

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

VANTAGE MICRO LLC,

Plaintiff,

v.

**MEDIATEK USA INC. and MEDIATEK
INC.,**

Defendants.

Civil Action No. 6:19-cv-00580

DEMAND FOR JURY TRIAL

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Vantage Micro LLC (“Vantage Micro” or “Plaintiff”) hereby alleges for its Complaint for patent infringement against Defendants MediaTek USA Inc. (“MediaTek USA”) and MediaTek Inc. (“MediaTek Inc.”) (collectively “MediaTek” or “Defendant”) on personal knowledge as to its own actions and on information and belief as to the actions of others, as follows:

NATURE OF THE ACTION

1. This is an action for patent infringement arising under the Patent Laws of the United States, 35 U.S.C. § 1 *et seq.*

THE PARTIES

2. Plaintiff Vantage Micro is a limited liability company organized under the laws of the State of Delaware, with its principal place of business at 717 North Union Street, Suite 9, Wilmington, DE 19805.

3. On information and belief, Defendant MediaTek Inc. is a foreign entity organized under the laws of Taiwan headquartered at No. 1, Dusing 1st Rd., Hsinchu Science Park, Hsinchu 30078, Taiwan.

4. On information and belief, Defendant MediaTek USA is a Delaware corporation with a place of business at 5914 West Courtyard Drive, Austin, Texas 78730 that is a subsidiary of MediaTek Inc. Upon information and belief, MediaTek USA is authorized to do business in Texas and may be served through its registered agent CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201.

5. Defendant MediaTek Inc. is a fabless semiconductor company that designs, develops, produces, manufactures, and markets integrated circuits with software and hardware application design, test, maintenance, and technical consultation services. MediaTek Inc. specializes in system-on-a-chip solutions enabling wireless communication compliant with communication standards such as LTE and Bluetooth and imports integrated circuits for sale, use, and distribution in the United States. MediaTek USA provides sales, research, and promotional support for MediaTek Inc.'s products in the United States.

6. On information and belief, MediaTek designs, develops, manufactures, sells, offers to sell, and/or imports products, devices, systems, and/or components of systems that either infringe or support the infringement of the patents asserted in this action as described herein for a wide range of products, devices, systems, and/or components of systems, including mobile devices (e.g., mobile phones and personal laptops), desktops, workstations, televisions, and other consumer products.

7. On information and belief, MediaTek sells and offers to sell products and services throughout the United States, including in this District, through its website, through major

electronics retailers in North America, and in concert and partnership with third parties who sell mobile phones, personal computers, servers, notebook computers, televisions, DVD players, and other consumer media products.

8. On information and belief, MediaTek conducts a significant amount of business in Texas and this District through online sales and advertisements directly to consumers, through product sales by MediaTek's distributors and resellers, and in concert and partnership with third parties.

9. Vantage Micro is the assignee and owner of the patents at issue in this action: U.S. Patents Nos. 6,678,838, 7,414,606, and 9,959,593 (collectively, the "Asserted Patents"). Vantage Micro holds all substantial rights, title, and interest in the Asserted Patents, as described below, including the exclusive right to sue Defendant for infringement and recover damages, including damages for past infringement.

10. Vantage Micro seeks monetary damages and prejudgment interest for Defendant MediaTek's past and ongoing direct and indirect infringement of the Asserted Patents.

JURISDICTION AND VENUE

11. This action for patent infringement arises under the patent laws of the United States, Title 35 of the United States Code.

12. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

13. This Court has personal jurisdiction over MediaTek USA and MediaTek, Inc. because those companies have sufficient minimum contacts with the forum as a result of business conducted within the State of Texas and within the Western District of Texas. For example, MediaTek USA has a place of business at 5914 West Courtyard Drive, Austin, Texas 78730. Personal jurisdiction also exists specifically over MediaTek USA because that company, directly or through subsidiaries or intermediaries, make, use, offer for sale, or sell products or

services within the State of Texas and within the Western District of Texas that directly or indirectly infringe the Asserted Patents (as discussed further below).

14. Furthermore, personal jurisdiction over MediaTek in this action comports with due process. MediaTek has conducted and regularly conducts business within the United States and this District. MediaTek has purposefully availed itself of the privileges of conducting business in the United States, and more specifically in the State of Texas and this District. MediaTek has sought protection and benefit from the laws of the State of Texas by placing products into the stream of commerce through an established distribution channel that infringe the Asserted Patents with the awareness and/or intent that they will be purchased by consumers in this District. Having purposefully availed itself of the privilege of conducting business within this District, MediaTek should reasonably and fairly anticipate being brought into court here.

15. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400(b) at least because the MediaTek entities are foreign corporations and are subject to personal jurisdiction in this district and/or have regularly conducted business in this District, and because certain of the acts complained of herein occurred in this District. Additionally, MediaTek—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 has purposefully and voluntarily placed one or more of its products into the stream of commerce that infringe the Asserted Patents with the awareness and/or intent that they will be purchased by consumers in this District. MediaTek 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 and businesses in this District.

THE ASSERTED PATENTS

16. On January 13, 2004, the United States Patent and Trademark Office (“USPTO”) duly and legally issued U.S. Patent No. 6,678,838 (“the ’838 Patent”), entitled “Method to Track Master Contribution Information in a Write Buffer.” A copy of the ’838 Patent is attached hereto as Exhibit 1.

17. Vantage Micro owns all substantial right, title, and interest in the ’838 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

18. On August 19, 2008, the USPTO duly and legally issued U.S. Patent No. 7,414,606 (“the ’606 Patent”), entitled “Method and Apparatus for Detecting a Flat Panel Display Monitor.” A copy of the ’606 Patent is attached hereto as Exhibit 2.

19. Vantage Micro owns all substantial right, title, and interest in the ’606 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

20. On May 1, 20018, the USPTO duly and legally issued U.S. Patent No. 9,959,593 (“the ’593 Patent”), entitled “Memory Controller Having Plurality of Channels that Provides Simultaneous Access to Data When Accessing Unified Graphics Memory.” A copy of the ’593 Patent is attached hereto as Exhibit 3.

21. Vantage Micro owns all substantial right, title, and interest in the ’593 Patent, and holds the right to sue and recover damages for infringement thereof, including past infringement.

COUNT I - INFRINGEMENT OF U.S. PATENT NO. 6,678,838

22. Vantage Micro incorporates and realleges the preceding paragraphs as if fully set forth herein.

23. At least as of May 14, 2019, Vantage Micro placed MediaTek on actual notice of the ’838 Patent and actual notice that its actions constituted and continued to constitute

infringement of the '838 Patent. MediaTek has had actual knowledge of the '838 Patent and its own infringement of the '838 Patent since at least that time.

24. MediaTek has infringed one or more claims of the '838 Patent, including but not limited to Claim 11, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, at least by using electronic products wherein multiple masters (including but not limited to computer processors, processor cores, graphics processors, and noncore master peripherals) write data to a memory (including but not limited to shared memory), where the memory includes information to associate a master with the data (“'838 Infringing Products”). The '838 Patent Infringing Products include the MediaTek Helio X30 and Helio P60 Systems-on-Chip (SoC) products.

25. Discovery is expected to uncover the full extent of MediaTek's unlawful use of Vantage Micro's patented technology in the '838 Patent beyond the '838 Infringing Products already identified through public information.

26. Attached hereto as Exhibit 4, and incorporated by reference herein, is a claim chart detailing how the representative Helio X30 and Helio P60 Systems-on-Chip (SoCs) directly infringe independent Claim 11 of the '838 Patent. On information and belief, any use of the Helio X30 or Helio P60 as SoCs necessarily practices the method of Claim 11 of the '838 Patent. Each of the elements of Claim 11 is found in the representative MediaTek product as shown in Exhibit 4.

27. On information and belief, MediaTek has induced infringement of one or more claims of the '838 Patent, including, but not limited to Claim 11, pursuant to 35 U.S.C. § 271(b), by encouraging its customers of the '838 Infringing Products and other third parties (including, *inter alia*, the downstream customers of its customers) to make, sell, offer to sell, and/or import

in the United States without authorization the '838 Infringing Products (or products of which the '838 Infringing Products are components) as described above and/or by encouraging those same customers and third parties to use the '838 Infringing Products (or products of which the '838 Infringing Products are components) to perform the method of Claim 11 of the '838 Patent. MediaTek has engaged in acts of inducement with the knowledge (at least as of May 14, 2019) that such actions constituted infringement of one or more claims of the '838 Patent and the specific intent to encourage that infringement.

28. MediaTek's acts of inducement include, *inter alia*: providing the '838 Infringing Products to its customers and other third parties and intending them to use the '838 Infringing Products; providing information, advertising, and instructions for these products through its own and third-party websites (*see, e.g.*, <https://www.mediatek.com/products/smartphones/mediatek-helio-x30>); providing potential customers with instructions on how to obtain these products (*see, e.g.*, <https://www.mediatek.com/about/contact-us>); and providing support and training to enable customers to use the products in an infringing way.

29. On information and belief, MediaTek has contributed to infringement of one or more claims of the '838 Patent under 35 U.S.C. § 271(c), including, but not limited to Claim 11, by offering to sell or selling within the United States and/or importing into the United States without authorization, one or more component of the '838 Infringing Products (or products of which the '838 Infringing Products are components) with the knowledge (at least as of May 14, 2019) that such component(s) are especially made or especially adapted for use in an infringement of the '838 Patent and are not staple articles of commerce suitable for substantial non-infringing use.

30. MediaTek has directly and indirectly infringed the '838 Patent and is thus liable for infringement of the '838 Patent pursuant to 35 U.S.C. § 271.

31. Vantage Micro has suffered, and continues to suffer, damages as a result of MediaTek's infringement of the '838 Patent.

32. MediaTek continued to infringe the '838 Patent from at least May 14, 2019 until its expiration, despite being on notice of the '838 Patent and its infringement. MediaTek has therefore infringed the '838 Patent knowingly, willfully, deliberately, and in disregard of Plaintiff's patent rights since at least May 14, 2019, at least by infringing with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Vantage Micro is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

33. Vantage Micro reserves the right to modify its infringement theories as discovery progresses in this case. Vantage Micro shall not be estopped for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Vantage Micro intends the claim chart (Exhibit 4) for the '838 patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Vantage Micro's preliminary or final infringement contentions or preliminary or final claim construction positions.

COUNT II - INFRINGEMENT OF U.S. PATENT NO. 7,414,606

34. Vantage Micro incorporates and realleges the preceding paragraphs as if fully set forth herein.

35. At least as of May 14, 2019, Vantage Micro placed MediaTek on actual notice of the '606 Patent and actual notice that its actions constituted and continue to constitute

infringement of the '606 Patent. MediaTek has had actual knowledge of the '606 Patent and its own infringement of the '606 Patent since at least that time.

36. MediaTek has infringed and continues to infringe one or more claims of the '606 Patent, including but not limited to Claim 6, pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, selling, offering to sell, and/or importing in the United States without authority microprocessors and graphics processing units (“GPUs”), systems-on-chips (“SoCs”), and similar products, devices, systems, and/or components of systems that detect, or support the detection of, monitors, including, but not limited to, Liquid Crystal Display (“LCD”), Light-Emitting Diode (“LED”), and Plasma Display Panel (“PDP”) monitors using various connection interfaces or “ports,” including, but not limited to, High-Definition Multimedia Interface (“HDMI”), DisplayPort (“DP”), and/or Digital Visual Interface (“DVI”) connections that support or comply with the HDMI, DP, and/or DVI specification (“'606 Infringing Products”). Examples of '606 Infringing Products include, without limitation, MediaTek’s microprocessors (e.g., MT5396, MT5398, MT5505, MT7623N/A), AIoT platforms (e.g., i300 (MT8362), MT6795, and MT6797), HDMI encoders, TV and SoC solutions (e.g., MT1389/G, MT5580, MT5582, MT5596, MT5597, MT5561, MT5592, and Helio series such as Helio X20, Helio X30, and Helio P90), wireless solutions (e.g., MT8167S), home entertainment and set-top box solutions (e.g., MT8502, MT8507, and MT8693), and voice-assistance solutions (e.g., MT8516).

37. Discovery is expected to uncover the full extent of MediaTek’s infringement of the '606 Patent beyond the '606 Infringing Products already identified through public information.

38. Attached hereto as Exhibit 5, and incorporated by reference herein, is a claim chart detailing how a '606 Infringing Product (X20) infringes independent Claim 6 of the '606 Patent. Each of the elements of Claim 6 is found in this MediaTek product as shown in Exhibit 5. MediaTek is directly infringing, literally infringing, and/or infringing the '606 Patent under the doctrine of equivalents. MediaTek is thus liable for infringement of the '606 Patent pursuant to 35 U.S.C. § 271.

39. At least as of May 14, 2019, MediaTek was placed on actual notice of the '606 Patent and actual notice that its actions constituted and continue to constitute infringement of one or more claims of the '606 Patent.

40. On information and belief, MediaTek has induced and continues to induce infringement of one or more claims of the '606 Patent, including, but not limited to, Claim 6, pursuant to 35 U.S.C. § 271(b) by encouraging its customers and other third parties such as users, distributors, wholesalers, and retailers of the '606 Infringing Products to make, use, sell, offer to sell, and/or import in the United States without authorization the '606 Infringing Products (or products of which the '606 Infringing Products are components) as described above and/or by encouraging those same customers and third parties to use the '606 Infringing Products (or products of which the '606 Infringing Products are components).

41. MediaTek's acts of inducement include, without limitation: providing the '606 Infringing Products to its customers and other third parties and intending them to use the '606 Infringing Products with hardware, software, and other infrastructure that enable and/or make use of these products; providing information, advertising, and instructions for these products through its own and third-party websites (*see, e.g.*, <https://labs.mediatek.com/en/platform/mediatek-x20>) (advertising X20, one of the '606 Infringing

Products and identifying third parties through which X20 can be purchased); *see also* <https://www.mediatek.com/products/smartphones/mt6797-helio-x20> (promoting the X20, one of the '606 Infringing Products)); encouraging customers and other third parties to communicate directly with MediaTek representatives about the '606 Infringing Products for purposes of technical assistance and repair as well as sales and marketing (*see, e.g.*, <https://www.mediatek.com/about/office-locations/mediatek-usa-offices> (providing consumers with addresses and phone numbers of U.S office through which technical issues and concerns regarding the '606 Infringing Products); *see also* <https://www.mediatek.com/about/contact-us> (providing a messaging platform through which MediaTek representatives can be contacted to address technical issues and concerns regarding the '606 Infringing Products); and <https://www.mtkfirmware.com/> (providing a web firmware platform for the '606 Infringing Products); encouraging customers and other third parties to use the '606 Infringing Products (e.g., <https://www.analogix.com/en/node/1998> (collaborating with a third party to promote the '606 Infringing Products and encouraging customers to use such technology); *see also* <https://www.mediatek.com/blog/8k-tv-ready-mediatek-s900-chip> (encouraging customers to use the '606 Infringing Products because it is “great for watching your favorite shows, and the fast refresh rates are ideal for next-gen games consoles too”)); and providing instructions on how to use the '606 Infringing Products (e.g., <https://lwn.net/Articles/764172/> (offering instructions on how to use one of the '606 Infringing Products) and <https://en.alpha-star.org/download/mediatek-x20-development-board-sch-v2-0#> (providing schematics and diagrams on building or developing one of the '606 Infringing Products)).

42. For example, MediaTek's technical documentation supplied with a '606 Infringing Product, the X20, instructs users to configure the product for use with HDMI,

DisplayPort, and/or DVI connections, and thus to perform the claimed invention of detecting a HDMI-compliant, DisplayPort-compliant, and/or DVI-compliant monitor (*see, e.g.*, MediaTek X20 Development Board Schematic (“Schematic”), *available at* <https://en.alpha-star.org/download/mediatek-x20-development-board-sch-v2-0#> (last accessed Aug. 6, 2019)).

43. MediaTek performed acts of inducement despite its actual knowledge since at least May 14, 2019, of the ’606 Patent and its knowledge that the specific actions it actively induced and continues to actively induce on the part of its customers and other third parties constitute infringement of the ’606 Patent. At the very least, because MediaTek has been, and remains, on notice of the ’606 Patent and the accused infringement, it has been, and remains, willfully blind regarding the infringement that it has induced and continues to induce.

44. On information and belief, MediaTek has contributed to, and continues to contribute to, infringement of one or more claims of the ’606 Patent, including but not limited to Claim 6, pursuant to 35 U.S.C. § 271(c) by offering to sell or selling within the United States, importing and/or supplying in the United States without authority one or more components of the ’606 Infringing Products (or products of which the ’606 Infringing Products are components) with the knowledge (at least as of May 14, 2019) that such components are especially made or especially adapted for use in an infringement of the ’606 Patent and are not staple articles of commerce suitable for substantial non-infringing use.

45. For example, these components, products, or devices detect, or support the detection of, a monitor and are also the critical and material component to displaying, or controlling the display of, images on a smartphone, tablet, desktop, or laptop according to claimed invention. MediaTek supplied, and continues to supply, these system on-chip components, products, or devices, including, without limitation, the ’606 Infringing Products

with the knowledge of the '606 Patent and with the knowledge that these components constitute critical and material parts of the claimed inventions of the '606 Patent. Moreover, MediaTek knows at least by virtue of its knowledge of its own products and the '606 Patent that these components are especially made and/or especially adapted for use as claimed in the '606 Patent and there is no substantial non-infringing use of the claimed elements of these components.

46. Vantage Micro has suffered, and continues to suffer, damages as a result of MediaTek's infringement of the '606 Patent.

47. MediaTek has continued to infringe the '606 Patent since at least the filing of this complaint, despite being on notice of the '606 Patent and its infringement. MediaTek has therefore infringed the '606 Patent knowingly, willfully, deliberately, and in disregard of Plaintiff's patent rights since at least May 14, 2019, at least by infringing with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Vantage Micro is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

48. Vantage Micro reserves the right to modify its infringement theories as discovery progresses in this case. Vantage Micro shall not be estopped for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint. Vantage Micro intends the claim chart (Exhibit 5) for the '606 Patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Vantage Micro's preliminary or final infringement contentions or preliminary or final claim construction positions.

COUNT III - INFRINGEMENT OF U.S. PATENT NO. 9, 959,593

49. Vantage Micro incorporates and realleges the preceding paragraphs as if fully set forth herein.

50. At least as of May 14, 2019, Vantage Micro placed MediaTek on actual notice of the '593 Patent and actual notice that its actions constituted and continued to constitute infringement of the '593 Patent. MediaTek has had actual knowledge of the '593 Patent and its own infringement of the '593 Patent since at least that time.

51. MediaTek has infringed one or more claims of the '593 Patent including, but not limited to, Claim 1 pursuant to 35 U.S.C. § 271(a), literally or under the doctrine of equivalents, by making, using, selling, offering to sell, and/or importing in the United States without authority, products, devices, systems, and/or components of systems that control, or include a memory controller that controls memory channels to provide simultaneous access to data for CPU and data for clients in a unified system/graphics memory ("'593 Infringing Products"). Examples of '593 Infringing Products include, without limitation, at least MediaTek's Helio series (e.g., X10, X20, X23, X25, X27, P90, and P60) and MT series (e.g., MT8176, MT6795, and MT6797).

52. Discovery is expected to uncover the full extent of MediaTek's infringement of the '593 Patent beyond the '593 Infringing Products already identified through public information.

53. Attached hereto as Exhibit 6, and incorporated by reference herein, is a claim chart detailing how MediaTek's MT8176, one of the '593 Infringing Products, infringes independent Claim 1 of the '593 patent. On information and belief, any use of the MT8176

necessarily infringes at least one claim of the '593 Patent. Each of the elements of Claim 6 is found in this MediaTek product as shown in Exhibit 5.

54. On information and belief, MediaTek has induced infringement of one or more claims of the '593 Patent, including, but not limited to, Claim 1, pursuant to 35 U.S.C. § 271(b) by encouraging its customers and other third parties (including, *inter alia*, the downstream customers of its customers), such as users, distributors, wholesalers, and retailers of the '593 Infringing Products to make, use, sell, offer to sell, and/or import in the United States without authorization the '593 Infringing Products (or products of which the '593 Infringing Products are components) as described above and/or by encouraging those same customers and third parties to use the '593 Infringing Products (or products of which the '593 Infringing Products are components) to perform the method of one or more claims, including, but not limited to, Claim 1, of the '593 Patent. MediaTek has engaged in acts of inducement with the knowledge (at least as of May 14, 2019) that such actions constituted infringement of one or more claims of the '593 Patent and the specific intent to encourage that infringement.

55. MediaTek's acts of inducement include, without limitation: providing the '593 Infringing Products to its customers and other third parties and intending them to use the '593 Infringing Products; providing information, advertising, and instructions for these products through its own and third-party websites (*see, e.g.*, <https://www.mediatek.com/products/smartphones> (advertising some of the '593 Infringing Products); *see also* <https://www.mediatek.com/features/corepilot-evolution> (promoting the '593 Infringing Products that use CorePilot technology); encouraging customers and other third parties to communicate directly with MediaTek representatives about the '593 Infringing Products for purposes of technical assistance and repair as well as sales and marketing (*see, e.g.*,

<https://www.mediatek.com/about/office-locations/mediatek-usa-offices> (providing consumers with addresses and phone numbers of U.S office through which technical issues and concerns regarding the '593 Infringing Products); *see also* <https://www.mediatek.com/about/contact-us> (providing a messaging platform through which MediaTek representatives can be contacted to address technical issues and concerns regarding the '593 Infringing Products); and <https://www.mtkfirmware.com/> (providing a web firmware platform for the '593 Infringing Products); encouraging customers and other third parties to use the '593 Infringing Products (e.g., http://cdn-cw.mediatek.com/White%20Papers/MediaTek_CorePilot%202.0_Final.pdf (encouraging customers to use the '593 Infringing Products through case studies)); and providing instructions on how to use the '593 Infringing Products (e.g., https://d86o2zu8ugzlg.cloudfront.net/mediatek-craft/documents/MediaTek_CorePilot_2.0.pdf (describing instructions on how to implement MediaTek's Device Fusion Technology)).

56. For example, MediaTek's technical documentation supplied with a '593 Infringing Product, MT8176, offers instructions to users to configure the MT8176 for controlling memory channels to provide simultaneous access to data for CPU and data for clients (e.g., GPU) in a unified system/graphics memory. *See, e.g.,* MediaTek CorePilot 2.0," *available at* http://cdn-cw.mediatek.com/White%20Papers/MediaTek_CorePilot%202.0_Final.pdf (last accessed Aug. 6, 2019).

57. On information and belief, MediaTek has contributed to infringement of one or more claims of the '593 Patent, including but not limited to Claim 1, pursuant to 35 U.S.C. § 271(c) by offering to sell or selling within the United States and/or importing into the United States without authorization one or more components of the '593 Infringing Products (or products of which the '593 Infringing Products are components) with the knowledge (at least as

of May 14, 2019) that such components are especially made or especially adapted for use in an infringement of the '593 Patent and are not staple articles of commerce suitable for substantial non-infringing use.

58. MediaTek supplied these components, including, without limitation, components of the '593 Infringing Products with the knowledge of the '593 Patent and with the knowledge that these components constitute critical and material parts of the claimed inventions of the '593 Patent. Moreover, MediaTek knew at least by virtue of its knowledge of its own products and the '593 Patent that these components are especially made and/or especially adapted for use as claimed in the '593 Patent and there is no substantial non-infringing use for these components.

59. MediaTek has directly and indirectly infringed the '838 Patent and is thus liable for infringement of the '593 Patent pursuant to 35 U.S.C. § 271.

60. Vantage Micro has suffered, and continues to suffer, damages as a result of MediaTek's infringement of the '593 Patent.

61. MediaTek has continued to infringe the '593 Patent since at least the filing of this complaint, despite being on notice of the '593 Patent and its infringement. MediaTek has therefore infringed the '593 Patent knowingly, willfully, deliberately, and in disregard of Plaintiff's patent rights since at least May 14, 2019, at least by infringing with actual knowledge of its direct and indirect infringement or while remaining willfully blind to the fact of its direct and indirect infringement. As a result of at least this conduct, Vantage Micro is entitled to enhanced damages under 35 U.S.C. § 284 and to attorneys' fees and costs under 35 U.S.C. § 285.

62. Vantage Micro reserves the right to modify its infringement theories as discovery progresses in this case. Vantage Micro shall not be estopped for purposes of its infringement contentions or its claim constructions by the claim charts that it provides with this Complaint.

Vantage Micro intends the claim chart (Exhibit 6) for the '593 Patent to satisfy the notice requirements of Rule 8(a)(2) of the Federal Rule of Civil Procedure. The claim chart is not Vantage Micro's preliminary or final infringement contentions or preliminary or final claim construction positions.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff Vantage Micro demands judgment for itself and against Defendant MediaTek as follows:

- a. A judgment that MediaTek has infringed, and continues to infringe, one or more claims of each of the Asserted Patents;
- b. A judgment that MediaTek has induced infringement, and continues to induce infringement, of one or more claims of each of the Asserted Patents;
- c. A judgment that MediaTek has contributed to, and continues to contribute, to the infringement of one or more claims of each of the Asserted Patents;
- d. A judgment that MediaTek has willfully infringed one or more claims of each of the Asserted Patents;
- e. A judgment awarding Vantage Micro all damages adequate to compensate for MediaTek's infringement, and in no event less than a reasonable royalty for MediaTek's acts of infringement, including all pre-judgment and post-judgment interest at the maximum rate allowed by law;
- f. A judgment awarding Vantage Micro treble damages pursuant to 35 U.S.C. § 284 as a result of MediaTek's willful conduct;
- g. A judgment and order finding that this is an exceptional case within the meaning of 35 U.S.C. § 285 and awarding Vantage Micro its reasonable attorneys' fees; and

h. A judgment awarding Vantage Micro such other relief as the Court may deem just and equitable.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38(b) of the Federal Rules of Civil Procedure, Plaintiff Vantage Micro demands a trial by jury of this action.

Dated: October 8, 2019

DEVLIN LAW FIRM LLC

/s/ Alex Chan

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