The Honorable _____

UNITED STATES DISTRICT COURT

WESTERN DISTRICT OF WASHINGTON

AT SEATTLE

LEMAIRE ILLUMINATION TECHNOLOGIES, LLC Plaintiff, v. HTC AMERICA, INC., Defendant.	No. **PLAINTIFF'S ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT** **JURY DEMAND**

Plaintiff Lemaire Illumination Technologies, LLC ("Lemaire Illumination") files this Plaintiff's Original Complaint for Patent Infringement against Defendant HTC America, Inc. ("HTC America" or "Defendant"), and alleges as follows:

INTRODUCTION

1. Lemaire Illumination is an inventor-owned technology company that holds thirteen issued U.S. Patents concerning pulsed light-emitting diode ("LED") illumination and apparatuses and methods related thereto, including at least U.S. Patent No. 6,095,661, issued August 1, 2000, entitled "Method and Apparatus for an L.E.D. Flashlight" (the "'661 Patent"), U.S. Patent No. 6,488,390, issued December 3, 2002, entitled "Color-Adjusted Camera Light and Method" (the "'390 Patent"), and U.S. Patent No. 9,119,266, issued August 28, 2015,

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

entitled "Pulsed L.E.D. Illumination Apparatus and Method" (the "'266 Patent"), (collectively, the "Patents-in-suit").

2. Defendant has infringed the Patents-in-suit by making and using the apparatuses and methods claimed by the Patents-in-suit by making, using, importing, providing, supplying, distributing, selling, and/or offering for sale at least the HTC One M8 smartphone device, the HTC One M9 smartphone device, the HTC 10 smartphone device, the HTC Desire Eye smartphone device, and the HTC U Ultra smartphone device, (collectively, the "Accused Devices"). Lemaire Illumination seeks damages for patent infringement.

THE PARTIES

3. Plaintiff **Lemaire Illumination** is a Texas limited liability company organized and existing under the laws of the State of Texas, having a principal place of business at 14565 Grand Avenue, Burnsville, Minnesota 55306.

4. Defendant **HTC America** is a corporation organized and existing under the law of the State of Washington having a principal place of business at 308 Occidental Avenue South, Suite 300, Seattle, Washington 98104. HTC America can be served with process by serving its registered agent, Cogency Global Inc., 1780 Barnes Blvd SW, Tumwater, Washington 98512.

JURISDICTION AND VENUE

5. This is an action for patent infringement in violation of the Patent Act of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. §§ 271(a)-(c) and 281-285.

6. The Court has original and exclusive subject matter jurisdiction over the patent infringement claims for relief under 28 U.S.C. §§ 1331 and 1338(a).

7. This Court has personal jurisdiction over Defendant. Defendant is a Washington corporation with established regular places of business in the State of Washington and this District. Defendant has conducted and continues to conduct business within the State of Washington. Defendant, directly or through subsidiaries or intermediaries (including

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

distributors, retailers, and others), ships, distributes, offers for sale, sells, designs, manufactures, and advertises products and/or services that infringe the Patents-in-suit in the United States, the State of Washington, and the Western District of Washington.

8. Defendant, directly and/or through subsidiaries and intermediaries, has purposefully and voluntarily placed one or more of its infringing Accused Devices, as described below, into the stream of commerce with the expectation that they will be purchased and used by consumers in the Western District of Washington. These infringing Accused Devices have been and continue to be purchased and used by consumers in the Western District of Washington. Defendant has committed acts of patent infringement within the State of Washington and, more particularly, within the Western District of Washington.

9. Venue is proper in the Western District of Washington under 28 U.S.C. § 1400(b) because Defendant HTC America is subject to personal jurisdiction in this District, and as a Washington corporation has its principal place of business in Seattle, Washington. Hence, HTC America resides in this District. Further, HTC America has committed acts of infringement, has a regular and established place of business in this District, i.e., Seattle, Washington, and a substantial part of the events or omissions giving rise to the claims herein occurred in this judicial district.

FACTUAL BACKGROUND

A. Inventor Charles A. Lemaire

10. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

11. Mr. Charles A. Lemaire is one of the inventors of each of the Patents-in-suit as well as the director and a member of Lemaire Illumination.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

12. Passionate about computers, optics, semiconductors, and electronics, Mr. Lemaire has spent more than three decades developing and perfecting a range of high-performance computers and other technologies.

13. Mr. Lemaire received his undergraduate degree in electrical engineering from the University of Minnesota with an emphasis on very-large-scale integration ("VLSI") circuits and integrated circuit fabrication. Fascinated about the area and willing to solidify his training in electronics, Mr. Lemaire went on to take numerous graduate courses in electronics, lasers, magnetics, and coding theory.

14. Mr. Lemaire continued his education earning an MBA from the College of St. Thomas and a law degree from William Mitchell College of Law.

15. Upon obtaining his undergraduate electronics degree, Mr. Lemaire completed an internship with Lawrence Livermore National Laboratory in California. After numerous graduate-school courses, he practiced as an electronics and software engineer with the IBM Corporation for more than seventeen years. After earning his law degree, Lemaire practiced patent law with the Intellectual Property Group at the law firm of Schwegman, Lundberg and Woessner, P.A. Mr. Lemaire is currently the founder and president of the Lemaire Patent Law Firm, PLLC.

16. Mr. Lemaire began working on his very first patented co-invention in the early 1980s and he continues to this day to use his knowledge and his vast experience to innovate and improve various technologies.

B. <u>Mr. Lemaire's Inventions related to LEDs</u>

17. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

18. Prior to Mr. Lemaire's work, LEDs were typically driven by a voltage supply that supplied current through a current-limiting resistor. The brightness changed as the voltage changed; for example, as a battery drained, LEDs grew dimmer. Some companies

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

at that time used pulsed electrical current to drive red LEDs to obtain monochrome images that were analyzed for machine-vision automation applications. Other companies used varying pulse widths to change the relative amounts of pulsed electrical current to drive red-, green-, and blue-light LEDs to obtain mixes of colors, but not while maintaining the illumination at a given level, nor to obtain color balance for digital color photos.

19. Over a period of approximately eight years, Mr. Lemaire worked with a team that included Mr. Lemaire's future co-inventors, Mr. Gary A. Lebens and Mr. Charles T. Bourn, to contribute to several innovations covering the LED field. Mr. Lebens, Mr. Bourn, and Mr. Lemaire considered how to drive LEDs more efficiently, how to maintain illumination brightness over a range of input voltages, and how to obtain and use various color spectra that were newly enabled by gallium nitride ("GaN") LEDs.

20. Mr. Lemaire's wide-ranging engineering background enabled him to envision new applications for the pulsed LED illumination and new ways to modify and control the color spectrum while maintaining a given brightness. As a result, Mr. Lemaire, together with Mr. Lebens and Mr. Bourn, co-invented several related inventions involving various applications for LEDs.

21. An initial patent application, U.S. Application No. 09/044,559, filed on March 19, 1998 (the "'559" Application), described several inventions that contributed greatly to methods, devices, and applications related to LED technology that extended way beyond the old premise of supplying pulsed current to LEDs. The '559 Application duly and legally issued as the '661 Patent on August 1, 2000.

22. While the '559 Application was still pending, the first of several divisional and continuation patent applications was filed, each duly and legally claiming priority to the original '559 Application. These additional patent applications form a portfolio that contains claims to other inventions described in the specification and drawings of the original '559 Application.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

23. On October 28, 2004, Mr. Lemaire purchased the entire portfolio of patents related to the initial ’661 Patent, including a related pending patent application at the time and all future applications based on the original ’661 Patent filed in the United States and all foreign countries, including the ’390 Patent and the ’266 Patent.

C. Lemaire Illumination

24. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

25. In 2011, following his entrepreneurial spirit, Mr. Lemaire co-founded Lemaire Illumination Technologies, LLC with the intent to develop and license various LED technologies based on the LED patents co-invented and owned by Mr. Lemaire.

26. Today, Lemaire Illumination owns a diverse portfolio of electrical patents, including the Patents-in-suit.

27. Over the last four and a half years, Lemaire Illumination’s portfolio has increased substantially through Mr. Lemaire’s efforts to strengthen the color-spectrum-control and color-balance technology and better understand and address the needs of the LED industry.

D. Lemaire Illumination Patents

28. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

29. The United States Patent and Trademark Office (the “USPTO”) has recognized the contributions of Mr. Lemaire to the public domain and it has awarded Mr. Lemaire numerous patents.

30. Lemaire Illumination is the owner of the entire right, title, and interest in and to the ’661 Patent entitled “Method and Apparatus for an L.E.D. Flashlight” that issued on August 1, 2000. Lemaire Illumination holds the exclusive rights to bring suit with respect

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

to any past, present, and future infringement of the ’661 Patent. A copy of the ’661 Patent is attached as Exhibit A hereto.

31. Claim 32 of the ’661 Patent, which depends from claim 31, is exemplary and recites as follows: An illumination source, comprising: (a) a light-emitting diode (LED) housing comprising one or more LEDs; (b) a source of electrical power; and (c) a control circuit that selectively applies power from a source of electric power to the one or more LEDs to substantially maintain a predetermined color spectrum of the one or more LEDs as a voltage of the source of electric power varies over a range that would otherwise vary the light output color spectrum, wherein: the one or more LEDs comprise one or more LEDs having a first characteristic color spectrum output and one or more LEDs having a second characteristic color spectrum output, the first characteristic color spectrum output different from the second characteristic color spectrum output; and wherein the control circuit controls a pulse characteristic in order to control the proportion of light output having the first characteristic color spectrum output to that having the second characteristic color spectrum output.

32. Claim 34 of the ’661 Patent is exemplary and recites as follows: An illumination source, comprising: (a) a light-emitting diode (LED) housing comprising one or more LEDs; and (b) an electrical control circuit that selectively applies pulsed power from a DC voltage source of electric power to the LEDs to control a light output color spectrum of the one or more LEDs and maintain a predetermined light output level of the LED units as a charge on the DC voltage source varies.

33. Claim 35 of the’661 Patent recites: The illumination source of claim 34, wherein: the one or more LEDs comprise one or more LEDs having a first characteristic color spectrum output and one or more LEDs having a second characteristic color spectrum output, the first characteristic color spectrum output different from the second characteristic color spectrum output; and wherein the control circuit controls one or more pulse characteristics in

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

order to control the proportion of light output having the first characteristic color spectrum output to that having the second characteristic color spectrum output.

34. Lemaire Illumination is the owner of the entire right, title, and interest in and to the ’390 Patent entitled “Color-Adjusted Camera Light and Method” that issued on December 3, 2002. Lemaire Illumination holds the exclusive rights to bring suit with respect to any past, present, and future infringement of the ’390 Patent. A copy of the ’390 Patent is attached as Exhibit B hereto.

35. Claim 8 of the ’390 Patent, which depends from claim 1, is exemplary and recites as follows: A portable video camera and illumination source system, comprising: a housing; one or more light-emitting diodes (LEDs) attached to the housing; a video camera imaging device attached to the housing; a control circuit that selectively applies a plurality of pulses from a source of electric power to the one or more LEDs; and a feedback signal coupled to the control circuit, wherein the control circuit changes a characteristic of each one of the plurality of pulses to control a light output characteristic of the LEDs based on the feedback signal, wherein the feedback signal is based on a color balance of a output signal from the imaging device and the control circuit separately adjusts the light output characteristic of each of a plurality of different color LEDs.

36. Claim 40 of the ’390 Patent, which depends from claim 35, is exemplary and recites as follows: A method for illuminating a scene comprising: controlling one or more light output pulses, directed towards the scene, of one or more light-emitting diodes (LEDs); obtaining a video image of the scene; and generating feedback, wherein the controlling maintains a characteristic of the illumination on the scene by varying the pulses of the LEDs based on the feedback, wherein the feedback is based at least in part on a measurement of color.

37. Lemaire Illumination is the owner of the entire right, title, and interest in and to the ’266 Patent entitled “Pulsed L.E.D. Illumination Apparatus and Method” and

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

issued on August 25, 2015. Lemaire Illumination holds the exclusive rights to bring suit with respect to any past, present, and future infringement of the ’266 Patent. A copy of the ’266 Patent is attached as Exhibit C hereto.

38. Claim 2 of the ’266 Patent, which depends from claim 1, is exemplary and recites: An apparatus comprising: a device that includes an electronic camera configured to output an image signal; a measurement unit configured to measure a color balance of the image signal; a plurality of light-emitting diodes (LEDs) mounted to the device, wherein the plurality of light-emitting diodes includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum; a control circuit, operably coupled to the measurement unit and to the plurality of light emitting diodes, wherein the control circuit controls a pulse characteristic to the one or more LEDs having a first characteristic spectrum in order to change a proportion of light output having the first characteristic spectrum to that having the second characteristic spectrum that is different than the first spectrum based at least in part on the measured color balance of the image signal; a DC voltage source, wherein the control circuit generates the series of pulses such that the average intensity of the light from the light-emitting diodes is kept constant as a voltage of the DC voltage source changes.

39. Claim 5 of the ’266 Patent, which depends from claim 1, is exemplary and recites: An apparatus comprising: a device that includes an electronic camera configured to output an image signal; a measurement unit configured to measure a color balance of the image signal; a plurality of light-emitting diodes (LEDs) mounted to the device, wherein the plurality of light-emitting diodes includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum; a control circuit, operably coupled to the measurement unit and to the plurality of light emitting diodes, wherein

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

the control circuit controls a pulse characteristic to the one or more LEDs having a first characteristic spectrum in order to change a proportion of light output having the first characteristic spectrum to that having the second characteristic spectrum that is different than the first spectrum based at least in part on the measured color balance of the image signal, wherein the control circuit also controls a pulse width of pulses applied to the plurality of light-emitting diodes based on a measured light output intensity of the plurality of light-emitting diodes.

40. Claim 17 of the ’266 Patent, which depends from claim 16, is exemplary and recites: An apparatus comprising: a device that includes an electronic camera configured to output an image signal; a measurement unit configured to measure a color balance of the image signal; a plurality of light-emitting diodes mounted to the device, wherein the plurality of light-emitting diodes includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum; means for adjusting a color spectrum of light from the plurality of light-emitting diodes based at least in part on the measured color balance, wherein the means for adjusting the color spectrum comprises: means for generating a feedback signal based on the color balance of light from the plurality of light-emitting diodes, wherein the means for generating of the series of pulses includes means for controlling the color of light from the plurality of light-emitting diodes using means for adjusting an amount of current through the plurality of light-emitting diodes based on the feedback signal.

41. On information and belief, the Defendant was well aware of the ’661 Patent, the ’390 Patent, and the ’266 Patent since at least the filing of this action.

E. <u>Conduct by Defendant</u>

i. The HTC One M8 Smartphone Device

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

42. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

43. On information and belief, on or about March 25, 2014, Defendant unveiled the HTC One M8 smartphone device worldwide. *See* Exhibit D.

44. On information and belief, on or about March 25, 2014, Defendant began making, using, importing, providing, supplying, distributing, selling, and/or offering for sale the HTC One M8 smartphone device in the United States. *See id.*

45. On information and belief, the HTC One M8 smartphone device includes, among other things, a housing, an electrical control circuit, a measurement unit (which can be a processor and/or a sensor), a camera, a dual LED flash that includes one or more LEDs, and a battery that provides DC voltage to the one or more LEDs of the HTC One M8 smartphone device. *See* Exhibit D; *see also* Exhibit E; *see also* Exhibit F.

46. On information and belief, when the camera of the HTC One M8 smartphone device is activated to capture an image, the electrical control circuit selectively provides a set of pulses from the battery to the dual LED flash, which generates a light output of the one or more LEDs. This set of pulses changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash and to maintain the light output as the DC voltage source (i.e., the battery) charge varies. Further, the control circuit adjusts a height of the pulses to control a color spectrum of the LED output light and adjusts an LED on-time proportion to control an amount of the output light. According to Defendant:

> [t]he twin LED Smart Flash system is designed to vastly improve flash photos, eliminating the overblown glare and unnatural color of typical flash systems. *It works by making an instant light reading and firing the cool and warm LEDs in one of over a five hundred unique color temperature combinations that best match the scene*. This results in precisely controlled exposures, yielding more true-to-life pictures with vivid, authentic colors and especially accurate skin tones, even in difficult lighting conditions.

(emphasis added) Exhibit E. Further, the dual LED flash "[w]hen the flash is required, the *intelligent LED Dual Flash automatically selects the exact color tone* and light intensity for

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

more natural skin tones and a professional-looking shot." (emphasis added) Exhibit D.

47. On information and belief, at least the camera of the HTC One M8 smartphone device outputs an image signal, and the measurement unit measures a color balance of the image signal. *See* Exhibit E.

ii. The HTC One M9 Smartphone Device

48. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

49. On information and belief, on or about March 1, 2015, Defendant unveiled the HTC One M9 smartphone device at a launch event in Barcelona, Spain. *See* Exhibit G.

50. On information and belief, on or about March 27, 2015, Defendant began making, using, importing, providing, supplying, distributing, selling, and/or offering for sale the HTC One M9 smartphone device in the United States. *See* Exhibit H.

51. On information and belief, the HTC One M9 smartphone device includes, among other things, a housing, an electrical control circuit, a measurement unit (which can be a processor and/or a sensor), a camera, a dual LED flash that includes one or more LEDs, and a battery that provides DC voltage to the one or more LEDs of the HTC One M9 smartphone device. *See* Exhibit I.

52. On information and belief, when the camera of the HTC One M9 smartphone device is activated to capture an image, the electrical control circuit selectively provides a set of pulses from the battery to the dual LED flash, which generates a light output of the one or more LEDs. This set of pulses changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash and to maintain the light output as the DC voltage source (i.e., the battery) charge varies. Further, the control circuit adjusts a height of the pulses to control a color spectrum of the LED output light and adjusts an LED on-time

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

proportion to control an amount of the output light. *See* Exhibit G; *See also* Exhibit H; *see also* Exhibit I.

53. On information and belief, at least the camera of the HTC One M9 smartphone device outputs an image signal, and the measurement unit measures a color balance of the image signal. *See id.*

iii. The HTC 10 Smartphone Device

54. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

55. On information and belief, on or about April 12, 2016, Defendant unveiled the HTC 10 smartphone device worldwide with a launch event in Seattle, Washington. *See* Exhibit J.

56. On information and belief, on or about April 12, 2016, Defendant began making, using, importing, providing, supplying, distributing, selling, and/or offering for sale the HTC 10 smartphone device in the United States. *See* Exhibit K.

57. On information and belief, the HTC 10 smartphone device includes, among other things, a housing, an electrical control circuit, a measurement unit (which can be a processor and/or a sensor), a camera, a dual LED flash that includes one or more LEDs, and a battery that provides DC voltage to the one or more LEDs of the HTC 10 smartphone device. *See* Exhibit L; *see also* Exhibit M.

58. On information and belief, when the camera of the HTC 10 smartphone device is activated to capture an image, the electrical control circuit selectively provides a set of pulses from the battery to the dual LED flash, which generates a light output of the one or more LEDs. This set of pulses changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash and to maintain the light output as the DC voltage source (i.e., the battery) charge varies. Further, the control circuit adjusts a height of the

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

pulses to control a color spectrum of the LED output light and adjusts an LED on-time proportion to control an amount of the output light. *See id*.

59. On information and belief, at least the camera of the HTC 10 smartphone device outputs an image signal, and the measurement unit measures a color balance of the image signal. *See id*.

iv. The HTC Desire Eye Smartphone Device

60. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

61. On information and belief, on or about October 8, 2014, Defendant unveiled the HTC Desire Eye smartphone device worldwide with a launch event in New York City. *See* Exhibit N.

62. On information and belief, on or about October 8, 2014, Defendant began making, using, importing, providing, supplying, distributing, selling, and/or offering for sale the HTC Desire Eye smartphone device in the United States. *See id*.

63. On information and belief, the HTC Desire Eye smartphone device includes, among other things, a housing, an electrical control circuit, a measurement unit (which can be a processor and/or a sensor), a rear-facing camera, a front-facing camera, a dual LED flash adjacent the rear-facing camera that includes one or more LEDs, a dual LED flash adjacent the front-facing camera that includes one or more LEDs and a battery that provides DC voltage to the one or more LEDs of each of the dual LED flash adjacent the rear-facing camera and the dual LED flash adjacent the front-facing camera of the HTC Desire Eye smartphone device. *See* Exhibit O; *see also* Exhibit N.

64. On information and belief, when the rear-facing camera of the HTC Desire Eye smartphone device is activated to capture an image, the electrical control circuit selectively provides a set of pulses from the battery to the dual LED flash adjacent the rear-facing camera, which generates a light output of the one or more LEDs. This set of pulses

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash adjacent the rear-facing camera and to maintain the light output as the DC voltage source (i.e., the battery) charge varies. Further, the control circuit adjusts a height of the pulses to control a color spectrum of the LED output light and adjusts an LED on-time proportion to control an amount of the output light. According to Defendant, "BSI sensors capture crisp photos, even in low-light conditions, and *intelligent dual-LED flash on both cameras provides flattering, natural tones when ambient light levels drop further*." (emphasis added) Exhibit N.

65. On information and belief, at least the rear-facing camera of the HTC Desire Eye smartphone device outputs an image signal, and the measurement unit measures a color balance of the image signal. *See* Exhibit O; *see also* Exhibit N.

66. On information and belief, when the front-facing camera of the HTC Desire Eye smartphone device is activated to capture an image, the electrical control circuit selectively provides a set of pulses from the battery to the dual LED flash adjacent the front-facing camera, which generates a light output of the one or more LEDs. This set of pulses changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash adjacent the front-facing camera and to maintain the light output as the DC voltage source (i.e., the battery) charge varies. Further, the control circuit adjusts a height of the pulses to control a color spectrum of the LED output light and adjusts an LED on-time proportion to control an amount of the output light. According to Defendant, "BSI sensors capture crisp photos, even in low-light conditions, and *intelligent dual-LED flash on both cameras provides flattering, natural tones when ambient light levels drop further*." (emphasis added) Exhibit N.

67. On information and belief, at least the front-facing camera of the HTC Desire Eye smartphone device outputs an image signal, and the measurement unit measures a color balance of the image signal. *See* Exhibit O; *see also* Exhibit N.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

v. The HTC U Ultra Smartphone Device

68. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

69. On information and belief, on or about January 12, 2017, Defendant unveiled the HTC U Ultra smartphone device worldwide. *See* Exhibit P.

70. On information and belief, on or about March 10, 2017, Defendant began making, using, importing, providing, supplying, distributing, selling, and/or offering for sale the HTC U Ultra smartphone device in the United States. *See* Exhibit Q.

71. On information and belief, the HTC U Ultra smartphone device includes, among other things, a housing, an electrical control circuit, a measurement unit (which can be a processor and/or a sensor), a camera, a dual LED flash that includes one or more LEDs, and a battery that provides DC voltage to the one or more LEDs of the HTC U Ultra smartphone device. *See* Exhibit R; *see also* Exhibit S.

72. On information and belief, when the camera of the HTC U Ultra smartphone device is activated to capture an image, the electrical control circuit selectively provides a set of pulses from the battery to the dual LED flash, which generates a light output of the one or more LEDs. This set of pulses changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash and to maintain the light output as the DC voltage source (i.e., the battery) charge varies. Further, the control circuit adjusts a height of the pulses to control a color spectrum of the LED output light and adjusts an LED on-time proportion to control an amount of the output light. *See id.*

73. On information and belief, at least the camera of the HTC U Ultra smartphone device outputs an image signal, and the measurement unit measures a color balance of the image signal. *See id.*

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

COUNT I

INFRINGEMENT OF UNITED STATES PATENT NO. 6,095,661

74. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

75. On August 1, 2000, the '661 Patent entitled "Method and Apparatus for an L.E.D. Flashlight" was duly and legally issued by the USPTO.

76. Lemaire Illumination owns the '661 Patent by assignment and possesses all rights of recovery under the '661 Patent, including the exclusive right to sue for infringement, recover damages, and obtain injunctive relief.

77. Lemaire Illumination has not licensed or otherwise authorized, explicitly or implicitly, the '661 Patent in any way to Defendant.

78. Defendant, directly or through intermediaries, has been and is now, among other things, making, using, importing, providing, supplying, distributing, selling, and/or offering for sale apparatuses including, without limitation, the Accused Devices that are covered by one or more claims of the '661 Patent, in the State of Washington, in this judicial district, and elsewhere in the United States. In doing so, Defendant infringes one or more claims of the '661 Patent, literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), including claims 32, 34, and 35 of the '661 Patent.

79. For example, each of the Accused Devices directly infringes claim 32 of the '661 Patent because each Accused Device is an illumination source and has at least a light-emitting diode (LED) housing comprising one or more LEDs, i.e., each of the Accused Devices has a dual LED flash having one or more LEDs and supporting case structure; a source of electrical power, i.e., each of the Accused Devices has at least a battery, which is a source of electrical power; and a control circuit that selectively applies power from a source of electric power to the one or more LEDs to substantially maintain a predetermined color spectrum of the one or more LEDs as a voltage of the source of electric power varies over a

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

range that would otherwise vary the light output color spectrum, i.e., each of the Accused Devices includes a control circuit that selectively applies power from a source of electric power to the one or more LEDs to substantially maintain a predetermined color spectrum of the one or more LEDs as a voltage of the source of electric power varies over a range that would otherwise vary the light output color spectrum; wherein: the one or more LEDs comprise one or more LEDs having a first characteristic color spectrum output and one or more LEDs having a second characteristic color spectrum output, the first characteristic color spectrum output different from the second characteristic color spectrum output, i.e., in each of the Accused Devices one or more LEDs in the dual flash having a first characteristic color spectrum output and one or more LEDs having a second characteristic color spectrum output, the first characteristic color spectrum output different from the second characteristic color spectrum output; and wherein the control circuit controls a pulse characteristic in order to control the proportion of light output having the first characteristic color spectrum output to that having the second characteristic color spectrum output, i.e., the control circuit in each of the Accused Devices controls a pulse characteristic in order to control the proportion of light output having the first characteristic color spectrum output to that having the second characteristic color spectrum output. *See* Exhibits A, D-S.

80. For example, each of the Accused Devices directly infringes claim 34 of the ’661 Patent because each Accused Device is an illumination source and has at least a light-emitting diode (LED) housing comprising one or more LEDs, i.e., each of the Accused Devices has a dual LED flash having one or more LEDs and supporting case structure, and an electrical control circuit that selectively applies pulsed power from a DC voltage source of electric power to the LEDs to control a light output color spectrum of the one or more LEDs and maintain a predetermined light output level of the LED units as a charge on the DC voltage source varies, i.e., each of the Accused Devices has an electrical control circuit that selectively provides a set of pulses from the battery to the dual LED flash, which generates a light output

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

of the one or more LEDs of the dual LED flash. This set of pulses changes to control a color spectrum of the light output of the one or more LEDs of the dual LED flash and maintains the light output as the DC voltage source (i.e., the battery) charge varies. *See* Exhibits A, D-S.

81. For example, each of the Accused Devices directly infringes claim 35 of the '661 Patent because each Accused Devices includes all limitations of claim 34 and wherein: the one or more LEDs comprise one or more LEDs having a first characteristic color spectrum output and one or more LEDs having a second characteristic color spectrum output, the first characteristic color spectrum output different from the second characteristic color spectrum output, i.e., the one or more LEDs of the dual flash of each Accused Devices comprise one or more LEDs having a first characteristic color spectrum output and one or more LEDs having a second characteristic color spectrum output, the first characteristic color spectrum output different from the second characteristic color spectrum output; and wherein the control circuit controls one or more pulse characteristics in order to control the proportion of light output having the first characteristic color spectrum output to that having the second characteristic color spectrum output, i.e., in each of the Accused Devices the control circuit controls one or more pulse characteristics in order to control the proportion of light output having the first characteristic color spectrum output to that having the second characteristic color spectrum output. *See* Exhibits A, D-S.

82. On information and belief, Defendant has infringed the '661 Patent by inducing others, including at least users of the Accused Devices, through its advertising, publications, instructions, manuals, and/or technical support to infringe claims 32, 34, and 35 of the '661 Patent in violation of 35 U.S.C. § 271(b). *See*, e.g., Exhibits D, E, N.

83. On information and belief, Defendant takes active steps to induce infringement of claims 32, 34, and 35 of the '661 Patent by others, including its customers, authorized resellers, distributors, and users of the Accused Devices, and Defendant takes such active steps knowing that those steps will induce, encourage, and facilitate direct infringement

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

by others. Such active steps include, but are not limited to, encouraging, advertising (including by internet websites, television, store displays, etc.), promoting, and instructing others to use and/or how to use at least the camera and flash systems of the Accused Devices. *See id.*

84. On information and belief, Defendant knows or should know that such activities induce others to directly infringe claims 32, 34, and 35 of the '661 Patent, including for example, by encouraging them to use and/or how to use at least the camera and flash systems of the Accused Devices.

85. On information and belief, Defendant contributes to the infringement of claims 32, 34, and 35 of the '661 Patent by others, including its customers, authorized resellers, and distributors, and users of the Accused Devices. Acts by Defendant that contributes to the infringement by others include, but are not limited to, the sale, offer for sale, and/or import by Defendant of at least the Accused Devices for use in the claimed processes of the '661 Patent and/or the camera and flash component systems of the Accused Devices which are not staple articles or capable of substantial non-infringing uses, and constitute a material part of the inventions claimed in claims 32, 34, and 35 of the '661 Patent. Defendant knew or should have known that at least the Accused Devices and/or the camera and flash component systems of the Accused Devices were especially made or adapted for use in an infringement of claims 32, 34, and 35 of the '661 Patent.

86. Defendant undertook and continues infringing actions despite that such activities infringe the '661 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the filing of this action, Defendant has been aware that its actions constituted and continues to constitute infringement of the '661 Patent, and that the '661 Patent is valid. Despite its knowledge that its actions constitute infringement, Defendant has continued its infringing activities in a willful, wanton, malicious, bad-faith, deliberate,

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

consciously wrongful or flagrant manner, which is an egregious case of culpable behavior. As such, Defendant willfully infringes the ’661 Patent.

87. Lemaire Illumination has been injured and has been caused significant financial damage as a direct and proximate result of the Defendant’s infringement of the ’661 Patent.

88. Unless enjoined by this Court, Defendant will continue to infringe the ’661 Patent, and thus cause irreparable injury and damage to Lemaire Illumination.

89. Lemaire Illumination is entitled to recover from Defendant the damages sustained by Lemaire Illumination as a result of the Defendant’s wrongful acts in an amount subject to proof at trial.

90. Lemaire Illumination has been irreparably injured and is entitled to seek injunctive relief, in addition to all other legal and equitable remedies.

COUNT II

INFRINGEMENT OF UNITED STATES PATENT NO. 6,488,390

91. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

92. On December 3, 2002, the ’390 Patent entitled “Color-Adjusted Camera Light and Method” was duly and legally issued by the USPTO.

93. Lemaire Illumination owns the ’390 Patent by assignment and possesses all rights of recovery under the ’390 Patent, including the exclusive right to sue for infringement, recover damages, and obtain injunctive relief.

94. Lemaire Illumination has not licensed or otherwise authorized, explicitly or implicitly, the ’390 Patent in any way to Defendant.

95. Defendant, directly or through intermediaries, has been and is now, among other things, making, using, importing, providing, supplying, distributing, selling, and/or offering for sale apparatuses including, without limitation, the HTC One M8

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device that are covered by one or more claims of the '390 Patent, in the State of Washington, in this judicial district, and elsewhere in the United States. In doing so, Defendant infringes one or more claims of the '390 Patent, literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), including claims 8 and 40 of the '390 Patent.

96. For example, each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device directly infringes claim 8 of the '390 Patent because each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device is a portable video camera and illumination source system that has at least a housing; one or more light-emitting diodes (LEDs) attached to the housing, i.e., each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device has a dual flash that includes one or more LEDs attached to the housing; a video camera imaging device attached to the housing, i.e., each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device has a video camera imaging devices attached to the housing; a control circuit that selectively applies a plurality of pulses from a source of electric power to the one or more LEDs; and a feedback signal coupled to the control circuit, i.e., each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device has a control circuit that selectively applies a plurality of pulses from at least a battery to the dual flash that has one or more LEDs; and a feedback signal coupled to the control circuit; wherein the control circuit changes a characteristic of each one of the plurality of pulses to control a light output characteristic of the LEDs based on the feedback signal, i.e., wherein the control circuit of each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device changes a characteristic of each one of the plurality of pulses to control a light output characteristic of the LEDs based on the feedback signal;

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

wherein the feedback signal is based on a color balance of a output signal from the imaging device and the control circuit separately adjusts the light output characteristic of each of a plurality of different color LEDs, i.e., the feedback signal of each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device is based on a color balance of a output signal from the imaging device and the control circuit separately adjusts the light output characteristic of each of a plurality of different color LEDs. *See* Exhibits B, D-I, N-O.

97. For example, each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device directly infringes claim 40 of the '390 Patent because each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device performs a method for illuminating a scene that includes at least the steps of: controlling one or more light output pulses, directed towards the scene, of one or more light-emitting diodes (LEDs), i.e., each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device controls one or more light output pulses, directed towards the scene, of one or more light-emitting diodes (LEDs) of a dual flash; obtaining a video image of the scene, i.e., each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device obtains a video image of the scene; and generating feedback, wherein the controlling maintains a characteristic of the illumination on the scene by varying the pulses of the LEDs based on the feedback, i.e., each of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device generates feedback, wherein the controlling maintains a characteristic of the illumination on the scene by varying the pulses of the LEDs of the dual flash based on the feedback, wherein the feedback is based at least in part on a measurement of color, i.e., the feedback of each of the HTC One M8 smartphone device, the HTC One M9 smartphone

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

device, and the HTC Desire Eye smartphone device is based at least in part on a measurement of color. *See* Exhibits B, D-I, N-O.

98. On information and belief, Defendant has infringed the '390 Patent by inducing others, including at least users of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device, through its advertising, publications, instructions, manuals, and/or technical support to infringe one or more of at least claims 8 and 40 of the '390 Patent in violation of 35 U.S.C. § 271(b). *See*, e.g., Exhibits D, E, N.

99. On information and belief, Defendant takes active steps to induce infringement of claims 8 and 40 of the '390 Patent by others, including its customers, authorized resellers, distributors, and users of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device, and Defendant takes such active steps knowing that those steps will induce, encourage, and facilitate direct infringement by others. Such active steps include, but are not limited to, encouraging, advertising (including by internet websites, television, store displays, etc.), promoting, and instructing others to use and/or how to use at least the camera and flash systems of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device. *See id*.

100. On information and belief, Defendant knows or should know that such activities induce others to directly infringe claims 8 and 40 of the '390 Patent, including for example, by encouraging them to use and/or how to use at least the camera and flash systems of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device.

101. On information and belief, Defendant contributes to the infringement of claims 8 and 40 of the '390 Patent by others, including its customers, authorized resellers, and distributors, and users of the HTC One M8 smartphone device, the HTC One M9 smartphone

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

device, and the HTC Desire Eye smartphone device. Acts by Defendant that contribute to the infringement by others include, but are not limited to, the sale, offer for sale, and/or import by Defendant of at least the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device for use in the claimed processes of the '390 Patent and/or the camera and flash component systems of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device which are not staple articles or capable of substantial non-infringing uses, and constitute a material part of the inventions claimed in claims 8 and 40 of the '390 Patent. Defendant knew or should have known that at least the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device and/or the camera and flash component systems of the HTC One M8 smartphone device, the HTC One M9 smartphone device, and the HTC Desire Eye smartphone device were especially made or adapted for use in an infringement of claims 8 and 40 of the '390 Patent.

102. Defendant undertook and continues its infringing actions despite that such activities infringe the '390 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the filing of this action, Defendant has been aware that its actions constituted and continues to constitute infringement of the '390 Patent, and that the '390 Patent is valid. Despite its knowledge that its actions constitute infringement in a willful, wanton, malicious, bad-faith, deliberate, consciously wrongful or flagrant manner, Defendant has continued its infringing activities, which is an egregious case of culpable behavior. As such, Defendant willfully infringes the '390 Patent.

103. Lemaire Illumination has been injured and has been caused significant financial damage as a direct and proximate result of the Defendant's infringement of the '390 Patent.

104. Unless enjoined by this Court, Defendant will continue to infringe the '390 Patent, and thus cause irreparable injury and damage to Lemaire Illumination.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

105. Lemaire Illumination is entitled to recover from Defendant the damages sustained by Lemaire Illumination as a result of the Defendant's wrongful acts in an amount subject to proof at trial.

106. Lemaire Illumination has been irreparably injured and is entitled to seek injunctive relief, in addition to all other legal and equitable remedies.

COUNT III

INFRINGEMENT OF UNITED STATES PATENT NO. 9,119,266

107. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

108. On August 25, 2015, the '266 Patent entitled "Pulsed L.E.D. Illumination Apparatus and Method" was duly and legally issued by the USPTO.

109. Lemaire Illumination owns the '266 Patent by assignment and possesses all rights of recovery under the '266 Patent, including the exclusive right to sue for infringement, recover damages, and obtain injunctive relief.

110. Lemaire Illumination has not licensed or otherwise authorized, explicitly or implicitly, the '266 Patent in any way to Defendant.

111. Defendant, directly or through intermediaries, has been and is now, among other things, making, using, importing, providing, supplying, distributing, selling, and/or offering for sale apparatuses including, without limitation, the Accused Devices that are covered by one or more claims of the '266 Patent, in the State of Washington, in this judicial district, and elsewhere in the United States. In doing so, Defendant infringes one or more claims of the '266 Patent, literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), including claims 2, 5, and 17 of the '266 Patent.

112. For example, each of the Accused Devices directly infringes claim 2 of the '266 Patent because each Accused Device is an apparatus that includes at least a device that includes an electronic camera configured to output an image signal; a measurement unit

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

configured to measure a color balance of the image signal, i.e., each of the Accused Devices includes a measurement unit configured to measure a color balance of the image signal; a plurality of light-emitting diodes (LEDs) mounted to the device, i.e., each of the Accused Devices has a dual flash that includes a plurality of light-emitting diodes (LEDs) mounted to the device, wherein the plurality of light-emitting diodes includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, i.e., the dual flash of each of the Accused Devices includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum, i.e., for each of the Accused Devices the first characteristic spectrum is different from the second characteristic spectrum; a control circuit, operably coupled to the measurement unit and to the plurality of light emitting diodes, i.e., each of the Accused Devices includes a control circuit, operably coupled to the measurement unit and to the plurality of light emitting diodes, wherein the control circuit controls a pulse characteristic to the one or more LEDs having a first characteristic spectrum in order to change a proportion of light output having the first characteristic spectrum to that having the second characteristic spectrum that is different than the first spectrum based at least in part on the measured color balance of the image signal, i.e., the control signal of each of the Accused Devices controls a pulse characteristic to the one or more LEDs having a first characteristic spectrum in order to change a proportion of light output having the first characteristic spectrum to that having the second characteristic spectrum that is different than the first spectrum based at least in part on the measured color balance of the image signal; a DC voltage source, wherein the control circuit generates the series of pulses such that the average intensity of the light from the light-emitting diodes is kept constant as a voltage of the DC voltage source changes, i.e., each of the Accused Devices includes at least a battery which is a DC voltage source, wherein the control circuit

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

generates the series of pulses such that the average intensity of the light from the light-emitting diodes is kept constant as a voltage of the DC voltage source changes. *See* Exhibits C-S.

113. For example, each of the Accused Devices directly infringes claim 5 of the '266 Patent because each Accused Device is an apparatus that includes at least a device that includes an electronic camera configured to output an image signal; a measurement unit configured to measure a color balance of the image signal, i.e., each of the Accused Devices includes a measurement unit configured to measure a color balance of the image signal; a plurality of light-emitting diodes (LEDs) mounted to the device, i.e., each of the Accused Devices has a dual flash that includes a plurality of light-emitting diodes (LEDs) mounted to the device, wherein the plurality of light-emitting diodes includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, i.e., the dual flash of each of the Accused Devices includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum, i.e., for each of the Accused Devices the first characteristic spectrum is different from the second characteristic spectrum; a control circuit, operably coupled to the measurement unit and to the plurality of light emitting diodes, i.e., each of the Accused Devices includes a control circuit, operably coupled to the measurement unit and to the plurality of light emitting diodes, wherein the control circuit controls a pulse characteristic to the one or more LEDs having a first characteristic spectrum in order to change a proportion of light output having the first characteristic spectrum to that having the second characteristic spectrum that is different than the first spectrum based at least in part on the measured color balance of the image signal, i.e., the control signal of each of the Accused Devices controls a pulse characteristic to the one or more LEDs having a first characteristic spectrum in order to change a proportion of light output having the first characteristic spectrum to that having the second characteristic spectrum that is different than the first spectrum based at least in part on the

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

measured color balance of the image signal; wherein the control circuit also controls a pulse width of pulses applied to the plurality of light-emitting diodes based on a measured light output intensity of the plurality of light-emitting diodes, i.e., the control circuit of each of the Accused Devices also controls a pulse width of pulses applied to the plurality of light-emitting diodes of the dual flash based on a measured light output intensity of the plurality of light-emitting diodes of the dual flash. *See* Exhibits C-S.

114. For example, each of the Accused Devices directly infringes claim 17 of the '266 Patent because each Accused Device is an apparatus that includes at least a device that includes an electronic camera configured to output an image signal; a measurement unit configured to measure a color balance of the image signal, i.e., each of the Accused Devices has a a measurement unit configured to measure a color balance of the image signal; a plurality of light-emitting diodes mounted to the device, i.e., each of the Accused Devices has a dual flash that includes a plurality of light-emitting diodes mounted to the device, wherein the plurality of light-emitting diodes includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum, i.e., the dual flash having one or more LEDs of each of the Accused Devices includes one or more LEDs having a first characteristic spectrum and one or more LEDs having a second characteristic spectrum, wherein the first characteristic spectrum is different from the second characteristic spectrum; means for adjusting a color spectrum of light from the plurality of light-emitting diodes based at least in part on the measured color balance, i.e., each of the Accused Devices includes a means for adjusting a color spectrum of light from the plurality of light-emitting diodes based at least in part on the measured color balance, wherein the means for adjusting the color spectrum comprises: means for generating a feedback signal based on the color balance of light from the plurality of light-emitting diodes, i.e., the means for adjusting the color spectrum of each of the Accused Devices includes at least means for generating a feedback

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

signal based on the color balance of light from the plurality of light-emitting diodes of the dual flash; wherein the means for generating of the series of pulses includes means for controlling the color of light from the plurality of light-emitting diodes using means for adjusting an amount of current through the plurality of light-emitting diodes based on the feedback signal, i.e., the means for generating of the series of pulses of each of the Accused Devices includes means for controlling the color of light from the plurality of light-emitting diodes using means for adjusting an amount of current through the plurality of light-emitting diodes based on the feedback signal. *See* Exhibits C-S.

115. On information and belief, Defendant has infringed the ’266 Patent by inducing others, including at least users of the Accused Devices, through its advertising, publications, instructions, manuals, and/or technical support to infringe one or more of at least claims 2, 5, and 17 of the ’266 Patent in violation of 35 U.S.C. § 271(b). *See*, e.g., Exhibits D, E, N.

116. On information and belief, Defendant takes active steps to induce infringement of claims 2, 5, and 17 of the ’266 Patent by others, including its customers, authorized resellers, distributors, and users of the Accused Devices, and Defendant takes such active steps knowing that those steps will induce, encourage, and facilitate direct infringement by others. Such active steps include, but are not limited to, encouraging, advertising (including by internet websites, television, store displays, etc.), promoting, and instructing others to use and/or how to use at least the camera and flash systems of the Accused Devices. *See id.*

117. On information and belief, Defendant knows or should know that such activities induce others to directly infringe claims 2, 5, and 17 of the ’266 Patent, including for example, by encouraging them to use and/or how to use at least the camera and flash systems of the Accused Devices.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

118. On information and belief, Defendant contributes to the infringement of claims 2, 5, and 17 of the ’266 Patent by others, including its customers, authorized resellers, and distributors, and users of the Accused Devices. Acts by Defendant that contribute to the infringement by others include, but are not limited to, the sale, offer for sale, and/or import by Defendant of at least the Accused Devices for use in the claimed processes of the ’266 Patent and/or the camera and flash component systems of the Accused Devices which are not staple articles or capable of substantial non-infringing uses, and constitute a material part of the inventions claimed in claims 2, 5, and 17 of the ’266 Patent. Defendant knew or should have known that at least the Accused Devices and/or the camera and flash component systems of the Accused Devices were especially made or adapted for use in an infringement of claims 2, 5, and 17 of the ’266 Patent.

119. Defendant undertook and continues its infringing actions despite that such activities have infringed the ’266 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, since at least the filing of this action, Defendant has been aware that its actions constituted and continue to constitute infringement of the ’266 Patent, and that the ’266 Patent is valid. Despite its knowledge that its actions constitute infringement, Defendant has continued its infringing activities in a willful, wanton, malicious, bad-faith, deliberate, consciously wrongful or flagrant manner, which is an egregious case of culpable behavior. As such, Defendant willfully infringes the ’266 Patent.

120. Lemaire Illumination has been injured and has been caused significant financial damage as a direct and proximate result of the Defendant’s infringement of the ’266 Patent.

121. Unless enjoined by this Court, Defendant will continue to infringe the ’266 Patent, and thus cause irreparable injury and damage to Lemaire Illumination.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

122. Lemaire Illumination is entitled to recover from Defendant the damages sustained by Lemaire Illumination as a result of the Defendant's wrongful acts in an amount subject to proof at trial.

123. Lemaire Illumination has been irreparably injured and is entitled to seek injunctive relief, in addition to all other legal and equitable remedies.

EXCEPTIONAL CASE

124. Lemaire Illumination restates and re-alleges each of the allegations set forth herein and incorporates them herein.

125. This is an exceptional case warranting an award of attorney's fees to Lemaire Illumination under 35 U.S.C. § 285.

126. The Defendant has willfully and deliberately infringed, induced others to infringe, and/or contributed to the infringement of the Patents-in-suit with full knowledge and wanton disregard of Lemaire Illumination's rights thereunder, rendering this an "exceptional" case within the meaning of 35 U.S.C. § 285.

127. Lemaire Illumination has incurred attorneys' fees, costs, and expenses in the prosecution of this action. Pursuant to 35 U.S.C. § 285, Lemaire Illumination is entitled to recover its reasonable and necessary fees and expenses.

DEMAND FOR TRIAL BY JURY

128. Lemaire Illumination, specifically requests a trial by jury on all issues so triable, pursuant to Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

129. WHEREFORE, Plaintiff Lemaire Illumination respectfully requests that judgment be entered in its favor and against Defendant and that the Court grant the following relief to Plaintiff:

A. Judgment that Defendant has infringed the '661 Patent;

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

B. Judgment that Defendant has infringed the ’390 Patent;

C. Judgment that Defendant has infringed the ’266 Patent;

D. That the Court award general and special damages to Lemaire Illumination for Defendant’s infringing activities, which include but are not limited to Lemaire Illumination a reasonable royalty;

E. Judgment that this case is exceptional;

F. That this Court award Lemaire Illumination increased damages in an amount not less than three times the amount of damages found by the jury or assessed by this Court, for Defendant’s willful infringement pursuant to 35 U.S.C. § 285;

G. That the Court enter a preliminary and thereafter a permanent injunction against Defendant, its officers, directors, agents, servants, employees, parent companies, affiliates, subsidiaries, divisions, branches, attorneys, representatives, and all others acting in concert or privity with them, from direct infringement of the ’661 Patent;

H. That the Court enter a preliminary and thereafter a permanent injunction against Defendant’s active inducements of infringement and/or contributory infringements of the ’661 Patent by others;

I. That the Court enter a preliminary and thereafter a permanent injunction against Defendant, its officers, directors, agents, servants, employees, parent companies, affiliates, subsidiaries, divisions, branches, attorneys, representatives, and all others acting in concert or privity with them, from direct infringement of the ’390 Patent;

J. That the Court enter a preliminary and thereafter a permanent injunction against Defendant’s active inducements of infringement and/or contributory infringements of the ’390 Patent by others;

K. That the Court enter a preliminary and thereafter a permanent injunction against Defendant, its officers, directors, agents, servants, employees, parent companies, affiliates,

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

subsidiaries, divisions, branches, attorneys, representatives, and all others acting in concert or privity with them, from direct infringement of the ’266 Patent;

L. That the Court enter a preliminary and thereafter a permanent injunction against Defendant’s active inducements of infringement and/or contributory infringements of the ’266 Patent by others;

M. That this Court enter an order directing Defendant to deliver to Lemaire Illumination, and serve upon Lemaire Illumination’s counsel, within thirty (30) days after entry of the order of injunction, a report setting forth the manner and form in which Defendant has complied with each injunction;

N. That this Court award pre-judgment and post-judgment interest;

O. That this Court award Lemaire Illumination’s costs and attorney fees incurred in this action; and

P. That this Court award such further and other relief and the Court may deem just and proper.

NORTH CITY LAW, PC
17713 15th Ave NE, Suite 101
Shoreline, WA 98155-3839
Phone: 206.413.7288
Fax: 206.367.0120

Dated: March 4, 2019.

NORTH CITY LAW, PC

/s/ *Paul A. Barrera*

Paul A. Barrera, WSBA No. 51990
paul@northcitylaw.com
NORTH CITY LAW, PC
17713 Fifteenth Avenue Northeast, Suite 101
Shoreline, WA 98155-3839
Telephone: 206.413.7288
Facsimile: 206.367.0120

Katarzyna Brozynski (*pro hac vice pending*)
Texas State Bar No. 24036277
kbrozynski@spencerfane.com
Antonio S. Devora (*pro hac vice pending*)
Texas State Bar No. 24074133
adevora@spencerfane.com
SPENCER FANE, LLP
5700 Granite Parkway, Suite 650
Plano, TX 75024
(972) 324-0300 Telephone
(972) 324-0301 Fax

Attorneys for Plaintiff