IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TEXAS
WACO DIVISION

JIAXING SUPER LIGHTING ELECTRIC APPLIANCE CO., LTD. AND OBERT, INC.,	§	
Plaintiffs,	§	**CASE NO. 6:20-cv-00018-ADA**
vs.	§	**JURY TRIAL DEMANDED**
CH LIGHTING TECHNOLOGY CO., LTD., ELLIOTT ELECTRIC SUPPLY INC. AND SHAOXING RUISING LIGHTING CO., LTD.,	§	
Defendants.	§	

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiffs Jiaxing Super Lighting Electric Appliance Co., Ltd. ("Super Lighting") and Obert, Inc. ("Obert") (collectively "Plaintiffs") hereby assert the following claims for patent infringement against Defendants CH Lighting Technology Co., Ltd. ("CH Lighting"), Elliott Electric Supply Inc. ("Elliott") and Shaoxing Ruising Lighting Co., Ltd. ("Ruising") (collectively "Defendants"), and allege as follows:

THE PARTIES

1. Plaintiff Super Lighting is a corporation organized and existing under the laws of the People's Republic of China with its principal place of business at No. 1288 Jiachuang Rd., Xiuzhou Area, Jiaxing, Zhejiang, China.

2. Plaintiff Obert is the North American affiliate of Super Lighting and is a corporation organized under California law, with a principal place of business at 1380 Charles Willard St., Carson CA 90746.

Super Lighting Exhibit 2003
Current Lighting v. Jiaxing Super Lighting, IPR2023-00269

3. CH Lighting is a corporation organized and existing under the laws of the People's Republic of China who has, upon information and belief, a principal place of business at Chenhui Guangbao Industrial Park, Xietang Town, Shangyu District, Shaoxing City, Zhejiang, China (中国浙江省绍兴市上虞区谢塘晨辉光宝工业园区).

4. Elliott is a Texas corporation with a regular and established place of business at 3325 Clay Avenue, Waco, Texas, and at other locations in this District.

5. Ruising is a corporation organized and existing under the laws of the People's Republic of China who has, upon information and belief, a principal place of business at No. 0706-1, Shimao Skyline Center, Di Dang New City, Yuecheng District, Shaoxing, Zhejiang, China (中国浙江省绍兴市越城区迪荡新城世茂天际中心 0706 号-1).

BACKGROUND OF THE PARTIES

6. Super Lighting and Obert share a parent, Zhejiang Super Lighting Electric Appliance Co. Ltd. (collectively in this section the three companies are referred to as the "Super Lighting Group").

7. With approximately 2000 employees worldwide, the Super Lighting Group is focused on creating more environmentally friendly and sustainable products, such as its full range of energy efficient tube lighting products from fluorescent lamps to LED lighting. The Super Lighting Group is an industry leading manufacturer who is a major supplier of LED tubes to many brand name companies in the United States and throughout the world.

8. Over 25 years ago, in 1993, the Super Lighting Group was founded. Since then, the Super Lighting Group has conducted significant research, development, and innovation in the area of lighting technologies, including fluorescent and LED tube lamp products. The Super

Lighting Group's investment and continuous innovation have driven progress across the lighting industry, including in the areas of safety, reliability and energy efficiency. The Super Lighting Group has a patent portfolio of over 700 issued patents and patent applications worldwide, primarily related to LED tube lamps.

9. CH Lighting and Ruising manufacture and/or distribute the products accused of infringement in this case, and upon information and belief the two companies export those products from China and import them into the United States or direct those products to be imported into the United States, and upon information and belief they also offer to sell and/or sell those products in the United States. Upon information and belief, CH Lighting and Ruising have also used and demonstrated the accused products in the United States. Further upon information and belief, CH Lighting and Ruising are affiliated companies that share one or more officers, board members, and/or managers, with CH Lighting being a majority shareholder of Ruising. According to its website, CH Lighting has over 2000 employees. http://en.chlighting.com/intro/4.html

10. Elliott sells and offers to sell the products accused of infringement in this case in this district, throughout Texas, and throughout the United States.

11. Upon information and belief, CH Lighting and/or Ruising is paying for Elliott's defense and any potential judgment in this case.

JURISDICTION AND VENUE

12. This action arises under the patent laws of the United States, 35 U.S.C. § 1 *et seq.* This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

13. This Court has personal jurisdiction over Defendants. Defendants conduct business and have committed acts of patent infringement and/or have induced acts of patent infringement by others in this judicial district, the State of Texas, and elsewhere in the United States.

14. Personal jurisdiction by this Court over CH Lighting and Ruising is appropriate at least under a specific jurisdiction and/or stream of commerce theory. Upon information and belief, CH Lighting and Ruising import or direct their distributors to import LED tube lamp products, including the products accused of infringement in this case, through several ports of entry throughout the United States. CH Lighting and Ruising intend for their LED tube lamp products to be sold throughout the United States, including Texas. In addition, CH Lighting and Ruising deliver LED tube lamp products, including products accused of infringement in this case, into the stream of commerce with the expectation that they will be purchased by customers in Texas. CH Lighting and Ruising are trying to and actually do serve the Texas market, either directly or indirectly, with their LED tube lamp products. CH Lighting and Ruising are aware their products will reach Texas, and are further aware that their LED tube lamp products are actually sold in Texas. The exercise of jurisdiction over CH Lighting and Ruising would be fair and reasonable.

15. Personal jurisdiction by this Court over Elliott is appropriate at least because Elliott is a Texas corporation, and it has had and has substantial, continuous, and systematic contacts with this forum and has purposefully availed itself in Texas of the benefits of conducting activities in the forum by purposefully directing its activities toward the state, including by operating regular and established places of business at 3325 Clay Avenue in Waco, at 2501 S. Fort Hood St. in Killeen, at 2703 Hancock Dr. in Temple, and also by operating other,

regular and established places of business in Andrews, South Austin, North Austin, Bastrop, Cedar Park, Fort Stockton, Georgetown, Kennedy, Kerrville, Leon Valley, Manor, Marble Falls, Midland, New Braunfels, Odessa, Pearsall, Pecos, Pleasanton, Round Rock, San Antonio, San Marcos, and Uvalde. Elliott sells and offers for sale infringing products in this state, including at these locations. Elliott, therefore, obtains the benefits and protections of the State of Texas' laws. This dispute arises out of and has a substantial connection with Elliott's contacts with this state and its infringement in this state, and exercise of jurisdiction would be fair and reasonable.

16. Plaintiffs incorporate herein the allegations contained in the preceding paragraphs 1-14. Venue is proper in this judicial district pursuant to at least 28 U.S.C. § 1391 (b) and (c) and 28 U.S.C. § 1400(b). Regarding 28 U.S.C. § 1400(b), CH Lighting and Ruising are foreign corporations and may be sued in this judicial district. Elliott may be sued in this district because it has a regular and established place of business in this district, and because it commits acts of infringement (*i.e.*, sells and offers to sell accused products) in this district. Specifically, Elliott has a regular and established place of business at 3325 Clay Avenue, Waco, Texas. Elliott also has regularly established places of business within this district at 2501 S. Fort Hood St., Killeen, Texas, and also at 2703 Hancock Dr., Temple, Texas. Elliott has additional, regular, and established places of business in this district in the following locations: Andrews, South Austin, North Austin, Bastrop, Cedar Park, Fort Stockton, Georgetown, Kennedy, Kerrville, Leon Valley, Manor, Marble Falls, Midland, New Braunfels, Odessa, Pearsall, Pecos, Pleasanton, Round Rock, San Antonio, San Marcos, and Uvalde. Elliott sells and/or offers for sale the products accused of infringement at these locations in this district.

ASSERTED PATENTS

17. Super Lighting is the current owner and assignee of over 100 U.S. patents, including U.S. Patent Nos. 10,295,125 (the "'125 Patent"), 10,342,078 (the "'078 Patent"), 10,352,540 (the "'540 Patent"), 10,426,003 (the "'003 Patent"), 9,939,140 (the "'140 Patent), 10,378,700 (the "'700 Patent"), 10,448,479 (the "'479 Patent"), and 10,560,989 (the "'989 Patent") (collectively the "Patents-in-Suit"). Super lighting has the right to bring and join actions by Obert to recover damages for Defendants' infringement of the Patents-in-Suit.

18. Obert is the exclusive licensee of the Patents-in-Suit and has the right to bring and join actions by Super Lighting to recover damages for Defendants' infringement of the Patents-in-Suit.

19. The '125 Patent duly and legally issued on May 21, 2019. The '125 Patent is valid and enforceable.

20. The '078 Patent duly and legally issued on July 2, 2019. The '078 Patent is valid and enforceable.

21. The '540 Patent duly and legally issued on July 16, 2019. The '540 Patent is valid and enforceable.

22. The '003 Patent duly and legally issued on September 24, 2019. The '003 Patent is valid and enforceable.

23. The '140 Patent duly and legal issues on April 10, 2018. The '140 Patent is valid and enforceable.

24. The '700 Patent duly and legal issues on August 13, 2019. The '700 Patent is valid and enforceable.

25. The '479 Patent duly and legal issues on October 15, 2019. The '479 Patent is valid and enforceable.

26. The '989 Patent duly and legal issues on February 11, 2020. The '989 Patent is valid and enforceable.

DEFENDANTS' KNOWLEDGE OF ASSERTED PATENTS

27. CH Lighting says that its "core value" includes being "honest," "tak[ing] the right path," "to take responsibility," and to "operate legally." http://en.chlighting.com/intro/5.html CH Lighting, however, has completely ignored and continues to ignore these purported core values in its dealings with Super Lighting with respect to the Patents-in-Suit.

28. On October 2, 2019, representatives of Super Lighting sent CH Lighting a correspondence identifying the Patents-in-Suit, and other Super Lighting patents. Super Lighting advised CH Lighting that it was infringing the Patents-in-Suit, and requested that CH Lighting cease and desist from its infringing activity. Super Lighting requested a response by October 30, 2019. A copy of this correspondence is attached as Exhibit 1.

29. Neither Gan Caiying, the recipient of the October 2nd correspondence and the CEO of CH Lighting, nor anyone else from CH Lighting ever responded to the October 2nd correspondence.

30. On November 4, 2019, Super Lighting sent another correspondence to CH Lighting, noting that CH Lighting had not responded to the October 2nd correspondence. Super Lighting again requested a response to its October 2nd correspondence. Super Lighting even offered CH Lighting more time to respond if it needed more time. A copy of this correspondence is attached as Exhibit 2.

31. Once again, neither Gan Caiying, the CEO of CH Lighting and the recipient of the November 4th correspondence, nor anyone else from CH Lighting ever responded to this November 4th correspondence.

32. On December 22, 2019, Super Lighting sent a third correspondence to CH Lighting. This correspondence noted CH Lighting's complete lack of response to the October 2nd and November 4th correspondence, and further noted CH Lighting's continued infringement of the Patents-in-Suit and other Super Lighting patents, and further requested (yet again) that CH Lighting cease and desist from its willful infringement. A copy of this correspondence is attached as Exhibit 3.

33. Even though this was the ***third*** correspondence on the topic of CH Lighting's infringement of the Patents-in-Suit, neither Gan Caiying, the CEO of CH Lighting and the recipient of the December 22nd correspondence, nor anyone else from CH Lighting ever responded to this December 22nd correspondence.

34. CH Lighting's conduct of intentionally and deliberately ignoring all three of Super Lighting's attempts to discuss the Patents-in-Suit, along with CH Lighting's continued, deliberate, and systematic infringement of the Patents-in-Suit was and continues to be egregious. Rather than taking "the right path" or taking "responsibility," CH Lighting chose the opposite and unreasonable approach of intentionally burying its head in the sand when confronted by its infringement.

35. Upon information and belief, by virtue of its affiliation with and common manager(s) and/or officer(s) with CH Lighting, and by virtue of CH Lighting's ownership of Ruising, Ruising also had pre-suit notice of the Patents-in-Suit on or about the dates set forth in

paragraphs 28-33. Further upon information and belief, Ruising has deliberately and intentionally chosen to continue its infringement of the Patents-in-Suit.

COUNT 1

(Infringement of U.S. Patent No. 10,295,125)

36. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

37. All Defendants have infringed and continue to infringe one or more claims of the '125 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

38. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 29 of the '125 Patent at least by making, using, offering to sell, importing, and/or selling at least the KT-LED7T8-24GC-840-DX2. For example, upon information and belief CH Lighting and Ruising manufacture at least the KT-LED7T8-24GC-840-DX2 and similar infringing LED tube lamps in China, export or encourage others to export the KT-LED7T8-24GC-840-DX2 to the United States, and encourage distributors to sell the KT-LED7T8-24GC-840-DX2 in the United States with knowledge that the KT-LED7T8-24GC-840-DX2 infringes the '125 Patent and the intent for distributors and customers to sell, offer to sell, and use the KT-LED7T8-24GC-840-DX2 and similar infringing LED tube lamps. Distributors and end users directly infringe the '125 Patent by selling, offering to sell, and using infringing products including at least the KT-LED7T8-24GC-840-DX2 and other products which infringe in a similar manner.

39. Defendant Elliott directly infringes claim 29 by selling and offering to sell the KT-LED7T8-24GC-840-DX2 in this and other districts.

40. The KT-LED7T8-24GC-840-DX2 satisfies each of the limitations of at least claim 29 of the '125 Patent.

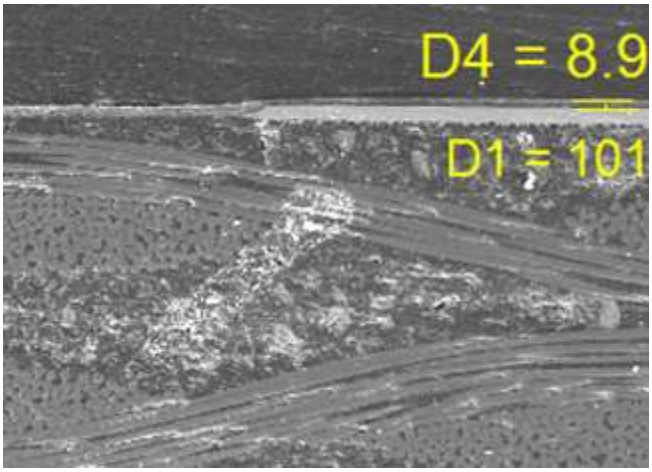
41. For example, the KT-LED7T8-24GC-840-DX2 has a lamp tube and two end caps attached at two ends of the lamp tube:

42. A power supply is disposed in at least one of the end caps, while an LED light strip is disposed inside the lamp tube, on an inner circumferential surface of the lamp tube.

43. The LED light strip of the KT-LED7T8-24GC-840-DX2 comprises both a mounting region and a connecting region, both of which are electrically connected to the plurality of LED light sources and the power supply. A plurality of LED light sources are mounted on the mounting region:

44. The connecting region includes at least two soldering pads for electrically connecting the power supply and "+" and "-" recognizing marks:

45. A protective layer is disposed on the light strip above the wiring layer:



46. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '125 Patent in a similar manner as the representative KT-LED7T8-24GC-840-DX2, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

47. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '125 Patent. CH Lighting and Ruising's conduct has been egregious for at least the reasons set forth in the Complaint, including but not limited to their deliberate continued infringement while at the same time ignoring multiple correspondence from Super Lighting. CH Lighting and Ruising's infringement of the '125 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

48. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '125 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 2

(Infringement of U.S. Patent No. 10,342,078)

49. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

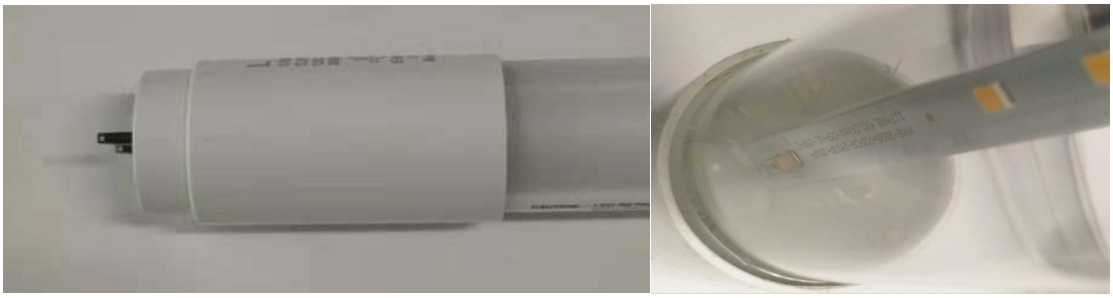
50. All Defendants have infringed and continue to infringe one or more claims of the '078 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

51. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 23 of the '078 Patent at least by making, using, offering to sell, importing, and/or selling at least the 12.5W LED T8 DW 4000K (3000680). For example, upon information and belief, CH Lighting and Ruising manufacture at least the 12.5W LED T8 DW 4000K (3000680) and similar infringing LED tube lamps in China, export or encourage others to export the 12.5W LED T8 DW 4000K (3000680) to the United States, and encourage distributors to sell the 12.5W LED T8 DW 4000K (3000680) in the United States with knowledge that the 12.5W LED T8 DW 4000K (3000680) infringes the '078 Patent and the intent for distributors and customers to sell, offer to sell, and use the 12.5W LED T8 DW 4000K (3000680) and similar infringing LED tube lamps. Distributors and end users directly infringe the '078 Patent by selling, offering to sell, and using infringing products including at least the 12.5W LED T8 DW 4000K (3000680) and other products which infringe in a similar manner.

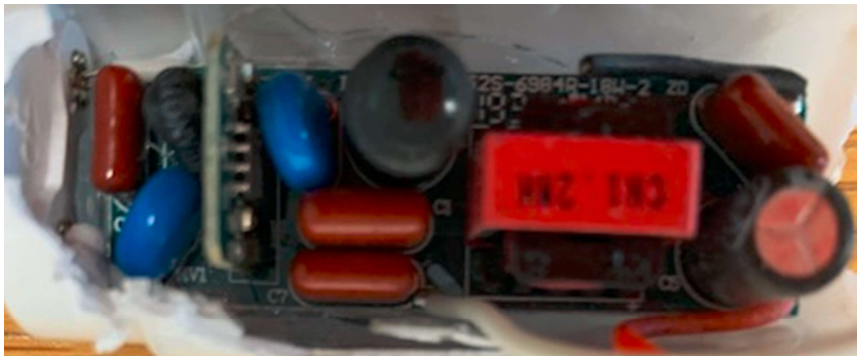
52. Defendant Elliott directly infringes claim 23 by selling and offering to sell the 12.5W LED T8 DW 4000K (3000680) in this and other districts.

53. The 12.5W LED T8 DW 4000K (3000680) satisfies each of the limitations of at least claim 23 of the '078 Patent.

54. For example, the 12.5W LED T8 DW 4000K (3000680) is an LED tube lamp that has a plurality of LEDs mounted within the tube.



55. For example, the 12.5W LED T8 DW 4000K (3000680) has a power supply that has a circuit board, a plurality of electronic components, and a heat-dissipating element that is mounted on the circuit board.



56. For example, the 12.5W LED T8 DW 4000K (3000680) has end caps, at the ends of the tube. The end caps have a lateral wall that is coaxial with the tube, and an end wall that is substantially perpendicular to an axial direction of the lateral wall. The circuit board is disposed inside an end cap, and the heat dissipating element extends between the end wall and is disposed in the end cap opening.

57. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '078 Patent in a similar manner as the representative 12.5W LED T8 DW 4000K (3000680), including at least the models substantially similar to CH Lighting models, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

58. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '078 Patent. CH Lighting and Ruising's infringement of the '078 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

59. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '078 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 3

(Infringement of U.S. Patent No. 10,352,540)

60. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

61. All Defendants have infringed and continue to infringe one or more claims of the '540 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

62. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 13 of the '540 Patent at least by making, using, offering to sell, importing, and/or selling at least the L13T8BY5041K. For example, upon information and belief CH Lighting and Ruising manufacture at least the L13T8BY5041K and similar infringing LED tube lamps in China, export or encourage others to export the L13T8BY5041K to the United States, and encourage distributors to sell the L13T8BY5041K in the United States with knowledge that the L13T8BY5041K infringes the '540 Patent and the intent for distributors and customers to sell, offer to sell, and use the L13T8BY5041K and similar infringing LED tube lamps. Distributors and end users directly infringe the '540 Patent by selling, offering to sell, and using infringing products including at least the L13T8BY5041K and other products which infringe in a similar manner.

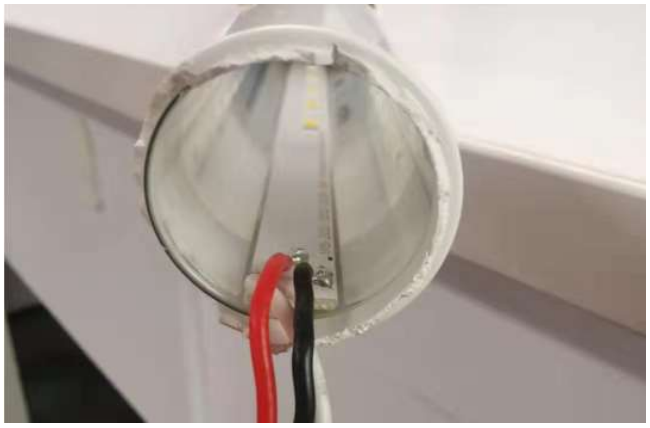
63. Defendant Elliott directly infringes claim 13 by selling and offering to sell the L13T8BY5041K in this and other districts.

64. The L13T8BY5041K satisfies each of the limitations of at least claim 13 of the '540 Patent.

65. For example, the L13T8BY5041K is an LED tube lamp that has a plurality of LEDs disposed within the tube as part of an LED light strip on the inner circumferential surface of the main body, and two ends regions at the end of the main body. The end caps sleeve the end regions, and the end caps have a lateral wall that is substantially coaxial with the tube, and an end wall that is substantially perpendicular to the axial direction of the tube. The end walls have two pins to receive a driving signal.

66. For example, the L13T8BY5041K has a power supply that has a circuit board that drives the LED light sources. The circuit board is disposed inside an end region and end cap.

67. For example, the L13T8BY5041K has an adhesive disposed between the lateral wall and the rear end regions.



68. For example, the L13T8BY5041K has a diffusion film that is disposed on the glass tube to diffuse light emitted from the LEDs.

69. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '540 Patent in a similar manner as the representative L13T8BY5041K, including at least the models substantially similar to CH Lighting models, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

70. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '540 Patent. CH Lighting and Ruising's infringement of the '540 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

71. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '540 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 4

(Infringement of U.S. Patent No. 10,426,003)

72. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

73. All Defendants have infringed and continue to infringe one or more claims of the '003 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

74. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 1 of the '003 Patent at least by making, using, offering to sell, importing, and/or selling at least the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp. For example, upon information and belief CH Lighting and Ruising manufacture at least the 12.5W LED T8 UNIV 5000K 48" (3000705) and similar infringing LED tube lamps in China, export or encourage others to export the 12.5W LED T8 UNIV 5000K 48" (3000705) to the United States, and encourage distributors to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) in the United States with knowledge that the 12.5W LED T8 UNIV 5000K 48" (3000705) infringes the '003 Patent and the intent for

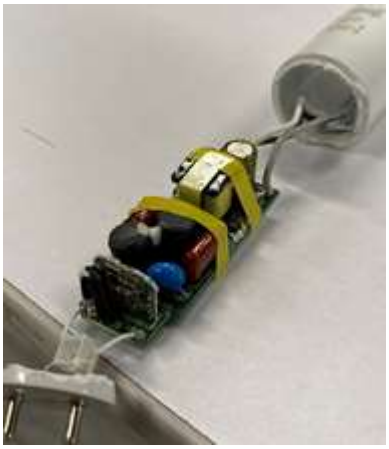
distributors and customers to sell, offer to sell, and use the 12.5W LED T8 UNIV 5000K 48" (3000705) and similar infringing LED tube lamps. Distributors and end users directly infringe the '003 Patent by selling, offering to sell, and using infringing products including at least the 12.5W LED T8 UNIV 5000K 48" (3000705) and other products which infringe in a similar manner.

75. Defendant Elliott directly infringes claim 1 by selling and offering to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) in this and other districts.

76. The 12.5W LED T8 UNIV 5000K 48" (3000705) satisfies each of the limitations of at least claim 1 of the '003 Patent.

77. For example, the 12.5W LED T8 UNIV 5000K 48" (3000705) is an LED tube lamp with two end caps at each end of the tube. Each of the end caps comprises a lateral wall substantially coaxial with the tube, an end wall substantially perpendicular to an axial direction of the lateral wall, and at least one opening penetrating through the end wall in a direction parallel to the axial direction of the lateral wall. The distance between the center of the end wall and at least one of the openings is approximately 68% of the distance between the center of the end wall and the periphery of the end wall, which is greater than 2/5 and less than 4/5 of the end wall radius.

78. A power supply is disposed in at least one end cap, while an LED light strip is disposed in the tube. The LED light strip contains a plurality of LED light sources electrically connected to the power supply via the LED light strip.



79. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '003 Patent in a similar manner as the representative 12.5W LED T8 UNIV 5000K 48" (3000705), including at least the models substantially similar to CH Lighting models, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

80. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '003 Patent. CH Lighting and Ruising's infringement of the '003 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

81. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and

irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '003 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 5

(Infringement of U.S. Patent No. 9,939,140)

82. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

83. All Defendants have infringed and continue to infringe one or more claims of the '140 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

84. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 1 of the '140 Patent at least by making, using, offering to sell, importing, and/or selling at least the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp. For example, upon information and belief CH Lighting and Ruising manufacture at least the 12.5W LED T8 UNIV 5000K 48" (3000705) and similar infringing LED tube lamps in China, export or encourage others to export the 12.5W LED T8 UNIV 5000K 48" (3000705) to the United States, and encourage distributors to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) in the United States with knowledge that the 12.5W LED T8 UNIV 5000K 48" (3000705) infringes the '140 Patent and the intent for distributors and customers to sell, offer to sell, and use the 12.5W LED T8 UNIV 5000K 48" (3000705) and similar infringing LED tube lamps. Distributors and end users directly infringe

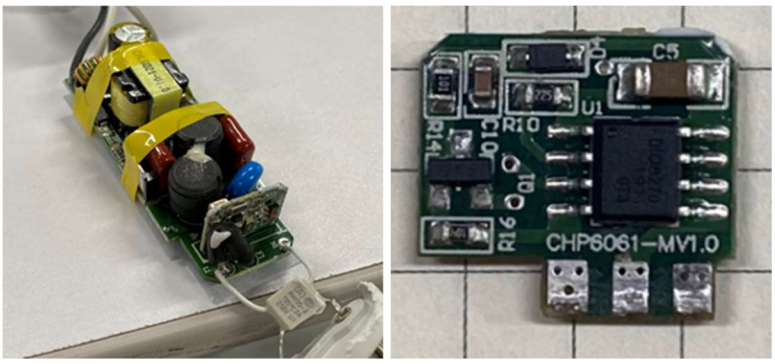
the ’140 Patent by selling, offering to sell, and using infringing products including at least the 12.5W LED T8 UNIV 5000K 48” (3000705) and other products which infringe in a similar manner.

85. Defendant Elliott directly infringes claim 1 by selling and offering to sell the 12.5W LED T8 UNIV 5000K 48” (3000705) in this and other districts.

86. The 12.5W LED T8 UNIV 5000K 48” (3000705) satisfies each limitation of at least claim 1 of the ’140 Patent.

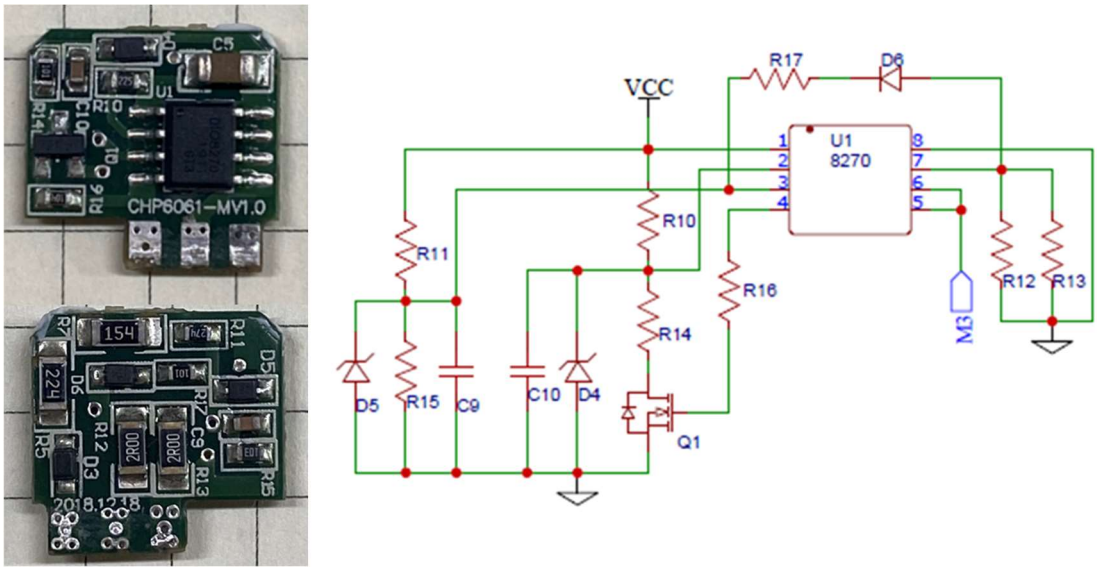
87. For example, the 12.5W LED T8 UNIV 5000K 48” (3000705) has an LED tube lamp.

88. The 12.5W LED T8 UNIV 5000K 48” (3000705) has an installation detection circuit, *e.g.*, the CHP6061-MV1.0 with the DIO8270 Intelligent Power Protection Switch and associated circuitry. The CHP6061-MV1.0 with the DIO8270 receive an external driving signal.

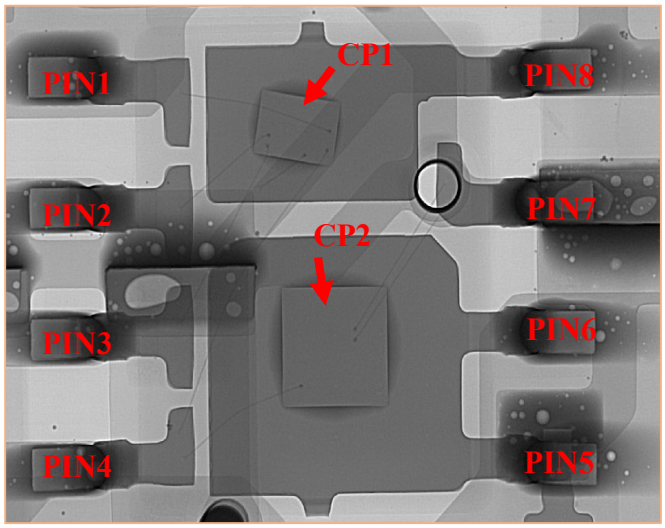


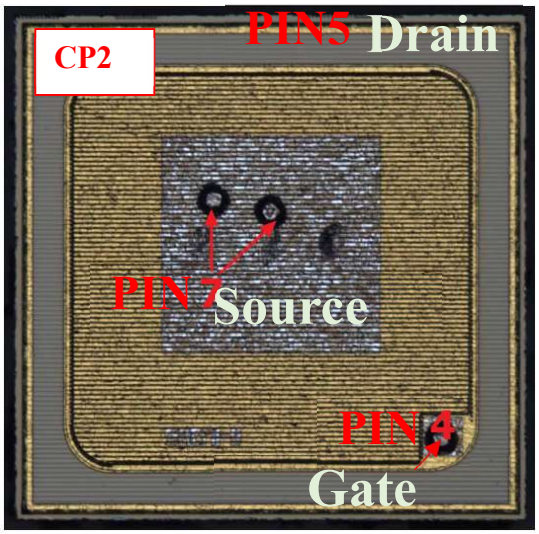
89. On information and belief, the installation detection circuit has a pulse generating circuit, and the installation detection circuit detects, during one of those pulses, whether the LED

tube lamp is properly installed on a lamp socket based on detecting a signal generated from the external driving signal. On information and belief, circuitry internal to the DIO8270 and associated external circuitry on the CHP6061-MV1.0 form a pulse generating circuit, and the pulse generating circuitry provides a pulse based in part on the voltage provided to pin 2 on the DIO8270 and, during that pulse, detects a signal input from pin 3 (connected to Pin 7 through D6 and R17) of the DIO8270. On information and belief, pin 7 provides the external driving signal from pin 5.

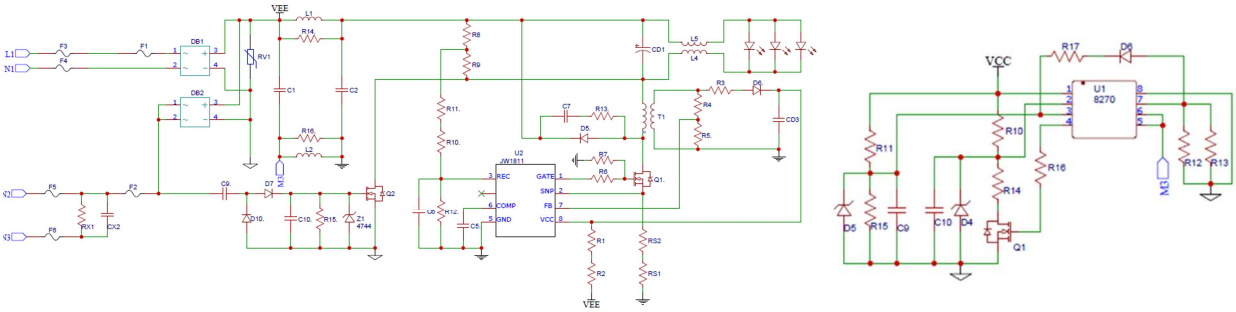


90. On information and belief, the installation detection circuit has a switch circuit coupled to the pulse generating circuit, where the pulses control turning the switch circuit on and off. On information and belief, circuitry internal to the DIO8270 provides an N-Type MOSFET (CP2) with a gate input and pin 5 and pin 7 which act as a drain and source, respectively. On information and belief, the DIO8270's N-Type MOSFET receives a signal from the pulse generating circuit (shown partially by CP1) and that signal is used, in part, to control switching the N-Type MOSFET on and off.

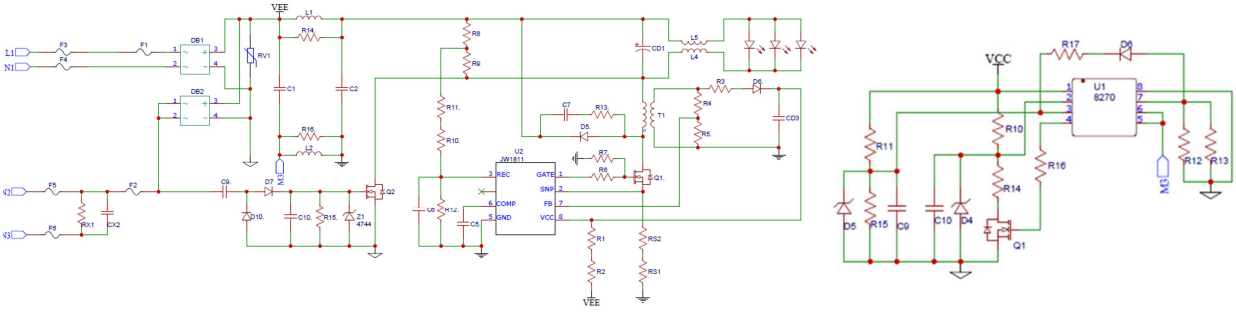




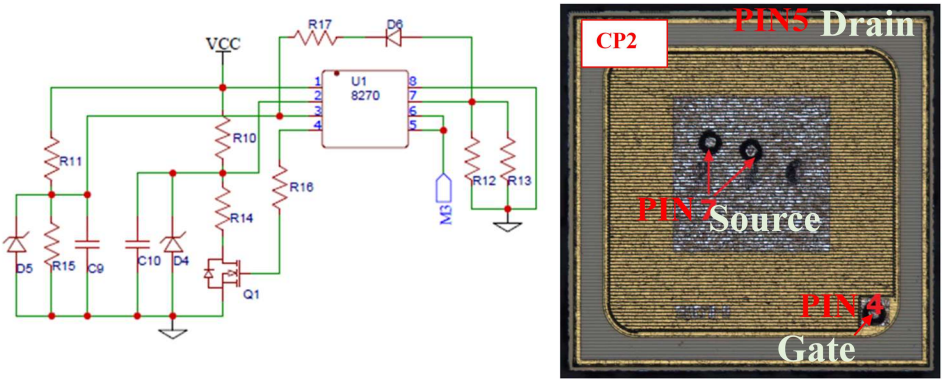
91. On information and belief, the installation detection circuit controls the switch circuit to be in an off state when the installation detection circuit detects, during the one or more pulse signals, that the LED tube lamp is not properly installed on the lamp socket. The DIO8270's N-Type MOSFET remains in an off state, *i.e.*, does not provide biasing voltage to CP2's gate, and causes the power loop of the LED tube lamp to be open, when the LED tube lamp is not properly installed. This open circuit occurs while the pulse generating circuitry provides a pulse based, in part, on the voltage provided on pin 2 to the DIO8270. The power loop to the LED Tube lamp is open because its current path through RS2->RS1->(common node denoted by Earth Ground)->L2->M3 is not conducting because the DIO8270's N-Type MOSFET is not conducting between its source (pin 7) and drain (pin5).



92. On information and belief, the installation detection circuit controls the switch circuit to be in an on state when the installation detection circuit detects, during the one or more pulse signals, that the LED tube lamp is properly installed on the lamp socket. The DIO8270's N-Type MOSFET remains in an on state, *i.e.*, does provide biasing voltage to CP2's gate, and causes the power loop of the LED tube lamp to be closed, when the LED tube lamp is properly installed. This closed circuit occurs while the pulse generating circuitry provides a pulse based, in part, on the voltage provided on pin 2 to the DIO8270. The power loop to the LED Tube lamp is closed because its current path through RS2->RS1->(common node denoted by Earth Ground)->L2->M3 is conducting because the DIO8270's N-Type MOSFET is conducting between its source (pin 7) and drain (pin5).



93. On information and belief, the signal generated from the external driving signal is a sampling signal on the power loop and the installation detection circuit further comprises a detection determining circuit that detects the sampling signal to determine whether the LED tube lamp is properly installed. The signal input to pin 3, which is output from pin 7 through D6 and R17, is from the power loop of the LED lamp and the switch because it is from pin 5 (the drain of CP2), and forms part of the detection determining circuit.



94. The pulse generating circuit is configured to output pulses independent of whether the detection determining circuit detects the sampling signal. The DIO8270 generates a pulse internal to the DIO8270 based on the voltage inputted to pin 2 independent of voltage applied to pin 3.

95. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '140 Patent in a similar manner as the representative 12.5W LED T8 UNIV 5000K 48" (3000705), including at least the models substantially similar to CH Lighting models, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

96. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '140 Patent. CH Lighting and Ruising's infringement of the '140 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

97. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to

preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '140 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 6

(Infringement of U.S. Patent No. 10,378,700)

98. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

99. All Defendants have infringed and continue to infringe one or more claims of the '700 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

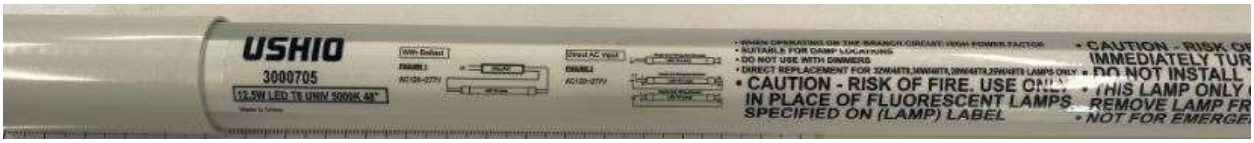
100. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 1 of the '700 Patent at least by making, using, offering to sell, importing, and/or selling at least the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp. For example, upon information and belief CH Lighting and Ruising manufacture at least the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp and similar infringing LED tube lamps in China, export or encourage others to export the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp to the United States, and encourage distributors to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp in the United States with knowledge that the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp infringes the '700 Patent and the intent for distributors and customers to sell, offer to sell, and use the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp and similar infringing LED tube lamps. Distributors and end users directly infringe the '700 Patent

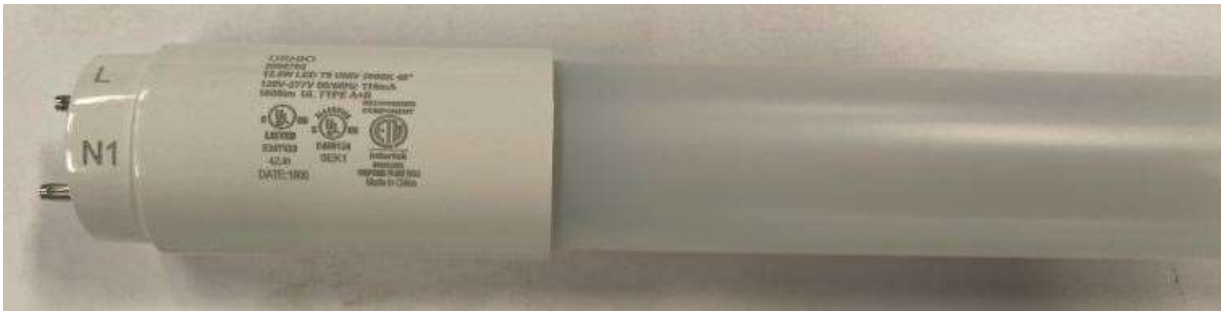
by selling, offering to sell, and using infringing products including at least the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp and other products which infringe in a similar manner.

101. Defendant Elliott directly infringes claim 1 by selling and offering to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp in this and other districts.

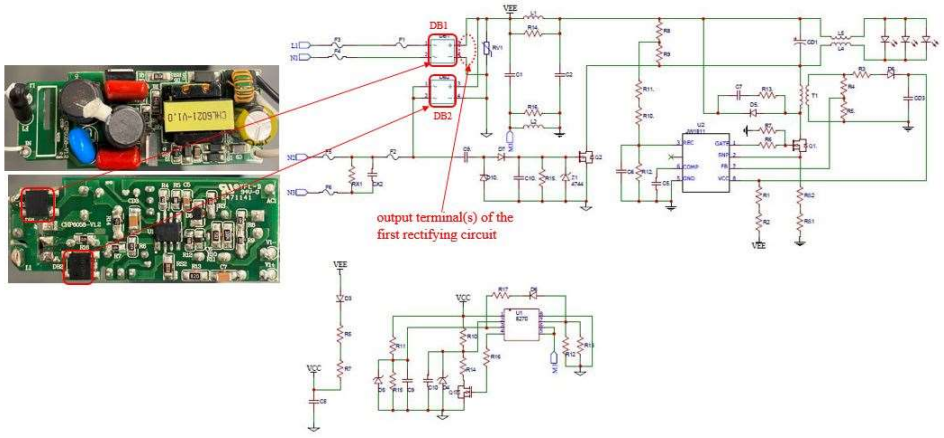
102. The 12.5W LED T8 UNIV 5000K 48" (3000705) satisfies each of the limitations of at least claim 1 of the '700 Patent.

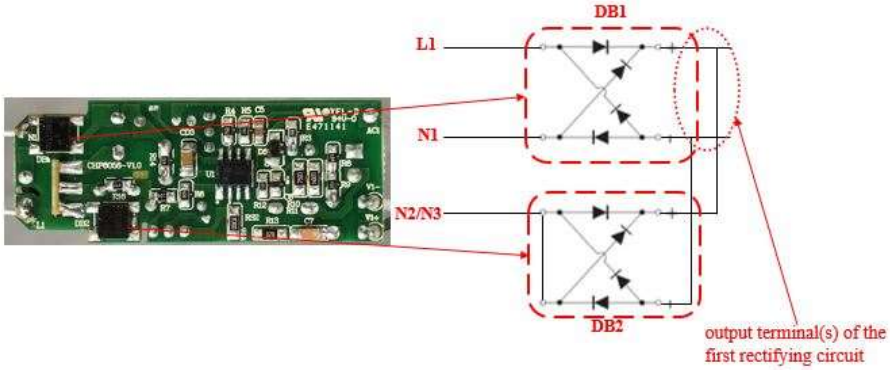
103. For example, the 12.5W LED T8 UNIV 5000K 48" (3000705) is an LED tube lamp comprising a first pin and a second pin coupled to a first end of a lamp tube and a third pin coupled to a second end of the lamp tube:



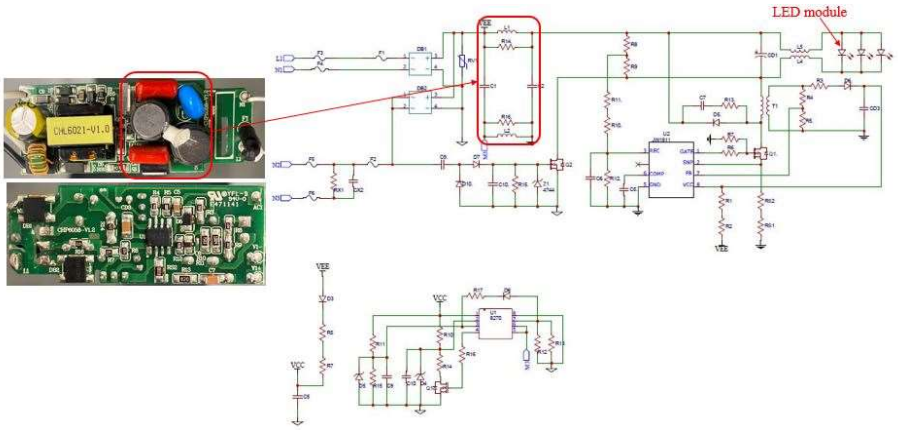


104. The tube lamp comprises two rectifying circuits, each of which comprises diodes. A first rectifying circuit is connected to the two pins at the first end of the lamp tube and a second rectifying circuit is connected to a pin at the second end of the lamp tube, and both rectifying circuits are for rectifying an external driving signal (e.g. electrical signals applied to the input pins) to produce a rectified signal:



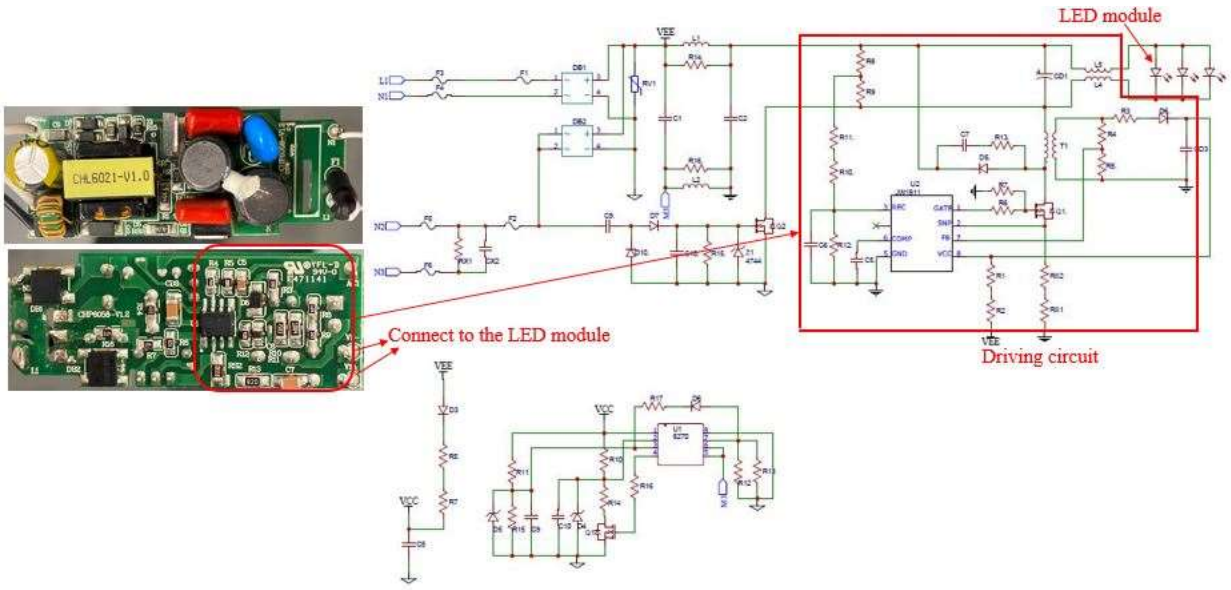


105. The tube lamp further comprises a filtering circuit coupled to the two rectifying circuits and an LED module for filtering the rectified signal to produce a filtered signal:

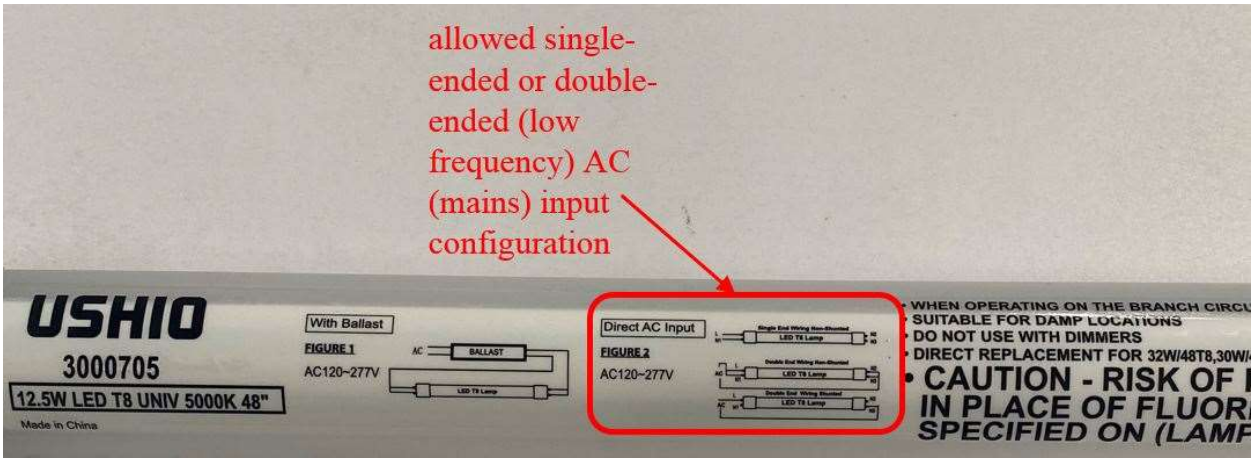


106. The tube lamp further comprises an LED module which includes LEDs for emitting light, and is configured to be driven either by the rectified signal or by the filtered signal:

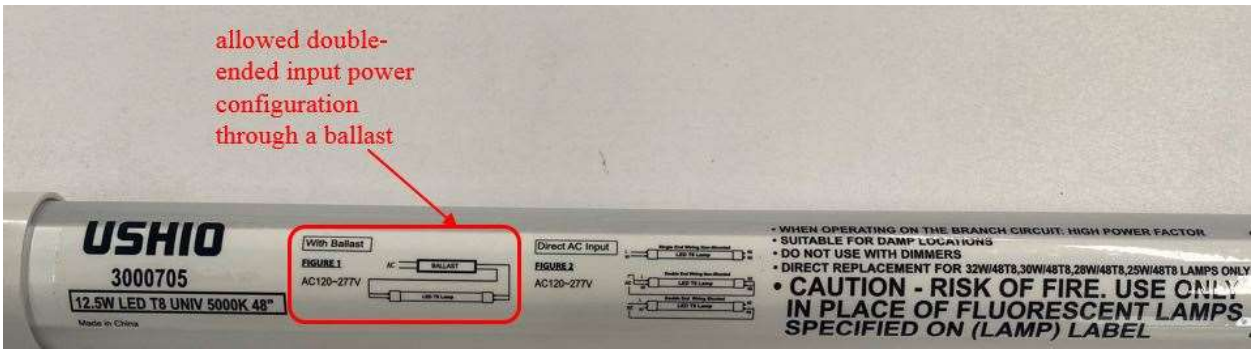
107. The tube lamp further comprises a driving circuit coupled between the rectifying circuits and the LED module and configured to drive the LED module:



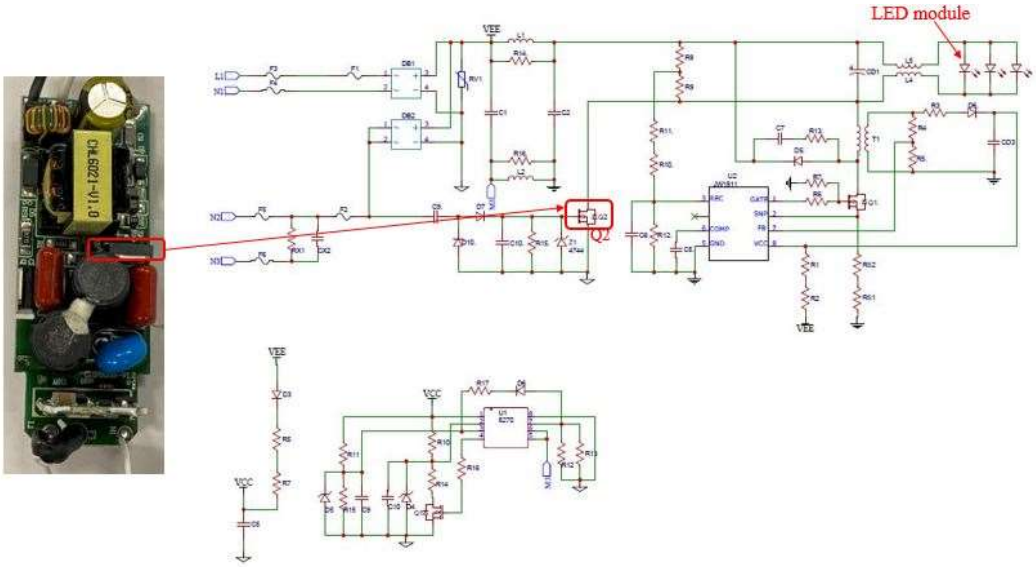
108. The LED tube lamp is further configured to receive an external driving signal from a low-frequency direct AC input either at one end through both pins or through pins at both ends of the lamp tube:



109. The LED lamp tube may be also driven by an electrical ballast through pins at opposite ends of the LED lamp tube:



110. The LED tube lamp includes a switching device for driving the LED module in different configurations depending on the arrangement of the external driving signal:



111. When the LED tube lamp receives a low frequency direct AC signal as the external driving signal, the LED tube lamp causes the rectified or filtered signal to be used by the driving circuit for driving the LED module to emit light. However, when the external driving signal is provided across pins at opposite ends of the LED tube lamp by an electrical ballast, the switching device causes the driving circuit to be bypassed and therefore the driving circuit does not drive the LED module to emit light.

112. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '700 Patent in a similar manner as

the representative 12.5W LED T8 UNIV 5000K 48" (3000705), including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

113. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '700 Patent. CH Lighting and Ruising's infringement of the '700 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

114. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '700 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 7

(Infringement of U.S. Patent No. 10,448,479)

115. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

116. All Defendants have infringed and continue to infringe one or more claims of the '479 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

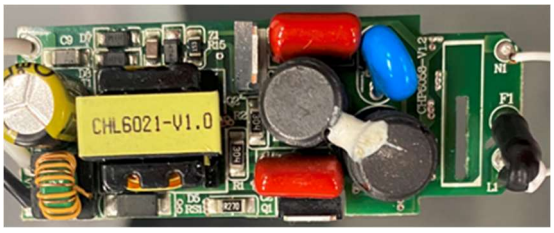
117. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 31 of the '479 Patent at least by making, using, offering to sell, importing, and/or selling at least the 12.5W LED T8 UNIV 5000K 48" (3000705) LED tube lamp. For example, upon information and belief CH Lighting and Ruising manufacture at least the 12.5W LED T8 UNIV 5000K 48" (3000705) and similar infringing LED tube lamps in China, export or encourage others to export the 12.5W LED T8 UNIV 5000K 48" (3000705) to the United States, and encourage distributors to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) in the United States with knowledge that the 12.5W LED T8 UNIV 5000K 48" (3000705) infringes the '479 Patent and the intent for distributors and customers to sell, offer to sell, and use the 12.5W LED T8 UNIV 5000K 48" (3000705) and similar infringing LED tube lamps. Distributors and end users directly infringe the '479 Patent by selling, offering to sell, and using infringing products including at least the 12.5W LED T8 UNIV 5000K 48" (3000705) and other products which infringe in a similar manner.

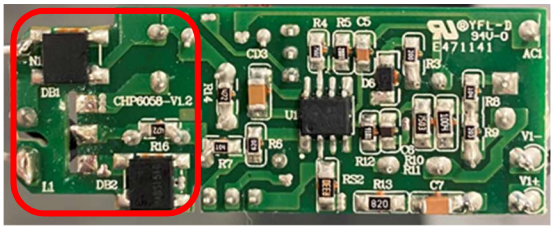
118. Defendant Elliott directly infringes claim 31 by selling and offering to sell the 12.5W LED T8 UNIV 5000K 48" (3000705) in this and other districts.

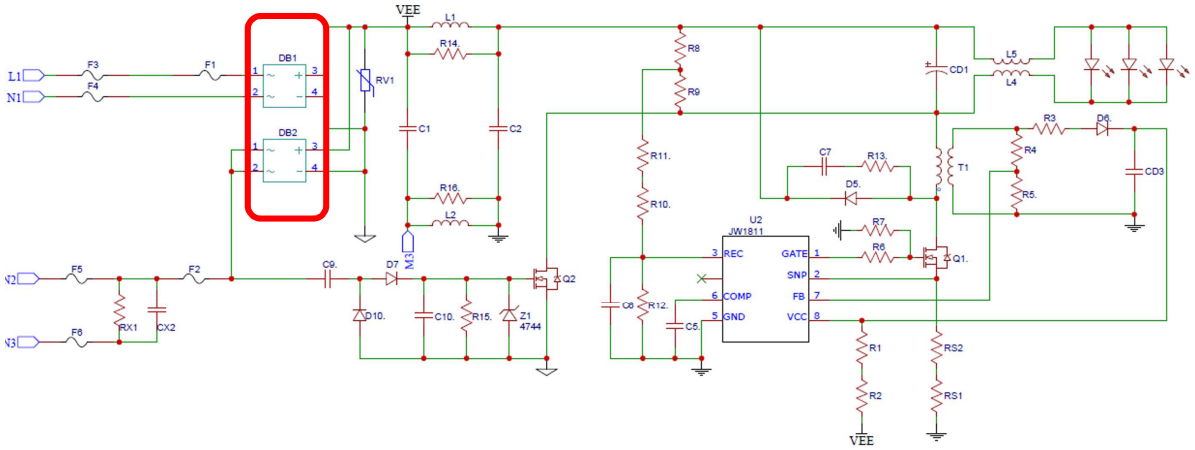
119. The 12.5W LED T8 UNIV 5000K 48" (3000705) satisfies each limitation of at least claim 31 of the '479 Patent.

120. For example, the 12.5W LED T8 UNIV 5000K 48" (3000705) is an LED lamp tube having two external connection terminals coupled to the lamp tube.

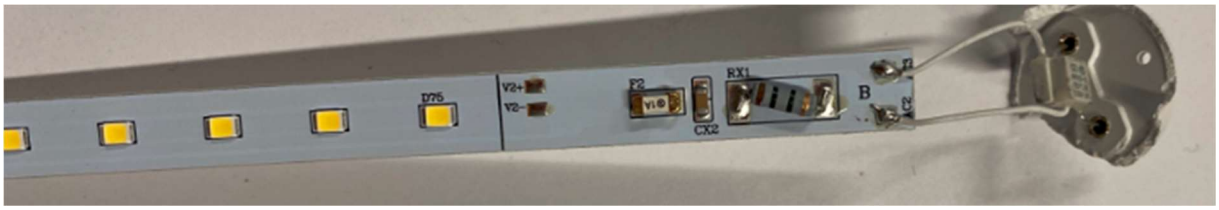
121. The 12.5W LED T8 UNIV 5000K 48" (3000705) has a first rectifying circuit having diodes connected to two external connection terminals that are for receiving an external driving signal. The first rectifying circuit produces a rectified signal from the input external driving signal.



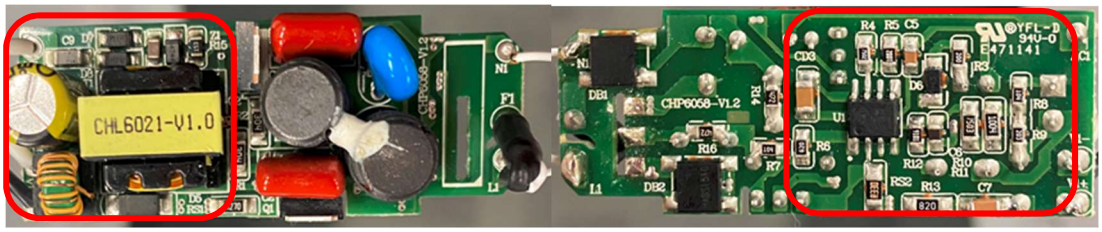




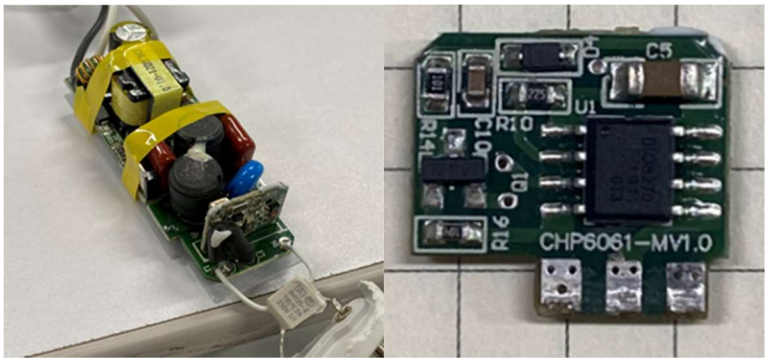
122. The 12.5W LED T8 UNIV 5000K 48" (3000705) has an LED module comprising LEDs for emitting light that are configured to be driven based on the rectified signal.



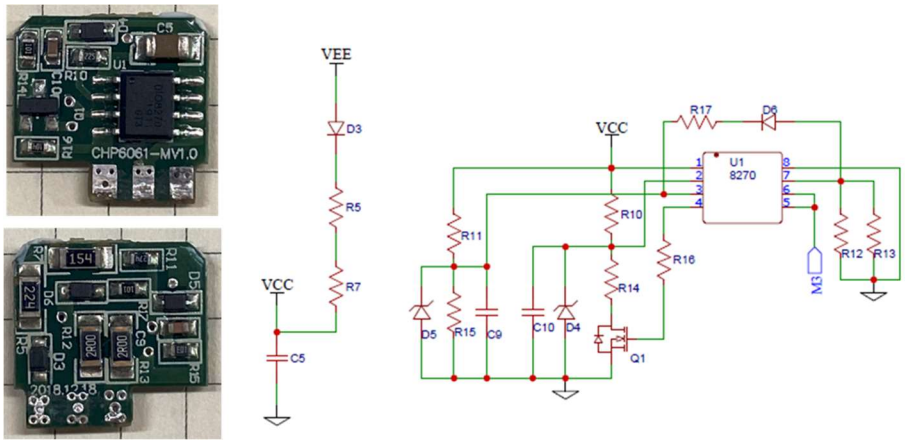
123. The 12.5W LED T8 UNIV 5000K 48" (3000705) has an LED driving circuit that is coupled between the rectifying circuit and the LED module.



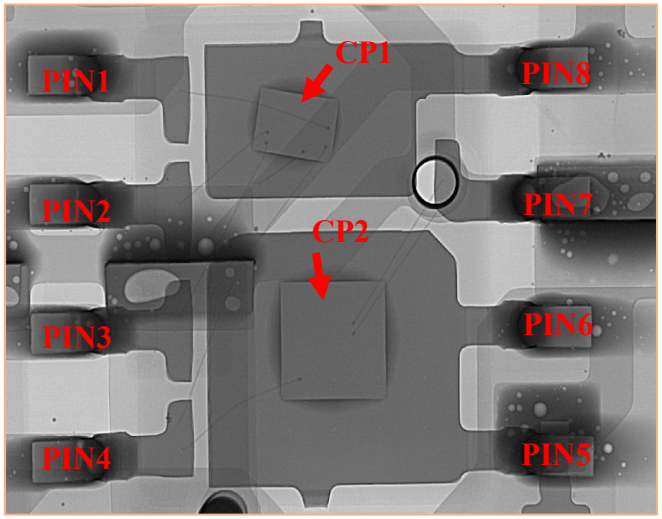
124. The 12.5W LED T8 UNIV 5000K 48" (3000705) has a control circuit that is coupled between the first rectifying circuit and the driving circuit. The 12.5W LED T8 UNIV 5000K 48" (3000705) has the CHP6061-MV1.0 with the DIO8270.

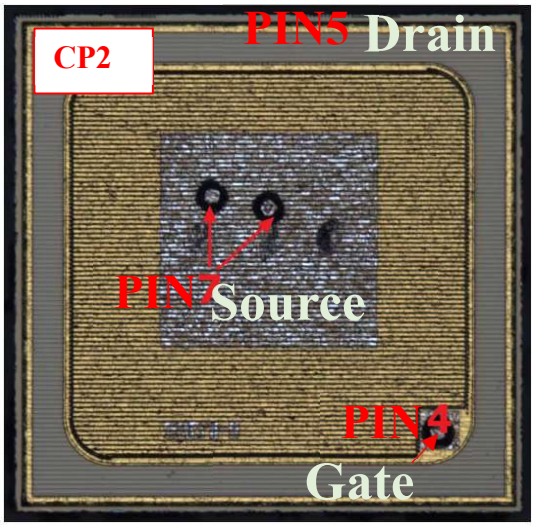


125. The CHP6061-MV1.0 has two devices connected in series, *e.g.*, R7 and C5, between an output terminal of the first rectifying circuit and ground. R7 and C5 provide a sampled signal on the node between them depending on the property of the rectified signal (VEE).



126. The DIO8270 provides a conduction path through the N-Type MOSFET in the DIO8270 between pins 5 and 7, causing the rectified signal to be used by the driving circuit to drive the LED module and emit light, when the sampled signal (VCC) is higher than a determined level.

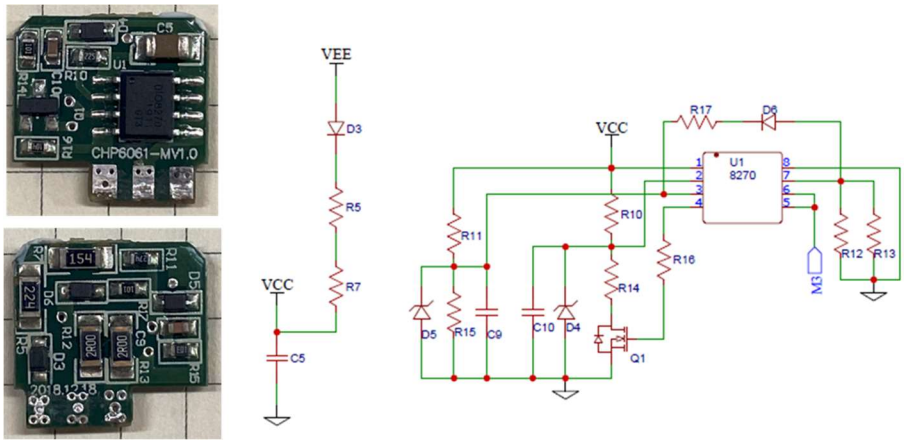




127. Following a pre-set delay, if the voltage level of VCC is lower than a predetermined level, the control circuit does not provide a conduction path through pin 5 and 7 of N-Type MOSFET in the DIO8270.

128. R7 and C5 are two devices that form a passive component string connected to the control circuit. They are a resistor and a capacitor, and form an RC time-constant that

determines the first pre-set delay period. VEE is from the rectified voltage, and is not processed by an active signal to charge C5 and generate VCC.



129. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the '479 Patent in a similar manner as the representative 12.5W LED T8 UNIV 5000K 48" (3000705), including at least the models substantially similar to CH Lighting models, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

130. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the '479 Patent, of which, upon information and belief, CH Lighting and Ruising have been aware of since shortly after its issuance based on their notice of and monitoring of Plaintiff's other patents. CH Lighting and Ruising's infringement of the '479 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

131. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to

preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '479 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

COUNT 8

(Infringement of U.S. Patent No. 10,560,989)

132. Plaintiffs repeat and re-allege all the allegations above as if fully set forth herein.

133. All Defendants have infringed and continue to infringe one or more claims of the '989 Patent by making, using, offering to sell, selling, and/or importing into the United States infringing devices without authority in violation of 35 U.S.C. § 271(a). CH Lighting and Ruising have actively induced infringement without authority in violation of 35 U.S.C. § 271(b). Defendants CH Lighting and Ruising continue to induce infringement without authority in violation of 35 U.S.C. § 271(b).

134. Defendants CH Lighting and Ruising have infringed and continue to infringe, directly and indirectly, literally and under the doctrine of equivalents, at least claim 1 of the '989 Patent at least by making, using, offering to sell, importing, and/or selling at least the KT-LED7T8-24GC-840-DX2. For example, upon information and belief CH Lighting and Ruising manufacture at least the KT-LED7T8-24GC-840-DX2 and similar infringing LED tube lamps in China, export or encourage others to export the KT-LED7T8-24GC-840-DX2 to the United States, and encourage distributors to sell the KT-LED7T8-24GC-840-DX2 in the United States with knowledge that the KT-LED7T8-24GC-840-DX2 infringes the '989 Patent and the intent for distributors and customers to sell, offer to sell, and use the KT-LED7T8-24GC-840-DX2 and similar infringing LED tube lamps. Distributors and end users directly infringe the '989 Patent

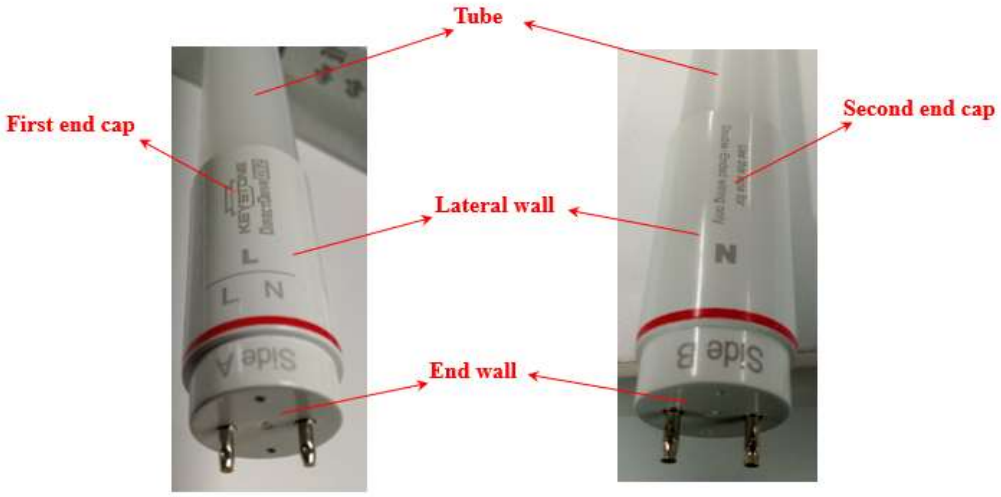
by selling, offering to sell, and using infringing products including at least the KT-LED7T8-24GC-840-DX2 and other products which infringe in a similar manner.

135. Defendant Elliott directly infringes claim 1 by selling and offering to sell the KT-LED7T8-24GC-840-DX2 in this and other districts.

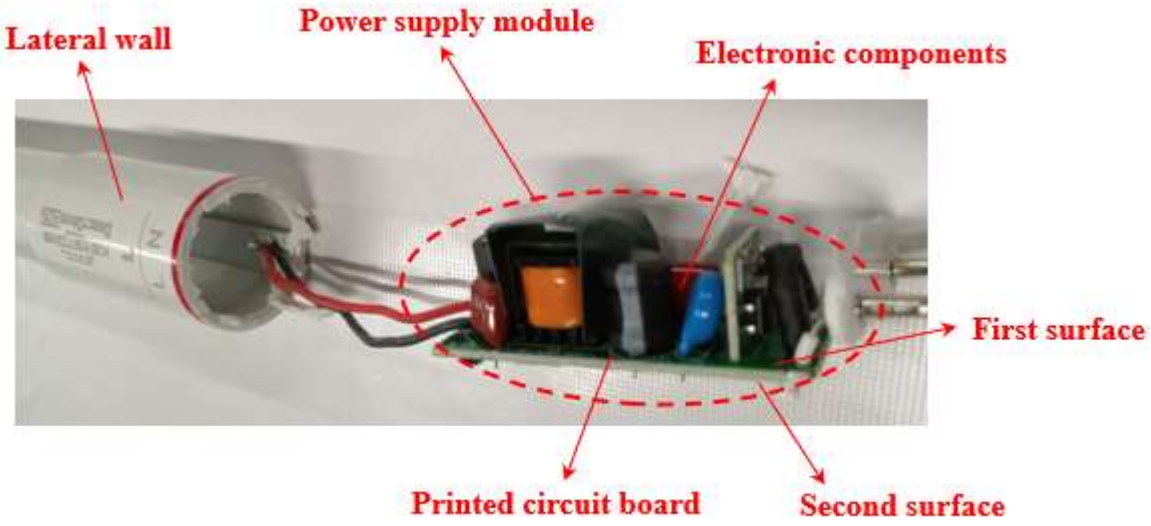
136. The KT-LED7T8-24GC-840-DX2 satisfies each of the limitations of at least claim 1 of the '989 Patent.

137. For example, the KT-LED7T8-24GC-840-DX2 has a lamp tube with two ends, an LED light strip attached to an inner circumferential surface of the tube, a plurality of LED light sources mounted on the LED light strip, and a power supply module electrically connected to the LED light strip and configured to drive the plurality of LED light sources:

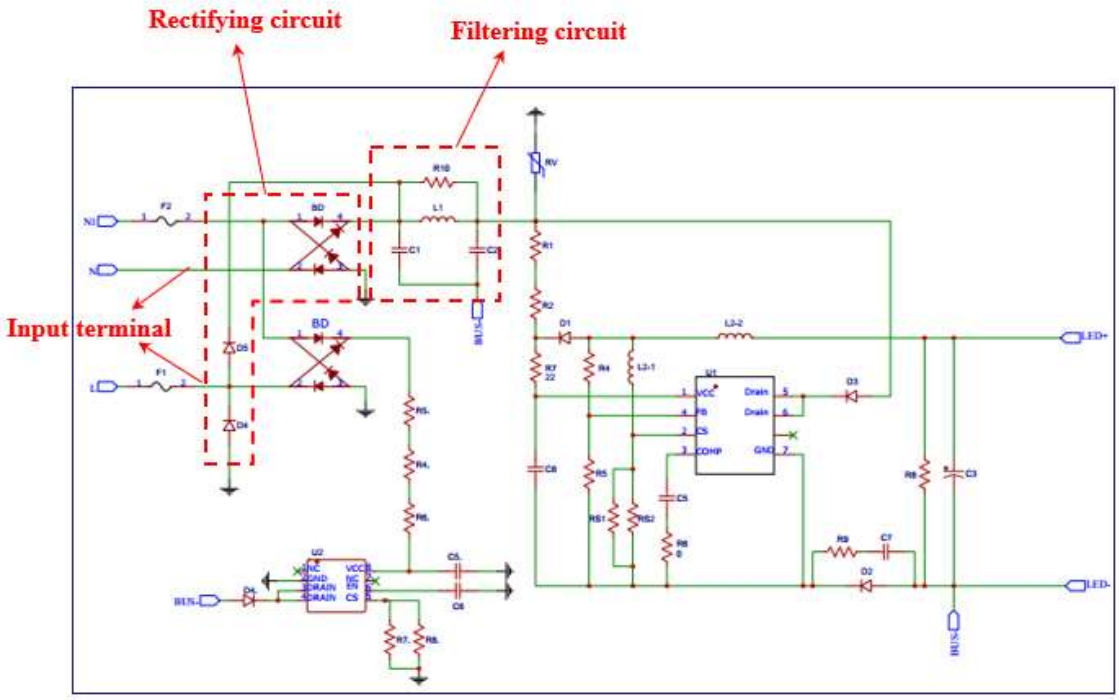
138. The LED lamp tube further includes first and second end caps attached at the ends of the tube, each of which includes a lateral wall substantially coaxial with and connecting to the tube and an end wall connecting to the lateral wall and substantially perpendicular to the axial direction of the lateral wall:



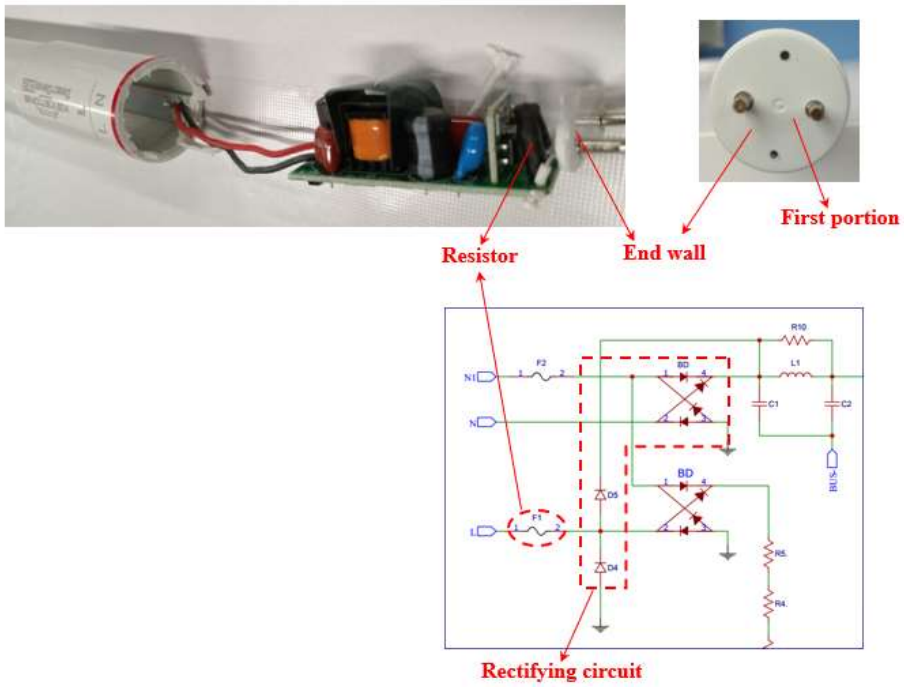
139. The power supply module comprises a printed circuit board, having two surfaces substantially parallel to each other and to the axial direction of the lateral wall of the end caps, with a plurality of electronic components mounted on the printed circuit board:



140. The electronic components on the printed circuit board include a rectifying circuit having at least two input terminals and configured to rectify a signal received from the at least two input terminals, and a filtering circuit electronically connected to the rectifying circuit:



141. The electronic components on the printed circuit board further comprise a resistor which is positioned closest to the end wall of a first end cap and connects to one of the input terminals of the rectifying circuit.



142. The end wall comprises a first portion made of an insulating material:

143. On information and belief, Defendants make, use, offer to sell, and/or import into the United States additional LED tube lamps that infringe the ’989 Patent in a similar manner as the representative KT-LED7T8-24GC-840-DX2, including at least the models substantially similar to CH Lighting models such as those found at Exhibit 4.

144. CH Lighting and Ruising have committed and continue to commit acts of infringement that CH Lighting and Ruising knew or should have known constituted an unjustifiably high risk of infringement of the ’989 Patent, of which, upon information and belief, CH Lighting and Ruising have been aware of since shortly after its issuance based on their notice

of and monitoring of Plaintiff's other patents. CH Lighting and Ruising's infringement of the '989 Patent has been and continues to be deliberate and willful, entitling Plaintiffs to an award of treble damages, reasonable attorney fees, and costs in bringing this action.

145. Defendants' direct and indirect infringement has caused and is continuing to cause damage and irreparable injury to Plaintiffs. Plaintiffs will continue to suffer damage and irreparable injury until that infringement is enjoined by this Court. Plaintiffs are entitled to preliminary and permanent injunctive relief and damages as a result of Defendants' infringement of the '989 Patent in accordance with 35 U.S.C. §§ 271, 281, 283, 284, and 285.

PRAYER FOR RELIEF

Plaintiffs pray for the following relief:

A. A judgment that Defendants have infringed one or more claims of each of the Asserted Patents;

B. A preliminary and permanent injunction enjoining Defendants and their officers, directors, agents, servants, affiliates, employees, divisions, branches, subsidiaries, parents, and all others acting in active concert or participation with Defendants, from infringing the Asserted Patents;

C. An award of damages resulting from Defendants' acts of infringement in accordance with 35 U.S.C. § 284;

D. A judgment and order finding that CH Lighting and Ruising's acts of infringement were egregious and willful and trebling damages under 35 U.S.C. § 284;

E. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding to Plaintiffs their reasonable attorneys' fees against Defendants.

F. A judgment and order requiring Defendants to provide accountings and to pay supplemental damages to Plaintiffs, including, without limitation, prejudgment and post-judgment interest; and

G. Any and all other relief to which Plaintiffs may show themselves to be entitled.

JURY TRIAL DEMAND

Plaintiffs hereby demand a trial by jury of all issues so triable.

Dated: March 16, 2020

Respectfully submitted,

PERKINS COIE LLP

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ATTORNEYS FOR JIAXING SUPER LIGHTING ELECTRIC APPLIANCE CO., LTD. AND OBERT, INC.

CERTIFICATE OF SERVICE

A true and correct copy of the foregoing instrument was served or delivered electronically via U.S. District Court [LIVE]- Document Filing System, to all counsel of record on this 16th day of March 2020.

/s/ Matthew C. Bernstein
Matthew C. Bernstein