

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS**

SAMSUNG ELECTRONICS CO., LTD. and
SAMSUNG ELECTRONICS AMERICA, INC.,

Plaintiffs,

v.

LYNK LABS, INC.,

Defendant.

Case No. 1:21-cv-02665

Jury Trial Demanded

**SAMSUNG ELECTRONICS CO., LTD. AND
SAMSUNG ELECTRONICS AMERICA, INC.’S SECOND AMENDED
COMPLAINT FOR DECLARATORY JUDGMENT OF NON-INFRINGEMENT**

Plaintiffs Samsung Electronics Co., Ltd. and Samsung Electronics America, Inc. (collectively, “Samsung”) seek a declaratory judgment against Defendant Lynk Labs, Inc. (“Lynk Labs”) of non-infringement as to the following patents owned by Lynk Labs: U.S. Patent Nos. 10,492,252, 10,499,466, 10,506,674, 10,966,298, 10,492,251, 10,750,583, 10,687,400, 10,517,149, 11,019,697, 10,154,551, and 10,652,979 (collectively, the “Patents-in-Suit”). Samsung hereby alleges as follows:

NATURE OF THE ACTION

1. This is an action for declaratory judgment arising under the patent laws of the United States, Title 35 of the United States Code, and the Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202. Samsung seeks a declaratory judgment of non-infringement of the Patents-in-Suit.

THE PARTIES

2. Samsung Electronics Corporation, Ltd. (“SEC”) is a corporation based in Suwon, South Korea. SEC designs and manufactures a wide variety of products, including, for example, cellular mobile phones, tablets, smart watches, wireless chargers, and televisions.

3. Samsung Electronics America, Inc. (“SEA”) is a New York corporation with its principal place of business at 85 Challenger Road, Ridgefield Park, New Jersey 07660.

4. On information and belief, Defendant Lynk Labs is a privately held corporation organized and existing under the laws of the State of Illinois, with its principal place of business at 2511 Technology Drive, Suite 108, Elgin, Illinois 60124.

JURISDICTION AND VENUE

5. This Court has exclusive subject matter jurisdiction over this action pursuant to federal question jurisdiction, 28 U.S.C. §§ 1331 and 1338(a), the Declaratory Judgment Act, 28 U.S.C. §§ 2201-2202, and the Patent Laws of the United States, 35 U.S.C. § 1 et seq.

6. An actual and justiciable controversy exists between Samsung and Lynk Labs as to the alleged infringement of the claims of the Patents-in-Suit.

7. This Court has subject matter jurisdiction over this action based on a real and immediate controversy between Samsung and Lynk Labs regarding whether various Samsung products infringe the Patents-in-Suit. As described in detail below, this controversy arises out of Lynk Labs’ infringement assertions with respect to Samsung’s Galaxy mobile phones, tablets, and watches (the “Accused Galaxy Products”); Samsung’s smart televisions (the “Accused TV Products”); Samsung’s wireless charger products (the “Accused Charger Products”); Samsung’s SmartThings app, Samsung’s SmartThings hub, and Samsung smartphones and other products

running the SmartThings app (the “Accused SmartThings Products”); and Samsung ACOM LED Products (the “Accused ACOM Products”).

8. This Court has personal jurisdiction over Lynk Labs. On information and belief, Lynk Labs is based in this District, and was based in this District at the time the Patents-in-Suit were prosecuted. Lynk Labs has also taken steps in this District to assert patents against Samsung.

9. Venue is proper in this Court under 28 U.S.C. § 1391 because Lynk Labs has its principal place of business in this District, Lynk Labs is subject to personal jurisdiction in this District, and a substantial part of the events giving rise to Samsung’s claims occurred in this District.

FACTUAL BACKGROUND

10. U.S. Patent No. 10,492,252 (“the ’252 Patent”) is entitled “AC Light Emitting Diode and AC LED Drive Methods and Apparatus,” and bears a filing date of May 8, 2019, and an issuance date of November 26, 2019. The ’252 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the ’252 Patent is attached hereto as Exhibit 1. On information and belief, Lynk Labs is the current assignee of the ’252 Patent.

11. U.S. Patent No. 10,499,466 (“the ’466 Patent”) is entitled “AC Light Emitting Diode and AC LED Drive Methods and Apparatus,” and bears a filing date of July 26, 2019, and an issuance date of December 3, 2019. The ’466 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the ’466 Patent is attached hereto as Exhibit 2. On information and belief, Lynk Labs is the current assignee of the ’466 Patent.

12. U.S. Patent No. 10,506,674 (“the ’674 Patent”) is entitled “AC Light Emitting Diode and AC LED Drive Methods and Apparatus,” and bears a filing date of July 26, 2019, and an issuance date of December 10, 2019. The ’674 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the ’674 Patent is attached hereto as Exhibit 3. On information and belief, Lynk Labs is the current assignee of the ’674 Patent.

13. U.S. Patent No. 10,966,298 (“the ’298 Patent”) is entitled “AC Light Emitting Diode and AC LED Drive Methods and Apparatus,” and bears a filing date of May 4, 2020, and an issuance date of March 30, 2021. The ’298 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the ’298 Patent is attached hereto as Exhibit 4. On information and belief, Lynk Labs is the current assignee of the ’298 Patent.

14. U.S. Patent No. 10,492,251 (“the ’251 Patent”) is entitled “AC Light Emitting Diode and AC LED Drive Methods and Apparatus,” and bears a filing date of October 1, 2018, and an issuance date of November 26, 2019. The ’251 Patent lists Michael Miskin and James N. Andersen as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the ’251 Patent is attached hereto as Exhibit 5. On information and belief, Lynk Labs is the current assignee of the ’251 Patent.

15. U.S. Patent No. 10,750,583 (“the ’583 Patent”) is entitled “AC Light Emitting Diode and AC LED Drive Methods and Apparatus,” and bears a filing date of June 21, 2019, and an issuance date of August 18, 2020. The ’583 Patent issued from U.S. Patent Application No. 16/449,273. The ’583 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the ’583 Patent

is attached hereto as Exhibit 6. On information and belief, Lynk Labs is the current assignee of the '583 Patent.

16. U.S. Patent No. 10,687,400 ("the '400 Patent") is entitled "AC Light Emitting Diode and AC LED Drive Methods and Apparatus," and bears a filing date of November 22, 2019, and an issuance date of June 16, 2020. The '400 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the '400 Patent is attached hereto as Exhibit 7. On information and belief, Lynk Labs is the current assignee of the '400 Patent.

17. U.S. Patent No. 10,517,149 ("the '149 Patent") is entitled "AC Light Emitting Diode and AC LED Drive Methods and Apparatus," and bears a filing date of December 10, 2018, and an issuance date of December 24, 2019. The '149 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the '149 Patent is attached hereto as Exhibit 8. On information and belief, Lynk Labs is the current assignee of the '149 Patent.

18. U.S. Patent No. 11,019,697 ("the '697 Patent") is entitled "AC Light Emitting Diode and AC LED Drive Methods and Apparatus," and bears a filing date of January 10, 2020 and an issuance date of May 25, 2021. The '697 Patent lists Michael Miskin, James N. Andersen, and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the '697 Patent is attached hereto as Exhibit 9. On information and belief, Lynk Labs is the current assignee of the '697 Patent.

19. U.S. Patent No. 10,154,551 ("the '551 Patent") is entitled "AC Light Emitting Diode and AC LED Drive Methods and Apparatus," and bears a filing date of October 30, 2017 and an issuance date of December 11, 2018. The '551 Patent lists Michael Miskin and James N.

Andersen as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the '551 Patent is attached hereto as Exhibit 10. On information and belief, Lynk Labs is the current assignee of the '551 Patent.

20. U.S. Patent No. 10,652,979 ("the '979 Patent") is entitled "LED Lighting System," and bears a filing date of November 22, 2019 and an issuance date of May 12, 2020. The '979 Patent lists Michael Miskin and Robert L. Kottritsch as co-inventors, and Lynk Labs Inc. as sole assignee. A true and correct copy of the '979 Patent is attached hereto as Exhibit 11. On information and belief, Lynk Labs is the current assignee of the '979 Patent.

21. Lynk Labs claims to be the owner of each of the Patents-in-Suit. Lynk Labs further claims to be the owner of over 60 issued patents and pending patent applications. Samsung reserves all rights to amend this Complaint to seek a declaratory judgment of non-infringement, invalidity, and/or unenforceability of these or any other U.S. patent owned by Lynk Labs.

The Parties' Dispute Belongs in Illinois

22. On information and belief, Lynk Labs was founded in 1997 in Elgin, Illinois, which is within this District. On information and belief, Lynk Labs is incorporated in Illinois.

23. On information and belief, Lynk Labs was founded by Michael Miskin, who is also the President and CEO of Lynk Labs. Michael Miskin is a named inventor on all of the Patents-in-Suit. In communications with the U.S. Patent and Trademark Office, Michael Miskin lists a correspondence address in Sleepy Hollow, Illinois, which is within this District.

24. On information and belief, Lynk Labs engaged in licensing negotiations with potential licensees regarding Lynk Labs' patents from Lynk Labs' offices in this District. On information and belief, Michael Miskin, in his role as President and CEO of Lynk Labs, sent and

received letters and emails from this District relating to the licensing of Lynk Labs' patents, and attended telephonic meetings from within this District relating to the licensing of Lynk Labs' patents.

25. Lynk Labs previously filed two cases in this District asserting its patents against other defendants, including (i) *Lynk Labs, Inc. v. Schneider Electric USA, Inc.*, No. 1:16-cv-04636 (N.D. Ill., filed April 25, 2016) and (ii) *Lynk Labs, Inc. v. Juno Lighting, LLC*, No. 1:15-cv-04833 (N.D. Ill., filed June 1, 2015). The Patents-in-Suit purport to be related to the patents Lynk Labs asserted against Schneider Electric USA, Inc. and Juno Lighting, LLC because they identify some of the same related applications, including, for example, Provisional Application No. 60/547,653, Provisional Application No. 60/559,867, Provisional Application No. 60/997,771, and/or Application No. 12/287,267.

Lynk Labs' Allegations of Infringement Against Samsung

26. On or about December 4, 2019, Samsung received an email from Michael Miskin, who represented himself as President and CEO of Lynk Labs, Inc. The email attached a list of 66 issued patents and pending patent applications that Lynk Labs claimed to own. The list includes, among others, the '252, '466, '251, and '551 Patents, and U.S. Patent Application Nos. 16/523,388 (which later issued as the '674 Patent), 16/449,273 (which later issued as the '583 Patent), 16/693,081 (which later issued as the '400 Patent), 16/215,502 (which later issued as the '149 Patent), and 16/693,155 (which later issued as the '979 Patent).

27. On or about May 14, 2020, Samsung received a letter from an attorney from the Chicago office of K&L Gates LLP ("K&L Gates"), who purported to represent Lynk Labs. The letter states that "Samsung ... is infringing numerous patents owned by Lynk Labs." The letter alleges that "Samsung's Galaxy smartphone, tablet and watch products infringe at least U.S.

Patent Nos. 10,492,252, 10,499,466 and 10,506,674.” The letter also alleges that Samsung’s SmartThings products infringe the ’251 Patent, the ’149 Patent, and the allowed claims of U.S. Patent Application No. 16/693,081 (which later issued as ’400 Patent).

28. On or about May 29, 2020, Samsung received another letter from K&L Gates on behalf of Lynk Labs. The letter states: “Lynk now provides you one claim chart for Samsung’s smartphones/tablets/watches, one chart for SmartThings implementations” The letter also states: “Lynk also believes that Samsung is fully capable of understanding why it infringes the claims of the remaining patents.”

29. On or about July 23, 2020, Samsung received another letter from K&L Gates on behalf of Lynk Labs. The letter states: “Please find attached the additional claim charts against Samsung.” The letter also states: “Please be advised that Lynk believes that further delay by Samsung is strong evidence of willful infringement.”

30. Samsung received additional correspondence from Lynk Labs alleging infringement of U.S. Patent Application Nos. 16/449,273, 16/866,119, 16/740,225. U.S. Patent Application No. 16/449,273 issued as the ’583 Patent. U.S. Patent Application No. 16/866,119 issued as the ’298 Patent. U.S. Patent Application No. 16/740,225 issued as the ’697 Patent.

31. To date, Samsung has received from Lynk Labs claim charts alleging infringement of at least the ’252, ’466, ’674, ’298, ’251, ’583, and ’400 Patents.

32. Lynk Labs’ claim chart for the ’252 Patent identified the Samsung Galaxy S10 and Galaxy Watch as the allegedly infringing products.

33. Lynk Labs’ claim chart for the ’466 Patent identified the Samsung Galaxy S10 as an allegedly infringing product.

34. Lynk Labs' claim charts for the '674 Patent identified the Samsung Galaxy S10 and the Samsung Q60T Smart TV television as the allegedly infringing products.

35. Lynk Labs' claim charts for U.S. Patent Application No. 16/866,119 (which issued as the '298 Patent) identified the Samsung Wireless Charger Duo, the Samsung Galaxy S9, and the Samsung Q90R QLED Smart 4K UHD TV as the allegedly infringing products.

36. Lynk Labs' claim chart for the '251 Patent identified the Samsung SmartThings app as an allegedly infringing product or feature.

37. Lynk Labs' claim chart for U.S. Patent Application No. 16/449,273 (which issued as the '583 Patent) identified the SmartThings hub and the SmartThings app running on a Samsung Galaxy S20 as the allegedly infringing products or features.

38. Lynk Labs' claim chart for the '400 Patent identified the SmartThings hub and the SmartThings app running on a Samsung Galaxy S20 as the allegedly infringing products or features.

COUNT I

(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,492,252)

39. Samsung incorporates by reference the allegations in Paragraphs 1 through 38 above as though fully set forth herein.

40. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '252 Patent.

41. The Accused Galaxy Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '252 Patent, either literally or under the doctrine of equivalents.

42. Claims 1, 7, 16, and 20 are the only independent claims of the '252 Patent.

43. Claims 1, 7, and 16 of the '252 Patent require “a transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus.”

44. The Accused Galaxy Products do not meet the claim requirement of “a transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus” at least because the transmission conductors of the Accused Galaxy Products, to the extent such conductors exist in the products, do not wirelessly receive an alternating electromagnetic field for providing power to charge the apparatus.

45. Claim 20 of the '252 Patent requires “wherein the flat planar substrate is sufficiently flexible to be folded without breaking.”

46. The Accused Galaxy Products do not meet the claim requirement of “wherein the flat planar substrate is sufficiently flexible to be folded without breaking” at least because the substrates of the Accused Galaxy Products are not sufficiently flexible such that they can be folded without breaking.

47. For at least the above reasons, the Accused Galaxy Products do not infringe any claims of the '252 Patent, either literally or under the doctrine of equivalents.

48. Samsung does not induce infringement of claims 1-20 of the '252 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

49. Samsung does not contributorily infringe claims 1-20 of the '252 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products do not satisfy several limitations of those claims. In addition, the Accused Galaxy Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

50. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '252 Patent.

COUNT II
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,499,466)

51. Samsung incorporates by reference the allegations in Paragraphs 1 through 50 above as though fully set forth herein.

52. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '466 Patent.

53. The Accused Galaxy Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '466 Patent, either literally or under the doctrine of equivalents.

54. Claims 1, 3, 7, 9, and 11 are the only independent claims of the '466 Patent.

55. Claims 1 and 9 of the '466 Patent require a “transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus.”

56. The Accused Galaxy Products do not meet the claim requirement of a “transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus” at least because the transmission conductors of

Accused Galaxy Products, to the extent such conductors exist in the products, do not wirelessly receive an alternating electromagnetic field for providing power to charge the apparatus.

57. Claim 11 of the '466 Patent requires “a first circuit, wherein the first circuit is configured to receive DC power and data signals from a transmission conductor.”

58. The Accused Galaxy Products do not meet the claim requirement of “a first circuit, wherein the first circuit is configured to receive DC power and data signals from a transmission conductor” at least because the circuits of the Accused Galaxy Products do not receive from a transmission conductor both DC power and data signals.

59. Claims 3 and 7 of the '466 Patent require “a lens doped with particles configured to receive and transmit light from the plurality of LEDs.”

60. The Accused Galaxy Products do not meet the claim requirement of “a lens doped with particles configured to receive and transmit light from the plurality of LEDs” at least because the Accused Galaxy Products do not have a lens that is doped with particles that receive and transmit light from LEDs.

61. For at least the above reasons, the Accused Galaxy Products do not infringe any claims of the '466 Patent, either literally or under the doctrine of equivalents.

62. Samsung does not induce infringement of claims 1-16 of the '466 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

63. Samsung does not contributorily infringe claims 1-16 of the '466 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the

Accused Galaxy Products do not satisfy several limitations of those claims. In addition, the Accused Galaxy Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

64. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '466 Patent.

COUNT III
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,506,674)

65. Samsung incorporates by reference the allegations in Paragraphs 1 through 64 above as though fully set forth herein.

66. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '674 Patent.

67. The Accused Galaxy Products and the Accused TV Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '674 Patent, either literally or under the doctrine of equivalents.

68. Claims 1, 8, 12, and 20 are the only independent claims of the '674 Patent.

69. Claim 1 of the '674 Patent requires "a power supply configured to increase a power supplied to the LED circuit when the circuit detects the touch." Claim 20 of the '674 Patent requires "a power supply, wherein the power supply is configured to increase the power to the LED circuit when the circuit detects the touch of a person."

70. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of "a power supply configured to increase a power supplied to the LED circuit when the circuit detects the touch" or "a power supply, wherein the power supply is configured to increase the power to the LED circuit when the circuit detects the touch of a person" at least

because the power supplies of the Accused Galaxy Products and the Accused TV Products do not increase the power supplied to an LED circuit when a circuit detects a touch.

71. Claim 8 of the '674 Patent requires “increasing a level of power to an LED circuit comprising at least one LED in the portable apparatus upon detection of the touch.”

72. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “increasing a level of power to an LED circuit comprising at least one LED in the portable apparatus upon detection of the touch” at least because the Accused Galaxy Products and the Accused TV Products do not increase the level of power provided to an LED circuit when a circuit detects a touch.

73. Claim 12 of the '674 Patent requires “a switch configured to control the at least one LED circuit; and a power supply configured to decrease or turn off power to the LED circuit when a user of the apparatus controls the switch.”

74. The Accused Galaxy Products do not meet the claim requirement of “a switch configured to control the at least one LED circuit; and a power supply configured to decrease or turn off power to the LED circuit when a user of the apparatus controls the switch” at least because the Accused Galaxy Products do not include a switch controllable by a user that is configured to control an LED circuit.

75. Claims 1, 12, and 20 of the '674 Patent require “wherein the apparatus is portable.” Claim 8 of the '674 Patent requires “a portable apparatus.”

76. The Accused TV Products do not meet the claim requirement of “wherein the apparatus is portable” or “a portable apparatus” at least because the Accused TV Products are not portable.

77. For at least the above reasons, the Accused Galaxy Products and the Accused TV Products do not infringe any claims of the '674 Patent, either literally or under the doctrine of equivalents.

78. Samsung does not induce infringement of claims 1-20 of the '674 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products and the Accused TV Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

79. Samsung does not contributorily infringe claims 1-20 of the '674 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products and the Accused TV Products do not satisfy several limitations of those claims. In addition, the Accused Galaxy Products and the Accused TV Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

80. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '674 Patent.

COUNT IV
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,966,298)

81. Samsung incorporates by reference the allegations in Paragraphs 1 through 80 above as though fully set forth herein.

82. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '298 Patent.

83. The Accused Galaxy Products and the Accused TV Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '298 Patent, either literally or under the doctrine of equivalents.

84. Claims 1, 6, 7, 9, 10, 13, 16, 17, 18, 21, and 22 are the only independent claims of the '298 Patent.

85. Claim 1 of the '298 Patent requires “a second circuit configured to detect contact with a conductive substance via capacitive sensing for controlling the at least one LED.” Claim 7 of the '298 Patent requires “a first circuit configured to detect contact with a conductive substance via capacitive sensing for at least controlling the LED circuit.” Claim 10 of the '298 Patent requires “a circuit configured to detect contact with a conductive substance for controlling at least the LED circuit.” Claim 13 of the '298 Patent requires “a circuit configured to detect contact with a conductive substance for controlling the plurality of LEDs.” Claim 16 of the '298 Patent requires “a circuit configured to detect contact with a user via capacitive sensing for at least controlling the LED circuit.” Claim 17 of the '298 Patent requires “a circuit configured to detect contact with a conductive substance for at least controlling the LED circuit.” Claim 21 of the '298 Patent requires a “first device is configured to detect contact with a conductive substance via capacitive sensing for controlling at least the at least one LED.”

86. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “a second circuit configured to detect contact with a conductive substance via capacitive sensing for controlling the at least one LED,” “a first circuit configured to detect contact with a conductive substance via capacitive sensing for at least controlling the LED circuit,” “a circuit configured to detect contact with a conductive substance for controlling at least the LED circuit,” “a circuit configured to detect contact with a conductive substance for

controlling the plurality of LEDs,” “a circuit configured to detect contact with a user via capacitive sensing for at least controlling the LED circuit,” “a circuit configured to detect contact with a conductive substance for at least controlling the LED circuit,” or “first device is configured to detect contact with a conductive substance via capacitive sensing for controlling at least the at least one LED,” at least because (1) to the extent the Accused Galaxy Products have circuits or devices that detect contact with a conductive substance or a user, such circuits or devices do not control one LED, an LED circuit, or a plurality of LEDs; and (2) the Accused TV Products do not include a circuit or device that is configured to detect contact with a conductive substance or a user.

87. Claim 6 of the '298 Patent requires “increasing a level of power to an LED circuit comprising at least one LED in the apparatus after detection of the contact.”

88. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “increasing a level of power to an LED circuit comprising at least one LED in the apparatus after detection of the contact” at least because the Accused Galaxy Products and the Accused TV Products do not increase the level of power provided to an LED circuit upon the detection of a contact.

89. Claim 7 of the '298 Patent requires “a lens doped with particles configured to transmit light.”

90. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “a lens doped with particles configured to transmit light” at least because the Accused Galaxy Products and the Accused TV Products do not have a lens that is doped with particles that transmit light.

91. Claim 9 of the '298 Patent requires “a transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus.”

92. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “a transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus” at least because the transmission conductors of the Accused Galaxy Products and the Accused TV Products, to the extent such conductors exist in the products, do not wirelessly receive an alternating electromagnetic field for providing power to charge the apparatus.

93. Claim 16 of the '298 Patent requires “a second antenna configured to receive radio frequency noise, wherein said radio frequency noise is used to provide power to said apparatus.”

94. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “a second antenna configured to receive radio frequency noise, wherein said radio frequency noise is used to provide power to said apparatus” at least because the Accused Galaxy Products and the Accused TV Products do not use radio frequency noise to provide power to the apparatus.

95. Claim 18 of the '298 Patent requires “a transmission conductor configured to provide data and power to said apparatus.”

96. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “a transmission conductor configured to provide data and power to said apparatus” at least because the transmission conductors of the Accused Galaxy Products and the

Accused TV Products, to the extent such conductors exist in the products, do not provide both data and power.

97. Claim 22 of the '298 Patent requires “wherein the transmit device is configured to transmit power and signals wirelessly to the data communications device using resonance and inductance.”

98. The Accused Galaxy Products and the Accused TV Products do not meet the claim requirement of “wherein the transmit device is configured to transmit power and signals wirelessly to the data communications device using resonance and inductance” at least because the Accused Galaxy Products and the Accused TV Products do not use resonance and inductance to transmit power and signals.

99. Claim 1 of the '298 Patent requires “a third circuit having a second transmission conductor and a second inductor, wherein said second device is configured to use at least the second inductor to receive power wirelessly from said first device for powering the apparatus.” Claim 6 of the '298 Patent requires “receiving power wirelessly in the apparatus.” Claim 7 of the '298 Patent requires “a second circuit having a transmission conductor and an inductor, wherein the second circuit is configured to use at least the inductor to receive power wirelessly for powering the apparatus.” Claim 9 of the '298 Patent requires “a transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus.” Claim 10 of the '298 Patent requires “a power supply, wherein said power supply is configured to provide power to the apparatus and is configured to receive power wirelessly from a power source.” Claim 21 of the '298 Patent requires “a second device, wherein the second device is configured to transmit power and signals wirelessly to the first

device.” Claim 22 of the ’298 Patent requires “wherein the transmit device is configured to transmit power and signals wirelessly to the data communications device.”

100. The Accused TV Products do not meet the claim requirement of “a third circuit having a second transmission conductor and a second inductor, wherein said second device is configured to use at least the second inductor to receive power wirelessly from said first device for powering the apparatus,” “receiving power wirelessly in the apparatus,” “a second circuit having a transmission conductor and an inductor, wherein the second circuit is configured to use at least the inductor to receive power wirelessly for powering the apparatus,” “a transmission conductor configured to wirelessly receive an alternating electromagnetic field that is used to provide power to charge the apparatus,” “a power supply, wherein said power supply is configured to provide power to the apparatus and is configured to receive power wirelessly from a power source,” “a second device, wherein the second device is configured to transmit power and signals wirelessly to the first device,” or “wherein the transmit device is configured to transmit power and signals wirelessly to the data communications device” at least because the Accused TV Products do not receive or transmit power wirelessly.

101. For at least the above reasons, the Accused Galaxy Products and the Accused TV Products do not infringe any claims of the ’298 Patent, either literally or under the doctrine of equivalents.

102. Samsung does not induce infringement of claims 1-25 of the ’298 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products and the Accused TV Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others’ infringement.

103. Samsung does not contributorily infringe claims 1-25 of the '298 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products and the Accused TV Products do not satisfy several limitations of those claims. In addition, the Accused Galaxy Products and the Accused TV Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

104. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '298 Patent.

COUNT V

(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,492,251)

105. Samsung incorporates by reference the allegations in Paragraphs 1 through 104 above as though fully set forth herein.

106. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '251 Patent.

107. The Accused SmartThings Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '251 Patent, either literally or under the doctrine of equivalents.

108. Claims 1, 8, 11, 13, 14, and 20 are the only independent claims of the '251 Patent.

109. Claims 1, 8, and 11 of the '251 Patent require "[a]n LED lighting system" comprising an "an LED driver" and an "LED circuit." Claim 13 of the '251 Patent requires "[a] lighting system" comprising "a driver" and an "LED circuit."

110. The Accused SmartThings Products do not meet the claim requirement of "[a]n LED lighting system" comprising an "an LED driver" and an "LED circuit" or "[a] lighting

system” comprising “a driver” and an “LED circuit” at least because the Accused SmartThings Products are not and do not include a lighting system that includes an LED driver and an LED circuit.

111. Claim 14 of the '251 Patent requires “an LED driver” comprising “an input of a first voltage and a first frequency, wherein the first voltage is an AC voltage.”

112. The Accused SmartThings Products do not meet the claim requirement of “an LED driver” comprising “an input of a first voltage and a first frequency, wherein the first voltage is an AC voltage” at least because the Accused SmartThings Products are not and do not include an LED driver that has an AC voltage input.

113. Claim 20 of the '251 Patent requires “[a]n LED lighting device” comprising “an LED driver” and “LED packages.”

114. The Accused SmartThings Products do not meet the claim requirement of “[a]n LED lighting device” comprising “an LED driver” and “LED packages” at least because the Accused SmartThings Products are not and do not include an LED lighting device that includes an LED driver and LED packages.

115. For at least the above reasons, the Accused SmartThings Products do not infringe any claims of the '251 Patent, either literally or under the doctrine of equivalents.

116. Samsung does not induce infringement of claims 1-23 of the '251 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

117. Samsung does not contributorily infringe claims 1-23 of the '251 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. In addition, the Accused SmartThings Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

118. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '251 Patent.

COUNT VI
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,750,583)

119. Samsung incorporates by reference the allegations in Paragraphs 1 through 118 above as though fully set forth herein.

120. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '583 Patent.

121. The Accused SmartThings Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '583 Patent, either literally or under the doctrine of equivalents.

122. Claims 1, 8, and 11 are the only independent claims of the '583 Patent.

123. Claim 1 of the '583 Patent requires “[a]n LED lighting system” comprising “an LED driver” and an “LED circuit.”

124. The Accused SmartThings Products do not meet the claim requirement of “[a]n LED lighting system” comprising “an LED driver” and an “LED circuit” at least because the Accused SmartThings Products are not and do not include an LED lighting system that includes an LED driver and an LED circuit.

125. Claim 8 of the '583 Patent requires “[a] lighting device” comprising “an LED circuit array” and “an LED circuit driver.”

126. The Accused SmartThings Products do not meet the claim requirement of “[a] lighting device” comprising “an LED circuit array” and “an LED circuit driver” at least because the Accused SmartThings Products are not and do not include a lighting device that includes an LED circuit array and an LED circuit driver.

127. Claim 11 of the '583 Patent requires “[a]n LED lighting device” comprising an “LED circuit” and “an LED driver.”

128. The Accused SmartThings Products do not meet the claim requirement of “[a]n LED lighting device” comprising an “LED circuit” and “an LED driver” at least because the Accused SmartThings Products are not and do not include an LED lighting device that includes an LED circuit and an LED driver.

129. For at least the above reasons, the Accused SmartThings Products do not infringe any claims of the '583 Patent, either literally or under the doctrine of equivalents.

130. Samsung does not induce infringement of claims 1-18 of the '583 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

131. Samsung does not contributorily infringe claims 1-18 of the '583 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. In addition, the Accused SmartThings Products were not designed for an infringing use, have substantial non-

infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

132. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '583 Patent.

COUNT VII
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,687,400)

133. Samsung incorporates by reference the allegations in Paragraphs 1 through 132 above as though fully set forth herein.

134. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '400 Patent.

135. The Accused SmartThings Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '400 Patent, either literally or under the doctrine of equivalents.

136. Claims 1, 7, 14, and 21 are the only independent claims of the '400 Patent.

137. Claims 1 and 7 of the '400 Patent require “[a] lighting system” comprising an “LED circuit” and “a plurality of LEDs.”

138. The Accused SmartThings Products do not meet the claim requirement of “[a] lighting system” comprising an “LED circuit” and “a plurality of LEDs” at least because the Accused SmartThings Products are not and do not include a lighting system that includes an LED circuit and a plurality of LEDs.

139. Claim 14 of the '400 Patent requires “[a]n LED lighting device” comprising “a plurality of LED circuits” and an “LED circuit.”

140. The Accused SmartThings Products do not meet the claim requirement of “[a]n LED lighting device” comprising “a plurality of LED circuits” and an “LED circuit” at least

because the Accused SmartThings Products are not and do not include an LED lighting device that includes a plurality of LED circuits and an LED circuit.

141. Claim 21 of the '400 Patent requires "[a] lighting device" comprising an "LED circuit" and "at least two LEDs."

142. The Accused SmartThings Products do not meet the claim requirement of "[a] lighting device" comprising an "LED circuit" and "at least two LEDs" at least because the Accused SmartThings Products are not and do not include a lighting device that comprises an LED circuit and at least two LEDs.

143. For at least the above reasons, the Accused SmartThings Products do not infringe any claims of the '400 Patent, either literally or under the doctrine of equivalents.

144. Samsung does not induce infringement of claims 1-26 of the '400 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

145. Samsung does not contributorily infringe claims 1-26 of the '400 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. In addition, the Accused SmartThings Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

146. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '400 Patent.

COUNT VIII

(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,517,149)

147. Samsung incorporates by reference the allegations in Paragraphs 1 through 146 above as though fully set forth herein.

148. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '149 Patent.

149. The Accused SmartThings Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '149 Patent, either literally or under the doctrine of equivalents.

150. Claims 1, 5, 11, and 17 are the only independent claims of the '149 Patent.

151. Claims 1, 5, and 11 of the '149 Patent require “[a] lighting system” comprising an “LED circuit,” “a plurality of LEDs,” and “a driver.”

152. The Accused SmartThings Products do not meet the claim requirement of “[a] lighting system” comprising an “LED circuit,” “a plurality of LEDs,” and “a driver” at least because the Accused SmartThings Products are not and do not include a lighting system that includes an LED circuit, a plurality of LEDs, and a driver.

153. Claim 17 of the '149 Patent requires “[a] lighting system” comprising an “LED circuit,” “at least two LEDs,” and “a driver.”

154. The Accused SmartThings Products do not meet the claim requirement of “[a] lighting system” comprising an “LED circuit,” “at least two LEDs,” and “a driver” at least because the Accused SmartThings Products are not and do not include a lighting system that includes an LED circuit, at least two LEDs, and a driver.

155. For at least the above reasons, the Accused SmartThings Products do not infringe any claims of the '149 Patent, either literally or under the doctrine of equivalents.

156. Samsung does not induce infringement of claims 1-20 of the '149 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

157. Samsung does not contributorily infringe claims 1-20 of the '149 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused SmartThings Products do not satisfy several limitations of those claims. In addition, the Accused SmartThings Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

158. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '149 Patent.

COUNT IX
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 11,019,697)

159. Samsung incorporates by reference the allegations in Paragraphs 1 through 158 above as though fully set forth herein.

160. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '697 Patent.

161. The Accused Galaxy Products and the Accused Charger Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '697 Patent, either literally or under the doctrine of equivalents.

162. Claims 1, 7, and 14 are the only independent claims of the '697 Patent.

163. Claim 1 of the '697 Patent requires "a semiconductor device configured to emit a laser."

164. The Accused Galaxy Products and the Accused Charger Products do not meet the claim requirement of "a semiconductor device configured to emit a laser" at least because the Accused Galaxy Products and the Accused Charger Products do not include a semiconductor device that emits a laser.

165. Claim 7 of the '697 Patent requires "a second transmission conductor configured to wirelessly receive second power and second data from an alternating electromagnetic field." Claim 14 of the '697 Patent requires "a transmission conductor configured to wirelessly receive power and data from an alternating electromagnetic field."

166. The Accused Galaxy Products and the Accused Charger Products do not meet the claim requirement of "a second transmission conductor configured to wirelessly receive second power and second data from an alternating electromagnetic field" or "a transmission conductor configured to wirelessly receive power and data from an alternating electromagnetic field" at least because the transmission conductors of the Accused Galaxy Products and the Accused Charger Products, to the extent such conductors exist in the products, do not wirelessly receive both power and data from an alternating electromagnetic field.

167. For at least the above reasons, the Accused Galaxy Products and the Accused Charger Products do not infringe any claims of the '697 Patent, either literally or under the doctrine of equivalents.

168. Samsung does not induce infringement of claims 1-22 of the '697 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products and the Accused Charger Products do not satisfy several limitations of

those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

169. Samsung does not contributorily infringe claims 1-22 of the '697 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused Galaxy Products and the Accused Charger Products do not satisfy several limitations of those claims. In addition, the Accused Galaxy Products and the Accused Charger Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

170. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '697 Patent.

COUNT X
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,154,551)

171. Samsung incorporates by reference the allegations in Paragraphs 1 through 170 above as though fully set forth herein.

172. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '551 Patent.

173. The Accused ACOM Products have not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '551 Patent, either literally or under the doctrine of equivalents.

174. Claims 1, 5, 10, 16, 22-29, 33, 34, 36, and 37 are the only independent claims of the '551 Patent.

175. Claim 1 of the '551 Patent requires "the driver providing rectified AC voltage and current to the LED circuit."

176. The Accused ACOM Products do not meet the claim requirement of “the driver providing rectified AC voltage and current to the LED circuit” recited by Claim 1 of the ’551 Patent at least because the driver of the Accused ACOM Products do not provide rectified AC voltage and current to an LED circuit.

177. Claim 5 of the ’551 Patent requires “the driver having an input of a first rectified AC voltage and current from the bridge rectifier and the driver providing a second rectified AC voltage and current to the LED circuit.”

178. The Accused ACOM Products do not meet the claim requirement of “the driver having an input of a first rectified AC voltage and current from the bridge rectifier and the driver providing a second rectified AC voltage and current to the LED circuit” recited by Claim 5 of the ’551 Patent at least because the driver of the Accused ACOM Products do not provide rectified AC voltage and current to an LED circuit.

179. Claim 10 of the ’551 Patent requires “the driver having an input of a first AC voltage and a first frequency and a high frequency inverter stage output of a second AC voltage and a second frequency, wherein the second frequency is a relatively higher frequency, and the second AC voltage at the second frequency is provided the bridge rectifier and the bridge rectifier provides DC voltage and DC current to the LED circuit.”

180. The Accused ACOM Products does not meet the claim requirement of “the driver having an input of a first AC voltage and a first frequency and a high frequency inverter stage output of a second AC voltage and a second frequency, wherein the second frequency is a relatively higher frequency, and the second AC voltage at the second frequency is provided the bridge rectifier and the bridge rectifier provides DC voltage and DC current to the LED circuit” at least because the driver of the Accused ACOM Products does not have an input of a first AC

voltage and a first frequency, and output of a second AC voltage and a second frequency, wherein the second frequency is a relatively higher frequency.

181. Claim 16 of the '551 Patent requires “the driver having an input of a first AC voltage and a first frequency and an output of a pulsed DC voltage rectified at a pulsed second frequency, wherein the second frequency is a relatively higher frequency, and the pulsed DC voltage is provided to the LED circuit.”

182. The Accused ACOM Products does not meet the claim requirement of “the driver having an input of a first AC voltage and a first frequency and an output of a pulsed DC voltage rectified at a pulsed second frequency, wherein the second frequency is a relatively higher frequency, and the pulsed DC voltage is provided to the LED circuit” at least because the driver of the Accused ACOM Products does not have an input of a first AC voltage and a first frequency, and produce an output of a pulsed DC voltage rectified at a pulsed second frequency, wherein the second frequency is a relatively higher frequency.

183. Claim 22 of the '551 Patent requires “a driver connected to the at least one LED circuit, the driver providing AC voltage and current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency and an output of a second AC voltage and a second frequency, wherein the second AC voltage is a relatively fixed voltage and the second frequency is a relatively higher frequency than the first frequency when connected to the at least one LED circuit.”

184. The Accused ACOM Products does not meet the claim requirement of “a driver connected to the at least one LED circuit, the driver providing AC voltage and current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency and an output of a second AC voltage and a second frequency, wherein the second AC voltage is a

relatively fixed voltage and the second frequency is a relatively higher frequency than the first frequency when connected to the at least one LED circuit” at least because the driver of the Accused ACOM Products does not have an input of a first AC voltage and a first frequency and an output of a second AC voltage and a second frequency, wherein the second AC voltage is a relatively fixed voltage and the second frequency is a relatively higher frequency than the first frequency.

185. Claim 23 of the '551 Patent requires “a driver connected to the at least one LED circuit, the driver providing rectified constant voltage and/or current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from mains power and a high frequency inverter stage output of a second AC voltage and a second frequency which is relatively higher than the first frequency, wherein the second AC voltage is rectified into a relatively fixed DC voltage.”

186. The Accused ACOM Products does not meet the claim requirement of “a driver connected to the at least one LED circuit, the driver providing rectified constant voltage and/or current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from mains power and a high frequency inverter stage output of a second AC voltage and a second frequency which is relatively higher than the first frequency, wherein the second AC voltage is rectified into a relatively fixed DC voltage” at least because the driver of the Accused ACOM Products does not provide a rectified constant voltage and/or current to at least one LED circuit.

187. Claims 24 and 25 of the '551 Patent require “a driver connected to the least one bridge rectifier, the driver providing AC voltage and AC current to the at least one bridge rectifier, and the bridge rectifier providing DC voltage and DC current to the at least one LED

circuit, the driver having an input of a first AC voltage and a first frequency and an output of a second AC voltage and a second frequency, wherein the second AC voltage is a relatively fixed voltage and the second frequency is a relatively higher frequency than the first frequency.”

188. The Accused ACOM Products does not meet the claim requirement of “a driver connected to the least one bridge rectifier, the driver providing AC voltage and AC current to the at least one bridge rectifier, and the bridge rectifier providing DC voltage and DC current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency and an output of a second AC voltage and a second frequency, wherein the second AC voltage is a relatively fixed voltage and the second frequency is a relatively higher frequency than the first frequency” at least because the driver of the Accused ACOM Products does not provide AC voltage and AC current to at least one bridge rectifier. In addition, the driver of the Accused ACOM Products also does not have an input of a first AC voltage and a first frequency and an output of a second AC voltage and a second frequency, wherein the second AC voltage is a relatively fixed voltage and the second frequency is a relatively higher frequency than the first frequency.

189. Claim 26 of the '551 Patent requires “a driver connected to the at least one LED circuit, the driver providing DC voltage and DC current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source and an output of a second relatively constant rectified DC voltage to the at least one LED circuit.”

190. The Accused ACOM Products does not meet the claim requirement of “a driver connected to the at least one LED circuit, the driver providing DC voltage and DC current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source and an output of a second relatively constant rectified DC voltage to

the at least one LED circuit” at least because the driver of the Accused ACOM Products does not provide DC voltage and DC current to at least one LED circuit.

191. Claim 27 of the '551 Patent requires “a driver connected to the least one bridge rectifier, the bridge rectifier providing rectified. AC voltage and current to the driver, and the driver providing DC voltage and DC current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source and an output of a second rectified AC voltage that is a relatively fixed frequency when connected to the at least one LED circuit mounted on a reflective substrate.”

192. The Accused ACOM Products does not meet the claim requirement of “a driver connected to the least one bridge rectifier, the bridge rectifier providing rectified. AC voltage and current to the driver, and the driver providing DC voltage and DC current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source and an output of a second rectified AC voltage that is a relatively fixed frequency when connected to the at least one LED circuit mounted on a reflective substrate” at least because the driver of the Accused ACOM Products does not provide DC voltage and DC current to at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source and an output of a second rectified AC voltage that is a relatively fixed frequency when connected to the at least one LED circuit mounted on a reflective substrate.

193. Claim 28 of the '551 Patent requires “the driver providing rectified AC voltage and current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency and an output of a rectified second pulsed AC voltage and a second frequency, wherein the second frequency is a relatively higher frequency than the first frequency.”

194. The Accused ACOM Products does not meet the claim requirement of “the driver providing rectified AC voltage and current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency and an output of a rectified second pulsed AC voltage and a second frequency, wherein the second frequency is a relatively higher frequency than the first frequency” at least because the driver of the Accused ACOM Products does not provide rectified AC voltage and current to at least one LED circuit, the driver having an input of a first AC voltage and a first frequency and an output of a rectified second pulsed AC voltage and a second frequency, wherein the second frequency is a relatively higher frequency than the first frequency.

195. Claim 29 of the '551 Patent requires “a driver connected to the least one bridge rectifier, the driver and the bridge rectifier providing rectified AC voltage and current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source.”

196. The Accused ACOM Products does not meet the claim requirement of “a driver connected to the least one bridge rectifier, the driver and the bridge rectifier providing rectified AC voltage and current to the at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source” at least because the driver of the Accused ACOM Products does not provide rectified AC voltage and current to at least one LED circuit, the driver having an input of a first AC voltage and a first frequency from a mains power source.

197. Claims 33, 34, 36, and 37 of the '551 Patent each require “the driver providing AC voltage and AC current to the bridge rectifier and the bridge rectifier providing DC voltage and DC current to the LED circuit.”

198. The Accused ACOM Products does not meet the claim requirement of “the driver providing AC voltage and AC current to the bridge rectifier and the bridge rectifier providing DC voltage and DC current to the LED circuit” at least because the driver of the Accused ACOM Products does not provide AC voltage and AC current to a bridge rectifier with the bridge rectifier providing DC voltage and DC current to the LED circuit.

199. For at least the above reasons, the Accused ACOM Products do not infringe any claims of the '551 Patent, either literally or under the doctrine of equivalents.

200. Samsung does not induce infringement of claims 1-37 of the '551 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused ACOM Products do not satisfy the limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

201. Samsung does not contributorily infringe claims 1-37 of the '551 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused ACOM Products do not satisfy the limitations of those claims. In addition, the Accused ACOM Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

202. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '551 Patent.

COUNT XI
(Declaratory Judgment of Non-Infringement of U.S. Patent No. 10,652,979)

203. Samsung incorporates by reference the allegations in Paragraphs 1 through 202 above as though fully set forth herein.

204. An actual and justiciable controversy exists between Samsung and Lynk Labs concerning the non-infringement of the '979 Patent.

205. The Accused ACOM Products has not infringed, and do not infringe, directly or indirectly, any valid and enforceable claim of the '979 Patent, either literally or under the doctrine of equivalents.

206. Claims 1, 7, and 13 are the only independent claims of the '979 Patent.

207. Claims 1 and 13 of the '979 Patent require “an LED driver circuit comprising a bridge rectifier and a capacitor, the LED driver circuit configured to receive an AC voltage from a mains voltage power source and provide a DC voltage output to the LED package[s] through the power connection leads.”

208. The Accused ACOM Products does not meet the claim requirement of “an LED driver circuit comprising a bridge rectifier and a capacitor, the LED driver circuit configured to receive an AC voltage from a mains voltage power source and provide a DC voltage output to the LED package[s] through the power connection leads” at least because the driver circuit of the Accused ACOM Products does not receive an AC voltage from a mains voltage power source and does not provide a DC voltage output to LED package(s) through the power connection leads.

209. Claim 7 of the '979 Patent requires “wherein the LED driver circuit comprises an input configured to receive a first AC voltage from the mains AC voltage power source and to provide a DC voltage output to the LEDs.”

210. The Accused ACOM Products does not meet the claim requirement of “wherein the LED driver circuit comprises an input configured to receive a first AC voltage from the mains AC voltage power source and to provide a DC voltage output to the LEDs” at least

because the driver circuit of the Accused ACOM Products does not receive a first AC voltage from a mains AC voltage power source and does not provide a DC voltage output to LEDs.

211. For at least the above reasons, the Accused ACOM Products do not infringe any claims of the '979 Patent, either literally or under the doctrine of equivalents.

212. Samsung does not induce infringement of claims 1-18 of the '979 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused ACOM Products do not satisfy the limitations of those claims. Additionally, Samsung has not acted with the knowledge and/or specific intent necessary for induced infringement and has not encouraged others' infringement.

213. Samsung does not contributorily infringe claims 1-18 of the '979 Patent because, for at least the reasons stated above, there is no direct infringement of those claims because the Accused ACOM Products do not satisfy the limitations of those claims. In addition, the Accused ACOM Products were not designed for an infringing use, have substantial non-infringing uses, and are not a material part of any infringing combination. Additionally, Samsung did not have the knowledge or intent necessary for contributory infringement.

214. Samsung is entitled to a judgment from this Court that Samsung has not infringed, and does not infringe, any valid and enforceable claim of the '979 Patent.

PRAYER FOR RELIEF

WHEREFORE, Samsung prays for the following judgment and relief:

- a. A declaration that Samsung has not infringed, and does not infringe, either directly or indirectly, any valid and enforceable claim of the Patents-in-Suit, either literally or under the doctrine of equivalents;

- b. An injunction against Lynk Labs and its officers, agents, servants, employees, and those persons in active concert or participation with them who receive actual notice of this judgment from directly or indirectly asserting infringement or instituting any action for infringement of the Patents-in-Suit against Samsung or any of its customers or suppliers;
- c. An order declaring that Samsung is the prevailing party and that this case is an exceptional case under 35 U.S.C. § 285, and awarding Samsung its costs, expenses, and reasonable attorneys' fees under 35 U.S.C. § 285 and all other applicable statutes, rules and common law, including this Court's inherent authority; and
- d. Any other equitable and/or legal relief that this Court may deem just and proper.

JURY TRIAL DEMAND

Pursuant to Federal Rule of Civil Procedure 38, Samsung hereby demands a trial by jury on all issues and claims so triable.

Dated: September 8, 2021

Respectfully submitted,

/s/ Ryan K. Yagura

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CERTIFICATE OF SERVICE

The undersigned hereby certifies that the above Second Amended Complaint was filed on September 8, 2021 with the Northern District of Illinois ECF System, serving a copy on all parties.

Ryan K. Yagura
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