knowledge, and/or with willful blindness of the fact, that the induced acts constitute infringement of the '712 patent. Seoul Semiconductor's distributors, customers and/or end users have directly infringed and are directly infringing, either literally and/or under the doctrine of equivalents, the inventions claimed in the '712 patent through their selling, offering for sale, importing and/or using the Accused LED Filament Products. Seoul Semiconductor induces this direct infringement through its affirmative acts of manufacturing, selling, distributing, and/or otherwise making available the Accused LED Filament Products, and providing technical guides, product data sheets, demonstrations, advertisements, installation

guides, and other forms of support that induce their distributors, customers, and/or end users to directly infringe the '712 patent. The Accused LED Filament Products are designed in such a way that when they are used for their intended purpose, the user infringes the '712 patent. Seoul Semiconductor knows and intends that its distributors, customers, and/or end users that purchase the Accused LED Filament Products will use those products for their intended purpose.

92. Seoul Semiconductor is, thus, at minimum, liable to Plaintiff in an amount that adequately compensates Plaintiff for Seoul Semiconductor's infringements, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

JURY DEMAND

93. Plaintiff hereby requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

94. Plaintiff respectfully requests that the Court find in its favor and against Seoul Semiconductor and that the Court grant Plaintiff the following relief:

a. A judgment that Seoul Semiconductor has directly infringed the Asserted Patents as alleged herein;

b. A judgment that Seoul Semiconductor has indirectly infringed the

Asserted Patents as alleged herein;

c. A judgment for an accounting of all damages, past and future, including lost profits, sustained by Plaintiff as a result of the acts of infringement by Seoul Semiconductor;

d. A judgment and order requiring Seoul Semiconductor to pay Plaintiff damages under 35 U.S.C. § 284, including up to treble damages as provided by 35 U.S.C. § 284, and any royalties determined to be appropriate;

e. A judgment and order requiring Seoul Semiconductor to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;

f. A judgment and order finding this to be an exceptional case and requiring Seoul Semiconductor to pay the costs of this action (including all disbursements) and attorneys' fees as provided by 35 U.S.C. § 285; and

g. Such other and further relief as the Court deems just and equitable.

Dated: February 12, 2021

Respectfully submitted,

By: */s/ James Z. Foster*

James Z. Foster
Georgia Bar No. 756038
GREENBERG TRAURIG, LLP
Terminus 200
3333 Piedmont Road NE
Suite 2500

Atlanta, GA 30305
Telephone: (618) 553-2100
Facsimile: (678) 553-2212
Email: fosterja@gtlaw.com

Scott Bornstein (*pro hac vice* forthcoming)
Joshua L. Raskin (*pro hac vice* forthcoming)
Richard Pettus (*pro hac vice* forthcoming)
Jeffrey R. Colin (*pro hac vice* forthcoming)
Elana B. Araj (*pro hac vice* forthcoming)
Sandra L. Applebaum (*pro hac vice* forthcoming)

GREENBERG TRAURIG, LLP
MetLife Building, 200 Park Avenue
New York, NY 10002
Telephone: (212) 801-9200
Facsimile: (212) 801-6400
Email: bornsteins@gtlaw.com
Email: raskinj@gtlaw.com
Email: pettusr@gtlaw.com
Email: colinj@gtlaw.com
Emil: araje@gtlaw.com
Email: applebaums@gtlaw.com

Nicholas Brown (*pro hac vice* forthcoming)
GREENBERG TRAURIG, LLP
4 Embarcadero Center
Suite 3000
San Francisco, CA 94111
Telephone: (415) 655-1300
Facsimile: (415) 707-2010

Robert P. Lynn, Jr. (*pro hac vice* forthcoming)
Stephen W. Livingston (*pro hac vice* forthcoming)
LYNN GARTNER DUNNE, LLP
330 Old Country Road, Suite 103
Mineola, New York 11501
Telephone: (516) 742-6200

rplynn@lgdlaw.com
swlivingston@lgdlaw.com

Attorneys for Plaintiff Satco Products, Inc.

ACTIVE 55318007v3