

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
TEXARKANA DIVISION**

AIST SOLUTIONS CO.,

Plaintiff,

v.

TCL INDUSTRIES HOLDINGS CO.,
LIMITED; TCL ELECTRONICS
HOLDINGS LIMITED; TCL
COMMUNICATION LIMITED; TCL
COMMUNICATION TECHNOLOGY
HOLDINGS LTD.; TCL MOBILE
INTERNATIONAL LIMITED; HUIZHOU
TCL MOBILE COMMUNICATION CO.,
LTD; and TCL MOBILE
COMMUNICATION (HK) COMPANY
LIMITED,

Defendants.

Civil Action No. 5:25-cv-53

**COMPLAINT AND DEMAND
FOR JURY TRIAL**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff AIST Solutions Co. (“AISol”), by and through its undersigned counsel, files this complaint under 35 U.S.C. § 271 for Patent Infringement against Defendants TCL Industries Holdings Co., Limited (“TCL Industries Holdings”), TCL Electronics Holdings Limited (“TCL Electronics”), TCL Communication Limited (“TCL Communication”), TCL Communication Technology Holdings Ltd. (“TCL Communications Tech.”), TCL Mobile International Limited (“TCL Mobile”), Huizhou TCL Mobile Communication Co., Ltd. (“Huizhou TCL Mobile”), TCL Mobile Communication (HK) Company Limited (“TCL Mobile HK”) (all collectively, “TCL” or “Defendants”) and further alleges as follows, upon actual knowledge with respect to itself and its own acts, and upon information and belief as to all other matters.

OVERVIEW

1. This is an action for patent infringement by AISol. AISol is a company founded in April 2023 as a fully owned subsidiary of Japan's National Institute of Advanced Industrial Science and Technology ("AIST"). AISol, together with AIST, combines technology and marketing to help bring forth a sustainable society of the future through the implementation of a national innovation ecosystem.

2. AIST is one of the largest public research institutes in Japan. It was founded in 2001 under Japan's Ministry of Economy, Trade, and Industry, and focuses on bridging the gap between innovative technological seeds and commercialization. Despite its founding in 2001, AIST traces its roots back to the Geological Survey of Japan, Ministry of Agriculture and Commerce (established in 1882). Through its own actions and those of its predecessor organizations, AIST has been conducting research and development for over 140 years to contribute to Japan's development and to the improvement of people's lives.

3. Notable research achievements of AIST and its predecessor organizations include indium oxide transparent conductive film for electronic display technology; PAN carbon fiber; isomerized sugar; an ammonia gas turbine; and MTJ elements for magnetic heads used in hard drive disks worldwide. Recently, AIST has performed one of the world's largest calculations for AI processing infrastructure, built Japan's first quantum annealing machine, and created image recognition technology that does not require prior training with real images.

4. As a core and pioneering part of Japan's national innovation system, AIST has about 2,300 researchers doing research and development at 12 research bases across Japan. AIST also collaborates with many Japanese and foreign institutions to advance technology and benefit society, working with thousands of additional researchers.

5. AIST has collaborated with research institutions from around the world, including Fraunhofer-Gesellschaft, the French National Centre for Scientific Research (CNRS), and the Industrial Technology Research Institute, Taiwan (ITRI).

6. AIST's vision is to "Create the Future, Collaborate Together." Research priorities of AIST include renewable energy, AI-based manufacturing, the fusion of human factors and IT, digital manufacturing, bio-manufacturing, chemical manufacturing, battery technology, medical technology, materials evaluation technology, information technology, and healthcare. AIST also operates the National Metrology Institute of Japan and the Geological Survey of Japan.

7. AISol is a corporation designated as a "Utilization Entity of Research and Development Results" pursuant to Article 34-6, paragraph (1), item (iii) of the Act on the Promotion of Science, Technology and Innovation Creation (the "Innovation Act").

8. Accordingly, AISol qualifies as a Utilization Entity of Research and Development Results pertaining to the outcomes of research and development conducted by AIST, as defined under the aforementioned provision of the Innovation Act. The incorporation of AISol, with a 100% capital contribution by AIST, was duly authorized by the Ministry of Economy, Trade, and Industry of Japan

9. AISol was formed to facilitate research and commercialization of research results. AISol develops research and commercialization projects with companies, universities, and other research institutions across seven different areas tied to the research-promotion functions of AIST, the technological assets that have been cultivated by AIST to date, and market needs. These areas are AI and semiconductor solutions, material DX solutions, digital platform solutions, energy solutions, circular economy solutions, biotech solutions, and wellbeing solutions.

10. AISol is also engaged in the formation of startup ventures that will further its goals of commercializing research results, carrying out proof-of-concept projects with a view to eventual implementation in society, and developing supply chains. AISol expects that these startup ventures will assist it to bring forth a sustainable society of the future.

11. AISol has put into practice a national innovation ecosystem by promoting businesses that leverage the intellectual property owned by AIST and AISol. AISol solicits the transfer of intellectual property from companies and other organizations, combines those assets with AIST's and AISol's homegrown IP portfolios, and licenses that technology to companies who commercialize it. Technology transfer proceeds are used to fund AIST's future research efforts, thereby encouraging the creation of new achievements. Research results funded by the proceeds from these IP licenses will be freely accessed by the companies and other organizations who participate in the ecosystem by transferring their own IP.

12. In May 2024, AISol launched a wholly owned subsidiary, AIST Solutions America LLC ("AISol America"), with its principal offices at 911 N. Bishop, Bldg. C, Suite 204, Wake Village, Texas 75501. Among other things, AISol America aims to further advance AISol's efforts to form research partnerships and support technology startups in a variety of areas.

13. For example, AISol America has partnered with the AR-TX Regional Economic Development Incorporation (AR-TX REDI) to "provide economic development services to local industries," to "connect[] local businesses with AIST's research results," to "facilitat[e] the commercialization of innovative technologies," and to "spur[] technological growth across the two-state [Arkansas-Texas] region." <https://www.einpresswire.com/article/755588662/aist-solutions-america-partners-with-ar-tx-redi-to-boost-tech-development-and-economic-growth-in-texas-arkansas-region>.

14. AISol and AISol America have also begun to form partnerships with universities in the East Texas region to provide engaging research opportunities for Texas students and professors while further advancing AISol's mission to promote research across a wide variety of today's most important technological areas contributing social challenges and commercialization of research results.

15. AISol's efforts to form research partnerships and support technology startups are supported in part by revenue derived from the licensing of its growing patent portfolio, including the patents asserted here.

TCL's Knowledge of AISol's Patent Portfolio

16. TCL has been aware of AISol's patents since at least November 8, 2024, when a letter (dated November 5, 2024) was delivered to Defendant TCL Electronics Holdings Ltd. That letter identified specific U.S. patents and specific TCL products that incorporated the patented technologies described in the identified patents.

17. AISol's November 2024 letter also notified TCL of its infringement of each of the patents asserted in this lawsuit by sale of the products accused here.

18. AISol's November 2024 letter further invited TCL to take a license to the identified patents, including those patents asserted here.

19. As of the filing of this Complaint, TCL has not responded to AISol's November 5 letter.

20. AISol had hoped that TCL would accept AISol's invitation to begin licensing negotiations for AISol's patent portfolio, and that the parties could reach a mutually beneficial solution. However, TCL's failure to respond has forced AISol to bring this action against TCL as

a result of TCL's knowing and ongoing infringement of AISol's patents, as further described herein.

21. Accordingly, AISol has filed this Complaint because TCL continues to make, use, import into the United States, sell in the United States, and offer for sale in the United States products incorporating AISol's patented technology without a license.

THE PARTIES

22. Plaintiff AIST Solutions Co. is a Japanese corporation with a registered place of business at 1-1-1, Umezono, Tsukuba, Ibaraki Prefecture, Japan.

23. Upon information and belief, TCL Industries Holdings Co., Limited ("TCL Industries Holdings") is a limited liability company registered in the People's Republic of China, with its principal place of business located at 22/F, TCL Technology Building, No. 17, the Huifeng Third Road, Zhongkai Hi-Tech Development District, Huizhou City, Guangdong, PRC, 516006.

24. TCL Industries Holdings may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

25. On information and belief, TCL Industries Holdings participates in the design, manufacture, sale, and/or offer for sale of the Accused Products.¹

¹ The "Accused Products" in this Complaint include at least TCL smartphone products (*e.g.*, TCL 50 XL 5G, TCL 50 XL NXTPAPER 5G, TCL 50 XE NXTPAPER 5G, TCL 50 XE 5G, TCL 50 LE, TCL 40 X 5G, TCL 40 XE 5G, TCL 40 XL, TCL 40 T, TCL 30 5G, TCL 30 V 5G, TCL 30 XE 5G, TCL 30 XL, TCL 30 SE, TCL 30 LE, TCL 30 Z, TCL 20 Pro 5G, TCL 20 A 5G, TCL 20 Ax 5G, TCL 20S, TCL 20 SE, TCL 20 XE, TCL 10 Pro, TCL 10 5G UW, TCL 10L, TCL ION X, TCL ION Z, TCL A30, TCL SIGNA, and TCL Stylus 5G) and TCL tablet products (*e.g.*, TAB Pro 5G, NXTPAPER 11, TAB 10 NXTPAPER 5G, TAB 10 GEN 2, TAB 10 5G, TABMAX 10.4, TAB 10s, TAB 8 LE, TAB 8 WiFi, TAB 8 SE, TAB 8 Plus, TAB, TAB DISNEY EDITION 2, TAB DISNEY EDITION, and TAB FAMILY EDITION).

26. Upon information and belief, TCL Electronics Holdings Limited (“TCL Electronics”) is a limited liability company duly organized and existing under the laws of the Cayman Islands, having an address of 5th Floor, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, New Territories, Hong Kong.

27. The registered address of TCL Electronics is P.O. Box 309, Ugland House, Grand Cayman, KY1-1104, Cayman Islands.

28. TCL Electronics may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

29. TCL Electronics is an indirect wholly-owned subsidiary of TCL Industries Holdings. TCL Electronics is involved in the manufacture and sales of TVs, smartphones, smart commercial displays, and smart home products, including the Accused Products.

30. TCL Electronics operates the website at <http://electronics.tcl.com>, and includes a Small-and-Medium-Sized Display unit, which oversees mobile communication devices and tablets, such as the Accused Products.

31. As noted in TCL Electronic’s 2023 Annual Report, it and its fellow TCL companies ranked fourth in smartphone shipments in the United States, and third in the United States for shipments of tablets.

32. Upon information and belief, TCL Communication Limited (“TCL Communication”) is a corporation duly organized and existing under the laws of China, having an address of 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, NT, Hong Kong.

33. TCL Communication may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

34. TCL Communication is involved in the manufacture and sale of smartphones and connective devices, and in the provision of related services. For example, TCL Communication applies for United States Federal Communication Commission (“FCC”) certifications for use of the Accused Products in the United States, and has declared to the FCC that it is the manufacturer of the Accused Products.

35. TCL Communication Technology Holdings Ltd. (“TCL Communications Tech.”) is a limited liability company registered in the People’s Republic of China, with its principal place of business located at 22/F, TCL Technology Building, No. 17, the Huifeng Third Road, Zhongkai Hi-Tech Development District, Huizhou City, Guangdong, PRC, 516006.

36. TCL Communications Tech. may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

37. On information and belief, TCL Communications Tech. participates in the design, manufacture, sale, and/or offer for sale of the Accused Products.

38. TCL Mobile International Limited (“TCL Mobile”) is a corporation duly organized and existing under the laws of Hong Kong, and conducts business from its corporate headquarters at 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong Science Park, Shatin, New Territories, Hong Kong.

39. TCL Mobile may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

40. TCL Mobile is indirectly the wholly owned subsidiary of TCL Electronics. Upon information and belief, TCL Mobile is engaged in the activity of importing and/or distributing mobile devices and other products, such as the Accused Products, and the rendering of related services.

41. Huizhou TCL Mobile Communication Co., Ltd. (“Huizhou TCL Mobile”) is a corporation duly organized and existing under the laws of the People’s Republic of China, and conducts business from its corporate headquarters at 86 Hechang 7th West Road, Zhongkai Hi-Tech Development Zone, Huizhou, Guangdong 516006, China.

42. Huizhou TCL Mobile may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

43. Huizhou TCL Mobile is indirectly the wholly owned subsidiary of TCL Electronics. Upon information and belief, Huizhou TCL Mobile is engaged in the activity of importing and/or distributing mobile devices and other products, such as the Accused Products, and the rendering of related services.

44. TCL Mobile Communication (HK) Company Limited (“TCL Mobile HK”) is a corporation duly organized and existing under the laws of Hong Kong, and conducts business from a principal place of business at 5/F, Building 22E, 22 Science Park East Avenue, Hong Kong

Science Park, Shatin, New Territories, Hong Kong. TCL Mobile HK may also be served with process by serving the Texas Secretary of State, 1019 Brazos Street, Austin, Texas 78701, as its agent for service because it engages in business in Texas but has not designated or maintained a resident agent for service of process in Texas as required by statute. This action arises out of that business.

45. TCL Mobile HK is indirectly the wholly owned subsidiary of TCL Electronics. Upon information and belief, TCL Mobile HK is engaged in the activity of importing and/or distributing mobile devices and other products, such as the Accused Products, and the rendering of related services.

46. These named Defendants (collectively, “TCL”) are part of an interrelated group of companies that together comprise one of the world’s largest manufacturers of televisions and smartphones and one of the leading sellers of televisions and smartphones in the United States, including the TCL brands.

47. TCL Electronics refers to itself and its subsidiaries as the “Group,” such as in its 2023 Annual Report, describes itself as “a world-leading consumer electronics company” and states that the Group is involved in the “Small-and-Medium-Sized Display” business, which includes the sale of smartphones and tablets in the United States.

48. The Defendants named here and their affiliates are part of the same corporate structure and distribution chain for the making, importing, offering to sell, selling, and using of the accused devices in the United States, including in the State of Texas generally and this Judicial District specifically. The Defendants named here and their affiliates are part of the same management, common ownership, advertising platforms, facilities, distribution chains and platforms, and accused product lines and products involving related technologies.

49. Thus, the Defendants named here and their affiliates operate as a unitary business venture and are jointly and severally liable for the acts of patent infringement alleged herein.

50. TCL has agents, for example authorized sellers and sales representatives, that offer to sell and sell products pertinent to this Complaint through the State of Texas, including in this Judicial District, and to consumers throughout this Judicial District, such as on <https://www.cspire.com/>; <https://www.amazon.com>; Walmart, 3302 Summerhill Rd Texarkana, Texas 75503; Walmart, 200 Wake Village Rd Wake Village, Texas 75501; and Verizon, 3902 Saint Michael Dr., Texarkana, Texas 75503.

51. The parties to this action are properly joined under 35 U.S.C. § 299 because of the right to relief asserted against Defendants jointly and severally arises out of the same series and transactions or occurrences relating to the making and using of the same products or processes. Additionally, questions of fact common to all Defendants will arise in this action.

NATURE OF THE ACTION, JURISDICTION, AND VENUE

52. AISol brings this action for patent infringement under the patent laws of the United States, 35 U.S.C. § 271 *et seq.*

53. This Court has subject matter jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a) because the action arises under the patent laws of the United States.

54. This Court has personal jurisdiction over Defendants pursuant to due process and/or the Texas Long Arm Statute because (1) Defendants conduct business and continue to do business in Texas; and (2) Defendants have committed acts of direct and indirect patent infringement in this Judicial District, the State of Texas, and elsewhere in the United States, including making, using, offering to sell, and/or selling accused products in Texas, and/or importing accused products into

Texas, including by Internet sales and sales via retail and wholesale stores, inducing others to commit acts of patent infringement in Texas, and/or committing at least a portion of any other infringing acts alleged herein.

55. In addition, or in the alternative, this Court has personal jurisdiction over Defendants pursuant to Fed. R. Civ. P. 4(k)(2).

56. This Court previously found that a number of Defendants are subject to personal jurisdiction in this forum. *See Canon, Inc. v. TCL Elecs. Holdings Ltd.*, No. 2:18-CV-00546-JRG, 2020 WL 1478356, at *3 (E.D. Tex. Mar. 25, 2020).

57. Additionally, a number of Defendants have admitted to personal jurisdiction in this forum in at least *Monument Peak Ventures, LLC v. TCL Electronics Holdings Ltd. f/k/a TCL Multimedia Technology Holdings, Ltd.*, No. 5:24-CV-00011-RWS-JBB, Dkt. 56 (E.D. Tex. Sept. 9, 2024).

58. Personal jurisdiction also exists specifically over each of the Defendants because they have overlapping executives, interlocking corporate structures, and close relationships as manufacturers, importers, and distributors of the Accused Products.

59. Venue is proper in the Eastern District of Texas pursuant to 28 U.S.C. §§ 1391(b), 1391(c), and 1400(b) because (1) Defendants have done and continue to do business in this Judicial District; (2) Defendants have committed and continue to commit acts of patent infringement in this Judicial District, including making, using, offering to sell, and/or selling accused products in this Judicial District, and/or importing accused products into this Judicial District, including by internet sales and sales via retail and wholesale stores, and/or inducing others to commit acts of patent infringement in this Judicial District; and (3) Defendants are foreign entities.

60. Venue is also proper as to each of the Defendants, each of which is organized under the laws of a foreign jurisdiction pursuant to 28 U.S.C. § 1391(c)(3).

COUNT 1 - INFRINGEMENT OF U.S. PATENT NO. 9,008,996

61. AISol incorporates all preceding paragraphs by reference.

62. U.S. Patent No. 9,008,996 (the “’996 Patent”) duly issued on April 14, 2015, and is entitled *Moving Body Positioning Device*. A copy of the ’996 Patent is attached as Exhibit 1.

63. AISol is the owner by assignment of the ’996 Patent and possesses all rights under the ’996 Patent, including the exclusive right to recover for past and future infringement.

64. Claim 1 of the ’996 Patent recites:

A moving body positioning apparatus comprising:

a section for detecting or measuring any of (i) whether or not a moving body is moving, (ii) a movement speed of the moving body, and (iii) a travel distance that the moving body has traveled;

a position acquiring section for acquiring a plurality of positions of the moving body as positioning results;

a processor configured to integrally process the positioning results inputted therein; and

a processor configured to preprocess the positioning results that are to be inputted into the processor configured to integrally process,

the processor configured to preprocess inputting the positioning results obtained from the position acquiring section into the processor configured to integrally process based on output from the section for detecting or measuring, wherein

a first state in which the moving body is moving is distinguished from a second state in which the moving body is not moving by the processor configured to preprocess;

a data processing of the positioning results performed in the second state is different from a data processing of the positioning results performed in the first state,

wherein, in the second state, the processor configured to preprocess presents an information indicative of an absence of an output; and

depending on whether the moving body is moving or not, a positioning result, which needs adjustment, is selected,

wherein based on the detected or measured any one of (i), (ii), or (iii), the travel distance that the moving body has traveled is determined, and when the determined travel distance is less than or equal to a predetermined threshold value, the processor configured to preprocess selects one of the positioning results, previously received, as a representative value inputted to the processor configured to integrally process.

65. TCL has directly infringed one or more claims of the '996 Patent in this Judicial District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale, and/or selling its telecommunications technology, including at least the Accused Products.

66. AISol reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused Products are identified to describe TCL's infringement and in no way limit the discovery and infringement allegations against TCL concerning other devices that incorporate the same or reasonably similar functionalities.

67. A detailed description of examples of how TCL infringes certain claims of the '996 Patent (both literally and under the doctrine of equivalents) is attached as Exhibit 2.

68. The foregoing features and capabilities of each of the Accused Products and TCL's description and/or demonstration thereof, including in user manuals and advertising, reflect TCL's direct infringement by satisfying every element of at least claim 1 of the '996 Patent under 35 U.S.C. § 271(a).

69. Further, TCL has indirectly infringed at least claim 1 of the '996 Patent in this Judicial District and elsewhere in the United States by, among other things, actively inducing the

use, offering for sale, selling, or importation of at least the Accused Products. TCL's actions aid others such as its partners, customers, clients, and end users to infringe by advertising and distributing the Accused Products, providing instruction materials, and obtaining product certification for sales of the Accused Products in the United States.

70. Customers of TCL who purchase the Accused Products and make, use, import, offer for sale and/or sell the Accused Products directly infringe the '996 Patent. TCL is therefore liable for infringement of the '996 Patent pursuant to 35 U.S.C. § 271(b).

71. TCL has been aware of the '996 Patent since, at least, November 8, 2024, by virtue of correspondence sent by AISol. By the time of trial, TCL will thus have known and intended (since receiving such notice), that its continued actions would actively induce the infringement of at least claim 1 of the '996 Patent.

72. TCL undertook, continued, and continues its infringing actions despite an objectively high likelihood that such activities infringed the '996 Patent, which has been duly issued by the USPTO, and is presumed valid.

73. For example, at least since it received AISol's letter on November 8, 2024, TCL has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '996 Patent, and yet it has taken no actions to avoid infringement or obtain a license to the '996 Patent. As such, TCL willfully infringes the '996 Patent.

74. AISol has been damaged by TCL's infringement of the '996 Patent.

COUNT 2 - INFRINGEMENT OF U.S. PATENT NO. 9,117,139

75. AISol incorporates all preceding paragraphs by reference.

76. U.S. Patent No. 9,117,139 (the "'139 Patent") duly issued on August 25, 2015, and is entitled *Video Processing Apparatus and Video Processing Method*. A copy of the '139 Patent is attached as Exhibit 3.

77. AISol is the owner by assignment of the '139 Patent and possesses all rights under the '139 Patent, including the exclusive right to recover for past and future infringement.

78. Claim 22 of the '139 Patent recites:

A video processing apparatus comprising:

a first determination unit that determines whether or not a distribution of luminance, which is obtained from luminance signals of video captured by an image capturing unit, satisfies a predetermined condition;

a first acquisition unit that acquires a number of pixels with a luminance value larger than a predetermined luminance value within a partial area defined in the video;

a second determination unit that determines whether or not a ratio of the number of pixels acquired by said first acquisition unit to a total number of pixels in the video is higher than a predetermined value; and

a night scene determination unit that determines that a scene captured by the image capturing unit is a night scene if said first determination unit determines that the predetermined condition is satisfied and if said second determination unit determines that the ratio is higher than the predetermined value.

79. TCL has directly infringed one or more claims of the '139 Patent in this Judicial District and elsewhere in Texas, including at least claim 22 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including at least the Accused Products. AISol reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused Products are identified to describe TCL's infringement and in no way limit the discovery and infringement allegations against TCL concerning other devices that incorporate the same or reasonably similar functionalities.

80. A detailed description of examples of how TCL infringes certain claims of the '139 Patent (both literally and under the doctrine of equivalents) is attached as Exhibit 4.

81. The foregoing features and capabilities of each of the Accused Products and TCL's description and/or demonstration thereof, including in user manuals and advertising, reflect TCL's direct infringement by satisfying every element of at least claim 22 of the '139 Patent under 35 U.S.C. § 271(a).

82. Further, TCL has indirectly infringed at least claim 22 of the '139 Patent in this Judicial District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused Products. TCL's actions aid others such as its partners, customers, clients, and end users to infringe by advertising and distributing the Accused Products, providing instruction materials, and obtaining product certification for sales of the Accused Products in the United States. Customers of TCL who purchase the Accused Products and make, use, import, offer for sale and/or sell the Accused Products directly infringe the '139 Patent. TCL is therefore liable for infringement of the '139 Patent pursuant to 35 U.S.C. § 271(b).

83. TCL has been aware of the '139 Patent since, at least, November 8, 2024, by virtue of correspondence sent by AISol. By the time of trial, TCL will thus have known and intended (since receiving such notice), that its continued actions would actively induce the infringement of at least claim 22 of the '139 Patent.

84. TCL undertook, continued, and continues its infringing actions despite an objectively high likelihood that such activities infringed the '139 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, at least since it received AISol's letter on November 8, 2024, TCL has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '139 Patent, and yet it has taken no

actions to avoid infringement or obtain a license to the '139 Patent. As such, TCL willfully infringes the '139 Patent.

85. AISol has been damaged by TCL's infringement of the '139 Patent.

COUNT 3 - INFRINGEMENT OF U.S. PATENT NO. 9,179,090

86. AISol incorporates all preceding paragraphs by reference.

87. U.S. Patent No. 9,179,090 (the "'090 Patent") duly issued on November 3, 2015, and is entitled *Moving Image Recording Device, Control Method Therefor, and Non-Transitory Computer Readable Storage Medium*. A copy of the '090 Patent is attached as Exhibit 5.

88. AISol is the owner by assignment of the '090 Patent and possesses all rights under the '090 Patent, including the exclusive right to recover for past and future infringement.

89. Claim 1 of the '090 Patent recites:

A moving image recording device comprising:

an instruction unit configured to receive an instruction from a user to superimpose an item on a moving image during taking or playing back of the moving image;

an item superimposition unit configured to superimpose the item over a portion of the moving image which is taken or played back after the reception of the instruction by the instruction unit; and

a control unit configured to determine a representative image in the moving image and perform control to store information indicating the representative image in association with the moving image,

wherein the control unit determines the representative image of the moving image based on a change in a superimposed state of the item superimposed over the taken or played back moving image so that an image over which the item has been superimposed is determined as the representative image.

90. TCL has directly infringed one or more claims of the '090 Patent in this Judicial District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its

telecommunications technology, including at least the Accused Products. AISol reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused Products are identified to describe TCL's infringement and in no way limit the discovery and infringement allegations against TCL concerning other devices that incorporate the same or reasonably similar functionalities.

91. A detailed description of examples of how TCL infringes certain claims of the '090 Patent (both literally and under the doctrine of equivalents) is attached as Exhibit 6.

92. The foregoing features and capabilities of each of the Accused Products and TCL's description and/or demonstration thereof, including in user manuals and advertising, reflect TCL's direct infringement by satisfying every element of at least claim 1 of the '090 Patent under 35 U.S.C. § 271(a).

93. Further, TCL has indirectly infringed at least claim 1 of the '090 Patent in this Judicial District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused Products. TCL's actions aid others such as its partners, customers, clients, and end users to infringe by advertising and distributing the Accused Products, providing instruction materials, and obtaining product certification for sales of the Accused Products in the United States. Customers of TCL who purchase the Accused Products and make, use, import, offer for sale and/or sell the Accused Products directly infringe the '090 Patent. TCL is therefore liable for infringement of the '090 Patent pursuant to 35 U.S.C. § 271(b).

94. TCL has been aware of the '090 Patent since, at least, November 8, 2024, by virtue of correspondence sent by AISol. By the time of trial, TCL will thus have known and intended

(since receiving such notice), that its continued actions would actively induce the infringement of at least claim 1 of the '090 Patent.

95. TCL undertook, continued, and continues its infringing actions despite an objectively high likelihood that such activities infringed the '090 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, at least since it received AISol's letter on November 8, 2024, TCL has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '090 Patent, and yet it has taken no actions to avoid infringement or obtain a license to the '090 Patent. As such, TCL willfully infringes the '090 Patent.

96. AISol has been damaged by TCL's infringement of the '090 Patent.

COUNT 4 - INFRINGEMENT OF U.S. PATENT NO. 9,584,676

97. AISol incorporates all preceding paragraphs by reference.

98. U.S. Patent No. 9,584,676 (the "'676 Patent") duly issued on February 28, 2017, and is entitled *Information Processing Apparatus and Control Method Therefor*. A copy of the '676 Patent is attached as Exhibit 7.

99. AISol is the owner by assignment of the '676 Patent and possesses all rights under the '676 Patent, including the exclusive right to recover for past and future infringement.

100. Claim 8 of the '676 Patent recites:

An information processing apparatus comprising:

a communication unit;

a non-transitory memory; and

a processor coupled to the memory, which executes the following:

receiving, via the communication unit, log data containing a plurality of position data and a plurality of corresponding time data;

receiving image data with which position data indicating an image capturing position and time data indicating an image capturing time are associated;

creating a locus by serially connecting the plurality of position data contained in the log data based on the time data contained in the log data;

correcting the locus by serially connecting the position data associated with the image data and the plurality of position data contained in the log data based on the time data associated with the image data and the time data contained in the log data so that the corrected locus shows a more precise route than the locus created based only on the log data; and

displaying the corrected locus on a display unit.

101. TCL has directly infringed one or more claims of the '676 Patent in this Judicial District and elsewhere in Texas, including at least claim 8 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including at least the Accused Products. AISol reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused Products are identified to describe TCL's infringement and in no way limit the discovery and infringement allegations against TCL concerning other devices that incorporate the same or reasonably similar functionalities.

102. A detailed description of examples of how TCL infringes certain claims of the '676 Patent (both literally and under the doctrine of equivalents) is attached as Exhibit 8.

103. The foregoing features and capabilities of each of the Accused Products and TCL's description and/or demonstration thereof, including in user manuals and advertising, reflect TCL's direct infringement by satisfying every element of at least claim 8 of the '676 Patent under 35 U.S.C. § 271(a).

104. Further, TCL has indirectly infringed at least claim 8 of the '676 Patent in this Judicial District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused Products. TCL's actions aid others such as its partners, customers, clients, and end users to infringe by advertising and distributing the Accused Products, providing instruction materials, and obtaining product certification for sales of the Accused Products in the United States. Customers of TCL who purchase the Accused Products and make, use, import, offer for sale and/or sell the Accused Products directly infringe the '676 Patent. TCL is therefore liable for infringement of the '676 Patent pursuant to 35 U.S.C. § 271(b).

105. TCL has been aware of the '676 Patent since, at least, November 8, 2024, by virtue of correspondence sent by AISol. By the time of trial, TCL will thus have known and intended (since receiving such notice), that its continued actions would actively induce the infringement of at least claim 8 of the '676 Patent.

106. TCL undertook, continued, and continues its infringing actions despite an objectively high likelihood that such activities infringed the '676 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, at least since it received AISol's letter on November 8, 2024, TCL has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '676 Patent, and yet it has taken no actions to avoid infringement or obtain a license to the '676 Patent. As such, TCL willfully infringes the '676 Patent.

107. AISol has been damaged by TCL's infringement of the '676 Patent.

COUNT 5 - INFRINGEMENT OF U.S. PATENT NO. 8,244,179

108. AISol incorporates all preceding paragraphs by reference.

109. U.S. Patent No. 8,244,179 (the “’179 Patent”) duly issued on August 14, 2012, and is entitled *Wireless Inter-Device Data Processing Configured Through Inter-Device Transmitted Data*. A copy of the ’179 Patent is attached as Exhibit 9.

110. AISol is the owner by assignment of the ’179 Patent and possesses all rights under the ’179 Patent, including the exclusive right to recover for past and future infringement.

111. Claim 49 of the ’179 Patent recites:

A wireless data processing apparatus comprising:

a communication transceiver to communicate primary data in at least one direction over at least one wireless communication channel;

a radio-frequency identification (RFID) transceiver to communicatively couple with an external data processing device over an RFID channel so as to communicate device-descriptive data in at least one direction therewith; and

a processor communicatively coupled to the communication transceiver and the RFID transceiver to interoperate with the external data processing device in accordance with the device-descriptive data via the primary data communicated over the wireless communication channel.

112. TCL has directly infringed one or more claims of the ’179 Patent in this Judicial District and elsewhere in Texas, including at least claim 49 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including at least the Accused Products. AISol reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused Products are identified to describe TCL’s infringement and in no way limit the discovery and infringement allegations against TCL concerning other devices that incorporate the same or reasonably similar functionalities.

113. A detailed description of examples of how TCL infringes certain claims of the '179 Patent (both literally and under the doctrine of equivalents) is attached as Exhibit 10.

114. The foregoing features and capabilities of each of the Accused Products and TCL's description and/or demonstration thereof, including in user manuals and advertising, reflect TCL's direct infringement by satisfying every element of at least claim 49 of the '179 Patent under 35 U.S.C. § 271(a).

115. Further, TCL has indirectly infringed at least claim 49 of the '179 Patent in this Judicial District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused Products. TCL's actions aid others such as its partners, customers, clients, and end users to infringe by advertising and distributing the Accused Products, providing instruction materials, and obtaining product certification for sales of the Accused Products in the United States. Customers of TCL who purchase the Accused Products and make, use, import, offer for sale and/or sell the Accused Products directly infringe the '179 Patent. TCL is therefore liable for infringement of the '179 Patent pursuant to 35 U.S.C. § 271(b).

116. TCL has been aware of the '179 Patent since, at least, November 8, 2024, by virtue of correspondence sent by AISol. By the time of trial, TCL will thus have known and intended (since receiving such notice), that its continued actions would actively induce the infringement of at least claim 49 of the '179 Patent.

117. TCL undertook, continued, and continues its infringing actions despite an objectively high likelihood that such activities infringed the '179 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, at least since it received AISol's letter on November 8, 2024, TCL has been aware of an objectively high likelihood that its actions

constituted and continue to constitute infringement of the '179 Patent, and yet it has taken no actions to avoid infringement or obtain a license to the '179 Patent. As such, TCL willfully infringes the '179 Patent.

118. AISol has been damaged by TCL's infringement of the '179 Patent.

COUNT 6 - INFRINGEMENT OF U.S. PATENT NO. 8,400,521

119. AISol incorporates all preceding paragraphs by reference.

120. U.S. Patent No. 8,400,521 (the "'521 Patent") duly issued on March 19, 2013, and is entitled *Electronic Camera*. A copy of the '521 Patent is attached as Exhibit 11.

121. AISol is the owner by assignment of the '521 Patent and possesses all rights under the '521 Patent, including the exclusive right to recover for past and future infringement.

122. Claim 1 of the '521 Patent recites:

An electronic camera, comprising:

an imager, having an imaging surface capturing a scene, which repeatedly outputs a scene image;

an extractor which extracts a specific reference image coincident with a partial image outputted from said imager corresponding to a predetermined area allocated to the imaging surface, from among a plurality of reference images;

an adjuster which executes a process of adjusting an exposure amount of the imaging surface by emphasizing the predetermined area in parallel with an extraction process of said extractor;

an identifier which identifies a color of an object equivalent to the partial image noticed by said extractor, corresponding to extracting the specific reference image by said extractor;

a corrector which executes a process of correcting a tonality of the scene image outputted from said imager with reference to an identified result of said identifier, in place of the extraction process of said extractor; and

a searcher which searches for a partial image coincident with the specific reference image extracted by said extractor from the scene image having the tonality corrected by said corrector.

123. TCL has directly infringed one or more claims of the '521 Patent in this Judicial District and elsewhere in Texas, including at least claim 1 literally and/or under the doctrine of equivalents, by or through making, using, importing, offering for sale and/or selling its telecommunications technology, including at least the Accused Products. AISol reserves the right to discover and pursue any additional infringing devices that incorporate infringing functionalities. For the avoidance of doubt, the Accused Products are identified to describe TCL's infringement and in no way limit the discovery and infringement allegations against TCL concerning other devices that incorporate the same or reasonably similar functionalities.

124. A detailed description of examples of how TCL infringes certain claims of the '521 Patent (both literally and under the doctrine of equivalents) is attached as Exhibit 12.

125. The foregoing features and capabilities of each of the Accused Products and TCL's description and/or demonstration thereof, including in user manuals and advertising, reflect TCL's direct infringement by satisfying every element of at least claim 1 of the '521 Patent under 35 U.S.C. § 271(a).

126. Further, TCL has indirectly infringed at least claim 1 of the '521 Patent in this Judicial District and elsewhere in the United States by, among other things, actively inducing the use, offering for sale, selling, or importation of at least the Accused Products. TCL's actions aid others such as its partners, customers, clients, and end users to infringe by advertising and distributing the Accused Products, providing instruction materials, and obtaining product certification for sales of the Accused Products in the United States. Customers of TCL who purchase the Accused Products and make, use, import, offer for sale and/or sell the Accused

Products directly infringe the '521 Patent. TCL is therefore liable for infringement of the '521 Patent pursuant to 35 U.S.C. § 271(b).

127. TCL has been aware of the '521 Patent since, at least, November 8, 2024, by virtue of correspondence sent by AISol. By the time of trial, TCL will thus have known and intended (since receiving such notice), that its continued actions would actively induce infringement of at least claim 1 of the '521 Patent.

128. TCL undertook, continued, and continues its infringing actions despite an objectively high likelihood that such activities infringed the '521 Patent, which has been duly issued by the USPTO, and is presumed valid. For example, at least since it received AISol's letter on November 8, 2024, TCL has been aware of an objectively high likelihood that its actions constituted and continue to constitute infringement of the '521 Patent, and yet it has taken no actions to avoid infringement or obtain a license to the '521 Patent. As such, TCL willfully infringes the '521 Patent.

129. AISol has been damaged by TCL's infringement of the '521 Patent.

PRAYER FOR RELIEF

WHEREFORE, AISol prays for relief as follows:

130. A judgment declaring that TCL has infringed and is infringing one or more claims of the '996, '139, '090, '676, '179, and '521 Patents;

131. A judgment awarding AISol damages as a result of TCL's infringement of one or more claims of the '996, '139, '090, '676, '179, and '521 Patents, together with interest and costs, consistent with lost profits and in no event less than a reasonable royalty;

132. A judgment awarding AISol treble damages and pre-judgment interest under 35 U.S.C. § 284 as a result of TCL's willful and deliberate infringement of one or more claims of the '996, '139, '090, '676, '179, and '521 Patents;

133. A judgment declaring that this case is exceptional and awarding AISol its expenses, costs, and attorneys' fees in accordance with 35 U.S.C. §§ 284 and 285 and Rule 54(d) of the Federal Rules of Civil Procedure;

134. A grant of a permanent injunction enjoining Defendants from further acts of infringement of one or more claims of the '996, '139, '090, '676, '179, and '521 Patents; and

135. Such other and further relief as the Court deems just and proper.

JURY TRIAL DEMANDED

AISol hereby demands a trial by jury.

Dated: April 21, 2025

By: /s/ Bryan Nese

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