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IN THE UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

CAO LIGHTING, INC., Plaintiff, v. FEIT ELECTRIC COMPANY, INC., a California corporation Defendant.	Case No.: 2:20-cv-4926 COMPLAINT FOR: INFRINGEMENT OF U.S. PATENT NO. 6,465,961 [DEMAND FOR JURY TRIAL]

Plaintiff CAO LIGHTING, INC. ("CAO Lighting"), by and through its counsel, Barnes & Thornburg LLP, files this Complaint against Defendant FEIT ELECTRIC COMPANY, INC. ("Feit" or "Defendant") and alleges as follows:

PRELIMINARY STATEMENT

1. This is a patent infringement action under the patent laws of the United States, Title 35 of the United States Code and, as such, this Court has exclusive subject matter jurisdiction under 28 U.S.C. §§ 1338(a) and 1331. Plaintiff alleges that Defendant has infringed and continues to infringe one or more claims of U.S. Patent No. 6,465,961 (the '961 patent). The '961 patent was previously asserted against Defendant Feit in a lawsuit filed on May 10, 2011 by CAO Group, Inc. ("CAO Group"), the prior owner of the '961 patent, in the United States District Court for the District of Utah, Case No. 2:11-cv-426-DB ("the Utah Action"). In the Utah Action, CAO Group alleged that Feit infringed one or more claims of the '961 patent. Following the filing of the complaint in the Utah Action, two defendants in that action filed petitions for inter partes reexamination and ex parte reexamination directed to the '961 patent. The Utah Action was stayed pending reexamination in March 2013. An Ex Parte Reexamination Certificate of the '961 patent was issued on or about September 2, 2014, in which new claims 21-103 were deemed patentable. The inter partes reexamination proceedings continued until May 2017.

2. During the pendency of the reexaminations, in July 2015, the '961 patent was assigned (along with rights to sue for past infringement) to Epistar Corporation, who then assigned the '961 patent back (along with the right to sue for past infringement) to CAO Group in June 2016. In October 2016, CAO Group assigned the '961 patent (along with the right to sue for past infringement) to CAO Lighting, a wholly owned subsidiary of CAO Group.

3. On January 14, 2020, CAO Group filed a motion to reopen the case and lift the stay in the Utah Action. On April 23, 2020, the District of Utah dismissed the Utah Action for lack of subject matter jurisdiction. On May 12, 2020, the District of Utah

clarified and amended its order and judgment that the dismissal of the Utah Action was without prejudice.

PARTIES

4. Plaintiff CAO Lighting, Inc. is a corporation with its principal place of business at 4628 West Skyhawk Drive, West Jordan, Utah 84084. CAO Lighting, Inc. is a wholly owned subsidiary of the CAO Group, Inc.

5. On information and belief, Feit is a corporation organized under the laws of the state of California with a principal place of business at 4901 Gregg Road, Pico Rivera, CA 90660. Feit has appointed Aaron Feit as its agent for service of process and such agent may be served at 4901 Gregg Road, Pico Rivera, CA 90660.

JURISDICTION AND VENUE

6. This is a civil action for patent infringement under the patent laws of the United States, Title 35 of the United States Code.

7. This Court has exclusive subject matter jurisdiction under 28 U.S.C. §§ 1338(a) and 1331.

8. This Court has personal jurisdiction over Defendant because it is a California corporation, has its principal place of business in California, and conducts business within this District. Defendant purposefully and voluntarily sold one or more of the infringing products with the expectation that they will be purchased by and used by consumers in this District. As described below, Defendant has committed and continues to commit acts of patent infringement in this District.

9. Venue is proper in this District under 28 U.S.C. § 1400(b) because Defendant has committed acts of patent infringement in this District, is incorporated in the state of California, and maintains a regular and established place of business in this District.

BACKGROUND

10. CAO Lighting is the owner by assignment of the ’961 patent. The ’961 Patent is directed to a semiconductor light source, such as LED chips or LED arrays, for

illuminating a physical space. CAO Lighting and its founder and CEO, Dr. Densen Cao, Ph.D., are innovation leaders and have created many fundamental technologies in LED lighting.

11. CAO Lighting makes, markets, and sells LED lighting products under the brand names LuxemBright® and Dynasty®. CAO Lighting's products provide energy saving solid state lighting solutions to signage and commercial lighting applications. LuxemBright® LED Signage systems provide sign owners with the best in-class value LED lighting solutions. Its potted and rugged design, with the addition of through hole LED lamps, makes the LuxemBright® LEDs usable outdoors in any harsh weather environment. The system offers different configurations for complete solutions for all types of signage lighting. Dynasty® LED Lighting products provide commercial, retail and general lighting applications. The energy savings and long life advantages are through CAO Lighting's extensive LED product family. Dynasty® LED is the only packaged LED light source to offer a 360 degree beam and removable base. CAO Lighting's Dynasty® Candelabra lamp, offers the same look and efficacy as traditional incandescent candelabras. However, this product only uses a little more than 3 watts of electricity. The Dynasty® lamp series can directly replace existing incandescent and compact fluorescence to have the same efficacy, but saves more than 60% of energy.

12. CAO Lighting was formerly a division of the CAO Group. Dr. Cao founded the CAO Group in 2000. This innovative company became a force in creating products that could be considered foundational in every dental practice. Based on his LED research, Dr. Cao introduced the first commercial LED curing light with a distribution partner. The use of LED curing lights saves $6,000 per dentist per year on average. After the introduction of curing lights, Dr. Cao took his knowledge of light-emitting technology and moved on to lasers. In 2002, he invented the first compact diode soft-tissue laser that was manufactured and sold by the CAO Group. Dr. Cao's research and expertise in light-emitting technology then led him into LED lighting. His research in long-lasting and energy-efficient LED lighting has been foundational in

replacement bulbs that, up to that point in time, were incandescent. For example, Dr. Cao invented methods to build LED light sources with 360º light beam and improved heat management. These methods are widely adopted in today's efficient LED lighting products. Dr. Cao also has pioneered LEDs as light sources for detecting forensic evidence in different fields. The CAO Group's branded product, UltraLite ALS®, is an industry standard and leading brand of forensic lights which has benefitted criminal investigations worldwide.

13. Dr. Cao, who has a Ph.D. in materials science and engineering from the University of Utah in Salt Lake City, is a named inventor on 160 patents and patent applications in the fields of LED curing lights, diode lasers, and LED lighting.

14. In 2013, the LED lighting division of the CAO Group was spun off into CAO Lighting, Inc., a wholly owned subsidiary. The '961 patent was assigned to CAO Lighting on October 26, 2016, and the assignment included all rights, title, and interest in the '961 patent, including the right to sue for past or current infringement and collect any royalties or damages for infringement.

OVERVIEW OF THE PATENTS-IN-SUIT

15. The '961 patent, titled "Semiconductor Light Source using a Heat Sink with a Plurality of Panels," was issued by the United States Patent and Trademark Office on October 15, 2002. The invention of the '961 patent is especially useful for partially or fully illuminating a space occupied by or viewed by humans, such as residential spaces, commercial spaces, outdoor spaces, the interior or exterior of a vehicle, and the like. A true and correct copy of the '961 Patent is attached hereto as Exhibit A.

16. CAO Lighting owns all rights, title and interest in the '961 patent, including the right to recover all past and future damages for infringement of the '961 patent.

17. Prior to the invention of the '961 patent, LEDs were used primarily in low intensity applications, such as panel displays (e.g., laptop computer screens), signal

lighting, and other instrumentation purposes. '961 patent, col. 1:13-16.

18. At the time of the invention of the '961 patent, and still today, LED light sources were desirable because they provided a high efficiency light source that used substantially less energy and created less heat than typical prior art light sources such as incandescent and halogen lights. '961 patent, col. 1:16-20. However, semiconductor light sources prior to Dr. Cao's invention had not been successfully and economically used to illuminate physical spaces. '961 patent, col. 1:20-22. Furthermore, at the time of Dr. Cao's invention, arranging a sufficient number of LED modules to generate the desired high light intensity took an excessive amount of physical space and created unmanageable amounts of heat. '961 patent, col. 1:26-29. Consequently, prior to Dr. Cao's invention, LED-based light sources were not suitable for replacing traditional tungsten light bulbs. '961 patent, col. 1:30-32. The traditional incandescent and fluorescent light sources at the time of Dr. Cao's invention had high energy consumption, high heat generation, and short useful life compared to Dr. Cao's invention. '961 patent, col. 1:50-54.

19. The invention of the '961 patent was directed to a semiconductor (e.g., LED) light source for use in illuminating spaces used by humans with a single color light in the visible range and which would efficiently dissipate the heat produced by the light source. '961 patent, col. 1:46-50.

20. For example, the '961 patent teaches the use of multiple high-power LED chips emitting white light, combined with effective heat dissipation in fixtures suitable for use in common lighting receptacles.

21. The '961 Patent discloses a semiconductor light source including (1) an enclosure with an interior volume, (2) a base including an electrical connector, (3) a heat sink configured to withdraw heat from and suitable for mounting semiconductor devices, and (4) semiconductor chips capable of emitting light with a power output greater than 40 milliwatts. The enclosure can be of any desired shape, such as a bulb, square, cylindrical, or n-sided.

22. The ’961 Patent was subject to two merged Inter Partes reexaminations (95/000,680 and 95/002,324) and an Ex Parte reexamination (90/012,957). As a result of those reexaminations, the original claims 1-20 of the ’961 Patent were cancelled and an Ex Parte Reexamination Certificate (10279th) was issued for the ’961 Patent on September 2, 2014, in which new claims 21-103 were determined to be patentable. A copy of the Certificate is attached hereto as Exhibit B.

23. Claims 21-103 of the ’961 Patent are valid and enforceable.

DEFENDANT’S LED LIGHTING PRODUCTS

24. Feit has infringed and continues to infringe (literally and/or under the doctrine of equivalents) one or more claims of the ’961 patent in this judicial district and elsewhere in the United States, including, at least, Claim 21 of the ’961 patent, by making, using, selling, offering to sell, and/or importing LED lighting products.

25. Claim 21 of the ’961 Patent is dependent upon claim 8, which depends from claim 7, which in turn depends from Claim 1. As noted, although claims 1, 7 and 8 were cancelled during reexamination of the ’961 Patent, claim 21 was found patentable. Claim 21, as well as claims 1, 7 and 8 from which Claim 21 depends, is set forth below:

> **Claim 1.** A semiconductor light source for emitting light to illuminate a space used by humans, the semiconductor light source comprising:
>
> an enclosure, said enclosure being fabricated from a material substantially transparent to white light,
>
> an interior volume within said enclosure,
>
> a heat sink located in said interior volume,
>
> said heat sink being capable of drawing heat from one or more semiconductors devices,
>
> said heat sink having a plurality of panels on it suitable for mounting semiconductor devices thereon,
>
> said panels on said heat sink being oriented to facilitate emission of light from the semiconductor light source in desired directions around the

semiconductor light source,

at least one semiconductor chip capable of emitting light mounted on one of said panels,

said semiconductor chip being capable of emitting monochromatic light, said semiconductor chip being selected from the group consisting of light emitting diodes, light emitting diode arrays, laser chips, LED modules, laser modules, and VCSEL chips, and

a coating for converting monochromatic light emitted by said chip to white light.

Claim 7. A device as recited in claim 1 wherein said chip includes

a substrate on which epitaxial layers are grown,

a buffer layer located on said substrate, said buffer layer serving to mitigate differences in material properties between said substrate and other epitaxial layers,

a first cladding layer serving to confine electron movement within the chip, said first cladding layer being adjacent said buffer layer,

an active layer, said active layer emitting light when electrons jump to a valance state,

a second cladding layer, said second cladding layer positioned so that said active layer lies between cladding layers, and

a contact layer on which an electron may be mounted for powering said chip.

Claim 8. A device as recited in claim 7 further comprising a first and a second reflective layers, each of said first and second reflective layers being located on opposite sides of said active layer, said reflective layers serving to reflect light emitted by said active layer.

Claim 21. The semiconductor light source as recited in claim 8, wherein: said at least one semiconductor chip is a light emitting diode (LED) chip

configured to output light at greater than 40 milliwatts, and said LED chip is configured to emit monochromatic visible light.

26. Feit's infringing products include, at least, the following:

Category	Product Description SKU #	Picture
General Purpose	A19 Warm White 40W Replacement 5.5W Non-Dimmable A450/827/10KLED	
	A19 Neutral White 40W Replacement 5.5W Non-Dimmable A450/835/10KLED	
	A19 Warm White 60W Replacement 10W Non-Dimmable A800/827/10KLED	
	A19 Neutral White 60W Replacement 8.5W Non-Dimmable A800/835/10KLED	
	A19 Cool White 60W Replacement 10W Non-Dimmable A800/841/10KLED	
	A19 Daylight 60W Replacement 8.5W Non-Dimmable A800/850/10KLED	

	A19 Warm White 75W Replacement 11.2W Non-Dimmable A1100/827/10KLED	
	A19 Warm White 100W Replacement 14.5W Non-Dimmable A1600/827/10KLED	
	A19Warm White 40W Replacement 6.5W Dimmable BPOM40/830/LED	
	A19 Warm White 60W Replacement 8.8W Dimmable OM60DM/927CA	
	A19 Warm White 60W Replacement 8.8W Dimmable OM60DM/930CA	
	A21 Daylight 150W Replacement 22W Dimmable A/OM2200/850/LEDG2	
	A21 Daylight 3-Way 5/10/16W Non-Dimmable A30/100/950CA	

	A21 Daylight 3-Way 7/15/21W Non-Dimmable A50/150/850/LEDG2	
	A19 Warm White Filament Type 40W Replacement 5W Dimmable A1940/827/FIL	
	A19 Daylight Filament Type 40W Replacement 5W Dimmable A1940/850/FIL	
	A19 Warm White Filament Type 75W Replacement 12W Dimmable A1975/827/FIL	
	A19 Daylight Filament Type 75W Replacement 12W Dimmable A1975/850/FIL	
	A19 Warm White Filament, Crystal Clear 40W Replacement 5W Dimmable BPA1940CL927CA	
	A19 Warm White Filament, Crystal Clear 60W Replacement 9W Dimmable BPA1960CL927CA	

	A19 Daylight Filament, Crystal Clear 60W Replacement 9W Dimmable BPA1960CL950CA	
	A19 Warm White Filament, Crystal Clear 75W Replacement 12W Dimmable BPA1975CL927CA	
	A19 Daylight Filament, Crystal Clear 75W Replacement 12W Dimmable BPA1975CL950CA	
	A21 Daylight Filament, Crystal Clear 100W Replacement 15W Dimmable BPA19100CL950CAFIL	
Flood/Spot Lighting	BR30 Warm White 65W Replacement 10.5W Dimmable BR30DM/10KLED	
	BR30 Daylight 65W Replacement 9.5W Non-Dimmable BR30/850/10KLED	
	BR30 Warm White 65W Replacement 7.2W Dimmable BR30DM/927CA	

	BR30 Warm White 85W Replacement 12.2W Dimmable BR30DMHO/927CA	
	BR30 Daylight 85W Replacement 12.2W Dimmable BR30DMHO/950CA	
	BR30 Daylight Smart Wifi Bulb 8W BR30/950CA/AG	
	BR30 RGBW Smart Light Bulb 8W BR30/RGB/CA/AG	
	BR40 Daylight 65W Replacement 12.5W Dimmable BR40DM/850/10KLED	
	PAR20 Warm White 50W Replacement 7W Non-Dimmable PAR2050/10KLED	
	PAR20 Daylight 50W Replacement 7W Non-Dimmable PAR2050/850/10KLED	

	PAR30 Warm White 75W Replacement 10.5W Non-Dimmable PAR30L75/10KLED	
	PAR30 Warm White 75W Replacement 8.3W Dimmable PAR38LDM/930CA	
	PAR30 Daylight 75W Replacement 8.3W Dimmable PAR38LDM/950CA	
	PAR3875 Warm White 75W Replacement 10.5W Non-Dimmable PAR3875/10KLED	
	PAR3875 Daylight 75W Replacement 10.5W Non-Dimmable PAR3875/850/10KLED	
	PAR38 Daylight 90W Replacement 11.1W Dimmable PAR38DM/950CA	
	PAR38 Daylight 120W Replacement 15.5W Dimmable PAR38DM/1400/950CA	
	PAR38 Warm White 120W Replacement 15.5W Dimmable PAR38DM/1400/950CA	

	PAR38 War White 120W Replacement 15.5W Dimmable PAR381380/LEDG2/COLD	
Downlight/Recessed	4” Recess Downlight Warm White 50W Equivalent 9W Dimmable LEDR4/827	
	4” Recess Downlight Warm White 50W Equivalent 9.5W Dimmable LEDR4/830	
	4” Recess Downlight Warm White 50W Equivalent 9W Dimmable LEDR4/927/MP/6	
	4” Recess Downlight Warm White 50W Equivalent 7.2W Dimmable LEDR4/930CA	
	4” Recess Downlight Daylight 50W Equivalent 7.2W Dimmable LEDR4/950CA	
	4” Recess Downlight Warm White 75W Equivalent 10.3W Dimmable LEDR4HO/930CA	

	4” Recess Downlight Adjustable Warm White 65W Equivalent 10W Dimmable LEDG2R4ADJ/830	
	4” Smart Recess Downlight RGBW LEDR4/RGBW/AG	
	5-6“ Recess Downlight Warm White 75W Equivalent 12.3W Dimmable LEDR56/930CA	
	5-6“ Recess Downlight Daylight 75W Equivalent 12.3W Dimmable LEDR56/950CA	
	5-6“ Recess Downlight Warm White 75W Equivalent 12.3W Dimmable LEDR56B/927CA/MP/6	
	5-6“ Recess Downlight Daylight 75W Equivalent 12.3W Dimmable LEDR56B/950CA/MP/6	
	5-6“ Recess Downlight Adjustable Warm White 65W Equivalent 15W	

	Dimmable LEDG2R56ADJ/830	
	4“ Recess Downlight Warm White 50W Equivalent 9.3W Dimmable LEDRSQ4/930CA	
	6“ Recess Downlight Warm White 65W Equivalent 16W Dimmable LEDRSQ6/930	
	6“ Recess Downlight Warm White 65W Equivalent 11.3W Dimmable LEDRSQ6/930CA	
G8, G9 & Bi Pin	G4 Base Warm White 10W Equivalent Dimmable BP10G4/830/LED	
	G4 Base Warm White 20W Equivalent Dimmable BP20G4/830/LED	
	G4 Base Daylight 20W Equivalent Dimmable BP20G4/850/LED	
	G8 Base Specialty Warm White 35W Equivalent Dimmable BP35G8/830/LED	

	G9 Base T4 Specialty Warm White 35W Equivalent Dimmable BP35G9/830/LED	
	G9 Base T4 Specialty Daylight 35W Equivalent Dimmable BP35G9/850/LED	
	G9 Warm White 40W Equivalent Dimmable BPG940/830/LED	
	G9 Daylight 40W Equivalent Dimmable BPG940/850/LED	
	Wedge LED Light Bulb Warm White 10W Equivalent Non-Dimmable LVW10/LED	
	Wedge LED Light Bulb Warm White 18W Equivalent Non-Dimmable LVW18/LED	
Decorative	G25 Warm White Filament Type 40W Dimmable BPG2540/927CA/FIL	
	G25 Daylight Filament Type 40W Dimmable BPG2540/950CA/FIL	

	A15 Warm White Filament Type 75W Dimmable BPA1575/927CA/FIL/2	
	A15 Daylight Filament Type 75W Dimmable BPA1575/950CA/FIL/2	
	A15 Warm White Filament Type 75W Dimmable BPA1575C/827/FIL/2	
	A15 Daylight Filament Type 75W Dimmable BPA1575C/850/FIL/2	
	A15 Warm White Filament Type Glass 75W Dimmable BPA1575N/827/FIL/2	
	A15 Daylight Filament Type Glass 75W Dimmable BPA1575N/850/FIL/2	
	A15 Warm White Filament Type 75W Dimmable BPA1575CL/927CA/FIL/2	

	A15 Daylight Filament Type 75W Dimmable BPA1575CL/950CA/FIL/2	
	Flame Tip Warm White Dimmable BPCFC25/927CA/FIL/2	
	Blunt Tip Warm White 40W Dimmable BPCTC40/927CA/FIL	
	Blunt Tip Daylight 40W Dimmable BPCTC40/950CA/FIL	
	Torpedo Tip Warm White 40W Dimmable BPETC40/927CA/FIL/2	
	Torpedo Tip Daylight 40W Dimmable BPETC40/950CA/FIL/2/RP	
	Blunt Tip Warm White 60W Dimmable BPCTC60/927CA/FIL	

	Blunt Tip Daylight 40W Dimmable BPCTC60/950CA/FIL	
	Blunt Tip Warm White 60W Dimmable BPETC60/927CA/FIL/2	
	Blunt Tip Daylight 60W Dimmable BPETC60/950CA/FIL/2	
	Vintage T10 Warm White Dimmable T10/VG/LED	
	Vintage ST19 Warm White 60W Dimmable BPST19/LED	

FIRST CLAIM FOR RELIEF
INFRINGEMENT OF THE '961 PATENT

27. Paragraphs 1 through 26 are incorporated by reference as if fully set forth herein.

28. Defendant has directly infringed, and continues to directly infringe, literally or by the doctrine of equivalents, at least Claim 21 of the '961 patent in this District and elsewhere in the United States.

29. Upon information and belief, Defendant has made, used, sold, or offered for sale, or imported into the United States, multiple lines of lighting products that fall within the scope of one or more of the claims of the '961 patent (including Claim 21), including, at least, the LED lighting products described above in paragraph 26.

30. Each of the above described products is a semiconductor (LED) light source including (1) an enclosure with an interior volume, (2) a base including an electrical connector, (3) a heat sink with plurality of panels configured to withdraw heat from and suitable for mounting semiconductor devices, and (4) LED chips positioned on at least one panel that are capable of emitting monochromatic light with a power output greater than 40 milliwatts.

31. Each of the foregoing products includes a coating to convert the monochromatic light to white light.

32. Each of the foregoing products includes LED chips with a substrate on which epitaxial layers are grown.

33. Each of the foregoing products includes LED chips with an active layer and a buffer layer on the substrate.

34. Each of the foregoing products includes LED chips with first and second cladding layers, positioned on opposite sides of the active layer.

35. Each of the foregoing products includes LED chips with a contact layer for powering the chip.

36. Each of the foregoing products includes LED chips with reflective layers on opposite sides of the active layer.

37. As a non-limiting example of the nature of Defendant's infringing LED lighting products, the Feit LED A19 bulb is shown below:

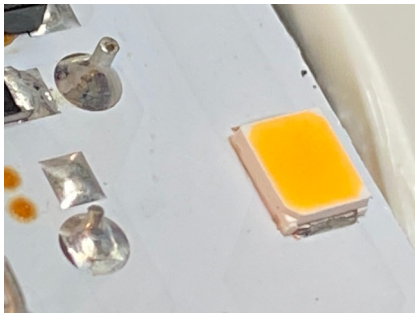
38. The Feit A19 bulb is a light source for emitting light to illuminate spaces used by humans.

39. The Feit A19 bulb includes an enclosure fabricated from a material substantially transparent to white light, which further includes an interior volume within the enclosure and at least one heat sink located in the interior volume of the enclosure, as shown below.

40. Upon information and belief, the LED chips in the Feit A19 LED bulb are p-n junction type LEDs.

41. The Feit A19 LED bulb has LED chips that are capable of emitting monochromatic light. Upon information and belief, the LED chips of the Feit A21 bulb emits blue light.

42. The Feit A19 LED bulb contains a coating for converting monochromatic light emitted by said chip to white light. Upon information and belief, the coating includes a phosphor based coating to convert at least some of the blue light to yellow light, which, when combined with the blue light yields white light.



43. The LED chip used in the Feit A19 LED bulb further contains a substrate on which epitaxial layers are grown.

44. Upon information and belief, the LED chips used in the Feit A19 LED bulb include a patterned sapphire substrate.

45. The LED chips used in the Feit A19 LED bulb include a buffer layer located on the substrate.

46. Upon information and belief, the buffer layer includes a gallium/nitride region.

47. The LED chips used in the Feit A19 LED bulb include an active layer.

48. Upon information and belief, the active layer in the LED chips in the Feit A19 LED bulb is an MQW active layer.

49. Upon information and belief, the active layer includes gallium/indium/nitride regions.

50. The LED chips used in the Feit A19 LED bulb include a first cladding layer which is positioned adjacent the buffer layer.

51. Upon information and belief, the first cladding layer of the LED chips of the Feit A19 LED bulb includes gallium/indium/nitride and gallium/nitride regions.

52. The LED chips used in the Feit A19 LED bulb include a second cladding layer positioned such that the active layer is between the two cladding layers.

53. Upon information and belief, the second cladding layer of the LED chips of the Feit A19 LED bulb includes an aluminum/gallium/nitride region.

54. The LED chips used in the Feit A19 LED bulb include a contact layer for powering the chip.

55. Upon information and belief, the contact layer includes doped gallium/nitride.

56. The LED chips used in the Feit A19 LED bulb have at a first and a second reflective layer, located on opposite sides of the active layer. These reflective layers serve at least in part to reflect light emitted by said active layer.

57. Upon information and belief, the patterned sapphire substrate and buffer of the Feit A19 LED bulb reflects light emitted by the active layer.

58. Upon information and belief, the chips used in the Feit A19 LED bulb include an ITO layer positioned adjacent to the contact layer.

59. Upon information and belief, the ITO layer reflects a light emitted by the active layer.

60. The LED chips used in the Feit A19 LED bulb are configured to output light at greater than 40 milliwatts.

61. The LED chips used in the Feit A19 LED bulb are configured to emit monochromatic visible light.

62. Upon information and belief, the LED chips used in the A19 LED bulb emit blue light.

63. This link shows a third party teardown of another Feit A19 LED bulb, the Smart A19 Led RGBW Bulb A19RGBWAGT1: See https://fccid.io/SYW-A19RGBWAGT1/Internal-Photos/Internal-Photos-4018527. The photographs demonstrate several of the limitations of claim 21 of the '961 patent, including the enclosure, the heat sink located in the interior volume of the enclosure, the LED chips positioned on at least one panel in the interior volume of the enclosure, and the yellow phosphor coating that converts the monochromatic light to white light.

64. Defendant has engaged in the manufacture, use, sale, offer for sale and/or importation of the aforementioned products, in the United States, without the permission, license or consent of CAO Lighting.

65. Defendant has been on notice that CAO believes that Defendant has been infringing the '961 patent since at least May 2011.

66. Defendant's acts of infringement have been and continue to be willful and deliberate. Defendant has been aware of the '961 patent since at least 2011 upon the filing of the original Utah Action alleging infringement of those patents and/or service of the same. Defendant also has been aware of the inter partes reexamination and ex

parte reexamination proceedings initiated by co-defendants in the Utah Action, which resulted in a stay of that action. On information and belief, Defendant knew of the issuance of the Ex Parte Reexamination Certificates on the '961 patent. Upon information and belief, Defendant has deliberately infringed the '961 patent and in disregard for the '961 patent by making, having made, using, importing, and offering for sale products that infringe the '961 patent. Upon information and belief, in light of the infringement claims asserted in the original Utah Action, of the filing of inter partes and ex parte reexaminations directed to the '961 patent, and of the knowledge of the results of those reexaminations, the risks of infringement of the '961 patent, including those claims determined to be patentable in the ex parte reexamination certificates on the '961 patent, were known to Defendant and/or were obvious under the circumstances that the infringement risks should have been known. Upon information and belief, Defendant has not attempted any design or sourcing changes to avoid the risks of infringement of the '961 patent. Defendant has acted despite an objectively high likelihood that their past and continuing actions constituted infringement of the '961 patent, and this objectively-defined risk was known or should have been known to Defendant. Defendant thus had actual knowledge of the '961 patent and knew that its conduct constituted infringement. CAO Lighting reasonably believes that such acts of willful infringement will continue in the future unless enjoined by this Court.

67. CAO Lighting has complied with all the provisions of 35 U.S.C. § 287.

68. By reason of their aforementioned acts of infringement, Defendant has been unjustly enriched.

69. By reason of Defendant's acts of infringement, CAO Lighting has suffered damages, including but not limited to, lost profits, and CAO Lighting is entitled to recover such lost profits. At a minimum, by reason of the aforementioned acts of infringement, CAO Lighting is entitled to recover a reasonable royalty.

70. By reason of Defendant's acts of infringement, unless enjoined by this Court, CAO Lighting will continue to suffer irreparable harm for which there is no

adequate remedy at law.

PRAYER FOR RELIEF

WHEREFORE, CAO Lighting respectfully requests the Court enter judgment in its favor and against Defendant as follows:

a) Declaring Defendant has directly infringed and currently are directly infringing the '961 patent;

b) Declaring that Defendant's infringement has been willful;

c) Declaring that Defendant be preliminarily and permanently enjoined from making, using, selling, offering to sell, or importing into the United States, the products found to infringe the '961 patent;

d) Awarding CAO Lighting damages sufficient to compensate for Defendant's infringement, including lost profits, but in an amount no less than a reasonable royalty, and that such damages be trebled pursuant to 35 U.S.C. § 284;

e) Declaring that this case is exceptional under 35 U.S.C. § 285;

f) Awarding all costs and expenses of this action, including reasonable attorney fees to CAO Lighting;

g) Awarding pre-judgment and post-judgment interest to CAO Lighting; and

h) Awarding to CAO Lighting all other further relief as the Court may deem, just, necessary and proper.

DEMAND FOR JURY TRIAL

CAO Lighting demands a trial by jury on all matters herein so triable.

Dated: June 3, 2020

BARNES & THORNBURG LLP

By: */s/ Roya Rahmanpour*
Seth A. Gold
Roya Rahmanpour

Attorneys for Plaintiff CAO Lighting, Inc.