

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF DELAWARE**

WI-LAN INC.,

Plaintiff,

v.

**MEDIATEK, INC.,
MEDIATEK USA, INC., and
MSTAR SEMICONDUCTOR, INC.**

Defendants.

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C.A. No. _____

JURY TRIAL DEMANDED

PLAINTIFF’S ORIGINAL COMPLAINT

Plaintiff Wi-LAN Inc., by and through its undersigned counsel, files this Original Complaint for Patent Infringement against Defendants MediaTek Inc., MediaTek USA, Inc., (collectively “MediaTek”) and MStar Semiconductor Inc. (“MStar”) (and collectively, “Defendants”).

THE PARTIES

1. Plaintiff Wi-LAN Inc. (“Wi-LAN”) is a corporation formed under the laws of the country of Canada with its principal place of business at 303 Terry Fox Drive, Suite 300, Ottawa, Ontario, Canada, K2K 3J1. Wi-LAN is a leading technology innovation and licensing business actively engaged in research, development, and licensing of new technologies.

2. Upon information and belief, Defendant MediaTek, Inc. is a corporation organized and existing under the laws of Taiwan, with its principal place of business located at No. 1, Dusing Rd. 1, Hsinchu Science Park, Hsinchu City 30078, Taiwan.

3. Upon information and belief, Defendant MediaTek USA, Inc. is a corporation organized and existing under the laws of Delaware, with its principal place of business located at 2860 Junction Ave., San Jose, CA 95134. Defendant MediaTek USA Inc. may be served through

its registered agent for service of process The Corporation Trust Company, Corporation Trust Center, 1209 Orange St., Wilmington, DE 19801.

4. Upon information and belief, MStar Semiconductor, Inc. is a corporation organized under the laws of Taiwan with its principal place of business at 4F-1, No. 26, Tai-Yuan Street, ChuPei Hsinchu Hsien 302, Taiwan. On information and belief, MStar Semiconductor, Inc. is a subsidiary of MediaTek, Inc. MStar Semiconductor, Inc., may be served its registered agent for service of process, MStar Semiconductor Inc., 4F-1, No. 26, Tai-Yuan Street, ChuPei Hsinchu Hsein 302, Taiwan, c/o MediaTek USA Inc., C T Corporation System, 818 W 7th St., Suite 930, Los Angeles, CA 90017.

5. Upon information and belief, MediaTek, Inc. is the parent of MediaTek USA, Inc.

6. Upon information and belief, MStar Semiconductor, Inc. was merged with MediaTek, Inc. on February 1, 2014 and is now a wholly-owned subsidiary of MediaTek, Inc.

7. Upon information and belief, Defendants have conducted, and regularly conduct, business within this District, have purposefully availed themselves of the privileges of conducting business in this District, and has sought protection and benefit from the laws of the State of Delaware.

JURISDICTION AND VENUE

8. This action arises under the Patent Laws of the United States, 35 U.S.C. § 1, *et seq.*, including 35 U.S.C. §§ 271, 281, 283, 284, and 285. This Court has subject matter jurisdiction over this case for patent infringement under 28 U.S.C. §§ 1331 and 1338(a).

9. As further detailed herein, this Court has personal jurisdiction over MediaTek USA, Inc. MediaTek USA, Inc., is amenable to service of summons for this action. Furthermore, personal jurisdiction over MediaTek USA, Inc., in this action comports with due process. MediaTek USA, Inc., has conducted and regularly conducts business within the United States

and this District. MediaTek USA, Inc., has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in Delaware and this District. MediaTek USA, Inc., has sought protection and benefit from the laws of the State of Delaware by incorporating in Delaware and placing infringing products into the stream of commerce through an established distribution channel with the awareness and/or intent that they will be purchased by consumers in this District.

10. MediaTek USA, Inc.—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents—ships, distributes, offers for sale, and/or sells its products in the United States and this District. MediaTek USA, Inc., has purposefully and voluntarily placed one or more of its infringing products, as described below, into the stream of commerce with the awareness and/or intent that they will be purchased by consumers in this District. MediaTek USA, Inc., knowingly and purposefully ships infringing products into and within this District through an established distribution channel. These infringing products have been and continue to be purchased by consumers in this District. Upon information and belief, through those activities, MediaTek USA, Inc., has committed the tort of patent infringement in this District and/or has induced others to commit patent infringement in this District. Plaintiff's cause of action for patent infringement arises directly from MediaTek USA, Inc.'s activities in this District.

11. As further detailed herein, this Court has personal jurisdiction over MediaTek, Inc. MediaTek, Inc., is amenable to service of summons for this action. Furthermore, personal jurisdiction over MediaTek, Inc., in this action comports with due process. MediaTek, Inc., has conducted and regularly conducts business within the United States and this District. MediaTek, Inc., has purposefully availed itself of the privileges of conducting business in the United States,

and more specifically in Delaware and this District. MediaTek, Inc., has sought protection and benefit from the laws of the State of Delaware by maintaining offices of its United States subsidiaries in Delaware and/or by placing infringing products into the stream of commerce through an established distribution channel with the awareness and/or intent that they will be purchased by consumers in this District.

12. MediaTek, Inc.—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents—ships, distributes, offers for sale, and/or sells its products in the United States and this District. MediaTek, Inc., has purposefully and voluntarily placed one or more of its infringing products, as described below, into the stream of commerce with the awareness and/or intent that they will be purchased by consumers in this District. MediaTek, Inc., knowingly and purposefully ships infringing products into and within this District through an established distribution channel. These infringing products have been and continue to be purchased by consumers in this District. Upon information and belief, through those activities, MediaTek, Inc., has committed the tort of patent infringement in this District and/or has induced others to commit patent infringement in this District. Plaintiff’s cause of action for patent infringement arises directly from MediaTek, Inc.’s activities in this District.

13. As further detailed herein, this Court has personal jurisdiction over MStar Semiconductor, Inc. MStar Semiconductor, Inc., is amenable to service of summons for this action. Furthermore, personal jurisdiction over MStar Semiconductor, Inc., in this action comports with due process. MStar Semiconductor, Inc., has conducted and regularly conducts business within the United States and this District. MStar Semiconductor, Inc., has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in Delaware and this District. MStar Semiconductor, Inc., has sought protection and benefit from

the laws of the State of Delaware by placing infringing products into the stream of commerce through an established distribution channel with the awareness and/or intent that they will be purchased by consumers in this District.

14. MStar Semiconductor, Inc.—directly or through intermediaries (including distributors, retailers, and others), subsidiaries, alter egos, and/or agents—ships, distributes, offers for sale, and/or sells its products in the United States and this District. MStar Semiconductor, Inc., has purposefully and voluntarily placed one or more of its infringing products, as described below, into the stream of commerce with the awareness and/or intent that they will be purchased by consumers in this District. MStar Semiconductor, Inc., knowingly and purposefully ships infringing products into and within this District through an established distribution channel. These infringing products have been and continue to be purchased by consumers in this District. Upon information and belief, through those activities, MStar Semiconductor, Inc., has committed the tort of patent infringement in this District and/or has induced others to commit patent infringement in this District. Plaintiff's cause of action for patent infringement arises directly from MStar Semiconductor, Inc.'s activities in this District.

15. Venue is proper in this Court according to the venue provisions set forth by 28 U.S.C. §§ 1391(b)-(d) and 1400(b). MediaTek, Inc., MediaTek USA, Inc., and MStar Semiconductor, Inc., are subject to personal jurisdiction in this District, and therefore are deemed to reside in this District for purposes of venue. Upon information and belief, MediaTek, Inc., MediaTek USA, Inc., and MStar Semiconductor, Inc., have committed acts within this Judicial District giving rise to this action and does business in this District, including but not limited to making sales in this District, providing service and support to their respective customers in this

District, and/or operating an interactive website, available to persons in this District that advertises, markets, and/or offers for sale infringing products.

BACKGROUND

A. The Patent-In-Suit.

16. U.S. Patent No. 6,359,654 titled “Methods and Systems for Displaying Interlaced Video on Non-Interlaced Monitors” (“the ’654 patent”) was duly and legally issued by the U.S. Patent and Trademark Office on March 19, 2002, after full and fair examination. Stephen G. Glennon, David A. G. Wilson, Michael J. Brunolli, and Benjamin Edwin Felts, III are the named inventors listed on the ’654 patent. The ’654 patent has been assigned to Plaintiff Wi-LAN Inc., and Plaintiff Wi-LAN Inc. holds all rights, title, and interest in the ’654 patent, including the right to collect and receive damages for past, present and future infringements. A true and correct copy of the ’654 patent is attached as **Exhibit A** and made a part hereof.

17. By assignment, Wi-LAN Inc. owns all right, title, and interest in and to the ’654 patent (“the Patent-in-Suit”).

B. Defendants’ Infringing Conduct.

18. Upon information and belief, Defendants make, use, offer to sell, and/or sell within, and/or import into the United States chips that incorporate the fundamental technologies covered by the ’654 patent. By way of example only, Plaintiff identifies the following MediaTek (MT) and MStar (MSD) branded chips or chipsets as infringing products of one or more claims of the Patent-in-Suit: MT5376, MT5380, MT5381, MT5382, MT5385, MT5387, MT5388, MT5389, MT5391, MT5392, MT5395, MT5396, MT5580, MT5590, MT5595, MSD95C, MSD3393, MSD3402, MSD6308, MSD8220 and all similar models, including all chips or chipsets that implement Defendant’s MDDi de-interlacing process (the “Defendants’ Infringing Products”).

19. By incorporating the fundamental inventions covered by the '654 patent, the Defendants can make the Defendants' Infringing Products that improve end product features, including but not limited to, accurate display of interlaced video on a non-interlaced display.

20. Upon information and belief, third-parties purchase and have purchased Defendants' Infringing Products for sale or importation into the United States, including this District. Upon information and belief, third-parties use and have used Defendants' Infringing Products (or products incorporating Defendants' Infringing Products) in the United States, including this District.

COUNT I

Patent Infringement of U.S. Patent No. 6,359,654

21. Plaintiff repeats and re-alleges each and every allegation of paragraphs 1-20 as though fully set forth herein.

22. The '654 patent is valid and enforceable. Indeed, the Patent Trial and Appeals Board ("PTAB") recently denied institution of a petition for *inter partes* review filed by a customer of the Defendants who have been accused of infringement purchase and use of Defendants' Infringing Products, Sharp Corporation and Sharp Electronics Corporation, in Case No. IPR2016-00010. *Decision Denying Institution of Inter Partes Review*, Case IPR2016-00010, April 1, 2016.

23. Defendants have never been licensed, either expressly or impliedly, under the '654 patent.

23. Upon information and belief, to the extent any marking or notice was required by 35 U.S.C. § 287, Plaintiff has complied with the requirements of that statute by providing actual or constructive notice to Defendant of its alleged infringement. Upon information and belief, if necessary under applicable law, and to the extent required under applicable law, Plaintiff

provides that any express licensees of the '654 patent have complied with the marking requirements of 35 U.S.C. § 287, if required to, related to all goods made, offered for sale, sold within, and/or imported into the United States that actually practice one or more claims of that patent.

24. Upon information and belief, Defendants have been directly infringing under 35 U.S.C. § 271(a), either literally or under the doctrine of equivalents, and/or indirectly infringing (by inducing infringement with specific intent under 35 U.S.C. § 271(b) or contributing to the infringement under 35 U.S.C. § 271(c)) the '654 patent by making, using, offering to sell, and/or selling to third-party manufacturers, distributors, and/or consumers (directly or through intermediaries and/or subsidiaries) in this District and elsewhere within the United States and/or importing into the United States, without authority, the Defendants' Infringing Products, and/or other products made, used, sold, offered for sale, or imported by Defendants that include and/or perform all of the limitations of one or more claims of the '654 patent.

25. For example, the Defendants' Infringing Products each practice the patented method identified in claim 1 as part of the de-interlacing process that is implemented on each infringing product. Specifically, each Defendants' Infringing Products implement a de-interlacing procedure, including, for example, the MDDi de-interlace process, which is used for displaying interlaced video data on a non-interlaced monitor. Each of the Defendants' Infringing Products performs each of the following steps recited by claim 1: (1) capturing a first field and a second field of each pair of fields into respective buffers; (2) scaling each of the first field and second field of each pair of fields to fill vertical resolution of the non-interlaced monitor; and (3) adjusting one of the first field or second field of the pair of fields to substantially correct for the vertical offset between the pairs of fields, where said adjusting is performed concurrently with

said scaling. Further, when the Defendants' Infringing Products are connected to, or incorporated with, a display device (*e.g.*, a digital television), the following steps of claim 1 are also performed: (4) displaying the first field of each pair of fields on the non-interlaced monitor for a first time period; and (5) displaying the second field of each pair of fields on the non-interlaced monitor in a second time period subsequent to the first time period.

26. Upon information and belief, third-parties, including but not limited to manufacturers (original equipment manufacturers and/or original design manufactures), distributors, and consumers that purchase the Defendants' Infringing Products, or products incorporating the Defendants' Infringing Products, that include and/or perform all of the limitations of one or more claims of the '654 patent, also directly infringe, either literally or under the doctrine of equivalents, under 35 U.S.C. § 271(a), the '654 patent by using, offering to sell, and/or selling infringing Defendants' Infringing Products, or products containing Defendants' Infringing Products, in this District and elsewhere in the United States.

27. Upon information and belief, Defendants had knowledge of the '654 patent and its infringing conduct at least since May 11, 2015 or soon thereafter when Wi-LAN filed a patent infringement lawsuit asserting the '654 patent against Defendants' customers Sharp Corporation and Sharp Electronics Corporation (collectively, "Sharp"), Vizio, Inc. ("Vizio"), OnCorp US., Inc., and On Corporation, Inc. ("OnCorp"). *See e.g., Wi-LAN Inc. v. Sharp Corp. et al.*, Case No. 1:15-CV-0379 (Del. May 11, 2015) (Lead Case). In connection with that lawsuit, upon information and belief, Sharp (and other defendants) requested indemnification from Defendants for Wi-LAN's claims of infringement on the '654 patent against the customers' products incorporating Defendants' Infringing Products. In addition, since early 2016, Defendants have been on notice of this case given the subpoena issued on it out of this Court under Federal Rule

of Civil Procedure 45, and related to the Sharp, Vizio, and OnCorp cases. Moreover, on information and belief, MStar and/or Defendants had knowledge of the '654 patent, as a result of WiLAN's lawsuit against Toshiba (*Wi-LAN USA, Inc. et al v. Toshiba Corporation et al.*, Case No. 1:12-cv-23744-DMM, Federal District Court, Southern District of Florida), which included MStar's chips (i.e., Defendants' Infringing Products) in Toshiba accused products (e.g., Toshiba television model no. 58L7350U and MStar MSD8881CV). As a result (as well as through notice of the initial lawsuit filed against Defendants' customers), Defendants were formally placed on notice of its infringement of the '654 patent.

28. Upon information and belief, since at least the above-mentioned dates when Defendants were placed on formal notice of its infringement, Defendants actively induced infringement under 35 U.S.C. § 271(b) and/or contributed to infringement under 35 U.S.C. § 271(c), by third-party manufacturers, distributors, importers and/or consumers of one or more claims of the '654 patent.

29. Since at least the notice provided on the above-mentioned dates, Defendants have done so with knowledge, or with willful blindness of the fact, that the induced acts constitute infringement of the '654 patent. Upon information and belief, Defendants intend to cause infringement by these third-party manufacturers, distributors, importers, and/or consumers. Defendants have taken affirmative steps to induce their infringement by, *inter alia*, creating advertisements that promote the infringing use of Defendants' Infringing Products, creating established distribution channels for these products into and within the United States, purchasing these products, manufacturing these products in conformity with U.S. laws and regulations, distributing or making available instructions or manuals for these products to purchasers and prospective buyers, developing infringing source code that is incorporated into Defendants'

Infringing Products in an executable format for the purpose of deriving the benefits of the patented functionality when said chips are incorporated into the end products of Defendants' customers, including but not limited to digital televisions, and/or providing technical support, replacement parts, or services for these products to these purchasers in the United States.

30. Additionally, Defendants know, and have known, that the Defendants' Infringing Products include proprietary hardware components and software instructions that work in concert to perform specific, intended functions. Such specific, intended functions, carried out by these hardware and software combinations, are a material part of the inventions of the '654 patent and are not staple articles of commerce suitable for substantial non-infringing use.

31. Specifically, each of the Defendants' Infringing Products contain at least a processor implementing, in combination with software instructions, functionality that is specifically programmed and/or configured to perform the de-interlacing process claimed in the '654 patent. Upon information and belief, the Defendants' Infringing Products contain discrete code that uniquely provides this functionality. The code, which is configured to control the incorporated processor and other components for performing these functions, is a material part of the inventions of the '654 patent and there is no substantial non-infringing use for this combination of hardware and software components.

32. Upon information and belief, Defendants' acts of infringement of the '654 patent have been willful and intentional pursuant to the standard enunciated by the United States Supreme Court in *Halo Elecs., Inc. v. Pulse Elecs., Inc.*, 136 S. Ct. 1923 (2016). Specifically, Defendants have had knowledge that the Defendants' Infringing Products infringe the '654 patent since the above-mentioned dates and have taken no actions to mitigate or modify the infringing functionality that it incorporates into its chipsets and sells, offers to sell, and/or

imports to its customers. Upon information and belief, Defendants were notified of its infringement through at least requests for indemnification from its customers that were notified directly by Wi-LAN of the infringing features implemented in the customer's end products through incorporation of the Defendants' Infringing Products. Specifically, upon information and belief, Defendants have received requests for indemnification regarding Wi-LAN's allegations of infringement regarding Sharp, Vizio, and OnCorp digital televisions that incorporate the infringing functionality into their products by, at least, including one or more of the Defendants' Infringing Products in their products. In addition, Defendants have been on notice of infringement as a result of Plaintiff's prior case against Toshiba, as detailed herein, as well as through service of a subpoena in the related customer cases, as discussed in the foregoing. Because Defendants have failed to take any action in response to its notification of infringement of the '654 patent, its actions since that time constitute willful and intentional infringement of Wi-LAN's protected rights.

33. As a direct and proximate result of these acts of patent infringement, Defendants have encroached on the exclusive rights of Plaintiff and its licensees to practice the '654 patent, for which Plaintiff is entitled to at least a reasonable royalty.

JOINDER OF PARTIES

34. Plaintiff incorporates paragraphs 1 through 33 herein by reference.

35. MediaTek, Inc., MediaTek USA, Inc., and MStar Semiconductor, Inc. are jointly and severally liable for the alleged infringements set forth in Count I.

36. The alleged infringements set forth in Count I arise out of the same transaction, occurrence, or series of transactions or occurrences relating to the testing, making, using,

offering for sale, selling, and/or importing of the Defendants' Infringing Products made the subject of Count I.

37. Questions of fact common to all Defendants will arise in this action including, for example, infringement by, or through use of, Defendants' Infringing Products.

38. Thus, joinder of MediaTek, Inc., MediaTek USA, Inc., and MStar Semiconductor Inc. is proper in this litigation pursuant to 35 U.S.C. § 299(a).

CONCLUSION

39. Plaintiff is entitled to recover from Defendant the damages sustained by Plaintiff as a result of Defendant's wrongful acts in an amount subject to proof at trial, which, by law, cannot be less than a reasonable royalty, together with interest and costs as fixed by this Court.

40. Plaintiff has incurred and will incur attorneys' fees, costs, and expenses in the prosecution of this action. The circumstances of this dispute create an exceptional case within the meaning of 35 U.S.C. § 285, and Plaintiff is entitled to recover its reasonable and necessary attorneys' fees, costs, and expenses.

JURY DEMAND

41. Plaintiff hereby requests a trial by jury pursuant to Rule 38 of the Federal Rules of Civil Procedure.

PRAYER FOR RELIEF

42. Plaintiff respectfully requests that the Court find in its favor and against Defendant, and that the Court grants Plaintiff the following relief:

- A. A judgment that Defendants have infringed the Patent-in-Suit as alleged herein, directly and/or indirectly by way of inducing and/or contributing to infringement of such patent;

- B. A judgment for an accounting of all damages sustained by Plaintiff as a result of the acts of infringement by Defendants;
- C. A judgment and order requiring Defendants to pay Plaintiff damages under 35 U.S.C. § 284, including up to treble damages for willful infringement as provided by 35 U.S.C. § 284, and any royalties determined to be appropriate;
- D. A permanent injunction enjoining Defendants and its officers, directors, agents, servants, employees, affiliates, divisions, branches, subsidiaries, parents and all others acting in concert or privity with them from direct and/or indirect infringement of the Patents-in-Suit pursuant to 35 U.S.C. § 283;
- E. A judgment and order requiring Defendants to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;
- F. A judgment and order finding this to be an exceptional case and requiring Defendants to pay the costs of this action (including all disbursements) and attorneys' fees as provided by 35 U.S.C. § 285; and
- G. Such other and further relief as the Court deems just and equitable.

Dated: May 11, 2017

Respectfully submitted,

Of Counsel:

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