# IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS AUSTIN DIVISION

<b>BLUE SKY NETWORKS, LLC,</b>	§	
	§	
Plaintiff	§	
	§	
V.	§	CIV. A. NO. 1:17-CV-656
	§	
	§	
<b>MEDIATEK USA INC. and</b>	§	JURY TRIAL REQUESTED
MEDIATEK INC.	§	
	§	
Defendants	-	

# BLUE SKY NETWORKS, LLC'S ORIGINAL COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Blue Sky Networks, LLC files this Original Complaint against MediaTek USA Inc. and MediaTek Inc. for infringement of U.S. Patent Nos. 6,088,398 (the "398 Patent"); 6,484,027 (the "027 Patent"); 6,865,372 (the "372 Patent"); 7,693,542 (the "542 Patent"); 7,885,684 (the "684 Patent"); 8,019,381 (the "381 Patent"); 8,265,691 (the "691 Patent"); 8,346,169 (the "169 Patent").

### **THE PARTIES**

1. Plaintiff and patent owner Blue Sky Networks, LLC ("Blue Sky") is a Texas limited liability company with its headquarters and principal place of business at 1400 Preston Road, Suite 475, Plano, Texas 75093.

2. MediaTek USA Inc. is a company incorporated under the laws of the State of Delaware and having an established, principal place of business at 5914 W. Courtyard Drive, Austin, Texas 78730.

3. MediaTek USA is registered to conduct business in Texas and may be served through its registered agent, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

4. On information and belief, MediaTek USA Inc. is a wholly owned subsidiary of MediaTek Inc., a Taiwanese company headquartered at No. 1, Dusing Road 1, Hsinchu Science Park, Hsinchu City 30078, Taiwan. Collectively, MediaTek Inc. and MediaTek USA Inc. may be referred to as "MediaTek."

5. MediaTek 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.

6. MediaTek 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.

7. MediaTek USA provides sales, research, and promotional support for MediaTek systems and components in the United States. MediaTek USA offers for sale,

imports, sells, distributes, licenses, and uses integrated circuits and components that practice the asserted Blue Sky patents.

### JURISDICTION AND VENUE

8. This is a patent suit brought under the United States Patent Act, namely 35 U.S.C. §§ 271, 281, and 284-285, among other laws. This Court has subject-matter jurisdiction pursuant to 28 U.S.C. §§ 1331 and 1338(a).

9. Venue is proper in this judicial district pursuant to 28 U.S.C. § 1400(b) because MediaTek conducts business in this district, maintains an established place of business in this district, committed acts of infringement in this district, and continues to commit infringing acts in this district.

10. MediaTek does business from their office in this district, designing, selling, and delivering accused products in this judicial district, advertising products for sale to potential customers in this district, and instructing end users and integrators how to use the accused products in this judicial district. MediaTek has committed acts of infringement in this judicial district and has purposely transacted business in this judicial district involving the accused products.

11. MediaTek markets Bluetooth-enabled and LTE-compliant development boards and chipsets for mobile phones, tablets, IoT applications, automotive, and home entertainment appliances. MediaTek LTE systems-on-chip (SOCs) are used in Android smartphones, and MediaTek SOCs are found in vehicle navigation systems, smart home control units, smart TVs, tablets, game consoles, and IoT-ready consumer devices.

12. MediaTek is subject to this Court's specific and general personal jurisdiction

because MediaTek USA resides and maintains a principal place of business in this judicial district and, alternatively, pursuant to due process and/or the Texas Long-Arm Statute, due at least to their substantial business in this State and judicial district, including at least committing infringing acts and regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from goods sold and services provided to Texas residents.

## **BLUE SKY PATENTS**

13. Blue Sky is the owner by assignment of all right, title, and interest in and to the following "Asserted Patents":

- U.S. Patent No. 6,088,398 (the "'398 Patent");
- U.S. Patent No. 6,484,027 (the "'027 Patent");
- U.S. Patent No. 6,865,372 (the "'372 Patent");
- U.S. Patent No. 7,693,542 (the "542 Patent");
- U.S. Patent No. 7,885,684 (the "'684 Patent");
- U.S. Patent No. 8,019,381 (the "'381 Patent");
- U.S. Patent No. 8,265,691 (the "'691 Patent"); and
- U.S. Patent No. 8,346,169 (the "'169 Patent").
- 14. Blue Sky possesses all rights of recovery under the Asserted Patents.

# The '398 OFDM Patent

15. Mattias Wahlqvist, Roger Larsson, and Christer Östberg invented the claimed subject matter of the '398 Patent while working for Telia Research, a technology research

arm of Telia Company AB, which dates to 1853 and is the largest mobile network operator in Sweden.

16. The '398 Patent, as its title indicates, relates to "Orthogonal Frequency Division Multiplex Systems." OFDM is a modulation format used in many of the latest wireless telecommunication systems and standards including LTE.

17. By using closely spaced carrier signals, OFDM signals are capable of high data rates. A related advantage of OFDM is minimization of interference between closely spaced carriers due to their orthogonality.

18. In OFDM systems, the signal is pulse-shaped to suppress side lobes in order to reduce guard bands and the space between carriers.

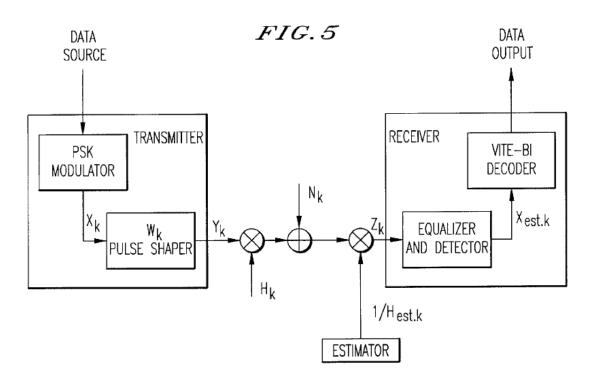
19. Recognizing the fact that pulse shaping breaks orthogonality and results in inter-symbol interference (ISI), the inventors introduced equalization to compensate for ISI.

20. In allowing the claims of the '398 Patent, the Examiner noted the absence in the prior art of "the receiver for the OFDM signals subjected to pulse shaping and every other subcarrier omitted, which receiver can recover data at a rate better than one-half the rate of an ordinary OFDM receiver with half the subcarriers absent due to an equalizer and the reduction of guard bands."

21. Figure 5 from the '398 Patent depicts schematically an OFDM system employing the claimed subject matter:

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22. In operation, receivers in mobile devices utilizing OFDM modulation and implementing the claimed subject matter equalize channels to maintain orthogonality so the received signal can be correctly decoded.

23. The United States Patent and Trademark Office issued the '398 Patent on July 11, 2000, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

24. The '398 Patent is valid and enforceable.

25. A copy of the '398 Patent is attached at Exhibit A.

### **The Enhanced Handset Patents**

26. Dan Mauney, Marc Sullivan, Charles Green, and Steve Harbin invented the claimed subject matter of the '027, '372, '542, '684, '381, '691, and '169 Patents (the "Enhanced Handset Patents") while working for SBC Technology Resources, Inc. in

Austin, Texas. SBC Technology Resources, later renamed SBC Laboratories in 2003, was the research and development arm of SBC Communications Inc., which acquired AT&T in 2005.

27. The Enhanced Handset Patents, titled "Enhanced Wireless Handset, Including Direct Handset-to-Handset Communication Mode, were duly and legally issued by the United States Patent and Trademark Office after full and complete examinations of each.

28. The Patent Examiner found each set of allowed claims to recite patentable subject matter and each respective application meeting all requirements for patentability.

29. In allowing the claims of the '381 Patent, for example, the Examiner found that "[n]one of the cited prior art of record teaches an apparatus and method for short-range wireless communication between an object and an apparatus comprising transmitting step and detecting step as specified in claims (i.e., claims 17 and 37)."

30. The Asserted Patents are directed to wireless handset and mobile devices for operation on a wireless network (e.g., a cellular, PCS, or WiFi network) and wireless short-range direct communication with other wireless handsets (i.e., direct handset-to-handset communication), paging devices, and other communication devices.

31. To facilitate set-up, the Asserted Patents describe find features (e.g., that assist a handset operator in determining what objects, including other handset users, are located within the handset's operating range), memory for maintaining a list of available devices for communicating via the short-range wireless network, and short-range messaging.

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32. In operation, handsets described in the Asserted Patents scan, find, register, and communicate with available devices and may present to a user a list from which the user may select devices to pair with a handset to enable two-way communication via the short-range wireless network independent of a cellular or other wireless network.

33. The Asserted Patents further describe how embodying handsets may simultaneously communicate on short range wireless network(s) and a wide-area wireless network such as cellular or PCS systems.

### A. United States Patent No. 6,484,027

34. The United States Patent and Trademark Office issued the '027 Patent on November 19, 2002, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

35. The '027 Patent is valid and enforceable.

36. A copy of the '027 Patent is attached at Exhibit B.

### B. United States Patent No. 6,865,372

37. The United States Patent and Trademark Office issued the '372 Patent on March 8, 2005, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

38. The '372 Patent issued from a division of application No. 09/094,600 from which the '027 Patent issued.

39. The '372 Patent is valid and enforceable.

40. A copy of the '372 Patent is attached at Exhibit C.

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# C. United States Patent No. 7,693,542

41. The United States Patent and Trademark Office issued the '542 Patent on April 6, 2010, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

42. The '372 Patent issued from a continuation of the application that issued as the '372 Patent, which was a division of application No. 09/094,600 from which the '027 Patent issued.

43. The '542 Patent is valid and enforceable.

44. A copy of the '542 Patent is attached at Exhibit D.

### D. United States Patent No. 7,885,684

45. The United States Patent and Trademark Office issued the '684 Patent on February 8, 2011, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

46. The '684 Patent issued from a continuation of the application that issued as the '542 Patent and is, therefore, related to the '372 and '027 Patents.

47. The '684 Patent is valid and enforceable.

48. A copy of the '684 Patent is attached at Exhibit E.

## E. United States Patent No. 8,019,381

49. The United States Patent and Trademark Office issued the '381 Patent on September 13, 2011, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

50. The '381 Patent issued from a continuation of the application that issued as

the '684 Patent and is, therefore, related to the '372, '027, and '542 Patents.

51. The '381 Patent is valid and enforceable.

52. A copy of the '381 Patent is attached at Exhibit F.

## F. United States Patent No. 8,265,691

53. The United States Patent and Trademark Office issued the '691 Patent on September 11, 2012, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

54. The '691 Patent issued from a continuation of the application that issued as

the '381 Patent and is, therefore, related to the '372, '027, '542, and '684 Patents.

55. The '691 Patent is valid and enforceable.

56. A copy of the '691 Patent is attached at Exhibit G.

# G. United States Patent No. 8,346,169

57. The United States Patent and Trademark Office issued the '169 Patent on January 1, 2013, after a complete examination and upon finding the claimed subject matter novel and the application meeting all requirements for patentability.

58. The '169 Patent is related to the other Asserted Patents.

59. The '169 Patent is valid and enforceable.

60. A copy of the '169 Patent is attached at Exhibit H.

## **MEDIATEK PRODUCTS**

61. MediaTek makes, imports, sells, offers to sell, distributes, licenses, markets and uses chipsets for use in mobile phones, tablets, wearables, personal computers, automobile infotainment systems, and other wireless electronic devices that comply with

LTE and/or Bluetooth technical standards.

62. In its 2016, Annual Report, MediaTek provided the following list of current

products:

### 1.1.3. Products Currently Offered by MediaTek

- A. Mobile communication chipsets;
- B. Tablet chipsets;
- C. Bluetooth chips;
- D. Wireless LAN (WLAN) chips;
- E. Global Positioning Satellite (GPS) chips;
- F. NFC (Near Field Communication) SoCs;
- G. Connectivity combo SoCs that integrated Bluetooth, FM, WLAN, GPS, etc
- H. Multimode wireless charging chips;
- Wearable device SoCs;
- J. Smart home connectivity chips;
- K. Bio-sensing analog front-end chips;
- L. Optical storage chipsets;
- M. DVD player SoCs;
- N. Blu-ray DVD player chipsets;
- O. Highly-integrated digital TV controller chips;
- P. ATSC and DVB-T TV decoder and demodulator chipsets;
- Q. xDSL chipsets;
- R. Automotive chipsets;
- S. Power management and controller chips for various electronics and
- T. USB PD Type-C controller chips

63. MediaTek's major products include "chipsets for wireless communication, digital TV, consumer electronics, optical storage, broadband networking and analog products for applications such as mobiles, digital TVs, PCs, various consumer electronics and wearables." (MediaTek 2016 Annual Report)

64. According to MediaTek, its wireless communication chipsets are mainly used in entry-level, mainstream and mid/high end FDD-LTE/ TDD-LTE/ WCDMA/ TD-SCDMA/ CDMA2000/ EVDO/ EDGE smartphones and tablets as well as GSM/ GPRS/ EDGE/ WCDMA/ HSUPA/ TD-SCDMA feature phones. Peripheral chips such as Bluetooth, WLAN, GPS, NFC and wireless charging are mainly used in mobile phones,

but can also be used in other applications such as routers, TVs, set-up-boxes, smart wearables, smart home appliances, game consoles, notebooks and portable navigation devices, etc."

65. MediaTek LTE-compliant products, including smartphone platforms such as the Helio X series (X30, X27, X25, X23, X20, and X10); Helio P series (P25, P20, and P10), MT6753, MT6752, MT6750, MT6595, MT6732, MT6735, MT6737 and MT6737T, MT6738; tablet platforms such as MT8783, MT8735D, B, P, and M, and MT8321 infringe the '398 OFDM Patent.

66. MediaTek LTE-compliant chipsets and platforms rely on OFDM.

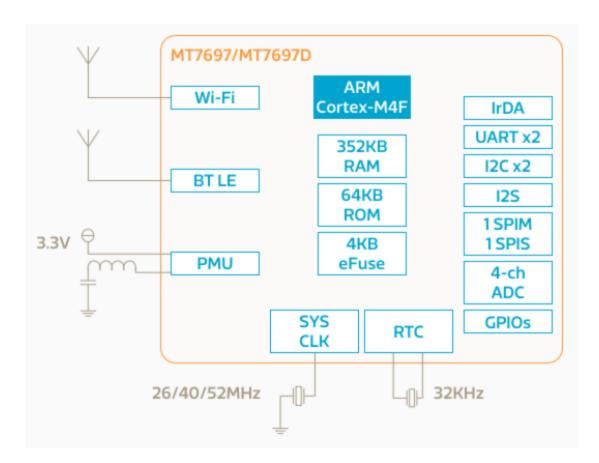
67. MediaTek LTE-compliant chipsets and platforms include receivers that contain an equalizer to compensate for sources of frequency offset between the transmitter and receiver in the device.

68. In MediaTek LTE-compliant devices, a receiver equalizes and synchronizes the signal to ensure the frequency offset is within a permissible error range.

69. MediaTek Bluetooth devices include: smartphone platforms such as the MediaTek X20, wearable chipsets such as the MT2523, MT2502, MT2601, and MT2511; smart home chipsets such as the MT7682, MT7686, MT5932, MT7687, MT7697 series, MT7688, and MT7681, tablet platforms such as the MT8176/MT6630, MT8173/MT6630, MT8167A and B, MT8163V/B and MT8163V/A, MT8127, MT8785, MT8783, MT8735D, P, B, and M, and MT8321.

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

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70. MediaTek Bluetooth-enabled products practice and/or are used to practice the Enhanced Handset Patents.

71. MediaTek Bluetooth-enabled products include hardware, software, radios and associated communication hardware for performing identification, pairing, and communication via short-range wireless networking protocols. Generally, MediaTek products feature Bluetooth short-range wireless functionality for practicing the claims of the Enhanced Handset Patents.

72. Accused MediaTek Bluetooth-enabled products are chipsets, SOCs, platforms, and SDKs for use in wireless handsets and similar products with enhanced operating features including the ability to locate other devices within range.

73. In normal operation, the accused MediaTek products are used to initiate a

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find feature to discover any Bluetooth enabled devices (e.g., peripherals, wearables, phones, computers, etc.) within range.

74. In an accused MediaTek product using Bluetooth BR/EDR, the product enters the page sub-state to determine whether available devices are within range and may transmit a train of page messages until a response is received from a potential target device.

75. The accused product, in turn, detects any response messages from available Bluetooth devices (e.g., a Bluetooth headset or speaker). The device collects and stores information received within the inquiry response messages and uses that information to compile a list of discovered or available Bluetooth devices.

76. When a connectable device receives a page request on its page scan channel from an accused MediaTek product, it enters into a sequence of exchanges with the accused device, which enters into a master response routine.

77. A link key is created and exchanged during the pairing process. Once the accused product is paired with a connectable device, higher level initialization procedures are invoked to update a stored list of paired devices.

78. In normal operation, accused MediaTek Bluetooth-enabled products provide a list "available" devices detected to be within range. The list is displayed on the handset running the MediaTek accused product.

79. MediaTek's API reference for the LinkIt SDKv4, for example, provides generic LE procedures related to device discovery and link connectivity. MediaTek directs, instructs, and encourages application development to configure and control Bluetooth devices operating in idle, advertising, scanning, initiating, and connected modes.

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

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80. Licensed users of MediaTek products are provided credentials allowing them to download the LinkIt SDK, tools, features, and documentation supporting the infringing functionality of the accused products.

81. MediaTek publishes API References such as the MT7697 API Reference at http://labs.mediatek.com/api/mt7697/group g a p l e.html.

82. The MediaTek API provides the bt\_status\_t bt\_gap\_le\_bond function to start the pairing procedure.

83. The MediaTek LinkIt development platform provides Bluetooth LE connectivity support for IoT and wearable applications.

84. MediaTek makes, sells, offers for sale, promotes, uses, and instructs and encourages customers to use the LinkIt platforms for development including, for example, the LinkIt One:

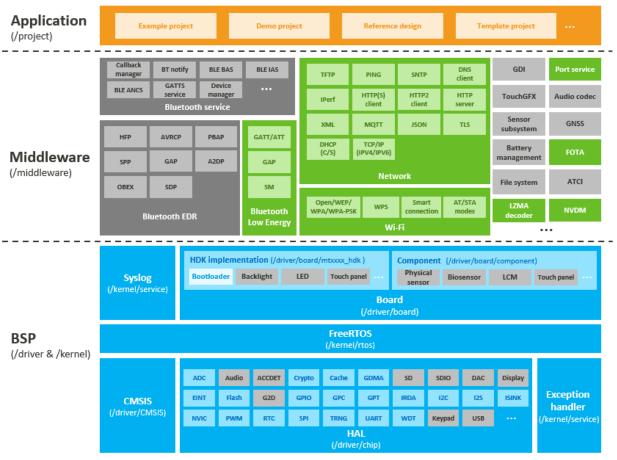


85. MediaTek provides to customers Bluetooth Generic Access Profile APIs and details how to use the GAP drivers, function groups, structures, and functions.

86. MediaTek LinkIt SDK includes Bluetooth modules for performing the pairing process described and claimed in the asserted claims:

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Modules shown in gray color are not supported by MT7697

87. MediaTek provides tutorials, source code, and instructions directing how to use the infringing Bluetooth functionality of the accused products.

88. For example, the following materials are published by MediaTek for using

BLE to do smart connection on MediaTek's LinkIt 7697 HDK:

### How to Run

#### Phases

- A. Turn on Device, when it is ready, it will start "BLE Advertising" (appear as BLE\_SMTCN)
- B. Launch Android App, Scan and connects to BLE\_SMTCN Device. After connected mobile will automatically send pre-defined Wi-Fi information to Device via BLE
  C. When Device receive the data, it will connect to Wi-Fi network and report back the SSID and IP to Mobile
- C. When Device receive the data, it will connect to written

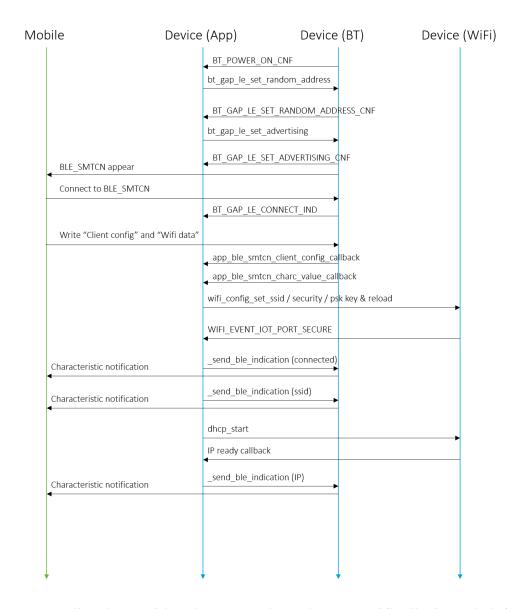
#### Mobile Side



89. MediaTek provides this ladder diagram describing the message sequence:

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90. MediaTek provides the accused products specifically intended for use in handsets, tablets, portable devices, IoT objects, and wearables that include displays, hardware, memory, software, and associated hardware and software for performing identification, pairing, and communication via short-range wireless networking protocols. Generally, MediaTek accused products feature Bluetooth short-range wireless functionality for practicing the claims of the Asserted Patents.

91. MediaTek markets LTE-compliant chipsets, SOCs, platforms, and

communication modules that rely on OFDM.

92. Infringing MediaTek LTE-compliant devices have receivers that contain an equalizer to compensate for sources of frequency offset between the transmitter and receiver in the device. The receiver equalizes and synchronizes the signal to ensure the frequency offset is within a permissible error range.

## COUNT I INFRINGEMENT OF U.S. PATENT NO. 6,088,398

93. Blue Sky incorporates by reference paragraphs 1-92 and re-alleges them as if stated here.

94. MediaTek directly infringes at least claim 13 of the '398 Patent by making, selling, offering for sale, importing, using, distributing, and licensing LTE-compliant chipsets, platforms, SOCs, and products identified above and throughout this Complaint that include OFDM functionality as described herein.

95. MediaTek's LTE-compliant products embody claim 13 of the '398 Patent and are designed and intended to operate on OFDM systems as recited, for example, in claim 1.

96. Defendants' LTE-compliant devices include receivers with equalizers that compensate for loss of orthogonality caused by pulse shaping.

97. MediaTek is on notice of the infringing LTE-compliant products, features, and how end users of the Accused LTE-compliant devices operate them on LTE networks and use the claimed apparatus.

98. In addition to directly infringing the '398 Patent, MediaTek indirectly

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

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infringes the '398 Patent by inducing and/or contributing to infringement by, among other things, making using, licensing, selling, offering for sale, and/or importing the MediaTek LTE-compliant accused products. Users, integrators, and resellers of the LTE-compliant accused products are direct infringers of the '398 Patent.

99. MediaTek advertises and promotes LTE-compliant products on their websites (e.g., www.mediatek.com).

100. MediaTek instructs customers to use LTE-complaint device communication systems to send and receive OFDM data.

101. MediaTek tests LTE-compliant devices to ensure interoperability and compliance with the LTE standard.

102. MediaTek's LTE-compliant devices perform synchronization procedures including Cell Search by which the device acquires time and frequency synchronization with a base station in the cell.

103. An equalizer in the MediaTek's LTE-compliant devices corrects frequency error to ensure orthogonality so the received signal is correctly decoded.

104. Defendants encourage, aid, and direct customers of their LTE-compliant devices to use and operate them on LTE networks.

105. MediaTek makes, uses, licenses, sells, offers to sell, and promotes LTEcompliant accused products with the specific intent that end users and customers use them in an infringing manner.

106. Defendants sell and offer to sell LTE-compliant devices for use in practicing the '398 Patent, and the accused devices are material to practicing one or more claims of

the '398 Patent. The LTE features have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '398 Patent by including the aforementioned hardware and software that operates in compliance with the LTE standard.

107. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

# COUNT II INFRINGEMENT OF U.S. PATENT NO. 6,484,027

108. Blue Sky incorporates by reference paragraphs 1-107 and re-alleges them as if stated here.

109. MediaTek directly infringes at least claims 5, 6, 7, and 8 of the '027 Patent by using and testing Bluetooth-enabled mobile devices having functionality described herein that embody the claims of the '027 Patent including representative claim 5.

110. Mobile devices incorporating the MediaTek accused products include enhanced operating features including the ability to locate other devices within range.

111. In normal operation, the accused MediaTek products as implemented in test devices initiate a find feature to discover any Bluetooth enabled devices (e.g., peripherals, phones, computers, etc.) within range.

112. MediaTek indirectly infringes at least claims 5, 6, 7, and 8 of the '027 Patent by providing the accused products to customers with the specific intent that they will be

integrated in Bluetooth-enabled mobile devices and used to perform the functionality described herein that embody the claims of the '027 Patent including representative claim 5.

113. In devices based upon MediaTek accused products implementing Bluetooth BR/EDR, the device enters the page sub-state to determine whether available devices are within range, and the device may transmit a train of page messages until a response is received from a potential target device.

114. A device, in turn, detects any response messages from available Bluetooth devices (e.g., a Bluetooth headset or speaker), collects and stores information received within the inquiry response messages and uses that information to compile a list of discovered or available Bluetooth devices.

115. When a connectable device receives a page request on its page scan channel, it enters into a sequence of exchanges with the handset, which enters into a master response routine.

116. The pairing process is used to generate a link key that is exchanged and used for authentication purposes during subsequent Bluetooth connections between devices. Once the device is connected, it is designated as a "paired" device.

117. Once a MediaTek device is paired with a connectable device, higher level initialization procedures are invoked to update a stored list of paired devices.

118. In normal operation, a Bluetooth-enabled MediaTek device lists "available" devices that are detected to be within range.

119. The user selects an "available" device for connection.

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120. MediaTek provides APIs to customers (i.e., device manufacturers) with software, hardware, and instructions how to enable pairing operations.

121. MediaTek is and has been since receiving notice indirectly infringing the '027 Patent by inducing and/or contributing to infringement by, among other things, making, licensing, providing, and/or importing the MediaTek products for integration and use in Bluetooth-compliant devices. MediaTek customers and users of the devices are direct infringers of the '027 Patent.

122. MediaTek has known about the '027 Patent at least since receiving notice from Blue Sky in June 2017. Defendants have been and are on notice of the infringing products, features, and how MediaTek customers operate them to perform the claimed methods and use the invention.

123. MediaTek instructs customers how to integrate and use the Accused Products' Bluetooth capability to infringe the asserted claims.

124. Defendants encourage, aid, and direct customers of the accused products to use, operate, integrate, and develop them, consistent with MediaTek's instructions, to perform the asserted method claims.

125. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them in an infringing manner.

126. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '027 Patent, and the accused devices are material to practicing one or more claims of the '027 Patent. The Bluetooth pairing features and associated hardware and

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software have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '027 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '027 Patent.

127. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## COUNT III INFRINGEMENT OF U.S. PATENT NO. 6,865,372

128. Blue Sky incorporates by reference paragraphs 1-127 and re-alleges them as if stated here.

129. Defendants directly infringe at least claims 1, 6, 11, and 16 of the '372 Patent.

130. Defendants make, use, sell, offer for sale, license, and import development kits such as the X20 that embody the claims of the '372 Patent including representative claim 1.

131. Defendants' Bluetooth-enabled platform communicates with peripherals using relevant short-range technologies including but not limited to Bluetooth BR/EDR.

132. The MediaTek X20 features Bluetooth 4.1.

HDK 💊



# MediaTek X20 development board

The new MediaTek X20 development board by Archermind is based on the Linaro 96Boards standard. At the board's heart is the MediaTek MT6797 SoC. This SoC features the industry's first tri-cluster, deca-core processing architecture with:

### Key features

- Dual-core ARM Cortex-A72 MPCore<sup>™</sup> operating at 2.1GHz to 2.3GHz
- Quad-core ARM Cortex-A53 MPCore<sup>™</sup> operating at up to 1.85GHz
- Quad-core ARM Cortex-A53 MPCore<sup>™</sup> operating at up to 1.4GHz
- ARM Mali-T880 GPU operating at up to 800MHz

## Development board specifications

Feature	
Application Processor	MediaTek MT6797 SoC with: • Dual-core ARM Cortex-A72 MPCore <sup>™</sup> operating at 2.1GHz to 2.3GHz • Quad-core ARM Cortex-A53 MPCore <sup>™</sup> operating up to 1.85GHz • Quad-core ARM Cortex-A53 MPCore <sup>™</sup> operating up to 1.4GHz • ARM Mail-T880 GPU operating up to 800MHz
Operating System	Android 6.0
Wi-Fi	802.11 a/b/g/n
Bluetooth	4.1

133. The X20 is capable of performing a Bluetooth Device Discovery procedure for retrieving the Bluetooth device address, clock, class-of-device field, and used page scan mode from discoverable devices located nearby.

134. In accordance with recitations of claim 1 of the '372 Patent, accused MediaTek Bluetooth products are enabled to pair or communicate with at least two distinct Bluetooth peripherals using two frequency channels.

135. Accused Products receive an identifier (e.g., name) from each paired (or available) peripheral and display the identifier in a list of paired or available devices.

136. Accused Products contain short-range wireless transmitters for short-range communications.

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137. Accused Products enter into the inquiry substate and transmit inquiry messages (e.g., inquiry data packets) as part of the discovery and pairing process with nearby compatible Bluetooth devices (e.g., wireless headset, Bluetooth speaker, etc.).

138. An Accused Product that embodies at least claim 1 of the '372 Patent consecutively transmits, to two Bluetooth peripherals, inquiry messages over at least two frequency channels. Based upon Bluetooth protocols, the Accused Product may determine the frequency channels by an inquiry hopping sequence.

139. If discoverable, peripherals receive the inquiry messages and, in turn, generate responses. Accordingly, the MediaTek Bluetooth products contain a receiver to receive the inquiry response messages from Bluetooth peripherals within range.

140. According to Bluetooth protocols, a peripheral's response message may contain information including device address, clock, class of device, and device name for each respective peripheral.

141. After receiving the response messages, an Accused Product dynamically creates and updates a list of detected peripherals within range. The list includes identifiers (e.g., names) for detected (e.g., available or paired) objects. The list includes the first object identifier and the second object identifier (e.g., two device names) for cases in which inquiry packets are sent over two frequency channels to two separate peripherals, and the two peripherals send response data packets including corresponding object identifiers (e.g., a device name for each peripheral).

142. In addition to directly infringing the '372 Patent, MediaTek is and has been at least since receiving notice from Blue Sky indirectly infringing the '372 Patent by

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inducing and/or contributing to infringement by, among other things, making using, licensing, selling, providing, and/or importing the MediaTek Bluetooth-enabled products identified above including SOCs, chipsets, smartphone platforms, wearable platforms, etc. for integration and use in Bluetooth-compliant devices.

143. MediaTek customers and users are direct infringers of the '372 Patent.

144. Defendants have been and are on notice of the infringing products, features, and how end users of the MediaTek Bluetooth accused products operate to perform the claimed methods and use the claimed apparatuses.

145. Defendants instruct customers how to integrate and develop and use the infringing functionality based upon the MediaTek products.

146. Defendants encourage, aid, and direct customers of the MediaTek products to use, integrate, develop, and operate them, consistent with MediaTek's instructions, to perform the asserted method claims and use the invention.

147. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them in an infringing manner.

148. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '372 Patent, and the accused devices are material to practicing one or more claims of the '372 Patent. The Bluetooth pairing features have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '372 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '372 Patent.

149. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## COUNT IV INFRINGEMENT OF U.S. PATENT NO. 7,693,542

150. Blue Sky incorporates by reference paragraphs 1-149 and re-alleges them as if stated here.

151. Defendants indirectly infringes at least claims 1, 2, 8, 9, 11, 17, and 18 of the '542 Patent.

152. MediaTek is and has been, at least since receiving notice from Blue Sky, indirectly infringing the '542 Patent by inducing and/or contributing to infringement by, among other things, making using, licensing, selling, providing, and/or importing the MediaTek Bluetooth-enabled products identified above including SOCs, chipsets, smartphone platforms, wearable platforms, etc. for integration and use in Bluetooth-compliant devices.

153. MediaTek customers and users are direct infringers of the '542 Patent.

154. MediaTek accused products enable communication with peripherals using relevant short-range technologies including but not limited to Bluetooth Basic Rate/Enhanced Data Rate (BR/EDR).

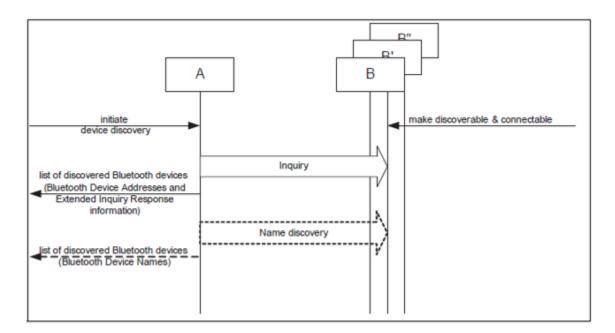
155. MediaTek accused products are specifically intended to be integrated into products such as smartphones that are enabled to use the Bluetooth communication system

to pair with third-party peripherals over a first network (e.g., a Bluetooth network) while the phone/device maintains a telephone call over a second network (e.g., cellular network).

156. By way of example, in one scenario a MediaTek Helios smartphone platform drives the functionality of a smartphone that is conducting a call over a 4G, 3G, LTE, or Wi-Fi network to send a query message (e.g., an inquiry data packet) to a Bluetooth peripheral (e.g., a hands-free headset) to determine whether the peripheral is present and within range. If the peripheral is in a discoverable mode (e.g., general discoverable mode), the Accused Product receives a response (e.g., inquiry response message) from the Bluetooth peripheral.

157. In such devices, two discoverability modes are defined: limited discoverable mode and general discoverable mode.

158. The following diagram illustrates the discovery procedure carried out by the Accused Products:



159. The device's response may include the peripheral's name, address, clock information, or class of device.

160. After receiving a response from a peripheral, the device generates and displays a list of discovered devices.

161. The list of available, discovered devices may be displayed to the user of the device via the user interface using the MediaTek-supplied API.

162. MediaTek tests the accused products to ensure the functionality described here and recited in the asserted claims and specifically intends the accused products to be used under such conditions.

163. MediaTek has been and is on notice of the infringing products, features, and how MediaTek customers integrate, develop, and operate them to perform the claimed methods and use the claimed apparatuses.

164. Defendants instruct customers to use the accused products' Bluetooth capability to infringe the asserted claims.

165. Defendants encourage, aid, and direct customers of the accused products to develop, integrate, use and operate them, consistent with Defendants' instructions, to perform the asserted method claims.

166. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them in an infringing manner.

167. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '542 Patent, and the accused devices are material to practicing one or more

claims of the '542 Patent. MediaTek's hardware, software, and associated modules provided in the MediaTek APIs enabling Bluetooth pairing features have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '542 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '542 Patent.

168. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## COUNT V INFRINGEMENT OF U.S. PATENT NO. 7,885,684

169. Blue Sky incorporates by reference paragraphs 1-168 and re-alleges them as if stated here.

170. MediaTek directly infringes at least claims 1, 2, 8, 9, 10, 14, 15, and 16 of the '684 Patent.

171. MediaTek is and has been, at least since receiving notice from Blue Sky, indirectly infringing the '684 Patent by inducing and/or contributing to infringement by, among other things, making using, licensing, selling, providing, and/or importing the MediaTek Bluetooth-enabled products identified above including SOCs, chipsets, smartphone platforms, wearable platforms, etc. for integration and use in Bluetooth-compliant devices.

172. MediaTek customers and users are direct infringers of the '5684 Patent.

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

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173. MediaTek accused products enable communication with peripherals using relevant short-range technologies including but not limited to Bluetooth Basic Rate/Enhanced Data Rate (BR/EDR).

174. MediaTek accused products have a transceiver configured to transmit inquiry messages to identify available communication devices.

175. MediaTek accused products are specifically intended to be integrated into products such as smartphones that are enabled to use the Bluetooth communication system to pair with third-party peripherals over a first network (e.g., a Bluetooth network) while the phone/device maintains a telephone call over a second network (e.g., cellular network).

176. In normal operation, devices based upon the MediaTek accused products receive responses from available communication devices and generate a list of them that is displayed to the user.

177. By way of example, in one scenario a MediaTek Helios smartphone platform drives the functionality of a smartphone that is conducting a call over a 4G, 3G, LTE, or Wi-Fi network to send a query message (e.g., an inquiry data packet) to a Bluetooth peripheral (e.g., a hands-free headset) to determine whether the peripheral is present and within range. If the peripheral is in a discoverable mode (e.g., general discoverable mode), the Accused Product receives a response (e.g., inquiry response message) from the Bluetooth peripheral.

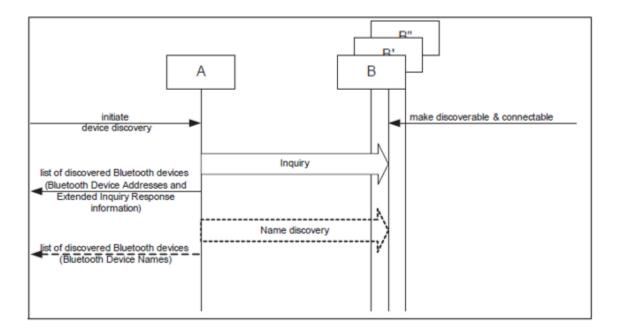
178. In such devices, two discoverability modes are defined: limited discoverable mode and general discoverable mode.

179. The following diagram illustrates the discovery procedure carried out by the

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

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accused products:



180. The list of available, discovered devices may be displayed to the user of the device via the user interface using the MediaTek-supplied API.

181. MediaTek tests the accused products to ensure the functionality described here and recited in the asserted claims and specifically intends the accused products to be used under such conditions.

182. MediaTek has been and is on notice of the infringing products, features, and how MediaTek customers integrate, develop, and operate them to perform the claimed methods and use the claimed apparatuses.

183. Defendants instruct customers to use the accused products' Bluetooth capability to infringe the asserted claims.

184. Defendants encourage, aid, and direct customers of the accused products to develop, integrate, use and operate them, consistent with Defendants' instructions, to

perform the asserted method claims.

185. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them in an infringing manner.

186. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '684 Patent, and the accused devices are material to practicing one or more claims of the '684 Patent. MediaTek's hardware, software, and associated modules provided in the MediaTek APIs enabling Bluetooth pairing features have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '684 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '684 Patent.

187. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

# COUNT VI INFRINGEMENT OF U.S. PATENT NO. 8,019,381

188. Blue Sky incorporates by reference paragraphs 1-187 and re-alleges them as if stated here.

189. Defendants indirectly infringe at least claims 1, 2, 3, 4, 11, 12, 13, 16, 20, 21,22, 23, 24, 31, 32, 33, 36, 39, and 40 of the '381 Patent.

190. MediaTek is and has been, at least since receiving notice from Blue Sky,

indirectly infringing the '381 Patent by inducing and/or contributing to infringement by, among other things, making using, licensing, selling, providing, and/or importing the MediaTek Bluetooth-enabled products identified above including SOCs, chipsets, smartphone platforms, wearable platforms, etc. for integration and use in Bluetooth-compliant devices.

191. MediaTek customers and users are direct infringers of the '381 Patent.

192. MediaTek accused products enable communication with peripherals using relevant short-range technologies including but not limited to Bluetooth Basic Rate/Enhanced Data Rate (BR/EDR).

193. In accordance with asserted claims of the '381 Patent, MediaTek accused products enable devices to pair with third-party peripherals over a first network (e.g., a Bluetooth network) while the phone maintains a communication over a second network (e.g., Wi-Fi network or cellular network).

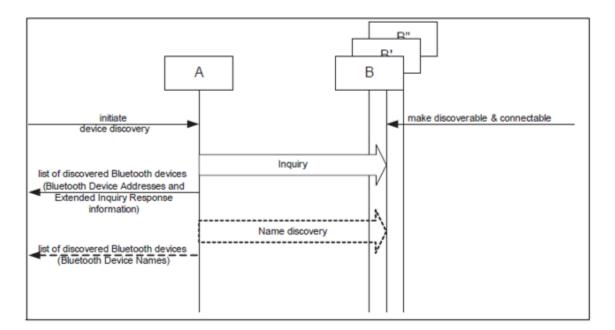
194. By way of example, in one scenario a MediaTek Helios smartphone platform drives the functionality of a smartphone that is conducting a data download, upload, or synchronization or conducting a voice call over a 4G, 3G, LTE, or Wi-Fi network to send a query message (e.g., an inquiry data packet) to a Bluetooth peripheral (e.g., a hands-free headset) to determine whether the peripheral is present and within range. If the peripheral is in a discoverable mode (e.g., general discoverable mode), the Accused Product receives a response (e.g., inquiry response message) from the Bluetooth peripheral.

195. In such devices, two discoverability modes are defined: limited discoverable mode and general discoverable mode.

196. In normal operation, the accused products enable transmission of an inquiry message (e.g., an inquiry data packet) to a Bluetooth peripheral (e.g., a hands-free headset) to determine whether the peripheral is within range.

197. If the peripheral is in a discoverable mode (e.g., general discoverable mode), the device receives a response (e.g., inquiry response message) from the Bluetooth peripheral.

198. The following diagram illustrates the discovery procedure carried out by the accused MediaTek products:



199. The device's response may include the peripheral's name, address, clock information, or class of device.

200. After receiving a response from a peripheral, the device generates and displays a list of discovered devices.

201. The list of available, discovered devices may be displayed to the user of the

device via the user interface using the MediaTek-supplied API.

202. MediaTek tests the accused products to ensure the functionality described here and recited in the asserted claims and specifically intends the accused products to be used under such conditions.

203. MediaTek has been and is on notice of the infringing products, features, and how MediaTek customers integrate, develop, and operate them to perform the claimed methods and use the claimed apparatuses.

204. Defendants instruct customers to use the accused products' Bluetooth capability to infringe the asserted claims.

205. Defendants are indirectly infringing the '381 Patent by inducing and/or contributing to infringement by, among other things, making, providing, and instructing integration of the MediaTek accused products in Bluetooth-enabled devices.

206. Defendants encourage, aid, and direct customers of the accused products to develop, integrate, use and operate them, consistent with Defendants' instructions, to perform the asserted method claims.

207. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them in an infringing manner.

208. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '381 Patent, and the accused devices are material to practicing one or more claims of the '381 Patent. MediaTek's hardware, software, and associated modules provided in the MediaTek APIs enabling Bluetooth pairing features have no substantial

## BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

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non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '381 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '381 Patent.

209. MediaTek tests the accused products in order to represent to customers the interoperability described and claimed in the '381 Patent such as the end users' ability to use a phone's Bluetooth capability to make voice calls with Bluetooth headsets to which voice communications in the form of digital data are conveyed.

210. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that customers use them and their Bluetooth capability in an infringing manner, consistent with MediaTek's instructions, APIs, and development tools.

211. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '381 Patent, and the accused devices are material to practicing one or more claims of the '381 Patent. The Bluetooth pairing and voice call features have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '381 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '381 Patent.

212. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

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# COUNT VII INFRINGEMENT OF U.S. PATENT NO. 8,265,691

213. Blue Sky incorporates by reference paragraphs 1-212 and re-alleges them as if stated here.

214. MediaTek directly infringes at least claims 1, 7, 11, 17, and 18 of the 91 Patent.

215. Defendants make, use, sell, offer for sale, license, and import development kits such as the X20 that embody the claims of the '691 Patent.

216. Defendants' Bluetooth-enabled platform communicates with peripherals using transceivers operating using relevant short-range technologies including but not limited to Bluetooth BR/EDR.

217. The MediaTek X20 features Bluetooth 4.1.

# HDK 🗞



# MediaTek X20 development board

The new MediaTek X20 development board by Archermind is based on the Linaro 96Boards standard. At the board's heart is the MediaTek MT6797 SoC. This SoC features the industry's first tri-cluster, deca-core processing architecture with:

#### Key features

- Dual-core ARM Cortex-A72 MPCore<sup>™</sup> operating at 2.1GHz to 2.3GHz
- Quad-core ARM Cortex-A53 MPCore<sup>™</sup> operating at up to 1.85GHz
- Quad-core ARM Cortex-A53 MPCore<sup>™</sup> operating at up to 1.4GHz
- ARM Mali-T880 GPU operating at up to 800MHz

Feature	
Application Processor	MediaTek MT6797 SoC with: • Dual-core ARM Cortex-A72 MPCore <sup>™</sup> operating at 2.1GHz to 2.3GHz • Quad-core ARM Cortex-A53 MPCore <sup>™</sup> operating up to 1.85GHz • Quad-core ARM Cortex-A53 MPCore <sup>™</sup> operating up to 1.4GHz • ARM Mail-T880 GPU operating up to 800MHz
Operating System	Android 6.0
Wi-Fi	802.11 a/b/g/n
Bluetooth	4.1

### Development board specifications

218. The X20 is capable of performing a Bluetooth Device Discovery procedure for retrieving the Bluetooth device address, clock, class-of-device field, and used page scan mode from discoverable devices located nearby.

219. In normal operation, the accused products transmit an inquiry message (e.g., an inquiry data packet) to a Bluetooth peripheral (e.g., a hands-free headset) to determine whether the peripheral is within range.

220. If the peripheral is in a discoverable mode (e.g., general discoverable mode), the accused device receives a response (e.g., inquiry response message) from the Bluetooth peripheral.

221. After receiving a response from a peripheral, the MediaTek platform generates and may display a list of discovered or available devices.

222. Once paired, accused devices operate in the connected state and exchange messages over one of two channels reserved for communication between them.

223. The physical channel is subdivided into time units known as slots, and data is transmitted between Bluetooth devices in packets positioned in these slots.

224. Other BR/EDR physical channels are used for discovering other Bluetooth

devices.

225. In order to support multiple concurrent communication sessions, the accused MediaTel products use time division multiplexing between channels.

226. In addition to directly infringing the '691 Patent, MediaTek has and continues to indirectly infringe at least claims 1, 2, 3, 7, 11, 12, 17, and 18 of the '691 Patent, at least since receiving notice from Blue Sky, by inducing and/or contributing to infringement by, among other things, making, providing, offering, licensing, selling, and/or importing the MediaTek Bluetooth-enabled products identified above including SOCs, chipsets, smartphone platforms, wearable platforms, etc. for integration and use in Bluetooth-compliant devices.

227. MediaTek customers and users are direct infringers of the '691 Patent.

228. Defendants have been and are on notice of the infringing products, features, and how end users of the MediaTek Bluetooth accused products operate to perform the claimed methods and use the claimed apparatuses.

229. Defendants instruct customers how to integrate and develop and use the infringing functionality based upon the MediaTek products.

230. Defendants encourage, aid, and direct customers of the MediaTek products to use, integrate, develop, and operate them, consistent with MediaTek's instructions, to perform the asserted method claims and use the invention.

231. MediaTek tests the accused products to ensure interoperability as claimed in the '691 Patent to ensure a device's capability to make voice calls with Bluetooth headsets to which voice communications in the form of digital data are conveyed to infringe the asserted claims.

232. MediaTek has been and is on notice of the infringing products, features, and how MediaTek customers integrate, develop, and operate them to perform the claimed methods and use the claimed apparatuses.

233. Defendants instruct customers to use the accused products' Bluetooth capability to infringe the asserted claims.

234. Defendants encourage, aid, and direct customers of the accused products to develop, integrate, use and operate them, consistent with Defendants' instructions, to perform the asserted method claims.

235. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them in an infringing manner.

236. MediaTek provides Bluetooth-enabled products for use in practicing the '691 Patent, and the accused products are material to practicing one or more claims of the '691 Patent. The Bluetooth pairing and voice call features and supporting hardware, software, and associated modules provided in the MediaTek APIs have no substantial non-infringing uses and are known to MediaTek to be especially made or adapted for use infringing the '691 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '691 Patent.

237. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty,

together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

# COUNT VIII INFRINGEMENT OF U.S. PATENT NO. 8,346,169

238. Blue Sky incorporates by reference paragraphs 1-237 and re-alleges them as if stated here.

239. MediaTek indirectly infringes at least claims 1, 2, 3, 5, 6, 8, 9, 10, 12, 13, and 15 of the '169 Patent by inducing and/or contributing to infringement by, among other things, making using, licensing, selling, providing, and/or importing the MediaTek Bluetooth-enabled products identified above including SOCs, chipsets, smartphone platforms, wearable platforms, etc. for integration and use in Bluetooth-compliant devices.

240. MediaTek customers and users are direct infringers of the '169 Patent.

241. MediaTek accused products enable communication with peripherals using relevant short-range technologies including but not limited to Bluetooth Basic Rate/Enhanced Data Rate (BR/EDR).

242. In normal operation, MediaTek accused products enable communication with peripherals wherein the device pairs with third-party peripherals and add selected peripherals to a list of paired devices stored on the device.

243. MediaTek accused products are specifically intended to be integrated into products such as smartphones that are enabled to use the Bluetooth communication system to initiate pairing.

244. By way of example, in one scenario a MediaTek Helios smartphone platform drives functionality wherein a user presses and temporarily holds a button (e.g., the call

control/power button on a Bluetooth headset) to initiate pairing with a MediaTek-based phone. In response, the infringing phone receives a pair request message (e.g., a paging message request) over a channel shared with other Bluetooth devices (e.g., a time-division multiplexed channel). In response to the pairing request, the phone prompts a user to add the Bluetooth peripheral to a list of authorized devices. If the user approves pairing the phone with the peripheral, the user selects on the phone interface to accept the pairing request and add the peripheral to a list of authorized devices.

245. After receiving a response from a peripheral, the device generates and displays a list of discovered devices.

246. The list of available, discovered devices may be displayed to the user of the device via the user interface using the MediaTek-supplied API.

247. MediaTek tests the accused products to ensure the functionality described here and recited in the asserted claims and specifically intends the accused products to be used under such conditions.

248. In particular, MediaTek tests the accused products to ensure use of both Bluetooth and voice-calling functionality.

249. MediaTek has been and is on notice of the infringing products, features, and how MediaTek customers integrate, develop, and operate them to perform the claimed methods and use the claimed apparatuses.

250. Defendants encourage, aid, and direct end users of the Accused Products to use and operate them, consistent with MediaTek's instructions and development toolkit to perform the asserted method claims and practice the invention.

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251. MediaTek has been and is on notice of the infringing features and how MediaTek customers integrate, develop, and operate them to practice the claims.

252. Defendants instruct and encourage end users to use the phone's Bluetooth capability to make voice calls with Bluetooth headsets to which voice communications in the form of digital data are conveyed to infringe the asserted claims.

253. Defendants make, use, license, sell, offer to sell, and promote Bluetoothenabled accused products with the specific intent that end users and customers use them and their Bluetooth capability in an infringing manner.

254. Defendants sell and offer to sell Bluetooth-enabled devices for use in practicing the '169 Patent, and the accused devices are material to practicing one or more claims of the '169 Patent. MediaTek's hardware, software, and associated modules provided in the MediaTek APIs enabling Bluetooth pairing features have no substantial non-infringing uses and are known to Defendants to be especially made or adapted for use infringing the '169 Patent by including the aforementioned hardware and software that operates in compliance with the Bluetooth technical standard and embody the '169 Patent.

255. Defendants' infringing conduct has damaged Blue Sky Networks. Defendants are liable to Blue Sky Networks in an amount that adequately compensates it for Defendants' infringement, which, by law, can be no less than a reasonable royalty, together with interest and costs as fixed by this Court under 35 U.S.C. § 284.

## NOTICE OF REQUIREMENT OF LITIGATION HOLD

256. Defendants are hereby notified they are legally obligated to locate, preserve, and maintain all records, notes, drawings, documents, data, communications, materials,

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electronic recordings, audio/video/photographic recordings, and digital files, including edited and unedited or "raw" source material, and other information and tangible things that Defendants know, or reasonably should know, may be relevant to actual or potential claims, counterclaims, defenses, and/or damages by any party or potential party in this lawsuit, whether created or residing in hard copy form or in the form of electronically stored information (hereafter collectively referred to as "Potential Evidence").

257. As used above, the phrase "electronically stored information" includes without limitation: computer files (and file fragments), e-mail (both sent and received, whether internally or externally), information concerning e-mail (including but not limited to logs of e-mail history and usage, header information, and deleted but recoverable emails), text files (including drafts, revisions, and active or deleted word processing documents), instant messages, audio recordings and files, video footage and files, audio files, photographic footage and files, spreadsheets, databases, calendars, telephone logs, contact manager information, internet usage files, and all other information created, received, or maintained on any and all electronic and/or digital forms, sources and media, including, without limitation, any and all hard disks, removable media, peripheral computer or electronic storage devices, laptop computers, mobile phones, personal data assistant devices, Blackberry devices, iPhones, video cameras and still cameras, and any and all other locations where electronic data is stored. These sources may also include any personal electronic, digital, and storage devices of any and all of Defendant's agents, resellers, or employees if Defendant's electronically stored information resides there.

258. Defendants are hereby further notified and forewarned that any alteration,

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

destruction, negligent loss, or unavailability, by act or omission, of any Potential Evidence may result in damages or a legal presumption by the Court and/or jury that the Potential Evidence is not favorable to Defendants' claims and/or defenses. To avoid such a result, Defendants' preservation duties include, but are not limited to, the requirement that Defendants immediately notify their agents and employees to halt and/or supervise the auto-delete functions of Defendants' electronic systems and refrain from deleting Potential Evidence, either manually or through a policy of periodic deletion.

### NOTICE

259. Blue Sky provided written notice to MediaTek on June 23, 2017, identifying the asserted patents and infringing MediaTek products ("system-on-a-chip, chipsets, and development kits supporting wireless communication standards such as Bluetooth and LTE" and specific models).

260. MediaTek did not respond to Blue Sky's invitation to exchange information confidentially and cooperatively, so Blue Sky filed this suit.

### **JURY DEMAND**

Blue Sky hereby demands a trial by jury on all claims, issues, and damages so triable.

### **PRAYER FOR RELIEF**

Blue Sky prays for the following relief:

a. That Defendants be summoned to appear and answer;

b. That the Court enter judgment in favor of Blue Sky that Defendants have infringed each and every one of the Asserted Patents;

### BLUE SKY'S ORIGINAL COMPLAINT - MEDIATEK

c. That this is an exceptional case under 35 U.S.C. §285;

d. That the Court grant Blue Sky judgment against Defendants for all actual, consequential, special, punitive, exemplary, increased, and/or statutory damages, including if necessary, an accounting of all damages; pre and post-judgment interest as allowed by law; and reasonable attorney's fees, costs, and expenses incurred in this action; and

e. That Blue Sky be granted such other and further relief as the Court may deem just and proper under the circumstances.

Dated: July 5, 2017

Respectfully submitted,

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By:

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